

ACADEMIC YEAR 2021-2022:
HIGH SCHOL STUDENTS
ATTENDING CCCS COLLEGES

TABLE OF CONTENTS

| | |
|---------------------------------------------------------------------|----|
| System Overview of High School Students | 2 |
| High School Students by College..... | 7 |
| Participation by Program | 10 |
| Participation by Program and College | 11 |
| Participation by Term..... | 12 |
| Demographics | 13 |
| Credentials Earned | 16 |
| Credit Hours Attempted..... | 20 |
| Academic Studies and Outcomes..... | 21 |
| Comparison of Course Pass Rates by College | 23 |
| Credits Earned and Tuition Saved | 25 |
| Career and Technical Education..... | 26 |
| Matriculation Rates to CCCS Colleges..... | 28 |
| Enrollment in a Four-year University and Overall Matriculation..... | 30 |
| Effect of Concurrent Enrollment on Academic Success Measures | 33 |
| Median Time and Credits to Degree | 36 |
| Median Wage | 39 |
| Conclusion | 43 |
| Appendix: Methodology | 45 |
| Data Source:..... | 45 |
| Methodology:..... | 45 |

SYSTEM OVERVIEW OF HIGH SCHOOL STUDENTS

AY20-21 was an unusual year due to the pandemic. Nationwide trends saw severe enrollment losses and Colorado Community College System (CCCS) Concurrent Enrollment was also impacted. CCCS saw a 5% drop in the number of high school students taking courses that award college credit, either on the college campus or in their own school. This is shown in Figure 1. Overall, 33,112 high school students enrolled in CCCS colleges in academic year (AY) 2020-2021. In AY 2020-2021, high school students accounted for 29 percent of the annual headcount within CCCS colleges (Figure 2), a four percentage-point increase over the year prior. High school students attempted 1.2% less credit hours than last year (Figure 3). In 2020-2021, 11.9 percent of all public high school students in Colorado earned some college credit via CCCS (Figure 4.1). Compared to all Colorado public high school students, CCCS high school students have a higher percentage of female and a lower percentage of students of color (Figure 4.2). The gap in percentage of students of color widened from 7.2 percentage points in 2019-2020 to 9.8 percentage points in 2020-2021. This was most pronounced within the Hispanic designation (Figures 4.2 and 4.3).

Figure 1: Number of Unique High School Students by Academic Year

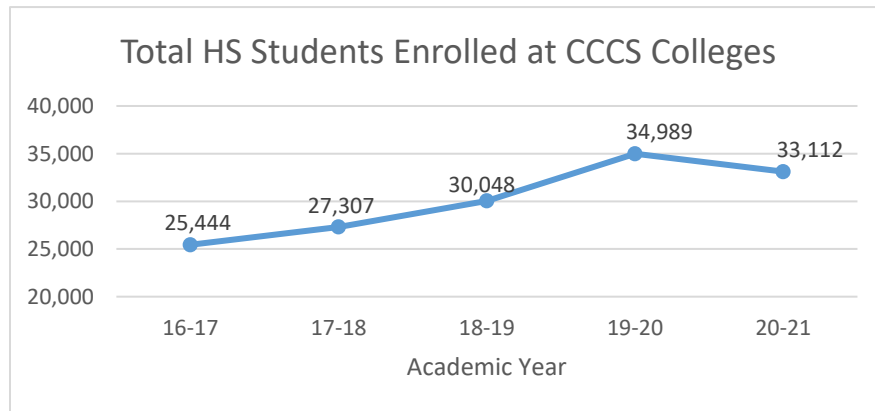


Figure 2- High School Students as a Percentage of Overall CCCS Headcount

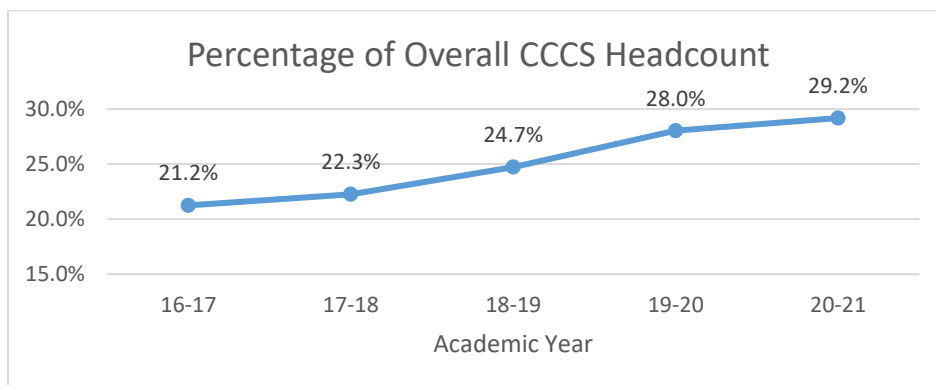


Figure 3 - Total Credit Hours Attempted by CCCS High School Students

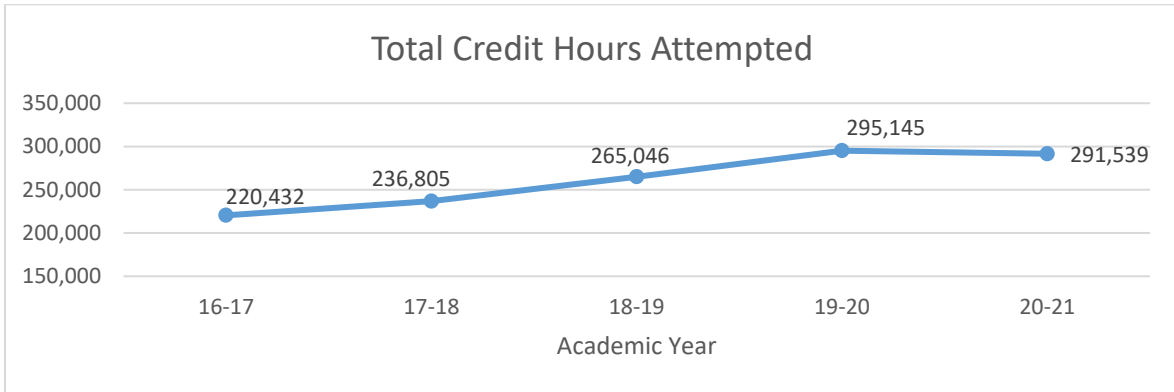


Figure 4.1 - CCCS High School Students Compared to all Colorado Public HS Students

| | Fall 2016 Enrollment/ AY 16-17 | Fall 2017 Enrollment/ AY 17-18 | Fall 2018 Enrollment/ AY 18-19 | Fall 2019 Enrollment/ AY 19-20 | Fall 2020 Enrollment/ AY 20-21 |
|---------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Public High School¹ | | | | | |
| Total Number of Students | 265,329 | 270,190 | 273,519 | 276,730 | 278,424 |
| Percent Change Year-to-Year | 1.8% | 1.8% | 1.2% | 1.2% | 0.6% |
| CCCS HS Students | | | | | |
| Total Number of Students | 25,444 | 27,307 | 30,048 | 34,989 | 33,112 |
| Percent Change Year-to-Year | 12.1% | 7.3% | 10.0% | 16.4% | -5.4% |
| CCCS as of Public High School | 9.6% | 10.1% | 11.0% | 12.6% | 11.9% |

¹ Public high school data/totals based on published Colorado Department of Education pupil membership data at <https://www.cde.state.co.us/cdereval/pupilcurrent>.

Figure 4.2 – AY 2020-2021 Demographic Breakdown of CCCS High School Students Compared to all Colorado Public HS Students

| | Public High School | | CCCS HS Students | | % Pt. Diff. |
|--------------------------------------------|--------------------|-------------------|------------------|-------------------|--------------------|
| | Number | Percentage | Number | Percentage | |
| Gender | | | | | |
| Female | 136,258 | 48.9% | 18,447 | 55.7% | 6.8% |
| Male | 142,166 | 51.1% | 14,665 | 44.3% | -6.8% |
| Race/Ethnicity | Number | Percentage | Number | Percentage | % Pt. Diff. |
| American Indian or Alaskan Native | 1,981 | 0.7% | 165 | 0.5% | -0.2% |
| Asian | 9,103 | 3.3% | 1,302 | 3.9% | 0.7% |
| Black or African American | 12,292 | 4.4% | 1,155 | 3.5% | -0.9% |
| Hispanic | 95,970 | 34.5% | 8,171 | 24.7% | -9.8% |
| Multiple races | 11,442 | 4.1% | 1,533 | 4.6% | 0.5% |
| Native Hawaiian and Other Pacific Islander | 787 | 0.3% | 68 | 0.2% | -0.1% |
| Non-Resident Alien (Int'l.) | 0 | 0.0% | 496 | 1.5% | 1.5% |
| Unknown | 0 | 0.0% | 2,070 | 6.3% | 6.3% |
| White | 146,849 | 52.7% | 18,152 | 54.8% | 2.1% |
| Students of Color | 131,575 | 47.3% | 12,394 | 37.4% | -9.8% |

Figure 4.3 – AY 2019-2020 Demographic Breakdown of CCCS High School Students Compared to all Colorado Public HS Students

| | Public High School | | CCCS HS Students | | % Pt. Diff. |
|--------------------------------------------|--------------------|-------------------|------------------|-------------------|--------------------|
| | Number | Percentage | Number | Percentage | |
| Gender | | | | | |
| Female | 135,231 | 48.6% | 19,018 | 54.4% | 5.8% |
| Male | 141,310 | 50.8% | 15,971 | 45.6% | -5.1% |
| Race/Ethnicity | Number | Percentage | Number | Percentage | % Pt. Diff. |
| American Indian or Alaskan Native | 1,975 | 0.7% | 165 | 0.5% | -0.2% |
| Asian | 9,323 | 3.3% | 1,359 | 4.1% | 0.8% |
| Black or African American | 12,477 | 4.5% | 1,284 | 3.9% | -0.6% |
| Hispanic | 94,607 | 34.0% | 8,597 | 26.0% | -8.0% |
| Multiple races | 10,824 | 3.9% | 1,583 | 4.8% | 0.9% |
| Native Hawaiian and Other Pacific Islander | 770 | 0.3% | 91 | 0.3% | 0.0% |
| Non-Resident Alien (Int'l.) | 0 | 0.0% | 916 | 2.8% | 2.8% |
| Unknown | 0 | 0.0% | 2,445 | 7.4% | 7.4% |
| White | 146,565 | 52.6% | 18,549 | 56.0% | 3.4% |
| Students of Color | 129,976 | 46.7% | 13,079 | 39.5% | -7.2% |

High school students enrolled in 94,885 courses in 2020-2021, a decrease of 4.3 percent from the previous year (Figure 5). Over half (59%) of the high school students enrolled in one or two courses, and 18.7 percent enrolled in five or more courses (Figure 6). Compared to previous academic years, the percentage of students enrolled in different number of courses remained relatively flat (Figure 7). Additionally, the average amount of credits earned by each student continues to hover around 8.7, as it has for the last five years (Figure 8). Figure 9 shows the top ten highest enrolled courses taken by CCCS high school students, with English Composition, College Algebra and English Composition II holding the top three spots.

Figure 5 - Total Courses Taken by CCCS High School Students

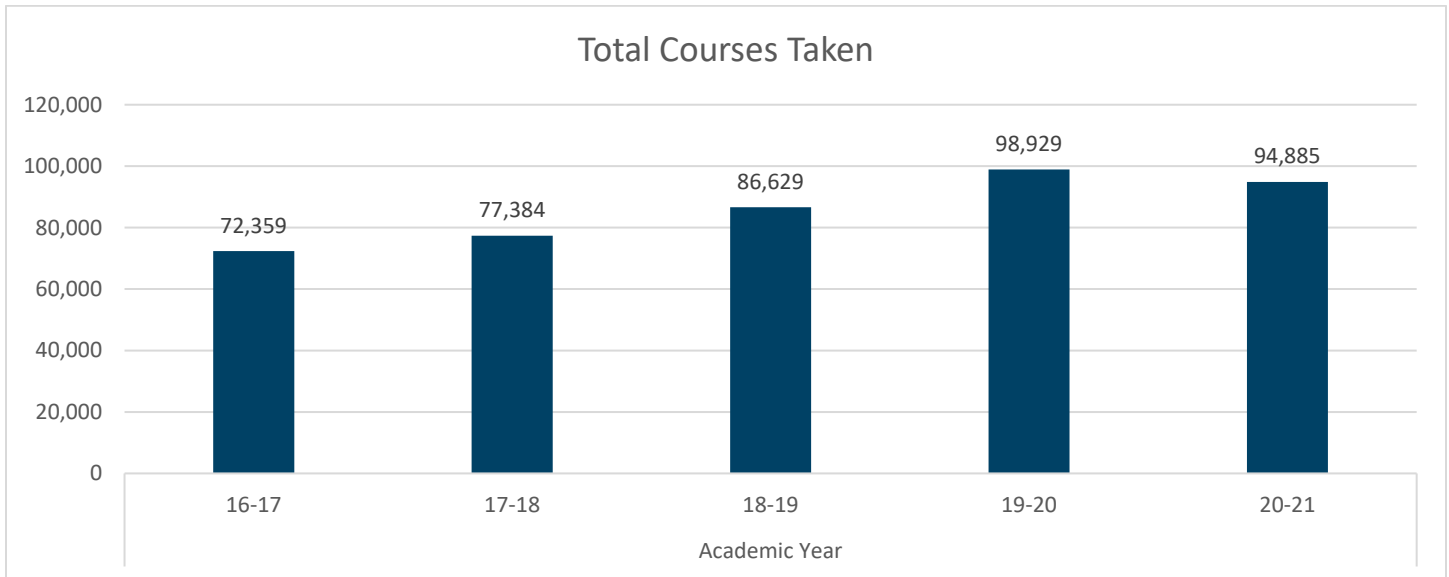


Figure 6: High School Students by Number of Courses Taken: AY 2020-2021

| Number of Courses Taken During the Year | 1 Course | 2 Courses | 3 Courses | 4 Courses | 5+ Courses | Total |
|-----------------------------------------|----------|-----------|-----------|-----------|------------|--------|
| Number of Students | 10,568 | 8,855 | 4,136 | 3,358 | 6,195 | 33,112 |
| Percentage of Students | 31.9% | 26.7% | 12.5% | 10.1% | 18.7% | 100.0% |

