



COLORADO

COMMUNITY COLLEGE SYSTEM

**Academic Year 2018-2019
High School Students Attending
CCCS Colleges**

September 2019

TABLE OF CONTENTS

System Overview of High School Students	3
Participation by Program	9
Credentials Earned	11
Demographics	13
Participation by Term	17
High School Students by Institution	19
Participation by Program and College	23
Academic Studies and Outcomes.....	25
Comparison of course success Rates by College.....	27
Credits earned/tuition saved.....	28
Career and Technical Education	29
Matriculation Rates to CCCS Colleges	30
Enrollment in a Four Year College and Overall Matriculation Rate of CCCS High School Students	33
Effect of Concurrent Enrollment on Student Success Measures.....	37
Conclusion	38

SYSTEM OVERVIEW OF HIGH SCHOOL STUDENTS

The Colorado Community College System (CCCS) continues to see consistent growth in the number of high school students taking courses that award college credit, either on the college campus or in their own school. This trend is represented in Figure 1. Overall, 29,740 high school students enrolled in CCCS colleges in academic year 2018-2019, which represents a 9.9 percent growth over 2017-2018. Over the past five years, the number of high school students taking college courses has grown by 44 percent. High school students attempted 10.3 percent more credit hours than last year (figure 3) and represent 17.4 percent of all credit hours at CCCS colleges. In 2018-19, 10.9% of all high school students in Colorado earned some college credit via CCCS (Figure 4). Furthermore, the percentage of high school students relative to overall student headcount continues to rise. In fact, high school students account for nearly a fourth of the annual headcount within CCCS institutions (Figure 2).