Figure 7 - Number of Courses Taken by High School Students

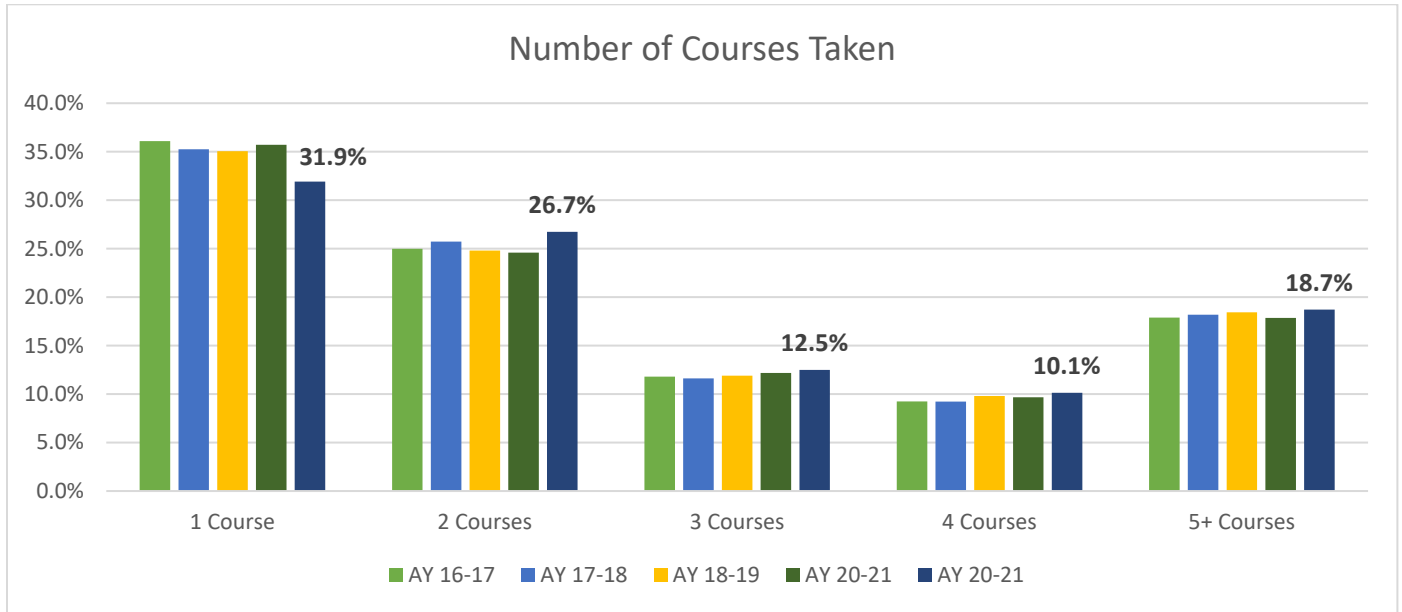


Figure 8 - Average Credit Hours Taken Per High School Student by Academic Year

| | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Average Credits Taken by HS Students | 8.8 | 8.8 | 8.9 | 8.7 | 8.9 |

Figure 9 - Top Ten Courses Taken by CCCS High School Students: AY 2020-2021

| Courses | Number of Course Enrollments | Percentage of all HS Course Enrollments |
|---------|------------------------------|-----------------------------------------|
| ENG121 | 8,265 | 8.7% |
| MAT121 | 5,410 | 5.7% |
| ENG122 | 4,873 | 5.1% |
| LIT115 | 2,690 | 2.8% |
| PSY101 | 2,261 | 2.4% |
| MAT122 | 2,220 | 2.3% |
| BUS115 | 2,165 | 2.3% |
| COM115 | 1,889 | 2.0% |
| HIS122 | 1,561 | 1.6% |
| BUS116 | 1,548 | 1.6% |

HIGH SCHOOL STUDENTS BY COLLEGE

In AY 2020-2021, Front Range Community College had the largest number of high school students, followed by Arapahoe Community College (Figure 10). Northeastern Junior College saw the biggest one-year increase in enrollments (Figure 11). Among CCCS colleges, the proportion of high school enrollments to overall enrollments ranged from a high of 45.5 percent at Community College of Aurora to 15.1 percent at Community College of Denver (Figures 12 and 13). High school enrollments in nine out of thirteen CCCS colleges comprised over a quarter of college enrollments. In most of the colleges, more high school students were registered for college courses in the spring term than in the summer or fall terms (Figure 14). Spring semester high school enrollment was over 60 percent at Red Rocks Community College in AY 2020-2021.

Figure 10 - High School Students by College

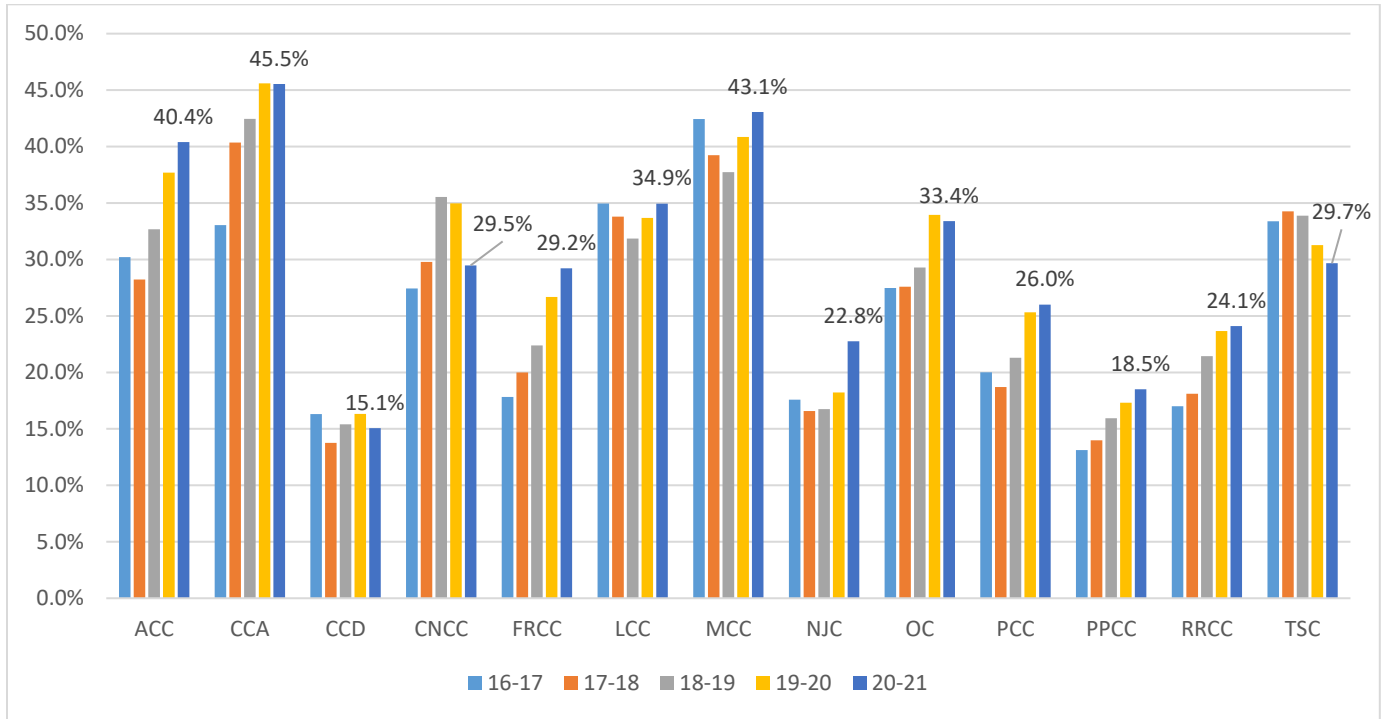
| College | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| ACC | 5,024 | 5,404 | 6,349 | 8,089 | 7,529 |
| CCA | 3,640 | 4,752 | 4,819 | 5,561 | 4,913 |
| CCD | 2,117 | 1,703 | 1,810 | 1,894 | 1,550 |
| CNCC | 462 | 535 | 622 | 548 | 423 |
| FRCC | 5,039 | 5,623 | 6,283 | 7,742 | 8,192 |
| LCC | 359 | 343 | 315 | 352 | 318 |
| MCC | 825 | 702 | 611 | 687 | 729 |
| NJC | 402 | 368 | 373 | 361 | 394 |
| OC | 511 | 480 | 475 | 546 | 509 |
| PCC | 1,731 | 1,852 | 2,059 | 2,448 | 2,256 |
| PPCC | 2,449 | 2,602 | 2,982 | 3,307 | 3,242 |
| RRCC | 2,107 | 2,146 | 2,584 | 2,736 | 2,434 |
| TSC | 778 | 797 | 766 | 718 | 623 |
| CCCS Total | 25,444 | 27,307 | 30,048 | 34,989 | 33,112 |

Figure 11 – Change from Previous Year in Number of High School Students Enrolled

| College | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|-------------------|--------------|-------------|--------------|--------------|--------------|
| ACC | 15.7% | 7.6% | 17.5% | 27.4% | -6.9% |
| CCA | 17.3% | 30.5% | 1.4% | 15.4% | -11.7% |
| CCD | -7.0% | -19.6% | 6.3% | 4.6% | -18.2% |
| CNCC | -7.4% | 15.8% | 16.3% | -11.9% | -22.8% |
| FRCC | 20.6% | 11.6% | 11.7% | 23.2% | 5.8% |
| LCC | -0.6% | -4.5% | -8.2% | 11.7% | -9.7% |
| MCC | 5.5% | -14.9% | -13.0% | 12.4% | 6.1% |
| NJC | -2.9% | -8.5% | 1.4% | -3.2% | 9.1% |
| OC | 7.4% | -6.1% | -1.0% | 14.9% | -6.8% |
| PCC | 14.0% | 7.0% | 11.2% | 18.9% | -7.8% |
| PPCC | 8.7% | 6.2% | 14.6% | 10.9% | -2.0% |
| RRCC | 14.8% | 1.9% | 20.4% | 5.9% | -11.0% |
| TSC | 16.8% | 2.4% | -3.9% | -6.3% | -13.2% |
| CCCS Total | 12.1% | 7.3% | 10.0% | 16.4% | -5.4% |

Figure 12 - HS Students as a Percentage of Overall Enrollment by Academic Year

| College | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| ACC | 30.2% | 28.2% | 32.7% | 37.7% | 40.4% |
| CCA | 33.0% | 40.3% | 42.5% | 45.6% | 45.5% |
| CCD | 16.3% | 13.8% | 15.4% | 16.3% | 15.1% |
| CNCC | 27.4% | 29.8% | 35.5% | 35.0% | 29.5% |
| FRCC | 17.8% | 20.0% | 22.4% | 26.7% | 29.2% |
| LCC | 35.0% | 33.8% | 31.9% | 33.7% | 34.9% |
| MCC | 42.4% | 39.2% | 37.7% | 40.8% | 43.1% |
| NJC | 17.6% | 16.6% | 16.7% | 18.2% | 22.8% |
| OC | 27.5% | 27.6% | 29.3% | 34.0% | 33.4% |
| PCC | 20.0% | 18.7% | 21.3% | 25.3% | 26.0% |
| PPCC | 13.1% | 14.0% | 15.9% | 17.3% | 18.5% |
| RRCC | 17.0% | 18.1% | 21.4% | 23.7% | 24.1% |
| TSC | 33.4% | 34.3% | 33.9% | 31.3% | 29.7% |
| CCCS Total | 21.2% | 22.3% | 24.7% | 28.0% | 29.2% |

Figure 13 - HS Students as a Percentage of Overall Enrollment

Figure 14 - HS Student Enrollment by Term and College: AY 2020-2021

| College | Summer | Fall | Spring | Summer as of Year | Fall as % of Year | Spring as of Year |
|-------------------|--------------|---------------|---------------|-------------------|-------------------|-------------------|
| ACC | 121 | 5,415 | 5,430 | 1.1% | 49.4% | 49.5% |
| CCA | 110 | 3,813 | 4,077 | 1.4% | 47.7% | 51.0% |
| CCD | 99 | 1,227 | 1,086 | 4.1% | 50.9% | 45.0% |
| CNCC | 3 | 356 | 324 | 0.4% | 52.1% | 47.4% |
| FRCC | 229 | 5,817 | 6,278 | 1.9% | 47.2% | 50.9% |
| LCC | 8 | 282 | 288 | 1.4% | 48.8% | 49.8% |
| MCC | 67 | 654 | 601 | 5.1% | 49.5% | 45.5% |
| NJC | 9 | 318 | 318 | 1.4% | 49.3% | 49.3% |
| OC | 6 | 407 | 385 | 0.8% | 51.0% | 48.2% |
| PCC | 40 | 1,651 | 1,731 | 1.2% | 48.2% | 50.6% |
| PPCC | 284 | 2,761 | 2,729 | 4.9% | 47.8% | 47.3% |
| RRCC | 81 | 1,176 | 1,957 | 2.5% | 36.6% | 60.9% |
| TSC | 6 | 413 | 510 | 0.6% | 44.5% | 54.9% |
| CCCS Total | 1,063 | 24,290 | 25,714 | 2.1% | 47.6% | 50.4% |

PARTICIPATION BY PROGRAM

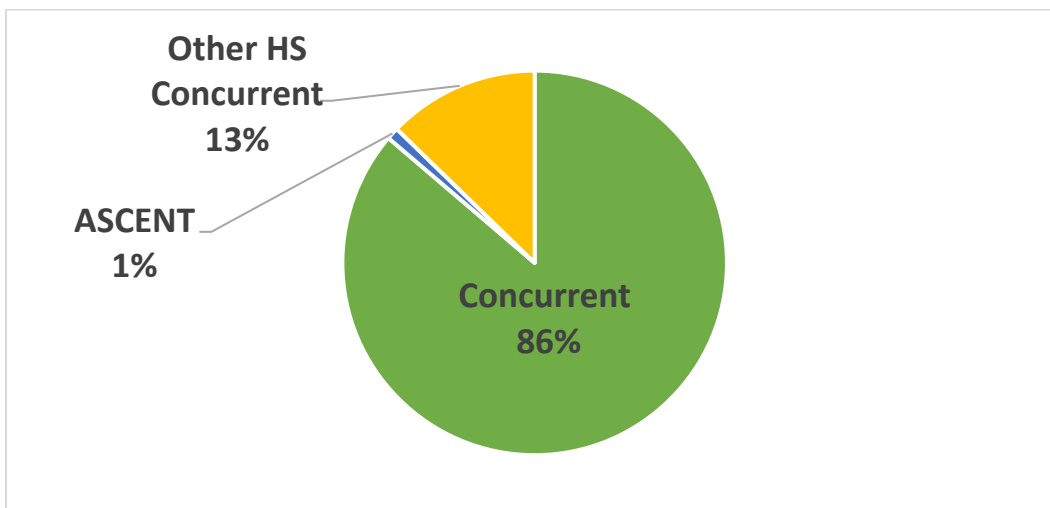
The two most common methods provided by Colorado law for high school students to earn college credit are the concurrent enrollment program and the “Accelerating Students through Concurrent Enrollment” or ASCENT program. However, high school students are not strictly limited to these two methods of enrollment and may participate in college courses through other methods as well.

The concurrent program provides high school students the opportunity to earn college credits at little or no cost. The concurrent enrollment program generally applies to students from public high schools and charter schools. Students at these institutions must receive permission from their local education provider to participate in the program. The local education providers must enter into cooperative agreements with the colleges with agreed-upon tuition rates. Colleges also receive state funding for these students via the College Opportunity Fund (COF).

The ASCENT program differs in that the state funds ASCENT students for an additional year of K-12 education. The number of participants in the program is limited by the state, and a student is only eligible if he or she completes or is on schedule to complete, twelve credit hours of credit-bearing, college-level postsecondary course work by the end of twelfth grade. Eligibility is also limited to the year immediately following a student’s twelfth grade year. Students who took CCCS courses outside the parameters of the concurrent and ASCENT programs are categorized as “other” forms of high school enrollment (namely Early College, P-Tech and self-pay). This method of categorizing students mirrors that of the Colorado Department of Education.

By far the most common method utilized by students to take college-level courses is the concurrent enrollment program, which accounted for 86 percent of high school enrollments system wide in AY 2020-2021 (Figure 15). The ASCENT program accounted for one percent of student enrollments. These are the same percentages as in 2019-2020 and roughly the same as they were in 2018-2019, a year in which 84.7 percent of high school participation was through the concurrent enrollment program.

Figure 15 - High School Students by Program Type: AY 2020-2021



PARTICIPATION BY PROGRAM AND COLLEGE

Figure 16 provides college breakdown by program – concurrent, ASCENT, Early College, P-Tech and other. The vast majority of students (86 percent) enrolled in CCCS colleges through the concurrent enrollment program. The proportion of concurrent enrollments, in 9 out of 13 colleges, was over 90%. Front Range Community College had the highest number of students (6,648) in the concurrent program, followed by Arapahoe Community College (6,622). In terms of course level, a majority (98.4%) of the course enrollment was college level, with only 1.6% in developmental education (Figure 17).

Figure 16 - High School Students by Program and College: AY 2020-2021

| College | Concurrent | ASCENT | Early College | P-Tech | Other HS Concurrent | % of Concurrent | % of ASCENT | % of Early College | % of P-Tech | % of Other HS |
|-------------|---------------|------------|---------------|------------|---------------------|-----------------|-------------|--------------------|-------------|---------------|
| ACC | 6,622 | 22 | 723 | 55 | 107 | 88.0% | 0.3% | 9.6% | 0.7% | 1.4% |
| CCA | 4,839 | 49 | 0 | 0 | 25 | 98.5% | 1.0% | 0.0% | 0.0% | 0.5% |
| CCD | 882 | 27 | 482 | 150 | 9 | 56.9% | 1.7% | 31.1% | 9.7% | 0.6% |
| CNCC | 412 | 0 | 0 | 0 | 11 | 97.4% | 0.0% | 0.0% | 0.0% | 2.6% |
| FRCC | 6,648 | 133 | 824 | 334 | 253 | 81.2% | 1.6% | 10.1% | 4.1% | 3.1% |
| LCC | 306 | 10 | 0 | 0 | 2 | 96.2% | 3.1% | 0.0% | 0.0% | 0.6% |
| MCC | 685 | 0 | 0 | 0 | 44 | 94.0% | 0.0% | 0.0% | 0.0% | 6.0% |
| NJC | 392 | 0 | 0 | 0 | 2 | 99.5% | 0.0% | 0.0% | 0.0% | 0.5% |
| OC | 503 | 2 | 0 | 0 | 4 | 98.8% | 0.4% | 0.0% | 0.0% | 0.8% |
| PCC | 2,120 | 24 | 0 | 0 | 112 | 94.0% | 1.1% | 0.0% | 0.0% | 5.0% |
| PPCC | 2,210 | 81 | 865 | 19 | 67 | 68.2% | 2.5% | 26.7% | 0.6% | 2.1% |
| RRCC | 2,225 | 25 | 87 | 0 | 97 | 91.4% | 1.0% | 3.6% | 0.0% | 4.0% |
| TSC | 619 | 0 | 0 | 0 | 4 | 99.4% | 0.0% | 0.0% | 0.0% | 0.6% |
| CCCS | 28,463 | 373 | 2,981 | 558 | 737 | 86.0% | 1.1% | 9.0% | 1.7% | 2.2% |

Figure 17 - HS Course Enrollment by Course Level: AY 2020-2021

| Course Level | Course Enrollments | % of Total HS Courses |
|------------------|--------------------|-----------------------|
| Developmental Ed | 1,541 | 1.6% |
| College Level | 93,344 | 98.4% |
| Total | 94,885 | 100.0% |

PARTICIPATION BY TERM

In general, more high school students were registered for college courses in the spring term than in the summer or fall terms (Figure 18), and the spring term accounted for the highest number of credit hours (Figure 20). College courses offered in high schools on a year-long basis help explain the higher spring numbers. Students in these courses are typically registered in the spring so the terms of registration and grading are the same. Compared with ASCENT students, a higher proportion of concurrent enrollment students were registered in the spring term (Figure 19).

Figure 18 - Number of High School Students by Term: AY 2020-2021

| | Summer | Fall | Spring | Summer as of Year | Fall as % of Year | Spring as of Year |
|-----------------------|--------|--------|--------|-------------------|-------------------|-------------------|
| Number of HS Students | 1,063 | 24,290 | 25,714 | 2.1% | 47.6% | 50.4% |

Figure 19- Number of High School Students by Term and Program: AY 2020-2021

| Program | Summer | Fall | Spring | Summer as of Year | Fall as % of Year | Spring as of Year |
|---------------------|--------------|---------------|---------------|-------------------|-------------------|-------------------|
| Concurrent | 528 | 23,109 | 24,435 | 1.1% | 48.1% | 50.8% |
| ASCENT | 1 | 374 | 342 | 0.1% | 52.2% | 47.7% |
| Other HS Concurrent | 534 | 807 | 937 | 23.4% | 35.4% | 41.1% |
| Total | 1,063 | 24,290 | 25,714 | 2.1% | 47.6% | 50.4% |

Figure 20 - Number and Percentage of Credit Hours by Term

| Academic Year | Summer | Fall | Spring | Total | Summer as % of Year | Fall as % of Year | Spring as % of Year |
|---------------|----------|------------|------------|------------|---------------------|-------------------|---------------------|
| AY 16-17 | 4,108.00 | 95,617.00 | 120,707.25 | 220,432.25 | 1.9% | 43.4% | 54.8% |
| AY 17-18 | 3,517.50 | 101,120.00 | 132,167.25 | 236,804.75 | 1.5% | 42.7% | 55.8% |
| AY 18-19 | 4,046.50 | 116,416.00 | 144,583.75 | 265,046.25 | 1.5% | 43.9% | 54.6% |
| AY 20-21 | 3,796.50 | 136,619.50 | 154,729.25 | 295,145.25 | 1.3% | 46.3% | 52.4% |
| AY 20-21 | 4,676.00 | 137,295.25 | 149,567.50 | 291,538.75 | 1.6% | 47.1% | 51.3% |

DEMOGRAPHICS

Over the last five years, an average of 54 percent of the high school students identified as female (Figure 21). In AY 2020-2021, high school students at CCCS colleges self-reported as 54.8 percent white (up from 53 percent in 2019-2020; Figure 22). Community College of Denver had the highest proportion of Hispanic students (49.5%), followed by Otero College at 42.8 percent (Figure 23). The percentage of students of color has stayed fairly flat, hovering within a percentage point of 36% for the last three years (Figure 24). First-generation college students has dropped dramatically from 42.5% in 2018-2019 to 35.6% in 2020-2021. The percentage of students of color and first-generation college students, in 2020-2021, ranged from 18 to 64 percent at CCCS colleges (Figure 25). Community College of Denver had the highest proportion of students of color while Lamar Community College had the highest proportion of first-generation students among the 13 colleges. In terms of age, over a third of the high school students were 17 years old (Figure 26).

Figure 21 - CCCS High School Students by Gender

| Gender | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Female | 13,821 | 14,788 | 16,033 | 19,018 | 18,447 | 54.3% | 54.2% | 53.4% | 54.4% | 55.7% |
| Male | 11,623 | 12,519 | 14,015 | 15,971 | 14,665 | 45.7% | 45.8% | 46.6% | 45.6% | 44.3% |
| Total | 25,444 | 27,307 | 30,048 | 34,989 | 33,112 | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Figure 22 - Percent of CCCS High School Student Population by Race/Ethnicity

| Race/Ethnicity | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|--------------------------------------------|----------|----------|----------|----------|----------|
| American Indian or Alaskan Native | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% |
| Asian | 3.5% | 3.6% | 3.5% | 3.9% | 3.9% |
| Black or African American | 3.5% | 3.4% | 3.6% | 3.7% | 3.5% |
| Hispanic | 24.3% | 24.4% | 23.7% | 24.6% | 24.7% |
| Multiple races | 3.9% | 4.2% | 4.2% | 4.5% | 4.6% |
| Native Hawaiian and Other Pacific Islander | 0.2% | 0.3% | 0.2% | 0.3% | 0.2% |
| Non-Resident Alien (International) | 2.3% | 2.3% | 2.1% | 2.6% | 1.5% |
| Unknown | 7.6% | 9.9% | 10.5% | 7.0% | 6.3% |
| White | 54.0% | 51.5% | 51.6% | 53.0% | 54.8% |

Figure 23 - Percent of CCCS High School Student Population by Race/Ethnicity and by College, AY20-21

| College | American Indian or Alaskan Native | Asian | Black or African American | Hispanic | Multiple races | Native Hawaiian and Other Pacific Islander | Non-Resident Alien (International) | Unknown | White | Students of Color |
|---------|-----------------------------------|-------|---------------------------|----------|----------------|--------------------------------------------|------------------------------------|---------|-------|-------------------|
| ACC | 0.3% | 4.7% | 2.1% | 12.9% | 4.8% | 0.1% | 0.7% | 7.0% | 67.4% | 25.6% |
| CCA | 0.2% | 6.5% | 12.7% | 35.2% | 5.8% | 0.4% | 4.6% | 5.5% | 29.1% | 65.4% |
| CCD | 0.6% | 3.9% | 6.0% | 49.5% | 3.8% | 0.1% | 8.3% | 6.1% | 21.7% | 72.3% |
| CNCC | 0.9% | 1.2% | 0.0% | 12.3% | 4.3% | 0.2% | 0.5% | 9.0% | 71.6% | 19.4% |
| FRCC | 0.4% | 4.2% | 0.8% | 24.6% | 3.9% | 0.2% | 0.6% | 6.1% | 59.3% | 34.6% |
| LCC | 1.3% | 0.0% | 0.6% | 39.6% | 3.1% | 0.0% | 0.9% | 2.2% | 52.2% | 45.6% |
| MCC | 1.0% | 0.7% | 1.4% | 28.3% | 3.0% | 0.0% | 0.7% | 2.7% | 62.3% | 35.0% |
| NJC | 0.3% | 0.8% | 0.3% | 17.8% | 1.3% | 0.0% | 0.8% | 3.0% | 75.9% | 21.1% |
| OC | 1.4% | 0.8% | 1.2% | 42.8% | 1.6% | 0.0% | 0.2% | 8.3% | 43.8% | 47.9% |
| PCC | 1.4% | 1.1% | 1.4% | 30.1% | 4.0% | 0.3% | 0.4% | 4.8% | 56.6% | 38.7% |
| PPCC | 0.6% | 2.8% | 4.5% | 19.9% | 7.6% | 0.3% | 0.3% | 5.2% | 58.8% | 35.9% |
| RRCC | 0.7% | 3.6% | 0.7% | 18.6% | 4.1% | 0.2% | 0.2% | 6.8% | 65.1% | 28.1% |
| TSC | 0.6% | 1.1% | 0.6% | 38.2% | 2.1% | 0.0% | 0.3% | 18.3% | 38.7% | 43.0% |

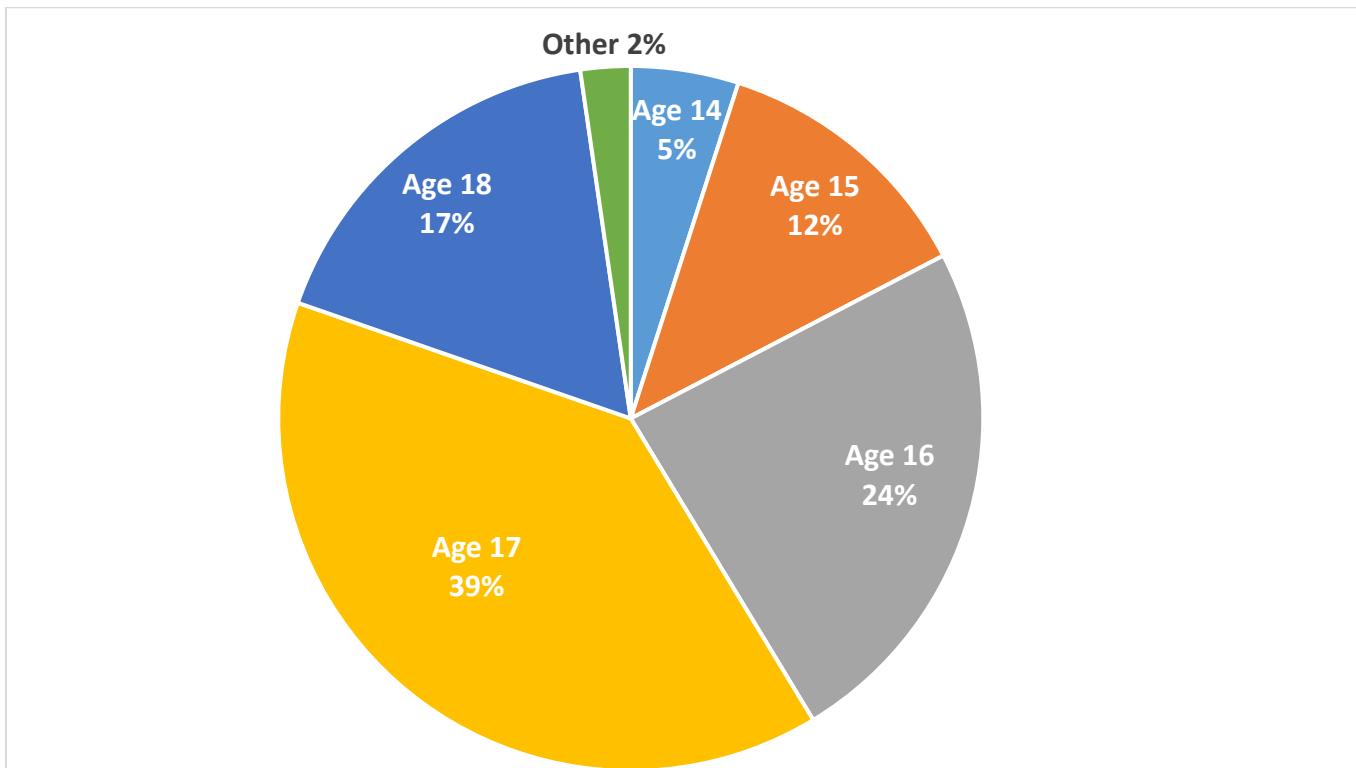
Figure 24- Demographic Breakdown, Three-year Trend

| | AY 18-19 | AY 19-20 | AY 20-21 | AY 18-19 | AY 19-20 | AY 20-21 |
|---------------------------------------|----------|----------|----------|----------|----------|----------|
| Race/Ethnicity: | | | | | | |
| Students of Color | 10,737 | 13,079 | 12,394 | 35.7% | 37.4% | 37.4% |
| Non-Students of Color | 19,311 | 21,910 | 20,718 | 64.3% | 62.6% | 62.6% |
| First-Generation Status: | | | | | | |
| First-Generation | 12,777 | 13,494 | 11,777 | 42.5% | 38.6% | 35.6% |
| Not First-Generation | 17,271 | 21,495 | 21,335 | 57.5% | 61.4% | 64.4% |
| Pell Eligibility: | | | | | | |
| Pell Eligible | 363 | 324 | 286 | 1.2% | 0.9% | 0.9% |
| Not Pell Eligible & Didn't File FAFSA | 29,685 | 34,665 | 32,826 | 98.8% | 99.1% | 99.1% |