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

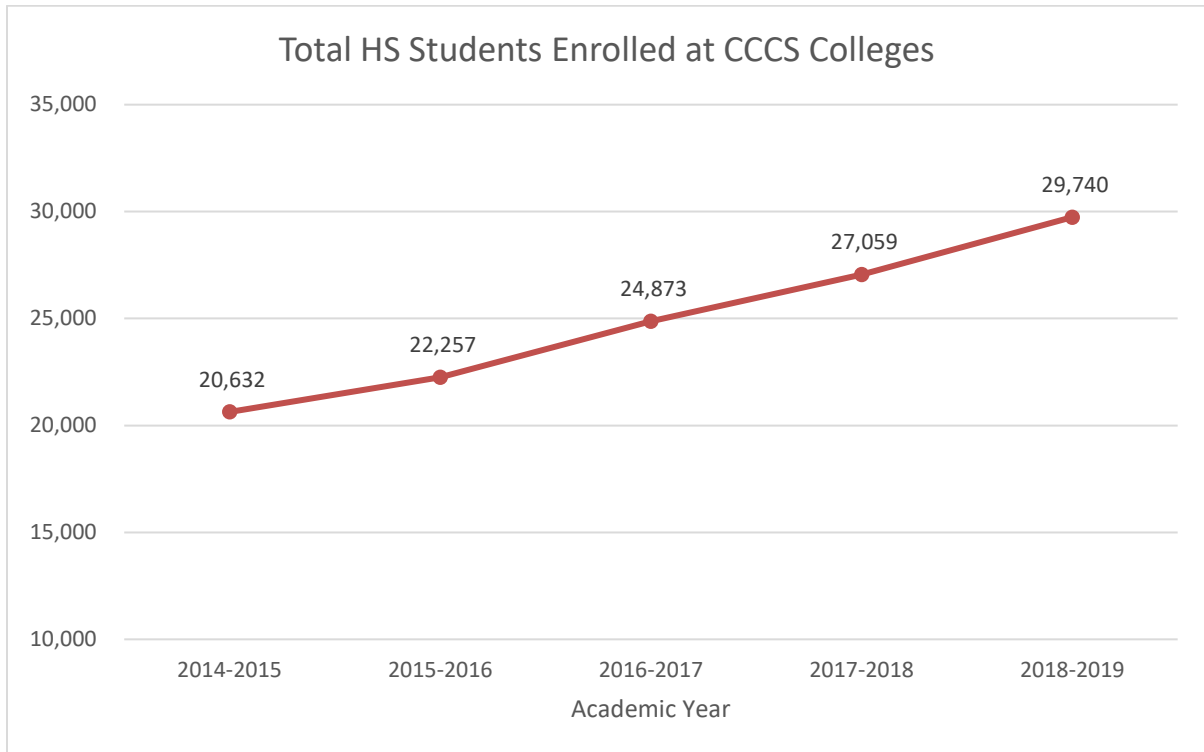


Figure 2- High School Students as a Percentage of Overall CCCS Headcount

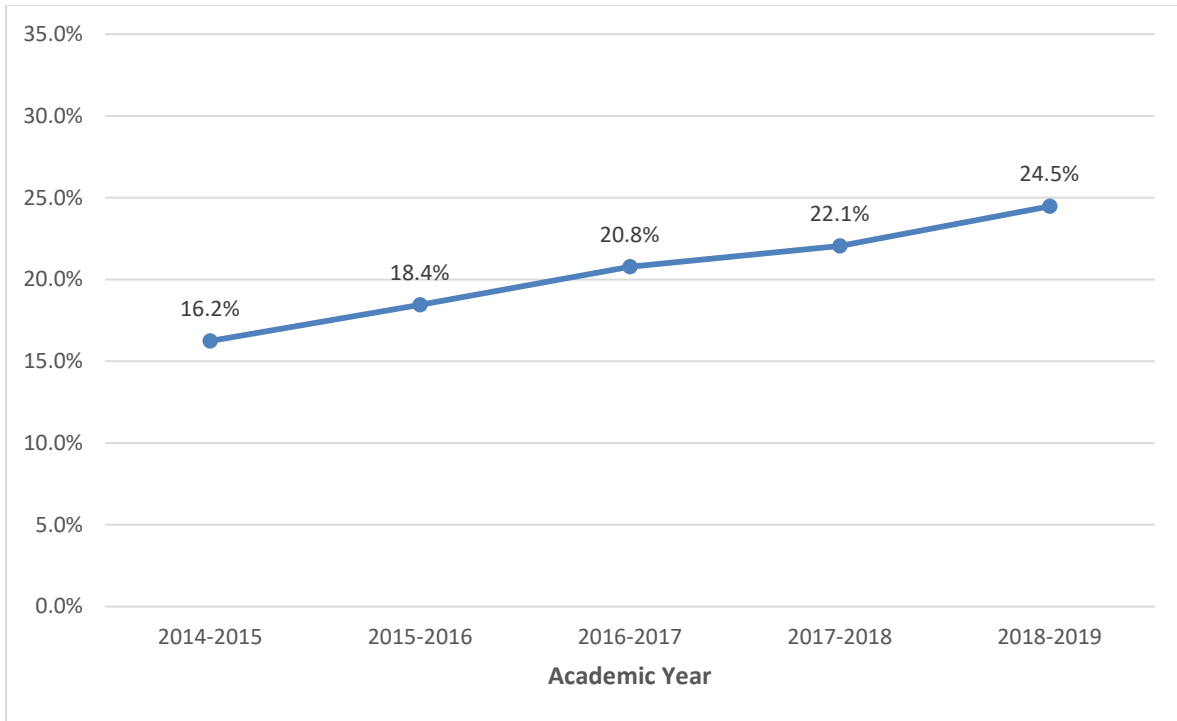


Figure 3 - Total Credit Hours Attempted by CCCS High School Students, AY 2018-2019

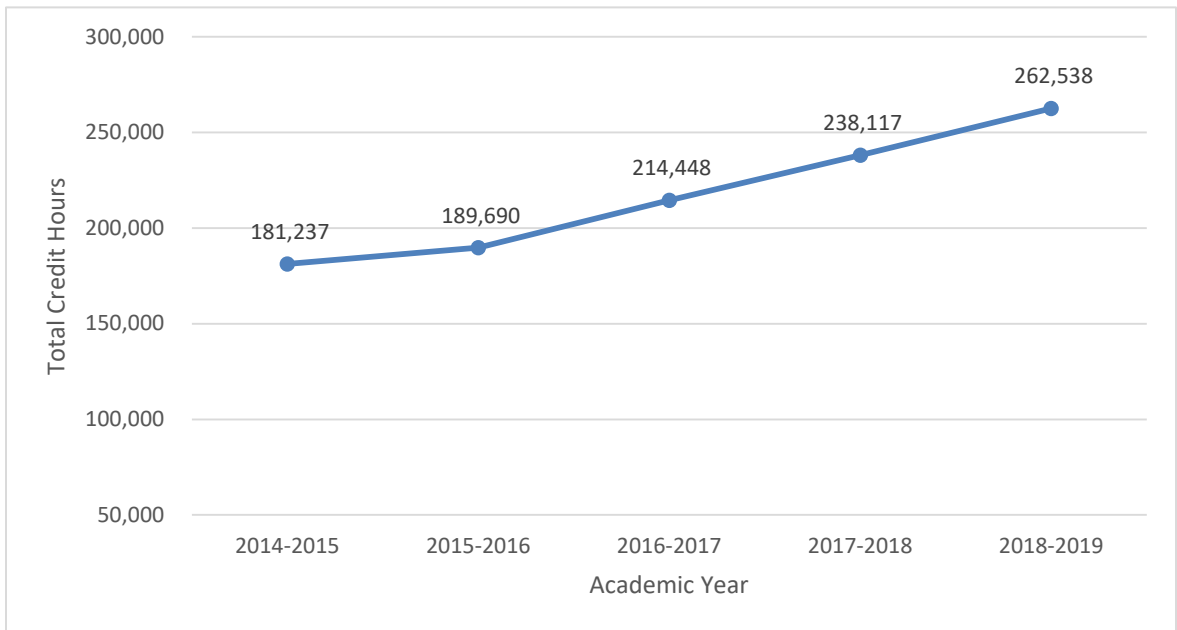


Figure 4 - CCCS High School Students Compared to all Colorado Public HS Students

	Fall 2014 Enrollment/ AY 2014-15	Fall 2015 Enrollment/ AY 2015-16	Fall 2016 Enrollment/ AY 2015-16	Fall 2017 Enrollment/ AY 2017-18	Fall 2018 Enrollment/ AY 2018-19
Total Public High School	254,497	260,743	265,329	270,190	273,519
Percent Change Year-to-Year	2.1%	2.5%	1.8%	1.8%	1.2%
CCCS HS Students	20,632	22,257	24,873	27,059	29,740
Percent Change Year-to-Year	8.5%	7.9%	11.8%	8.8%	9.9%
CCCS as % of Public High School	8.1%	8.5%	9.4%	10.0%	10.9%

*Public high school data/totals based on published Colorado Department of Education pupil membership data on the [CDE Website](#).

High school students were responsible for 85,628 course enrollments in 2018-2019, an increase of 10.2 percent over the previous academic year (Figure 5). The majority of high school students enrolled in one or two courses (60 percent), while slightly more than 18 percent enrolled in five or more courses (Figure 6 & 7). Additionally, the average amount of credits earned by each student continues to hover around 8.8 (figure 8), as it has for the last five years. 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

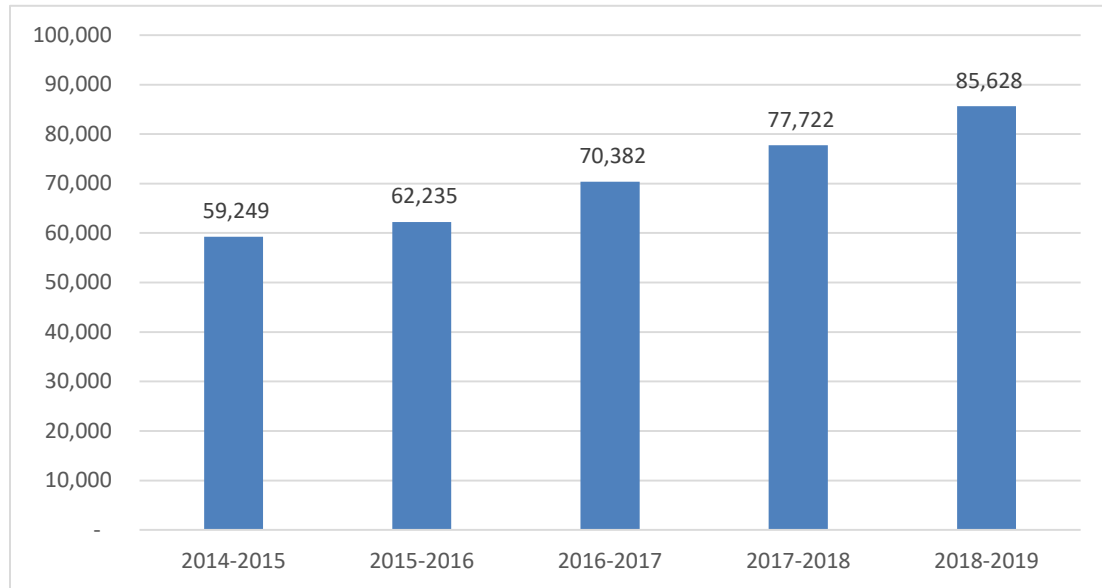


Figure 6: High School Students by Number of Courses Taken: AY 2018-2019

Number of Courses Taken During the Year	1 Course	2 Courses	3 Courses	4 Courses	5+ Courses	Total
Number of Students	10,411	7,392	3,542	2,940	5,455	29,740
Percentage of Students	35.0%	24.9%	11.9%	9.9%	18.3%	100.0%

**Figure 7 - Number of Courses Taken by High School Students,
AY 2015 through AY 2019**

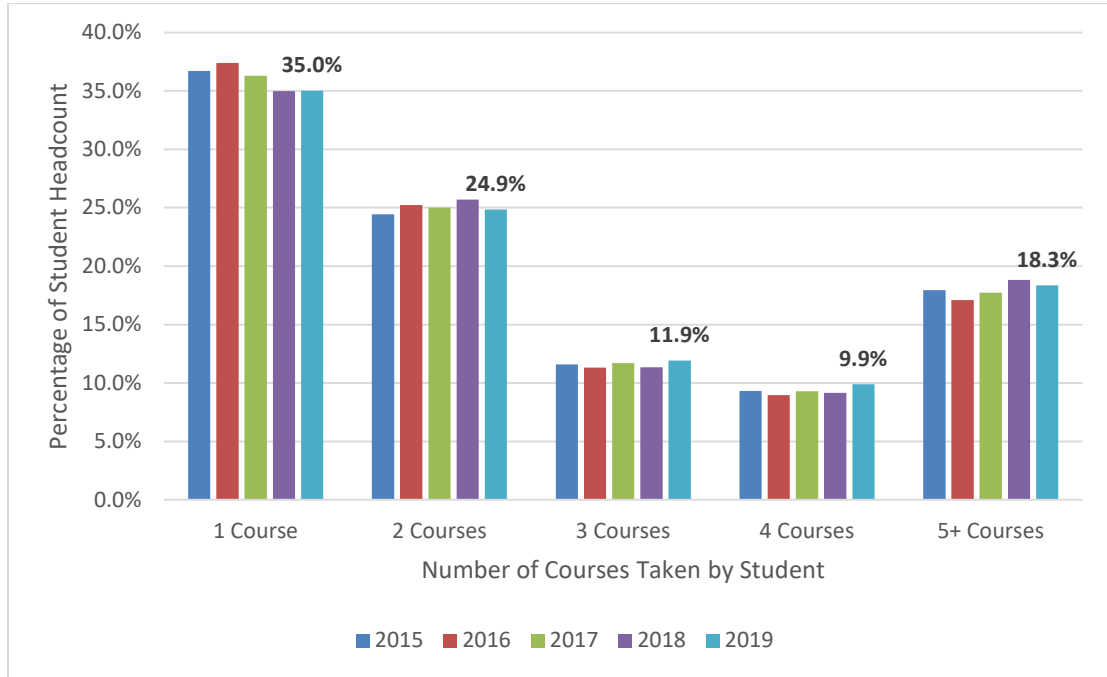


Figure 8 - Average Credit Hours Taken Per High School Student by Academic Year

Academic Year	2015	2016	2017	2018	2019
Average Credits Taken by HS Students	8.8	8.5	8.6	8.8	8.8

Figure 9 - Top Ten Courses Taken by CCCS High School Students: AY 2018-2019

COURSE	Number of Course Enrollments	Percentage of all HS Course Enrollments
ENG 121	7,251	8.5%
MAT 121	4,472	5.2%
ENG 122	4,103	4.8%
LIT 115	2,505	2.9%
PSY 101	1,879	2.2%
MAT 122	1,861	2.2%
BUS 115	1,750	2.0%
COM 115	1,727	2.0%
HIS 122	1,278	1.5%
MAT 135	1,270	1.5%