Figure 25 - Number and Percentage of Demographic Characteristics by College: AY 2020-2021

| College | Students of Color | Percent of Students of Color | First-Generation | Percent of First-Generation | Pell Eligible | Pct. Pell Eligible |
|---------|-------------------|------------------------------|------------------|-----------------------------|---------------|--------------------|
| ACC | 1,870 | 24.8% | 1,331 | 17.7% | 6 | 0.1% |
| CCA | 2,988 | 60.8% | 2,519 | 51.3% | 42 | 0.9% |
| CCD | 991 | 63.9% | 865 | 55.8% | 46 | 3.0% |
| CNCC | 80 | 18.9% | 197 | 46.6% | 3 | 0.7% |
| FRCC | 2,789 | 34.0% | 2,618 | 32.0% | 64 | 0.8% |
| LCC | 142 | 44.7% | 182 | 57.2% | 16 | 5.0% |
| MCC | 250 | 34.3% | 381 | 52.3% | 5 | 0.7% |
| NJC | 80 | 20.3% | 180 | 45.7% | 2 | 0.5% |
| OC | 243 | 47.7% | 283 | 55.6% | 2 | 0.4% |
| PCC | 863 | 38.3% | 1,101 | 48.8% | 28 | 1.2% |
| PPCC | 1,155 | 35.6% | 1,160 | 35.8% | 50 | 1.5% |
| RRCC | 677 | 27.8% | 697 | 28.6% | 21 | 0.9% |
| TSC | 266 | 42.7% | 263 | 42.2% | 1 | 0.2% |

Figure 26 - High School Students by Age: AY 2020-2021



CREDENTIALS EARNED

Overall, 2,224 high school students earned a credential in 2020-2021 (Figure 28), and a total of 2,644 awards were granted (Figure 27). Total number of students receiving a credential decreased 2.3 percent from AY 2019-2020. Of all awards granted, 79.3 percent of them were certificates and the majority of those certificates were one-year awards (Figure 29). Even though only 2.3 percent of the credentials earned were AAS degrees, it's worth noting that the number of recipients increased by almost 35 percent over last year. In AY 2020-2021, the proportion of total high school students who earned a credential was 6.7 percent, which was slightly higher (0.2 percentage point) than AY 2019-2020.

Figures 30.1 and 30.2 provide number of credentials awarded and total headcount by college. In AY 2020-2021, almost 40% of the students who received a credential were from Front Range Community College, which accounts for 42 percent of total credentials awarded. In the same academic year (Figure 31.1), white students received the highest number of credentials (1,530, 57.9%), followed by Hispanic students (676, 25.6%). Students of color received 34.9 percent (922) of the total credentials in AY 2020-2021, first-generation students received 38.8 percent (1,025) of the credentials, and male students received 47.2 percent (1,249) of the credentials (Figure 31.2). Compared to their respective population proportions, a higher percentage of white students (Population: 54.8% vs. Credentials Earned: 57.9%), first-generation students (Population: 35.6% vs. Credentials Earned: 38.8%), and male students (Population: 44.3% vs. Credentials Earned: 47.2%) received a credential. On the other hand, a smaller proportion of Black or African American students (Population: 3.5% vs. Credentials Earned: 1.7%) received a credential.

Figure 27 - Number of Credentials Awarded to High School Students

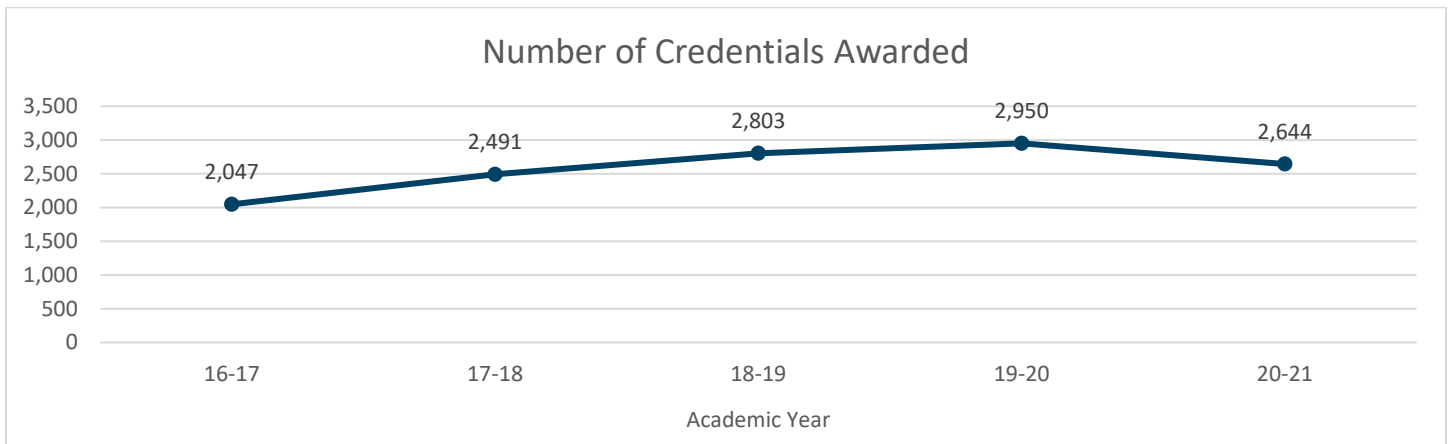


Figure 28 - Total Headcount of HS Students Receiving a Credential

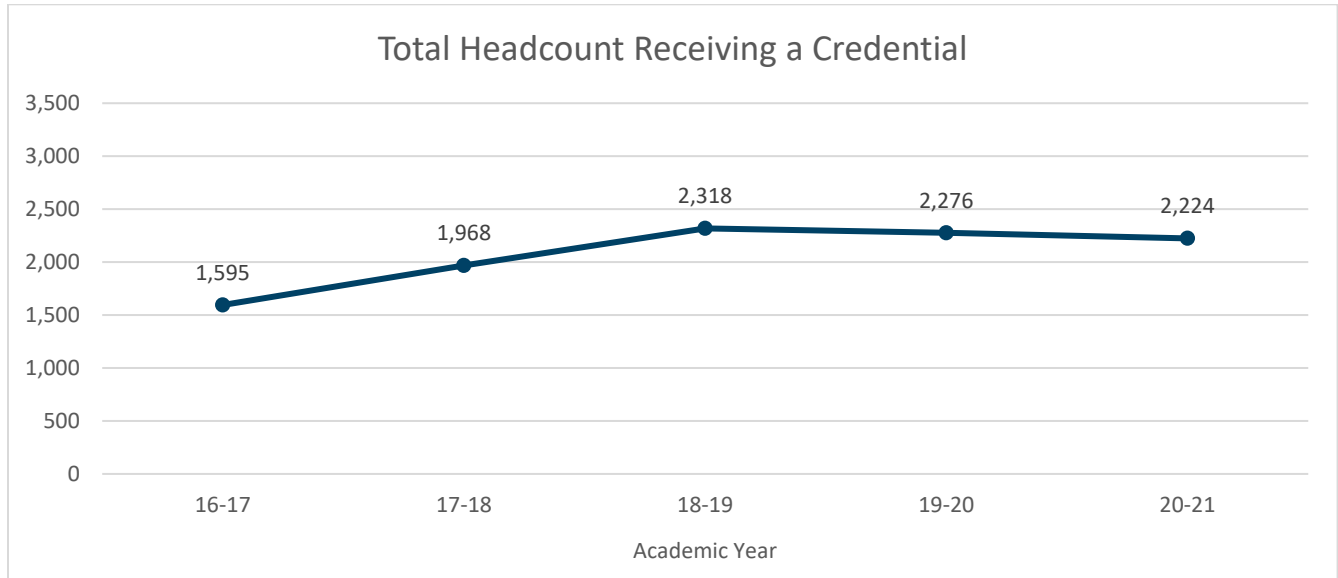


Figure 29 - Number and Type of Credentials Earned by High School Students

| Award Type | 19-20 Awards | 20-21 Awards | Percent of all Awards Granted | Change from 19-20 |
|------------------------------|--------------|--------------|-------------------------------|-------------------|
| 1-year certificate | 2,377 | 2,030 | 76.8% | -14.6% |
| 2-year certificate | 74 | 67 | 2.5% | -9.5% |
| Total Certificates | 2,451 | 2,097 | 79.3% | -14.4% |
| Associate of Applied Science | 46 | 62 | 2.3% | 34.8% |
| Associate of Arts | 240 | 253 | 9.6% | 5.4% |
| Associate of Science | 118 | 146 | 5.5% | 23.7% |
| Associate of General Studies | 95 | 86 | 3.3% | -9.5% |
| Total Degrees | 499 | 547 | 20.7% | 9.6% |
| Total Awards | 2,950 | 2,644 | 100.0% | -10.4% |

Figure 30.1 - Number of Credentials Awarded by College

| Number of Credentials Awarded | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|
| ACC | 117 | 211 | 274 | 187 | 194 |
| CCA | 26 | 40 | 27 | 34 | 50 |
| CCD | 34 | 70 | 81 | 68 | 67 |
| CNCC | 32 | 24 | 30 | 20 | 13 |
| FRCC | 703 | 761 | 776 | 1,067 | 1,105 |
| LCC | 22 | 48 | 30 | 37 | 37 |
| MCC | 87 | 89 | 46 | 30 | 67 |
| NJC | 2 | 3 | 11 | 10 | 29 |
| OC | 32 | 28 | 31 | 14 | 35 |
| PCC | 136 | 251 | 237 | 271 | 225 |
| PPCC | 220 | 292 | 487 | 468 | 345 |
| RRCC | 581 | 620 | 721 | 697 | 445 |
| TSC | 55 | 54 | 52 | 47 | 32 |
| Total | 2,047 | 2,491 | 2,803 | 2,950 | 2,644 |

Figure 30.2 - Total Headcount of HS Students Receiving a Credential: College Breakdown

| Total Headcount Receiving a Credential | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|----------------------------------------|--------------|--------------|--------------|--------------|--------------|
| ACC | 115 | 206 | 268 | 185 | 187 |
| CCA | 26 | 40 | 27 | 34 | 50 |
| CCD | 34 | 70 | 80 | 64 | 66 |
| CNCC | 31 | 23 | 29 | 16 | 13 |
| FRCC | 465 | 484 | 600 | 743 | 880 |
| LCC | 21 | 37 | 28 | 33 | 35 |
| MCC | 71 | 65 | 37 | 25 | 46 |
| NJC | 2 | 3 | 8 | 8 | 20 |
| OC | 28 | 28 | 31 | 14 | 35 |
| PCC | 119 | 212 | 216 | 208 | 185 |
| PPCC | 189 | 252 | 368 | 336 | 280 |
| RRCC | 452 | 508 | 582 | 569 | 395 |
| TSC | 42 | 40 | 44 | 41 | 32 |
| Total | 1,595 | 1,968 | 2,318 | 2,276 | 2,224 |

Figure 31.1 - Number of Credentials Awarded by College and by Race/Ethnicity: AY 2020-2021

| Colleges | American Indian or Alaskan Native | Asian | Black or African American | Hispanic | Multiple races | Native Hawaiian and Other Pacific Islander | Non-Resident Alien (Int'l.) | Unknown | White | Students of Color |
|-------------|-----------------------------------|-----------|---------------------------|------------|----------------|--------------------------------------------|-----------------------------|------------|--------------|-------------------|
| ACC | 1 | 5 | 3 | 24 | 6 | | 2 | 15 | 138 | 39 |
| CCA | | 3 | 5 | 16 | 2 | | 2 | 10 | 12 | 26 |
| CCD | | 4 | 4 | 37 | | | 15 | 1 | 6 | 45 |
| CNCC | 1 | | | 3 | | | | 1 | 8 | 4 |
| FRCC | 3 | 24 | 8 | 295 | 37 | 4 | 8 | 76 | 650 | 371 |
| LCC | | | | 18 | 2 | | 1 | | 16 | 20 |
| MCC | | | | 30 | 2 | | 2 | | 33 | 32 |
| NJC | | | | 1 | | | | 4 | 24 | 1 |
| OC | | | | 23 | | | | 1 | 11 | 23 |
| PCC | 5 | 2 | 2 | 77 | 7 | | 1 | 3 | 128 | 93 |
| PPCC | | 18 | 21 | 61 | 19 | | 2 | 12 | 212 | 119 |
| RRCC | 3 | 23 | 2 | 79 | 26 | 2 | | 29 | 281 | 135 |
| TSC | | | | 12 | 2 | | | 7 | 11 | 14 |
| CCCS | 13 | 79 | 45 | 676 | 103 | 6 | 33 | 159 | 1,530 | 922 |

Figure 31.2 - Number of Credentials Awarded by College and by Demographic: AY 2020-2021

| Colleges | All Credentials | Students of Color | Non-Students of Color | First-Generation | Not First Generation | Male | Female | Pell Eligible |
|-------------|-----------------|-------------------|-----------------------|------------------|----------------------|--------------|--------------|---------------|
| ACC | 194 | 39 | 138 | 62 | 132 | 52 | 141 | 3 |
| CCA | 50 | 26 | 12 | 24 | 26 | 14 | 36 | 5 |
| CCD | 67 | 45 | 6 | 49 | 18 | 14 | 53 | 7 |
| CNCC | 13 | 4 | 8 | 9 | 4 | 1 | 12 | |
| FRCC | 1105 | 371 | 650 | 405 | 700 | 609 | 496 | 7 |
| LCC | 37 | 20 | 16 | 24 | 13 | 22 | 15 | 4 |
| MCC | 67 | 32 | 33 | 37 | 30 | 20 | 47 | 1 |
| NJC | 29 | 1 | 24 | 15 | 14 | 23 | 6 | |
| OC | 35 | 23 | 11 | 27 | 8 | 5 | 30 | |
| PCC | 225 | 93 | 128 | 116 | 109 | 114 | 111 | 4 |
| PPCC | 345 | 119 | 212 | 104 | 241 | 139 | 206 | 15 |
| RRCC | 445 | 135 | 281 | 137 | 308 | 232 | 213 | 4 |
| TSC | 32 | 14 | 11 | 16 | 16 | 4 | 28 | |
| CCCS | 2,644 | 922 | 1,530 | 1,025 | 1,619 | 1,249 | 1,394 | 50 |

CREDIT HOURS ATTEMPTED

System-wide, students carried an average of 8.9 credit hours over the course of the AY 2020-2021 (Figure 32). Lamar Community College's average of 13.7 credit hours per student was the highest among the thirteen colleges. The proportion of high school credit hours to total credit hours was highest at Morgan Community College, at 54.9 percent; Arapahoe Community College, Community College of Aurora, Lamar Community College, and Morgan Community College all had rates that exceeded 35 percent. Front Range Community College high school students took the largest number of credit hours, followed by Pikes Peak Community College and then by Arapahoe Community College.

Figure 32 - CCCS High School Credits Attempted and Average Credits by College: AY 2020-2021

| College | HS Credit Hours | All CCCS Credit Hours | HS as of Total | Average Credit Hours Per Student |
|-------------------|-----------------|-----------------------|----------------|----------------------------------|
| ACC | 52,993 | 126,931 | 41.7% | 7.0 |
| CCA | 42,078 | 80,545 | 52.2% | 8.6 |
| CCD | 13,166 | 82,520 | 16.0% | 8.5 |
| CNCC | 4,095 | 12,359 | 33.1% | 9.7 |
| FRCC | 64,848 | 211,758 | 30.6% | 7.9 |
| LCC | 4,363 | 8,996 | 48.5% | 13.7 |
| MCC | 8,261 | 15,057 | 54.9% | 11.3 |
| NJC | 4,513 | 15,371 | 29.4% | 11.5 |
| OC | 4,200 | 15,343 | 27.4% | 8.6 |
| PCC | 22,451 | 69,686 | 32.2% | 10.0 |
| PPCC | 43,230 | 152,531 | 28.3% | 13.4 |
| RRCC | 21,998 | 78,723 | 27.9% | 9.0 |
| TSC | 5,346 | 19,637 | 27.2% | 8.6 |
| CCCS Total | 295,145 | 951,546 | 31.0% | 8.9 |

ACADEMIC STUDIES AND OUTCOMES

The course pass rates for all high school students across the Colorado Community College System have consistently been around 90 percent for the last five years (Figure 33). When broken down by program type across five years (Figure 34), students in the concurrent program had a higher pass rate (91.3%) than students in ASCENT (85.2%) or other programs (85.1%). In examining the course pass rate, students of color, first-generation college students, and male students had a lower pass rate than their counterparts (Figure 35).

Figure 33 - System Wide Course Pass Rates for High School Students, AY 2016-2017 through 2020-2021

| | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|--------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Number of Courses Passed | 127,250 | 107,307 | 155,784 | 175,692 | 169,188 |
| Total Courses | 140,593 | 118,641 | 172,642 | 195,265 | 188,849 |
| Success Rate | 90.5% | 90.4% | 90.2% | 90.0% | 89.6% |

Figure 34 - High School Student Course Pass Rate by Program Type – AY 2015-2016 through 2020-2021

| | Concurrent | ASCENT | Other HS Concurrent |
|--------------------------|-------------------|---------------|--------------------------------|
| Number of Courses Passed | 697,251 | 22,364 | 119,967 |
| Total Courses | 764,106 | 26,244 | 140,894 |
| Success Rate | 91.3% | 85.2% | 85.1% |

Figure 35 - HS Course Pass Rates by Demographic Group by College: AY 2020-2021

| Colleges | Students of Color | Non-Students of Color | First-Generation | Not First Generation | Male | Female | Pell Eligible |
|-------------------|-------------------|-----------------------|------------------|----------------------|--------------|--------------|---------------|
| ACC | 92.6% | 93.1% | 90.6% | 93.5% | 90.9% | 94.5% | 94.9% |
| CCA | 88.5% | 90.8% | 87.5% | 91.5% | 87.4% | 90.6% | 86.7% |
| CCD | 75.2% | 82.5% | 72.5% | 85.0% | 75.4% | 79.1% | 68.3% |
| CNCC | 94.8% | 93.4% | 92.3% | 94.8% | 92.2% | 94.7% | 100.0% |
| FRCC | 85.5% | 91.1% | 84.0% | 91.8% | 87.8% | 90.6% | 80.7% |
| LCC | 95.5% | 96.6% | 95.8% | 96.6% | 94.1% | 97.2% | 95.8% |
| MCC | 90.2% | 93.4% | 91.8% | 92.7% | 91.2% | 92.8% | 88.5% |
| NJC | 79.9% | 94.0% | 88.9% | 93.6% | 93.2% | 90.3% | 100.0% |
| OC | 87.4% | 88.2% | 84.6% | 91.6% | 83.8% | 90.3% | 100.0% |
| PCC | 86.9% | 89.9% | 86.8% | 90.7% | 87.3% | 89.9% | 82.2% |
| PPCC | 82.3% | 86.8% | 78.8% | 88.9% | 83.5% | 86.7% | 82.2% |
| RRCC | 94.2% | 94.3% | 92.9% | 94.9% | 92.9% | 95.3% | 85.0% |
| TSC | 93.4% | 94.3% | 90.4% | 96.5% | 95.4% | 92.9% | 100.0% |
| CCCS Total | 87.1% | 91.1% | 85.7% | 92.0% | 88.0% | 90.8% | 82.8% |

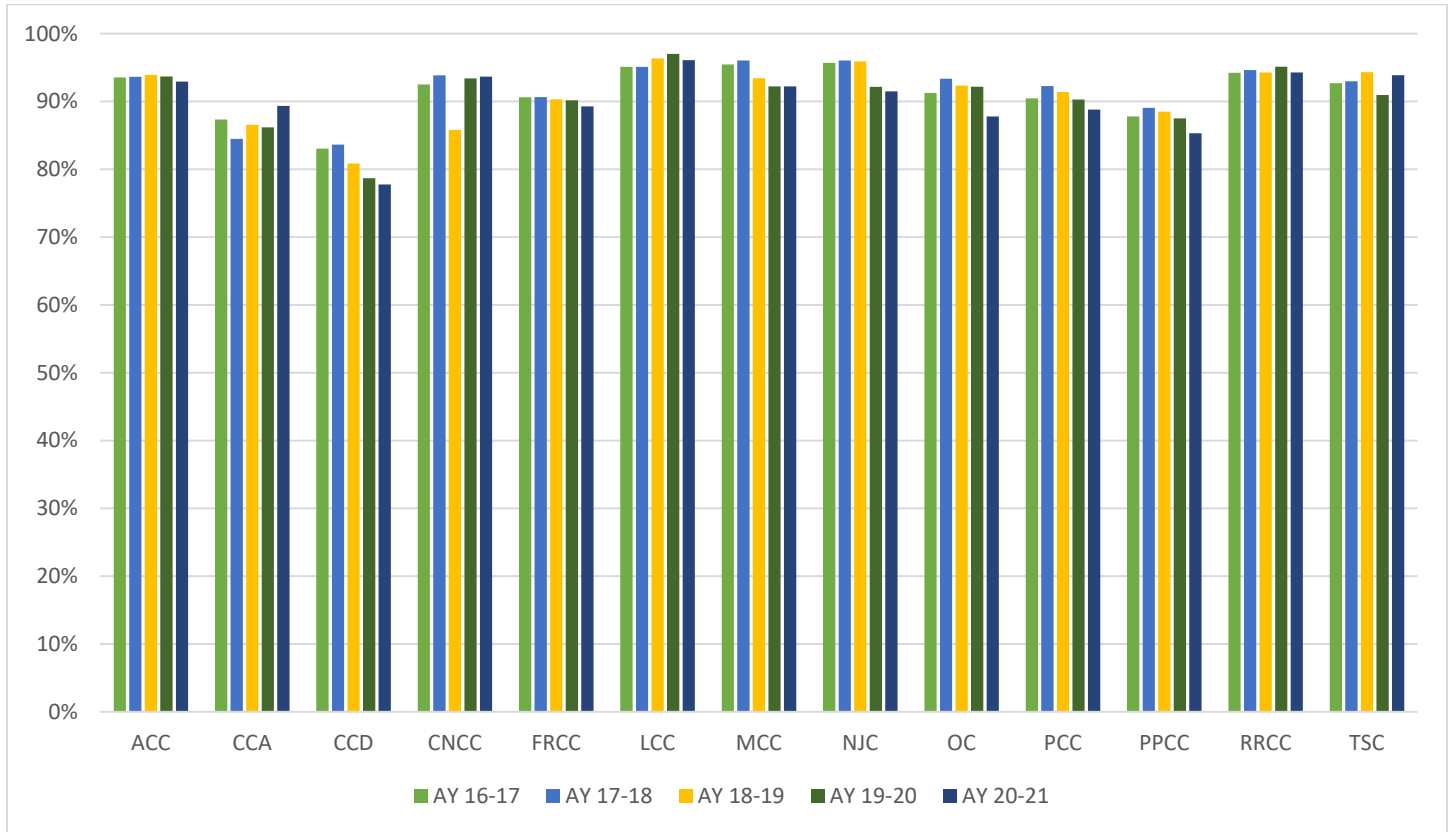
COMPARISON OF COURSE PASS RATES BY COLLEGE

Course pass rates at seven out of thirteen CCCS colleges met or exceeded the overall system level of 90 percent in 2020-21, while six colleges had a pass rate of lower than 90 percent (Figures 36 and 37). Lamar Community College had the highest course pass rate at 96 percent, while Community College of Denver registered a 77.8 percent pass rate, similar to the preceding four-year numbers.

Figure 36 - Course Pass Rates of HS Students by College

| Colleges | AY 16-17 | AY 17-18 | AY 18-19 | AY 19-20 | AY 20-21 |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| ACC | 93.5% | 93.6% | 93.9% | 93.7% | 92.9% |
| CCA | 87.3% | 84.5% | 86.6% | 86.2% | 89.3% |
| CCD | 83.0% | 83.6% | 80.9% | 78.7% | 77.8% |
| CNCC | 92.5% | 93.8% | 85.8% | 93.4% | 93.7% |
| FRCC | 90.6% | 90.6% | 90.3% | 90.2% | 89.3% |
| LCC | 95.1% | 95.1% | 96.4% | 97.0% | 96.1% |
| MCC | 95.5% | 96.0% | 93.4% | 92.2% | 92.2% |
| NJC | 95.7% | 96.0% | 95.9% | 92.2% | 91.5% |
| OC | 91.3% | 93.4% | 92.3% | 92.2% | 87.8% |
| PCC | 90.5% | 92.3% | 91.4% | 90.3% | 88.8% |
| PPCC | 87.8% | 89.1% | 88.5% | 87.5% | 85.3% |
| RRCC | 94.2% | 94.6% | 94.3% | 95.1% | 94.3% |
| TSC | 92.7% | 93.0% | 94.3% | 91.0% | 93.9% |
| CCCS Total | 90.5% | 90.4% | 90.2% | 90.0% | 89.6% |

Figure 37 - Comparison of Pass Rates by College



CREDITS EARNED AND TUITION SAVED

High school students earned 268,582 credits in 2020-2021, which was 92 percent of the 291,539 credit hours attempted. As with the number of course enrollments, the vast majority of credit hours were earned by concurrent enrollment students. In order to calculate cost savings for all high school students who took college classes in 2020-2021, we must consider ASCENT, Early College and P-Tech students as well as Concurrent Enrollment. These programs afford students similar opportunities to earn tuition-free college credit while in high school. With resident tuition of \$148.9 (after COF) per credit hour in 2020-2021, concurrent enrollment, Early College, ASCENT and P-Tech students and their families potentially saved \$39.2 million in college tuition costs for earned credit hours, which has only decreased 3.2% from AY 2019-2020 (Figure 38).

Figure 38 - Tuition Saved by Academic Year

| | AY 18-19 | AY 19-20 | AY 20-21 |
|--------------------------------------------|---------------------|---------------------|---------------------|
| Concurrent Enrollment & ASCENT: | | | |
| Attempted Credit Hours | 256,452 | 286,691 | 284,438 |
| Earned Credit Hours | 240,575 | 271,939 | 263,137 |
| Tuition (after COF) | \$148.9 | \$148.9 | \$148.9 |
| Tuition Saved | \$35,821,580 | \$40,491,717 | \$39,181,062 |



CAREER AND TECHNICAL EDUCATION

Career and technical education (CTE) accounted for 36 percent of high school course enrollments in 2020-21 (Figure 39). Success rates for students taking CTE courses, on average, was higher than the average for all high school students at 91.7 percent compared to 89.6. Note that Red Rocks Community College had a significantly higher percentage of CTE courses due to their extensive work with Warren Tech in Jeffco Public Schools. The top three CTE courses taken by high school students, system-wide in 2020-21, were Introduction to Business, Personal Finance, and Introduction to PC Applications (Figure 40).

Figure 39 - CTE Course Enrollments and Completions Rates by College

| College | AY 20-21 CTE Courses | All Courses Taken by HS Students | CTE as a Percent of all HS Courses | Success Rate for CTE Courses |
|-------------------|----------------------|----------------------------------|------------------------------------|------------------------------|
| ACC | 16,155 | 35,202 | 45.9% | 93.3% |
| CCA | 3,040 | 26,567 | 11.4% | 91.2% |
| CCD | 1,369 | 8,163 | 16.8% | 82.8% |
| CNCC | 608 | 2,587 | 23.5% | 95.2% |
| FRCC | 15,715 | 41,588 | 37.8% | 90.5% |
| LCC | 630 | 2,791 | 22.6% | 96.8% |
| MCC | 1,636 | 5,127 | 31.9% | 93.0% |
| NJC | 702 | 2,934 | 23.9% | 90.3% |
| OC | 788 | 2,811 | 28.0% | 87.1% |
| PCC | 5,956 | 14,962 | 39.8% | 92.3% |
| PPCC | 10,533 | 27,501 | 38.3% | 86.9% |
| RRCC | 9,777 | 15,124 | 64.6% | 96.8% |
| TSC | 1,170 | 3,492 | 33.5% | 95.7% |
| CCCS Total | 68,079 | 188,849 | 36.0% | 91.7% |

Figure 40 - Top CTE Courses Taken by High School Students: AY 2020-2021

| AY 20-21 Course Total | Course | Course Description |
|------------------------------|---------------|--------------------------------|
| 4,303 | BUS115 | Introduction to Business |
| 3,104 | BUS116 | Personal Finance |
| 1,915 | CIS118 | Intro PC Applications |
| 1,574 | MAR216 | Principles of Marketing |
| 1,557 | CRJ110 | Intro to Criminal Justice: SS3 |
| 1,243 | NUA101 | Nurse Aide Health Care Skills |
| 1,191 | NUA170 | Nurse Aide Clinical Experience |
| 927 | HWE100 | Human Nutrition |
| 824 | ASE102 | Intro to the Automotive Shop |
| 622 | CSC119 | Intro. to Programming (lang) |

MATRICULATION RATES TO CCCS COLLEGES

To ascertain the rate at which high school students later matriculate to CCCS colleges after high school, a four-year cohort model was used to allow for progression through high school for students at varying grade levels (freshman through senior). Thus, the cohort used in the following matriculation rates included high school students enrolled in CCCS courses during AY 2016-2017. Students were counted as having matriculated if they enrolled as a non-high school student in a CCCS college at any point from 2016-2017 through spring 2021.