PARTICIPATION BY PROGRAM

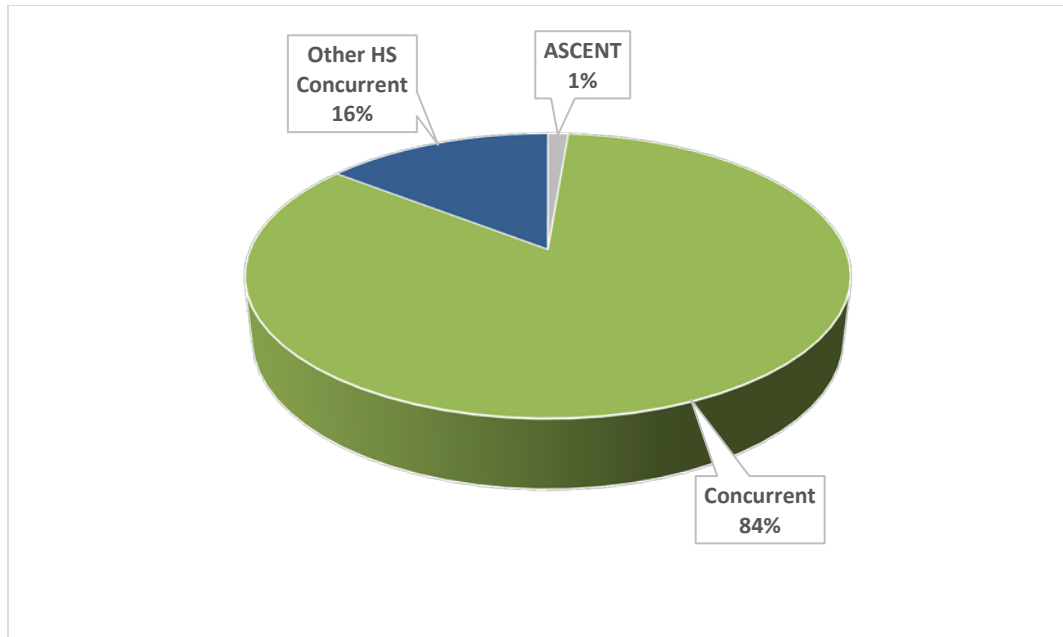
The two most common methods provided by Colorado law for high school students to earn college credit are the Concurrent Enrollment program and the “Accelerating Students through Concurrent Enrollment” or ASCENT program. . The Concurrent Enrollment program refers only to the statewide programs created by HB 09-1319 and codified in the Concurrent Enrollment Programs Act (CRS 22-35-101 et. seq.). High school students are not strictly limited to these two methods of enrollment, but may elect to self-pay for college credit or dual credit.

The Concurrent Enrollment 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. Tuition rates cannot exceed the standard CCCS tuition rate. 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 for purposes of this report (Early College, P-Tech, self-pay and Gateway to College for college credit or dual credit).

By far the most common method utilized by students to take college-level courses is the Concurrent Enrollment program, which accounted for 84 percent of high school enrollments system wide in 2018-2019 (Figure 5). The ASCENT program accounted for one percent of student enrollments. These are roughly the same percentages as in 2017-2018, a year in which 84.5 percent of high school participation was through the Concurrent Enrollment program.

Figure 10 - High School Students by Program Type: AY 2019



CREREDENTIALS EARNED

Overall, 2,201 high school students who were enrolled in a CCCS institution earned a credential in 2018-2019, and a total of 2,561 awards were granted (Figure 11 & 12). Of all awards granted, 82.9 percent of them were certificates and the majority of those certificates were one-year awards (Figure 13). The percentage of all concurrent enrollment students who earned a credential was 7.4, up from 6.9 percent the year before.

Figure 11 - Number of Credentials Awarded to High School Students: AY 2015 to AY 2019

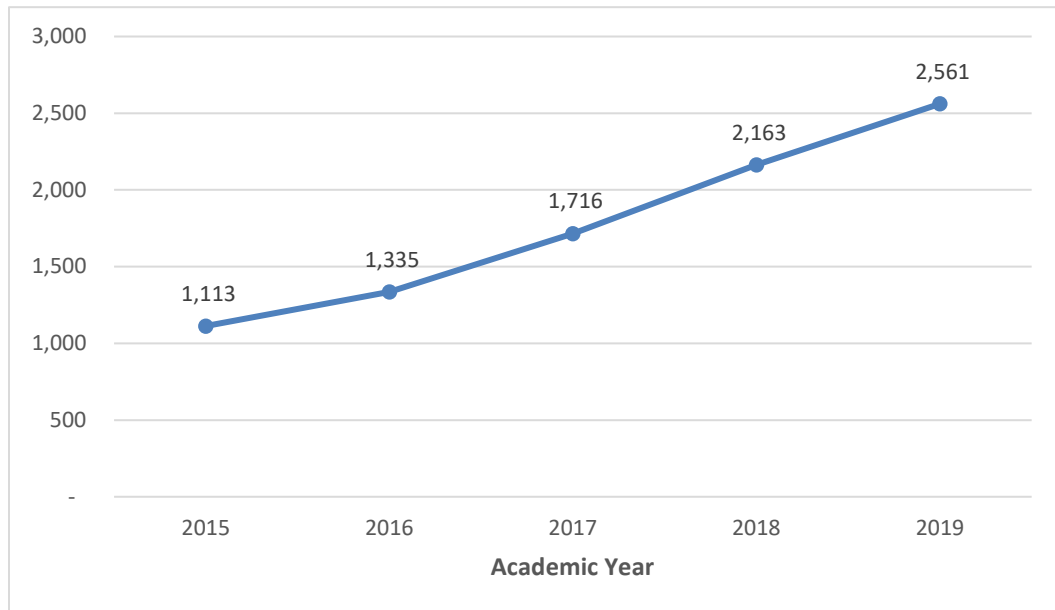


Figure 12 - Total Headcount of HS Students Receiving a Credential: AY 2015 to AY 2019

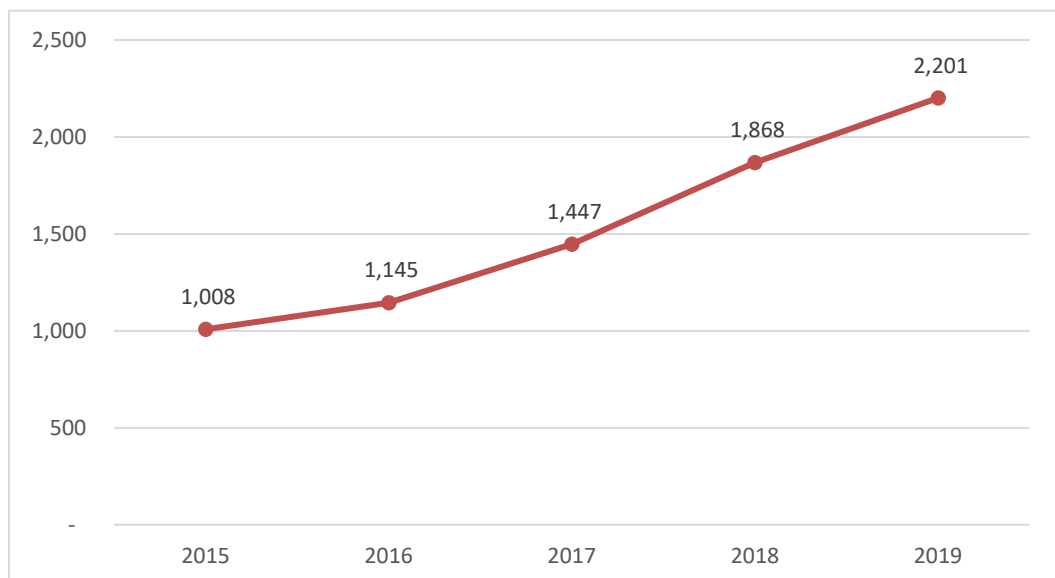


Figure 13 - Number and Type of Credentials Earned by High School Students: AY 2019

Award Type	2017-2018 Awards	2018-2019 Awards	Change from 2017-2018	Percent of all Awards Granted in 2018-2019
1-year certificate	1,721	2,025	17.7%	79.1%
2-year certificate	80	97	21.3%	3.8%
Total Certificates	1,801	2,122	17.8%	82.9%
Associate of Applied Science	23	31	34.8%	1.2%
Associate of Arts	174	202	16.1%	7.9%
Associate of General Studies	62	96	54.8%	3.7%
Associate of Science	103	110	6.8%	4.3%
Total Degrees	362	439	21.3%	17.1%
Total Awards	2,163	2,561	18.4%	100.0%

Figure 14 – Credentials by Race/Ethnicity

Race/Ethnicity	2017-2018 Awards	2018-2019 Awards	Change from 2017-2018	Percent of all 2018-2019 Awards
American Indian or Alaskan Native	11	14	27.3%	0.5%
Asian	43	53	23.3%	2.1%
Black or African American	24	37	54.2%	1.4%
Hispanic	452	549	21.5%	21.4%
Multiple races	63	84	33.3%	3.3%
Native Hawaiian and Other Pacific Islander	5	6	20.0%	0.2%
Non-Resident Alien (International)	49	68	38.8%	2.7%
Unknown	188	247	31.4%	9.6%
White	1,328	1,503	13.2%	58.7%
Total	2,163	2,561	18.4%	100.0%
Students of Color	598	743	24.2%	29.0%

DEMOGRAPHICS

Figure 15 - CCCS High School Students by Gender

Gender	AY 2017	AY 2018	AY 2019	AY 2017 %	AY 2018 %	AY 2019 %
Female	13,518	14,635	15,874	54%	54%	53%
Male	11,355	12,424	13,866	46%	46%	47%
Total	24,873	27,059	29,740	100%	100%	100%

Figure 16 – High School Student Gender Compared to All Public HS Students

Gender	CDE Fall 2018	CCCS 2018-2019
Female	48.9%	53.4%
Male	51.1%	46.6%
Total	100.0%	100.0%

The gender breakdown of concurrent enrollment students has stayed consistent over the last three years, with female students participating at a slightly higher rate (Figure 15). High school enrollees at CCCS institutions self-reported as 51.7 percent white (down from 57.4 percent in 2015-2016) while the percentage of overall high school enrollees of color has stayed fairly flat overall hovering around 34% to 36% for the last five years (Figure 18). The only category that has seen a significant increase over the last five years is the “unknown” category increasing from 5.8% to 10.3% (Figure 17). In fact, the “unknown” category increased by 24.7% between 2017-18 and 2018-19 (Figure 20). In terms of raw numbers, the largest demographic increase was in Black or African American students, increasing by 17%.

Figure 17 - Percent of CCCS High School Student Population by Race/Ethnicity

Race/Ethnicity	2015	2016	2017	2018	2019
American Indian or Alaskan Native	0.6%	0.5%	0.5%	0.5%	0.5%
Asian	3.1%	3.4%	3.6%	3.6%	3.5%
Black or African American	3.9%	3.6%	3.5%	3.4%	3.6%
Hispanic	22.5%	23.1%	24.6%	24.8%	23.7%
Multiple races	3.9%	4.0%	3.9%	4.2%	4.3%
Native Hawaiian and Other Pacific Islander	0.2%	0.3%	0.2%	0.3%	0.2%
Non-Resident Alien	2.5%	2.2%	2.3%	2.3%	2.1%
Unknown	5.8%	5.6%	7.5%	9.1%	10.3%
White	57.4%	57.4%	53.9%	52.0%	51.7%
Students of Color Subtotal	34.3%	34.9%	36.3%	36.7%	35.8%

Figure 18 – High School Student Race/Ethnicity Compared to All Public HS Students

Race/Ethnicity	CCCS 2018-2019	CDE Fall 2018
American Indian or Alaskan Native	0.5%	0.8%
Asian	3.5%	3.3%
Black or African American	3.6%	4.5%
Hispanic	23.7%	33.6%
Multiple races	4.3%	3.8%
Native Hawaiian and Other Pacific Islander	0.2%	0.3%
White	51.7%	53.7%
Non-Resident Alien (International) ¹	2.1%	0.0%
Unknown	10.3%	0.0%
Total (all)	100.0%	100.0%

¹ The Colorado Department of Education does not report the categories of “Unknown” or “Non-Resident Alien (International)”, which accounts for some of the discrepancies and zero percentages above.