A total of 8,074 unique high school students from the 2016-2017 cohort subsequently enrolled at any CCCS colleges over the next four academic years; a matriculation rate of 31.7 percent (Figure 42). It is important to note that the total number of students who matriculated has increased over the last few years, but the percentage decreased slightly (Figure 43).

Figure 41 and Figure 42 display high school student matriculation rates by college. When arrayed by college, high school students matriculate after graduation to the same CCCS college where they earned credit within four years 25.4 percent of the time. However, they were more likely to matriculate to any school in the Colorado Community College System, as this occurs, within four years, 31.7 percent of the time.

There was a marked disparity between the five metro-area colleges and the other eight schools in regard to matriculation rates. Thirty-three percent of high school students attending non-metro colleges matriculated to the same college after high school compared to 22 percent attending the five Denver metro colleges, indicating that location could have a significant impact on high school students' likelihood to return as an undergraduate student. Pikes Peak Community College, in particular, had the smallest gap between same college matriculation rate (33.0%) and any college matriculation rate (34.9%).

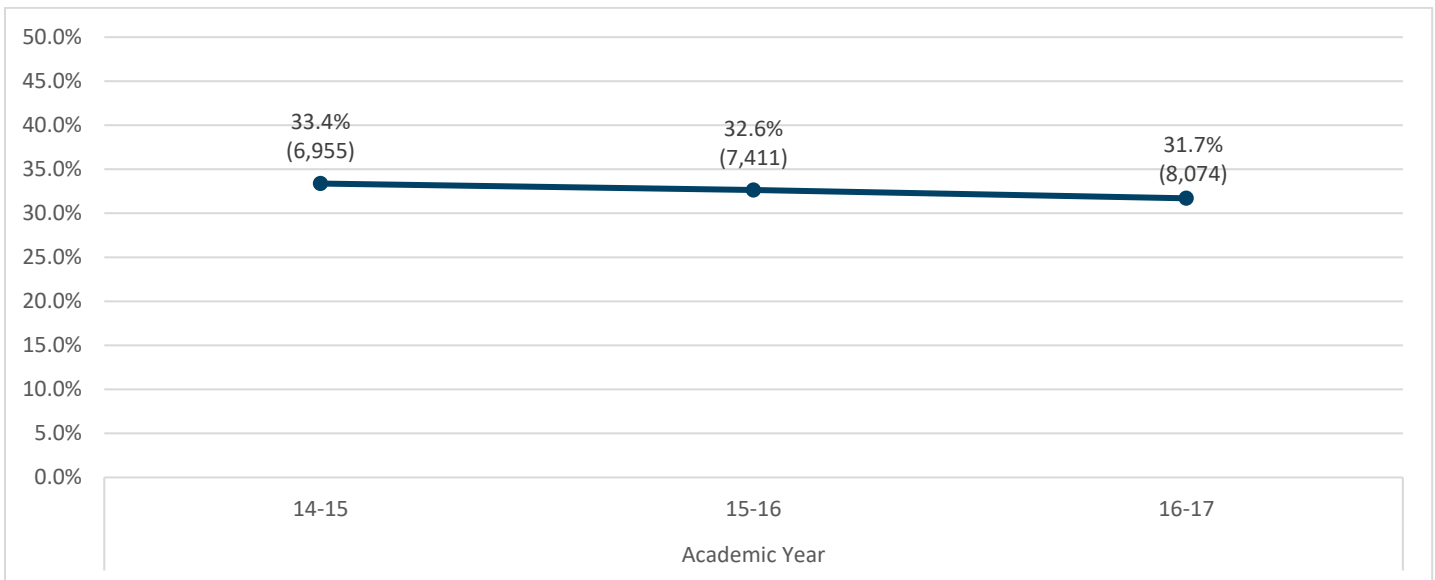
Figure 41 - High School Matriculation Rates at Same College within Four Academic Years, 2016-2017 HS Cohort

| College | Total HS Students 16-17 | Number of Students Matric. to Same CCCS College Within Four Years | Matriculation Rate |
|-------------------|-------------------------|-------------------------------------------------------------------|--------------------|
| ACC | 5,024 | 822 | 16.4% |
| CCA | 3,640 | 627 | 17.2% |
| CCD | 2,117 | 441 | 20.8% |
| CNCC | 462 | 110 | 23.8% |
| FRCC | 5,039 | 1,553 | 30.8% |
| LCC | 359 | 152 | 42.3% |
| MCC | 825 | 271 | 32.8% |
| NJC | 402 | 167 | 41.5% |
| OC | 511 | 198 | 38.7% |
| PCC | 1,731 | 516 | 29.8% |
| PPCC | 2,449 | 808 | 33.0% |
| RRCC | 2,107 | 562 | 26.7% |
| TSC | 778 | 247 | 31.7% |
| CCCS Total | 25,444 | 6,474 | 25.4% |

Figure 42 - High School Matriculation Rates at any CCCS College within Four Academic Years, 2016-2017 HS Cohort

| College | Total HS Students 16-17 | Number of Students Matriculated to any CCCS College Within Four Years | Matriculation Rate |
|-------------------|-------------------------|-----------------------------------------------------------------------|--------------------|
| ACC | 5,024 | 1,224 | 24.4% |
| CCA | 3,640 | 1,020 | 28.0% |
| CCD | 2,117 | 607 | 28.7% |
| CNCC | 462 | 129 | 27.9% |
| FRCC | 5,039 | 1,671 | 33.2% |
| LCC | 359 | 176 | 49.0% |
| MCC | 825 | 364 | 44.1% |
| NJC | 402 | 187 | 46.5% |
| OC | 511 | 237 | 46.4% |
| PCC | 1,731 | 589 | 34.0% |
| PPCC | 2,449 | 854 | 34.9% |
| RRCC | 2,107 | 728 | 34.6% |
| TSC | 778 | 288 | 37.0% |
| CCCS Total | 25,444 | 8,074 | 31.7% |

Figure 43 - Matriculation of HS Students to CCCS Colleges over Time



ENROLLMENT IN A FOUR-YEAR UNIVERSITY AND OVERALL MATRICULATION

Using the cohort model described above, we know that 31.7 percent of 2016-2017 students enroll at a CCCS college within four years after graduation. Additionally, 58.5 percent of those students go on to attend a four-year university (Figure 44.1). Combining those two groups of students, we now know that 75 percent of 2016-2017 CCCS high school students went on to pursue additional higher education opportunities at either a CCCS college or a four-year university, which was 1.3 percentage point decrease from 2015-2016 cohort. Of 25% of 2016-2017 students who didn't pursue additional higher education opportunities, 20.1% was employed between 2017 and 2021, with a total matriculation and employment rate of 95.1% (Figure 44.2). Figure 45 reflects that same information broken down by college, with Northeastern Junior College, Morgan Community College, Arapahoe Community College, and Trinidad State College logging the highest composite matriculation rates of over 80 percent. Matriculation and employment rate at nine out of thirteen colleges was over 95%.

Figure 44.1 - Overall Matriculation of CCCS High School Students within Four Years with Year-Over-Year Comparison

| Year Over Year Matriculation Comparison | High School Cohort | Matriculated at CCCS Institution | Matriculated to Four-Year School | Overall Matriculation (Either CCCS or Four-Year) | CCCS Matriculation Rate | Four-Year School Matriculation Rate | Overall Matriculation Rate |
|-----------------------------------------------------------------|--------------------|----------------------------------|----------------------------------|--------------------------------------------------|-------------------------|-------------------------------------|----------------------------|
| 2015-2016 CCCS High School Cohort (matriculated by 2020) | 22,704 | 7,411 | 13,133 | 17,311 | 32.6% | 57.8% | 76.2% |
| 2016-2017 CCCS High School Cohort (matriculated by 2021) | 25,444 | 8,074 | 14,875 | 19,074 | 31.7% | 58.5% | 75.0% |
| Y/Y Difference | 2,740 | 663 | 1,742 | 1,763 | -0.9 Pct. Point | 0.6 Pct. Point | -1.3 Pct. Point |
| Y/Y Perc. Increase | 12.1% | 8.9% | 13.3% | 10.2% | -2.8% | 1.1% | -1.7% |

Figure 44.2 - Overall Matriculation of CCCS High School Students with Most Recent Cohort Including Not Matriculated but Employed

| 2016-2017 CCCS High School Cohort | Matric. at CCCS Institution | Matric. to Four-Year School | Overall Matric. (Either CCCS or Four-Year) | Not Matric. but Employed | CCCS Matric. Rate | Four-Year School Matric. Rate | Overall Matric. Rate | Matric. and Employment Rate |
|-----------------------------------|-----------------------------|-----------------------------|--------------------------------------------|--------------------------|-------------------|-------------------------------|----------------------|-----------------------------|
| 25,444 | 8,074 | 14,875 | 19,074 | 5,127 | 31.7% | 58.5% | 75.0% | 95.1% |

Figure 45 - Overall Matriculation of CCCS High School Students within Four Years, By CCCS College

| College | Total 2016-2017 Cohort | Matric. to CCCS Institution | Matric. to Four-Year School | Overall Matric. (Either CCCS or Four-Year) | Not Matric. but Employed | CCCS Matric. Rate | Four-Year School Matric. Rate | Overall Matric. Rate (CCCS or Four-Year) | Matric. and Employment Rate |
|-------------|------------------------|-----------------------------|-----------------------------|--------------------------------------------|--------------------------|-------------------|-------------------------------|------------------------------------------|-----------------------------|
| ACC | 5,024 | 1,224 | 3,599 | 4,085 | 793 | 24.4% | 71.6% | 81.3% | 97.1% |
| CCA | 3,640 | 1,020 | 2,424 | 2,866 | 615 | 28.0% | 66.6% | 78.7% | 95.6% |
| CCD | 2,117 | 607 | 820 | 1,216 | 522 | 28.7% | 38.7% | 57.4% | 82.1% |
| CNCC | 462 | 129 | 273 | 340 | 92 | 27.9% | 59.1% | 73.6% | 93.5% |
| FRCC | 5,039 | 1,671 | 2,971 | 3,799 | 1,091 | 33.2% | 59.0% | 75.4% | 97.0% |
| LCC | 359 | 176 | 167 | 279 | 61 | 49.0% | 46.5% | 77.7% | 94.7% |
| MCC | 825 | 364 | 544 | 707 | 99 | 44.1% | 65.9% | 85.7% | 97.7% |
| NJC | 402 | 187 | 246 | 343 | 46 | 46.5% | 61.2% | 85.3% | 96.8% |
| OC | 511 | 237 | 229 | 374 | 101 | 46.4% | 44.8% | 73.2% | 93.0% |
| PCC | 1,731 | 589 | 813 | 1,181 | 472 | 34.0% | 47.0% | 68.2% | 95.5% |
| PPCC | 2,449 | 854 | 1,176 | 1,700 | 633 | 34.9% | 48.0% | 69.4% | 95.3% |
| RRCC | 2,107 | 728 | 1,107 | 1,544 | 488 | 34.6% | 52.5% | 73.3% | 96.4% |
| TSC | 778 | 288 | 506 | 640 | 114 | 37.0% | 65.0% | 82.3% | 96.9% |
| CCCS | 25,444 | 8,074 | 14,875 | 19,074 | 5,127 | 31.7% | 58.5% | 75.0% | 95.1% |

In examining the demographics of those students who matriculated to either a CCCS college or a four-year university, first-generation college students and students of color were more likely to enroll in a CCCS college (Figure 46). Additionally, in Figure 47, Non-Resident Alien, American Indian, Native Hawaiian and other Pacific Islander, and Hispanic students were more likely to attend a CCCS college. On the other hand, Asian students were more likely to matriculate to a four-year university. Colorado State University (13.3%) was the most popular 4-year college to which students matriculated (Figure 48), followed by Metropolitan State University of Denver (10.9%) and University of Colorado Boulder (10.4%).

Figure 46 - Overall Matriculation within Four Years by Demographic Groupings: AY 2016-2017 High School Cohort

| Demographic Grouping | % Matric. to CCCS within Four-Years | % Matric. to Four-Year School | Overall Matric. Rate (CCCS or Four-Year School) | Matric. and Employment Rate |
|-----------------------|-------------------------------------|-------------------------------|-------------------------------------------------|-----------------------------|
| Students of Color | 34.2% | 52.9% | 72.1% | 94.8% |
| Non-Students of Color | 30.4% | 61.6% | 76.6% | 95.3% |
| First-Generation | 34.9% | 44.6% | 66.0% | 93.1% |
| Not First-Generation | 29.0% | 70.6% | 82.8% | 96.9% |

Figure 47 - Overall Matriculation of CCCS High School Students within Four Years by Race/Ethnicity: AY 2016-2017 High School Cohort

| Race/Ethnicity | 2016-2017 Cohort | Matric. to CCCS Institution | Matric. to Four-Year School | Overall Matric. (Either CCCS or Four-Year) | Not Matric. but Employed | CCCS Matric. Rate | Four-Year School Matric. Rate | Overall Matric. Rate (CCCS or Four-Year) | Matric. and Employment Rate |
|--------------------------------------------|------------------|-----------------------------|-----------------------------|--------------------------------------------|--------------------------|-------------------|-------------------------------|------------------------------------------|-----------------------------|
| American Indian or Alaskan Native | 135 | 46 | 60 | 88 | 43 | 34.1% | 44.4% | 65.2% | 97.0% |
| Asian | 903 | 250 | 668 | 762 | 104 | 27.7% | 74.0% | 84.4% | 95.9% |
| Black or African American | 882 | 251 | 527 | 657 | 178 | 28.5% | 59.8% | 74.5% | 94.7% |
| Hispanic | 6,193 | 2,265 | 2,955 | 4,306 | 1,538 | 36.6% | 47.7% | 69.5% | 94.4% |
| Multiple races | 1,005 | 302 | 617 | 764 | 200 | 30.0% | 61.4% | 76.0% | 95.9% |
| Native Hawaiian and Other Pacific Islander | 62 | 21 | 32 | 40 | 19 | 33.9% | 51.6% | 64.5% | 95.2% |
| Non-Resident Alien (International) | 588 | 193 | 177 | 307 | 83 | 32.8% | 30.1% | 52.2% | 66.3% |
| Unknown | 1,940 | 444 | 1,238 | 1,455 | 359 | 22.9% | 63.8% | 75.0% | 93.5% |
| White | 13,736 | 4,302 | 8,601 | 10,695 | 2,603 | 31.3% | 62.6% | 77.9% | 96.8% |
| CCCS Total | 25,444 | 8,074 | 14,875 | 19,074 | 5,127 | 31.7% | 58.5% | 75.0% | 95.1% |

Figure 48 - Top Four-Year Destinations of CCCS High School Students

| Four-Year College Destination | Number of Students Matriculating | Percent of All Four-Year Matriculation |
|-----------------------------------------|----------------------------------|----------------------------------------|
| COLORADO STATE UNIVERSITY | 1,972 | 13.3% |
| METROPOLITAN STATE UNIVERSITY OF DENVER | 1,615 | 10.9% |
| UNIVERSITY OF COLORADO BOULDER | 1,554 | 10.4% |
| UNIVERSITY OF COLORADO DENVER | 1,342 | 9.0% |
| UNIVERSITY OF COLORADO COLORADO SPRINGS | 895 | 6.0% |
| UNIVERSITY OF NORTHERN COLORADO | 812 | 5.5% |
| COLORADO MESA UNIVERSITY | 439 | 3.0% |
| COLORADO SCHOOL OF MINES | 384 | 2.6% |
| COLORADO STATE UNIVERSITY - PUEBLO | 366 | 2.5% |
| UNIVERSITY OF WYOMING | 256 | 1.7% |

EFFECT OF CONCURRENT ENROLLMENT ON ACADEMIC SUCCESS MEASURES

To examine the effect concurrent enrollment has on student outcomes after high school, retention and graduation rates are presented below. Outcomes are separated into groups based on whether or not students participated in a high school concurrent enrollment program prior to matriculating to a CCCS college as a non-high school student.