Figure 19 - Students of Color as a Percentage of All CCCS High School Students, Five-year Trend

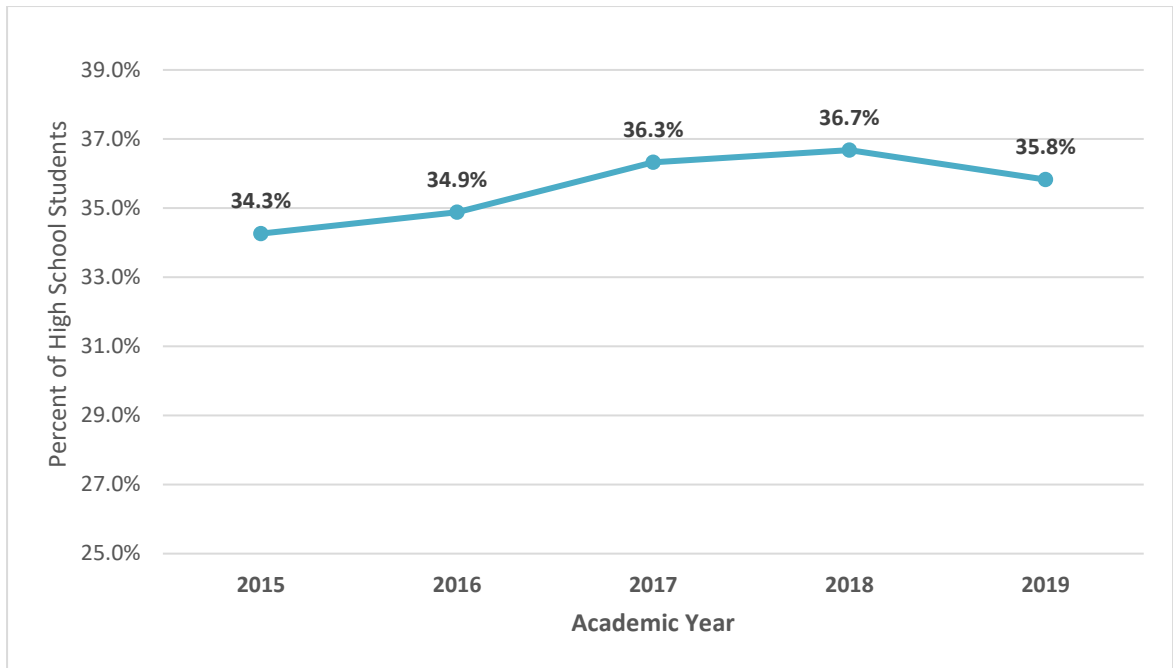
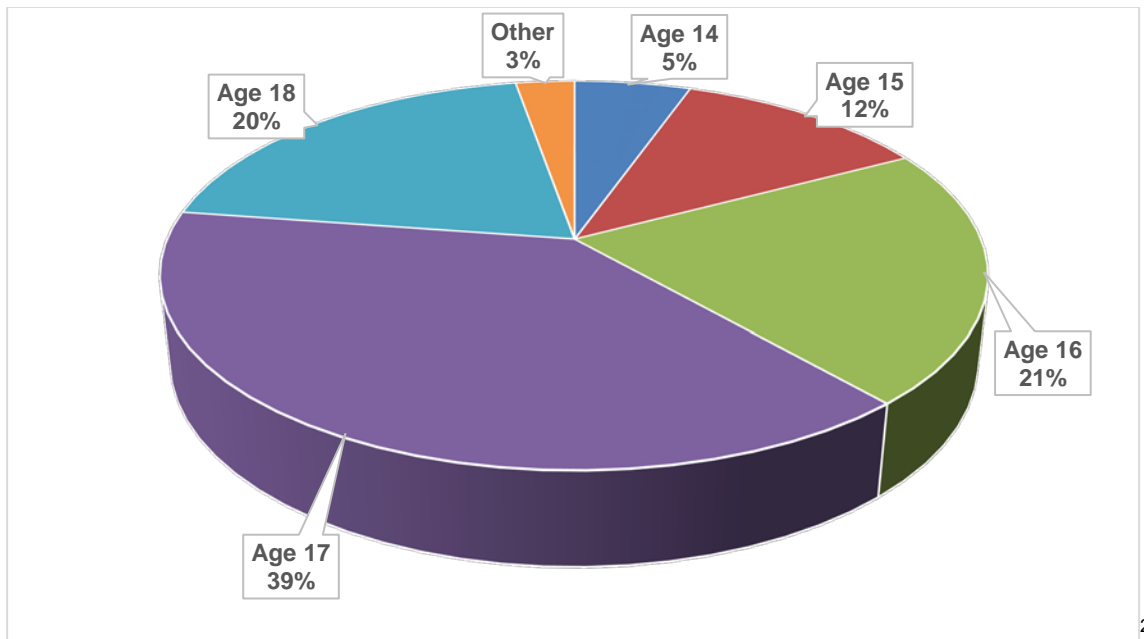


Figure 20 - Number of HS Students and Year-Over-Year Growth by Ethnicity

Race/Ethnicity	2018	2019	% Change
American Indian or Alaskan Native	134	146	9.0%
Asian	968	1,041	7.5%
Black or African American	916	1,072	17.0%
Hispanic	6,698	7,063	5.4%
Multiple races	1,135	1,265	11.5%
Native Hawaiian and Other Pacific Islander	74	68	-8.1%
Non-Resident Alien	614	631	2.8%
Unknown	2,458	3,065	24.7%
White	14,062	15,389	9.4%
Total	27,059	29,740	9.9%

Seventeen was the most common age for high school students enrolled in CCCS colleges at 39 percent, while 20% were eighteen (Figure 21).