Retention rates are measured on a fall-to-fall basis and adjusted for graduations, and graduation rates are based on 150% time, or graduation within three academic years. For both retention and graduation, the most recent cohorts available are presented: the fall 2019 cohort for retention, and the fall 2018 cohort for graduation.

Students were more likely to both retain and graduate based on past participation in a concurrent enrollment program. Students who had previously enrolled at a CCCS college while still in high school retained 54.1 percent of the time, compared with 45.1 percent for those that never dual enrolled while in high school (Figure 49.1). Even though both groups' retention rates decreased from last year (Figure 49.2), retention rate of students with concurrent enrollment didn't decrease as much as their counterparts (-3.6 percentage points vs. -4.2 percentage points). Students who participated in a concurrent enrollment program at Northeastern Junior College and Lamar Community College had the highest retention rate at 71.3 and 66.0 percent respectively (Figure 50). In terms of graduation rate, students with previous concurrent enrollment graduated 32 percent of the time, compared with 22.3 percent for students with no concurrent enrollment (Figure 51.1). Compared to last year, graduation rate of students with concurrent enrollment decreased three percentage points while their counterpart's graduation rate increased 2.7 percentage points (Figure 51.2). Three schools with students participating in a concurrent enrollment program saw over half of those students graduate within three academic years: Morgan Community College, Trinidad State College, and Northeastern Junior College (Figure 52).

Figure 49.1 - Fall-to-Fall Retention Rates by Past HS Concurrent Enrollment

| Past High School Dual Enrollment | Fall 2019 Cohort | Retained Fall 2020 | Fall-to-Fall Retention Rate |
|-----------------------------------|------------------|--------------------|-----------------------------|
| Previous Concurrent Enrollment | 2,392 | 1,293 | 54.1% |
| No Previous Concurrent Enrollment | 10,488 | 4,730 | 45.1% |
| Total | 12,880 | 6,023 | 46.8% |

Figure 49.2 - Fall-to-Fall Retention Rates by Past HS Concurrent Enrollment – Year-Over-Year Comparison

| Past High School Dual Enrollment | Fall 2018 to Fall 2019 Retention Rate | Fall 2019 to Fall 2020 Retention Rate | Y/Y Pct. Pt. Diff |
|-----------------------------------|---------------------------------------|---------------------------------------|-------------------|
| Previous Concurrent Enrollment | 57.7% | 54.1% | -3.6 |
| No Previous Concurrent Enrollment | 49.3% | 45.1% | -4.2 |
| Total | 50.7% | 46.8% | -4.0 |

Figure 50 - Fall-to-Fall Retention Rates by Past HS Concurrent Enrollment and by College

| College | Fall 2019 Cohort | Previous Concurrent Enrollment Retention Rate | No Previous Concurrent Enrollment Retention Rate |
|-------------------|------------------|-----------------------------------------------|--------------------------------------------------|
| ACC | 1,164 | 59.8% | 46.3% |
| CCA | 1,171 | 48.7% | 45.2% |
| CCD | 1,587 | 44.6% | 40.5% |
| CNCC | 203 | 56.1% | 55.6% |
| FRCC | 2,763 | 53.1% | 47.4% |
| LCC | 213 | 66.0% | 49.4% |
| MCC | 188 | 56.0% | 52.2% |
| NJC | 378 | 71.3% | 59.5% |
| OC | 247 | 50.7% | 44.9% |
| PCC | 801 | 55.6% | 45.3% |
| PPCC | 2,632 | 56.3% | 40.3% |
| RRCC | 1,196 | 46.9% | 44.6% |
| TSC | 337 | 64.6% | 60.5% |
| CCCS Total | 12,880 | 54.1% | 45.1% |

Figure 51.1 - Graduation Rates by Past HS Concurrent Enrollment

| Past High School Dual Enrollment | Fall 2018 Cohort | Graduated by Summer 2021 | Graduation Rate |
|-----------------------------------|------------------|--------------------------|-----------------|
| Previous Concurrent Enrollment | 2,004 | 641 | 32.0% |
| No Previous Concurrent Enrollment | 9,983 | 2,227 | 22.3% |
| Total | 11,987 | 2,868 | 23.9% |

Figure 51.2 - Graduation Rates by Past HS Concurrent Enrollment – Year-Over-Year Comparison

| Past High School Dual Enrollment | Fall 2017 Cohort -- Graduated by Summer 2020 Graduation Rate | Fall 2018 Cohort -- Graduated by Summer 2021 Graduation Rate | Y/Y Pct. Pt. Diff |
|-----------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------|
| Previous Concurrent Enrollment | 35.0% | 32.0% | -3.0% |
| No Previous Concurrent Enrollment | 19.6% | 22.3% | 2.7% |
| Total | 22.3% | 23.9% | 1.6% |

Figure 52 - Graduation Rates by Past HS Concurrent Enrollment and by College

| College | Fall 2018 Cohort | Previous Concurrent Enrollment Graduation Rate | No Previous Concurrent Enrollment Graduation Rate |
|-------------------|------------------|------------------------------------------------|---------------------------------------------------|
| ACC | 1,059 | 24.7% | 15.2% |
| CCA | 978 | 31.2% | 19.4% |
| CCD | 1,589 | 18.2% | 15.8% |
| CNCC | 198 | 34.1% | 29.9% |
| FRCC | 2,536 | 30.4% | 24.1% |
| LCC | 161 | 42.4% | 30.5% |
| MCC | 189 | 57.1% | 33.6% |
| NJC | 413 | 60.8% | 47.0% |
| OC | 307 | 43.5% | 39.1% |
| PCC | 772 | 40.5% | 23.8% |
| PPCC | 2,206 | 29.3% | 16.4% |
| RRCC | 1,291 | 22.0% | 25.1% |
| TSC | 288 | 54.7% | 48.8% |
| CCCS Total | 11,987 | 32.0% | 22.3% |

MEDIAN TIME AND CREDITS TO DEGREE

To understand how long it takes students to complete an associate degree, median years to degree and median credits to degree were assessed. Similar to retention and graduation rates, students who received an associate degree were separated into two groups based on whether or not they participated in a high school concurrent enrollment program in or before the semester they graduated.

The methodology of calculating years to degree and credits to degree was adopted and modified from the Colorado Department of Higher Education’s (CDHE) ROI report. Students who graduated with an associate degree in the most recent three academic years (AY 2018/2019 – AY 2020/2021) were used for both time to degree and credits to degree calculation. Reverse transfers were excluded. One academic year was divided into two terms, with summer and fall semesters in one term (0.5) and spring in another (0.5). Students who enrolled in both summer and spring semesters, for example, were counted as one academic year. Students enrolled more than 10 academic years were considered as an outlier and were removed from the final calculation. In the median credits to degree calculation, only institution-earned credits were included.

The median time to complete an associate degree among students who previously participated in a concurrent enrollment program was 2 years (Figure 53) for the past three years. These students spent less time to complete an associate program after high school because they have earned some credit hours in their concurrent enrollment program. On the other hand, the median time for students without concurrent enrollment was 3 years.

No significant difference was found in median credits to degree. In AY 2020-2021, both students who previously participated in a concurrent enrollment program and students without concurrent enrollment cumulated 64 credits upon graduation.

Figure 53 – Median Time and Credits to Degree by Past HS Concurrent Enrollment

| | AY 18-19 | AY 19-20 | AY 20-21 |
|---------------------------------------------|-------------|-------------|-------------|
| Median Time to Degree: | | | |
| Previous Concurrent Enrollment ² | 2.0 | 2.0 | 2.0 |
| No Previous Concurrent Enrollment | 3.0 | 3.0 | 3.0 |
| Median Credits to Degree: | | | |
| Previous Concurrent Enrollment | 65.0 | 64.0 | 64.0 |
| No Previous Concurrent Enrollment | 66.0 | 65.0 | 64.0 |

² Students who obtained an associate degree before graduating from high school were excluded.

Figure 54 shows the breakdown by degree type. In AY 2020-2021, AAS students with concurrent enrollment (2.5 years) spent a longer time to complete a degree, compared to AA/AS (2 years) and AGS (2 years) students. It's worth noting that, in AA/AS and AGS programs, students with and without concurrent enrollment cumulated the same amount of credits to upon graduation. The median time to complete an AA/AS and AGS degree, however, was longer among students without concurrent enrollment (3.0 years vs. 2.0 years). Although AAS students with concurrent enrollment cumulated 4 credits higher than students without concurrent enrollment, their time to degree was 0.5 years shorter. Students who previously participated in a concurrent enrollment program at Arapahoe Community College, Community College of Denver, Front Range Community College, Pueblo Community College, and Red Rock Community College took 0.5 years longer to complete a degree than the rest of the colleges (Figure 55). Students who previously participated in a concurrent enrollment program at most of the urban colleges (namely Arapahoe Community College, Community College of Aurora, Community College of Denver, Front Range Community College, and Pikes Peak Community College) cumulated less credit hours than students without concurrent enrollment upon graduation (Figure 56).

Figure 54 – Median Time and Credits to Degree by Past HS Concurrent Enrollment and by Degree Type, AY 2020-2021

| | AA/AS | AAS | AGS |
|-----------------------------------|-------|------|------|
| Median Time to Degree: | | | |
| Previous Concurrent Enrollment | 2.0 | 2.5 | 2.0 |
| No Previous Concurrent Enrollment | 3.0 | 3.0 | 3.0 |
| Median Credits to Degree: | | | |
| Previous Concurrent Enrollment | 63.0 | 71.0 | 62.0 |
| No Previous Concurrent Enrollment | 63.0 | 67.0 | 62.0 |

Figure 55 – Median Time to Degree by Past HS Concurrent Enrollment and by College, AY 2020-2021

| College | Previous Concurrent Enrollment | No Previous Concurrent Enrollment |
|---------|--------------------------------|-----------------------------------|
| ACC | 2.5 | 3.0 |
| CCA | 2.0 | 3.0 |
| CCD | 2.5 | 3.0 |
| CNCC | 2.0 | 2.5 |
| FRCC | 2.5 | 3.0 |
| LCC | 2.0 | 2.0 |
| MCC | 2.0 | 2.5 |
| NJC | 2.0 | 2.0 |
| OC | 2.0 | 2.0 |
| PCC | 2.5 | 3.0 |
| PPCC | 2.0 | 3.0 |
| RRCC | 2.5 | 3.0 |
| TSC | 2.0 | 2.0 |

Figure 56 – Median Credits to Degree by Past HS Concurrent Enrollment and by College, AY 2020-2021

| College | Previous Concurrent Enrollment | No Previous Concurrent Enrollment |
|---------|--------------------------------|-----------------------------------|
| ACC | 62.0 | 64.0 |
| CCA | 63.0 | 66.0 |
| CCD | 62.0 | 64.0 |
| CNCC | 69.0 | 62.0 |
| FRCC | 62.0 | 64.0 |
| LCC | 69.0 | 62.0 |
| MCC | 73.0 | 57.5 |
| NJC | 65.0 | 64.0 |
| OC | 62.5 | 57.0 |
| PCC | 68.5 | 66.0 |
| PPCC | 65.0 | 67.0 |
| RRCC | 69.0 | 64.0 |
| TSC | 70.5 | 60.0 |

MEDIAN WAGE

Similar to average time and degree, the methodology of calculating median wage among graduates who previously participated in a concurrent enrollment program was also adopted from CDHE’s ROI report. According to this report, wage data from the Colorado Department of Labor and Employment (CDLE) are inclusive of Colorado. Federal employees and self-employed are excluded. Since wage data are based on calendar year, graduation cohorts are established using calendar year. For example, the cohort 2015 includes graduates from spring 2015, summer 2015, and fall 2015. Two thresholds are implemented: (1) number of quarters employed, and (2) state minimum wage (see Appendix for details). As a result, about 28% of 2015 graduates were included in year one wage calculation, around 38% were included in year three wage calculation, and over 41% were included in year 5 wage calculation (Figure 57).

Of the 2015 graduates who previously participated in a concurrent enrollment program, 89 percent were employed at some point, with an average of 76.2% employed in year one after graduation, 71.8% employed in year three, and 66.37% employed in year five (Figure 57). The median wage for all graduates started in the \$20,000s in year one after graduation and by about \$42,000 in year five (Figure 58).