Figure 21 - High School Students by Age



2

² "Other" category includes ages that do not fall in the other categories mentioned. These include any students that were younger than 14 or older than 18, or with insufficient birth date data to calculate an age.

PARTICIPATION BY TERM

In 2018-19, more high school students were registered for college courses in the Spring term than in the Summer or Fall terms (Figure 22 & 23) and the Spring term accounted for the highest number of credit hours (Figure 24 & 25) 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.

Figure 22 - Number of High School Students by Term: AY 2018-2019 System-Wide

Term	Summer HS Headcount	Fall HS Headcount	Spring HS Headcount	Summer as % of Year	Fall as % of Year	Spring as % of Year
Number of HS Students	679	20,303	24,034	1.5%	45.1%	53.4%

Figure 23 - Number of High School Students by Term and Program: AY 2018-2019

Program	Summer Count	Fall Count	Spring Count	% of Summer HS Students	% of Fall HS Students	% of Spring HS Students
ASCENT	1	389	353	0.1%	1.9%	1.4%
Concurrent	240	16,967	20,535	35.2%	82.0%	84.2%
Other HS Concurrent	441	3,339	3,512	64.7%	16.1%	14.4%
Total	682	20,695	24,400	1.5%	45.2%	53.3%

Figure 24 - High School Credit Hours by Term, Overall Count

Academic Year	Summer	Fall	Spring	Total
2015	2,870.50	77,180.50	101,186.00	181,237.00
2016	1,358.00	80,976.50	107,355.00	189,689.50
2017	1,724.00	93,609.00	119,114.75	214,447.75
2018	2,285.50	104,810.50	131,021.00	238,117.00
2019	3,078.00	115,673.50	143,786.25	262,537.75

Figure 25 - High School Credit Hours by Term, Percentage

Academic Year	Summer	Fall	Spring	Total
2015	1.6%	42.6%	55.8%	100.0%
2016	0.7%	42.7%	56.6%	100.0%
2017	0.8%	43.7%	55.5%	100.0%
2018	1.0%	44.0%	55.0%	100.0%
2019	1.2%	44.1%	54.8%	100.0%

HIGH SCHOOL STUDENTS BY INSTITUTION

High school students accounted for 24.5 percent of the CCCS headcount in 2018-19 (Figure 28). Red Rocks Community College and Arapahoe Community College saw the biggest one-year increase in enrollments, while Morgan Community College saw the largest decrease (Figure 26 & 27). Among CCCS institutions, the proportion of high school enrollments to overall enrollments ranged from a high of 42.4 percent at Community College of Aurora to 15 percent at Community College of Denver (Figure 28 & 29). Figure 30 shows the numbers and percentages broken down by semesters at each institution.

Figure 26 - High School Students by Institution

COLLEGE	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
ACC	3,578	4,343	5,018	5,403	6,345
CCA	3,226	3,075	3,579	4,736	4,810
CCD	2,418	2,242	2,075	1,663	1,766
CNCC	500	505	460	540	623
FRCC	3,266	4,028	4,906	5,575	6,226
LCC	378	344	338	340	311
MCC	803	773	750	671	560
NJC	403	392	386	345	360
OJC	567	458	477	469	461
PCC	1,251	1,496	1,737	1,857	2,056
PPCC	2,018	2,197	2,360	2,599	2,977
RRCC	1,527	1,739	2,008	2,069	2,482
TSJC	697	665	779	792	763
CCCS Total	20,632	22,257	24,873	27,059	29,740

Figure 27 - One-Year Growth (Change from Previous Year) in Number of High School Students Enrolled

COLLEGE	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
ACC	0.7%	21.4%	15.5%	7.7%	17.4%
CCA	1.1%	-4.7%	16.4%	32.3%	1.6%
CCD	30.6%	-7.3%	-7.4%	-19.9%	6.2%
CNCC	2.5%	1.0%	-8.9%	17.4%	15.4%
FRCC	20.3%	23.3%	21.8%	13.6%	11.7%
LCC	-2.3%	-9.0%	-1.7%	0.6%	-8.5%
MCC	-6.2%	-3.7%	-3.0%	-10.5%	-16.5%
NJC	3.9%	-2.7%	-1.5%	-10.6%	4.3%
OJC	-2.9%	-19.2%	4.1%	-1.7%	-1.7%
PCC	3.2%	19.6%	16.1%	6.9%	10.7%
PPCC	16.9%	8.9%	7.4%	10.1%	14.5%
RRCC	2.4%	13.9%	15.5%	3.0%	20.0%
TSJC	24.0%	-4.6%	17.1%	1.7%	-3.7%
CCCS Total	8.5%	7.9%	11.8%	8.8%	9.9%

Figure 28 - HS Students as a Percentage of Overall Enrollment by Academic Year

COLLEGE	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
ACC	20.6%	25.5%	30.2%	28.2%	32.7%
CCA	28.4%	29.2%	32.5%	40.2%	42.4%
CCD	16.1%	16.3%	16.0%	13.4%	15.0%
CNCC	28.0%	29.8%	27.3%	30.1%	35.6%
FRCC	11.7%	14.5%	17.4%	19.8%	22.2%
LCC	36.3%	35.6%	32.9%	33.5%	31.4%
MCC	33.4%	35.1%	38.6%	37.5%	34.6%
NJC	15.1%	17.8%	16.9%	15.5%	16.2%
OJC	27.8%	24.8%	25.6%	27.0%	28.4%
PCC	12.6%	16.8%	20.1%	18.7%	21.3%
PPCC	10.1%	11.5%	12.6%	14.0%	15.9%
RRCC	11.8%	13.9%	16.2%	17.5%	20.6%
TSJC	28.0%	29.0%	33.4%	34.0%	33.7%
CCCS Total	16.2%	18.4%	20.8%	22.1%	24.5%