Figure 57 – Employment Status by Calendar Year

| Employment Status | Calendar Year 2013 | Calendar Year 2014 | Calendar Year 2015 | Calendar Year 2013 | Calendar Year 2014 | Calendar Year 2015 |
|----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 1-Year | | | | | | |
| Employed & Met Threshold | 491 | 685 | 841 | 25.2% | 25.9% | 27.8% |
| Employed & Didn't Meet Threshold | 1,043 | 1,317 | 1,462 | 53.5% | 49.7% | 48.4% |
| Not Employed or No Wage Data | 416 | 647 | 718 | 21.3% | 24.4% | 23.8% |
| 3-Year | | | | | | |
| Employed & Met Threshold | 746 | 991 | 1,149 | 38.3% | 37.4% | 38.0% |
| Employed & Didn't Meet Threshold | 698 | 923 | 1,020 | 35.8% | 34.8% | 33.8% |
| Not Employed or No Wage Data | 506 | 735 | 852 | 25.9% | 27.7% | 28.2% |
| 5-Year | | | | | | |
| Employed & Met Threshold | 845 | 1,192 | 1,252 | 43.3% | 45.0% | 41.4% |
| Employed & Didn't Meet Threshold | 546 | 620 | 751 | 28.0% | 23.4% | 24.9% |
| Not Employed or No Wage Data | 559 | 837 | 1,018 | 28.7% | 31.6% | 33.7% |
| Total Number of Students | 1,950 | 2,649 | 3,021 | | | |

Figure 58 – Median Wage by Year

| Years after Graduated | Calendar Year 2013 | Calendar Year 2014 | Calendar Year 2015 |
|------------------------------------------|---------------------------|---------------------------|---------------------------|
| 1-Year | \$22,085 | \$23,069 | \$23,340 |
| 3-Year | \$29,189 | \$34,250 | \$35,409 |
| 5-Year | \$41,853 | \$44,101 | \$41,986 |
| Pct. Change from 1-Year to 3-Year | 32.2% | 48.5% | 51.7% |
| Pct. Change from 1-Year to 5-Year | 89.5% | 91.2% | 79.9% |

2015 graduates earning a one to two year certificate edged out AAS graduates for the highest median wage (Figure 59) in Year 5. The Year 1 median wage of 2015 AAS graduates was nearly \$35K, compared with wages in the low \$20Ks among AA and AS graduates. The Year 1 wage difference between one-year and two-year certificate holders was in the range of \$12K in 2015.

Figure 59 – Median Wage by Credential Type

| Type of Credential | Calendar Year 2013 | Calendar Year 2014 | Calendar Year 2015 |
|----------------------------------------------|--------------------|--------------------|--------------------|
| Certificate (< 1 Year)³ | | | |
| 1-Year | \$19,820 | \$21,211 | \$20,931 |
| 3-Year | \$24,798 | \$31,373 | \$32,469 |
| 5-Year | \$39,344 | \$41,608 | \$39,491 |
| Pct. Change from 1-Year to 3-Year | 25.1% | 47.9% | 55.1% |
| Pct. Change from 1-Year to 5-Year | 98.5% | 96.2% | 88.7% |
| Certificate (1-2 Year)⁴ | | | |
| 1-Year | \$28,742 | \$30,516 | \$33,219 |
| 3-Year | \$36,289 | \$39,955 | \$45,475 |
| 5-Year | \$43,251 | \$46,919 | \$48,701 |
| Pct. Change from 1-Year to 3-Year | 26.3% | 30.9% | 36.9% |
| Pct. Change from 1-Year to 5-Year | 50.5% | 53.8% | 46.6% |
| AAS | | | |
| 1-Year | \$31,287 | \$37,609 | \$34,574 |
| 3-Year | \$40,539 | \$43,450 | \$44,188 |
| 5-Year | \$51,182 | \$51,850 | \$48,119 |
| Pct. Change from 1-Year to 3-Year | 29.6% | 15.5% | 27.8% |
| Pct. Change from 1-Year to 5-Year | 63.6% | 37.9% | 39.2% |
| AA/AS | | | |
| 1-Year | \$19,220 | \$20,803 | \$20,768 |
| 3-Year | \$26,041 | \$34,119 | \$33,080 |
| 5-Year | \$40,926 | \$45,776 | \$41,144 |
| Pct. Change from 1-Year to 3-Year | 35.5% | 64.0% | 59.3% |
| Pct. Change from 1-Year to 5-Year | 112.9% | 120.1% | 98.1% |
| AGS | | | |
| 1-Year | \$23,668 | \$24,149 | \$22,857 |
| 3-Year | \$34,057 | \$43,233 | \$34,604 |
| 5-Year | \$42,197 | \$48,153 | \$44,880 |
| Pct. Change from 1-Year to 3-Year | 43.9% | 79.0% | 51.4% |
| Pct. Change from 1-Year to 5-Year | 78.3% | 99.4% | 96.4% |

³ Certificate (< 1 Year) includes CER1 and CER1N

⁴ Certificate (1-2 Year) includes CER, CER2 and CER2N



Health Professions and Related Clinical Sciences (e.g., Phlebotomy, Nursing Assistant, Veterinary Assistant, Medical Assisting) was the most popular certificates for students who previously participated in a concurrent enrollment program, followed by Mechanic and Repair Technologies/Technicians certificates (e.g., Auto Technician, Engine Performance Technician, Diesel Mechanics) (Figure 60). The median wage of 2015 graduates from both programs started in the lower \$20,000s in year one and doubled (\$42K) in year five for Mechanic and Repair Technologies/Technicians while Health Professions and Related Clinical Sciences increased by 72%.

Figure 60 – Median Wage by Classification of Instructional Programs (CIP) Code, Certificates only

| Median Annual Wage | Calendar Year 2013 | Calendar Year 2014 | Calendar Year 2015 |
|-----------------------------------------------------------------------|---------------------------|---------------------------|---------------------------|
| Health Professions and Related Clinical Sciences (CIP: 51xxxx) | | | |
| 1-Year | \$19,022 | \$23,798 | \$22,574 |
| 3-Year | \$22,992 | \$31,671 | \$29,963 |
| 5-Year | \$39,004 | \$41,773 | \$38,804 |
| Pct. Change from 1-Year to 3-Year | 20.9% | 33.1% | 32.7% |
| Pct. Change from 1-Year to 5-Year | 105.0% | 75.5% | 71.9% |
| Mechanic and Repair Technologies/Technicians (CIP: 47xxxx) | | | |
| 1-Year | \$19,773 | \$20,491 | \$20,688 |
| 3-Year | \$26,337 | \$33,811 | \$37,700 |
| 5-Year | \$39,361 | \$42,476 | \$42,276 |
| Pct. Change from 1-Year to 3-Year | 33.2% | 65.0% | 82.2% |
| Pct. Change from 1-Year to 5-Year | 99.1% | 107.3% | 104.4% |

CONCLUSION

The purpose of compiling data on high school students is to identify emerging trends and monitor student success. With the fifth successive year of similar data collection and analysis, we note that the total number of high school students dropped by 5% in AY 2020-2021 with a total of 33,112 high school students enrolled in CCCS colleges. This actually accounted for 29 percent of total CCCS enrollment, which is a four percentage-point increase over last year where we may be seeing the overall effects of the pandemic on enrollment. CCCS high school students accounted for an 11.9 percent of total public high school students in Colorado. These students enrolled in 94,885 courses, a 4 percent decrease from AY 2019-2020. High school students continue to successfully complete their courses at high rates (almost 90%). Concurrent enrollment students, particularly, had a higher pass rate (91.3%) than students in ASCENT (85.2%) or other programs (85.1%). With a total of 263,137 credit hours earned by concurrent enrollment and ASCENT students in AY 2020-2021, students and their families potentially saved \$39.1 million in college tuition costs.

In the academic year 2020-2021, 2,224 high school students received a total of 2,644 credentials, which was a 10% decrease from the previous year. Career and technical education courses are maintaining their popularity, and students are succeeding in them at a higher rate than the rate for all courses.

The Colorado Department of Higher Education reports that, on average, participation in concurrent enrollment is associated with an increase in the likelihood of enrolling in college immediately after high school; a decrease in the likelihood of needing remedial education in the first year of college; and higher credit hour accumulation, grade point average, and retention in the first year of college, all of which have been linked to successful degree attainment. We found that, system-wide, 31.7 percent of AY 2016-2017 high school students matriculated to a CCCS college after graduating from high school. Moreover, 58.5 percent of these students matriculated to a four-year university. Consequently, a total of 75 percent of the AY 2016-2017 students continued their higher education after high school. Compared with students who never dual enrolled while in high school, students with concurrent enrollment had a higher retention (54.1% vs. 45.1%) and graduation rate (32.0% vs. 22.3%). In terms of median time and median credits to an associate degree, students with and without concurrent enrollment spent about the same amount of time and earned similar credit hours in their associate programs. The median time to complete an associate degree among students who previously participated in a concurrent enrollment program was 2 years after graduating from high school.

Based on CDLE's process for analyzing employment data, this study revealed that 89 percent of the 2015 graduates who previously participated in a concurrent enrollment program were employed in either the first, third, or fifth year following graduation, with an average employment rate of 76.2% in year one after graduation, 64.2% in year three, and 51.7% in year five, which was likely to have been affected by the pandemic in 2020. The median wage of all credential types was in the lower \$20,000s in year one and lower \$40,000s in year five. 2015 graduates earning a one to two year certificate edged out AAS graduates for the highest median wage (\$48,119 in Year 5). Students with an AAS degree had the highest median wage (\$34,574 among 2015 graduates) one year after graduation. Because of the positive benefits of concurrent enrollment, ASCENT and other programs, and the number of students involved, CCCS and institution leadership believe continued scrutiny of



the success of high school students at CCCS colleges and beyond is crucial to understanding the dynamics of the high school student population and strategically planning for its success.

APPENDIX: METHODOLOGY

DATA SOURCE:

High school students report data were pulled from the operational data store (ODS) at the Colorado Community College System office. Populations in majority of the sections were pulled from freeze tables for consistency, and are reflective of the end-of-term freeze for a given academic term. The end-of-term freeze dates allow time for data entry and cleanup after the actual end of the semester. End-of-term freeze dates are as follows:

- Summer – October 10
- Fall – February 10
- Spring – July 10

Credentials earned and graduation data were extracted from live tables to reflect the most recent award records.

METHODOLOGY:

Average credit hours taken: Average credit hours are calculated by summing all credit hours taken and dividing by unduplicated headcount in an academic year.

Career and technical education (CTE): CTE courses are identified using course attribute.

CCCS headcount: Unduplicated headcount of overall CCCS population, including students taking non-countable courses.

Course level: Developmental education courses include CCR (formerly REA), ENG with course number less than 100, MAT106, and MAT with course number less than 102. College level courses are any courses that are not developmental education.

Course pass rate: Pass in this report entails receiving a grade of 'C' or better. Fail courses include withdrawals. Pass rate is calculated by dividing the number of students passed (any grade of A, B, C, S/A, S/B, S/C, S) by total number of enrolled students (any student who received a grade, including W).

Courses taken: Number of courses taken by high school students. Students who take the same course multiple times are counted the number of times they occur.

Credential awarded: Number of degrees and certificates awarded to students. Students receiving more than one credentials are counted multiple times.

Credits attempted: Number of credit hours enrolled by high school students.

Fall-to-fall retention rate: Fall cohort includes new, first-time degree-seeking students enrolled in fall, or enrolled in fall term and first-time degree seeking in the summer directly preceding fall. Both full-time and part-time students were included for purposes of this study. Students are counted as retained if they enroll in the following fall semester or are awarded with a credential between the fall term of entry and the following summer term. Retention rate is calculated as the sum of students retaining divide by the total number of students in the cohort.

Graduation rate: Fall cohort includes new, first-time degree-seeking students enrolled in fall, or enrolled in fall term and first-time degree seeking in the summer directly preceding fall. Both full-time and part-time students are included for purposes of this study. Students are counted as graduated if they are awarded with a credential between the fall term of entry and summer of the third year. Graduation rate is calculated as the sum of graduates divide by the total number of students in the cohort.

Headcount of students receiving a credential: This is an unduplicated headcount of students who receive an associate degree or a certificate. Students receiving more than one credentials are counted once.

High school program: Program information is based on the high school attributes: (1) concurrent enrollment – HSC, (2) ASCENT – HSA, (3) other high school concurrent – any other HS attributes, GTC attributes or student population type is L or H.

High school students: Starting 2020, high school students are identified based on population type and high school attributes. Students who are coded as L or H in population type or have any high school attribute are considered as high school students.

Matriculation to CCCS colleges: Matriculation cohort includes all high school students enrolled in an academic year. A student is counted as having matriculated if he/she enrolls in CCCS colleges as a non-high school student at any point from the cohort year through spring of the fourth year.

Matriculation to four-year universities: Matriculation cohort includes all high school students enrolled in an academic year. A student is counted as having matriculated if he/she enrolls in a four-year university at any point from the cohort year through spring of the fourth year.

Median credits to degree: Credits to degree cohort includes all graduates with an associate degree in an academic year. Reverse transfers are excluded. Students received more than one associate degrees are unduplicated, with the earliest graduation term retained. Median credits to degree is calculated as an average credit hours that cohort students earned upon completion of an associate degree.

Median time to degree: Time to degree cohort includes all graduates with an associate degree in an academic year. Reverse transfers are excluded. Students received more than one associate degrees are unduplicated, with the earliest graduation semester retained. One academic year is divided into two terms, with summer and fall semesters in one term (0.5) and spring in another (0.5). Average time to degree is calculated as an average of the total amount of academic years that cohort students spend upon completion of an association degree.

Median wage: Median wage cohort includes all students received a credential in a calendar year. Students received more than one credential in a given year are unduplicated, with highest degree retained. Median wage is the median of earnings in year one, year three and year five. According to CDHE’s ROI report, the calculation of wage earnings begins two quarters after the graduation quarter. Therefore, year one wage is the sum of earnings from 3rd quarter to 6th quarter after graduation. Year three wage is the sum of earnings from 11th quarter to 14th quarter after graduation. Year five wage is the sum of earnings from 19th quarter to 22nd quarter (Q) after graduation. For example, spring 2012 cohort graduated in May 2012 (Figure 61). Their median year one wage is the median of earnings from Q1 2013 to Q4 2013, median year three wage is the median of earnings from Q1 2015 to Q4 2015, and median year five wage is the median of earnings from Q1 2017 to Q4 2017.

Two thresholds are implemented: (1) number of quarters employed and (2) state minimum wage. Graduates who are employed less than four quarters by the end of 6th quarter after graduation are excluded from year one wage calculation; graduates who are employed less than five quarters by the end of 14th quarter or by the end of 22nd quarter are excluded in year three wage and year five wage calculation. Graduates who earned less than the state minimum wage are also excluded.

Figure 61 – Wage calculation for spring 2012 cohort

| Calendar Year | Q1 | Q2 | Q3 | Q4 |
|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 2012 | | Graduated | 1 st Quarter | 2 nd Quarter |
| 2013 (1-Year Wage) | 3 rd Quarter | 4 th Quarter | 5 th Quarter | 6 th Quarter |
| 2014 | 7 th Quarter | 8 th Quarter | 9 th Quarter | 10 th Quarter |
| 2015 (3-Year Wage) | 11 th Quarter | 12 th Quarter | 13 th Quarter | 14 th Quarter |
| 2016 | 15 th Quarter | 16 th Quarter | 17 th Quarter | 18 th Quarter |
| 2017 (5-Year Wage) | 19 th Quarter | 20 th Quarter | 21 st Quarter | 22 nd Quarter |

Race/ethnicity: IPEDS’s definition of race/ethnicity is used in this report.

Students of color: All race/ethnicity except for non-resident alien, unknown and white.