Figure 29 - HS Students as a Percentage of Overall Enrollment

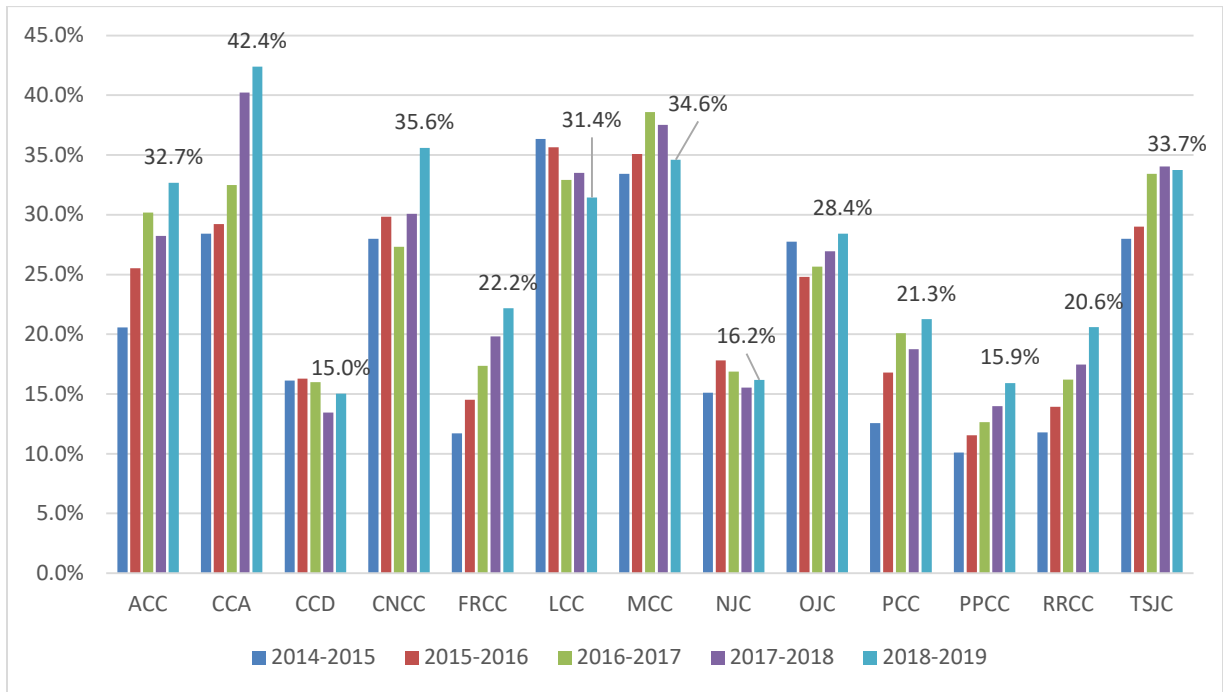


Figure 30 - HS Student Enrollment by Term and College: AY 2019

College	Summer HS Headcount	Fall HS Headcount	Spring HS Headcount	Summer as % of Year	Fall as % of Year	Spring as % of Year
ACC	74	4,193	4,754	0.8%	46.5%	52.7%
CCA	91	3,457	4,143	1.2%	44.9%	53.9%
CCD	20	1,156	1,448	0.8%	44.1%	55.2%
CNCC	15	461	517	1.5%	46.4%	52.1%
FRCC	134	4,458	4,909	1.4%	46.9%	51.7%
LCC	2	268	271	0.4%	49.5%	50.1%
MCC	1	532	491	0.1%	52.0%	47.9%
NJC	9	297	289	1.5%	49.9%	48.6%
OJC	-	358	376	0.0%	48.8%	51.2%
PCC	44	1,325	1,600	1.5%	44.6%	53.9%
PPCC	266	2,357	2,553	5.1%	45.5%	49.3%
RRCC	21	954	2,004	0.7%	32.0%	67.3%
TSJC	2	487	679	0.2%	41.7%	58.1%
Total	679	20,303	24,034	1.5%	45.1%	53.4%

PARTICIPATION BY PROGRAM AND COLLEGE

Figure 31 details high school students by program – Concurrent Enrollment, ASCENT, or other. The vast majority of students (84.2 percent) enrolled in CCCS colleges through the Concurrent Enrollment program. Figure 32 reflects that only 4 percent of course enrollments were in developmental education, while 96 percent were college level.

Figure 31 - High School Students by Program and Institution: AY 2018-2019

College	Concurrent	ASCENT	Other High School	Concurrent as % of HS Enrollment	ASCENT as % of HS Enrollment	Other High School as % of HS Enrollment
ACC	5,685	13	727	88.5%	0.2%	11.3%
CCA	4,738	75	14	98.2%	1.6%	0.3%
CCD	1,165	38	601	64.6%	2.1%	33.3%
CNCC	616	-	19	97.0%	0.0%	3.0%
FRCC	4,682	133	1,762	71.2%	2.0%	26.8%
LCC	298	9	7	94.9%	2.9%	2.2%
MCC	559	1	-	99.8%	0.2%	0.0%
NJC	355	3	9	96.7%	0.8%	2.5%
OJC	461	-	-	100.0%	0.0%	0.0%
PCC	2,012	19	158	91.9%	0.9%	7.2%
PPCC	1,918	76	1,024	63.6%	2.5%	33.9%
RRCC	2,393	24	75	96.0%	1.0%	3.0%
TSJC	752	4	9	98.3%	0.5%	1.2%
Total	25,634	395	4,405	84.2%	1.3%	14.5%

Figure 32 - HS Course Enrollment by Course Level

Course Level	Course Enrollments	% of Total HS Courses
Developmental Ed	3,325	3.9%
College Level	82,303	96.1%
Total	85,628	100.0%

System-wide, students carried an average of 8.6 credit hours over the course of the academic year. The proportion of high school credit hours to total credit hours was highest at Community College of Aurora, at 32 percent; Arapahoe Community College, Colorado Northwestern Community College, Lamar Community College and Morgan Community College also had rates that exceeded 20 percent. Pikes Peak Community College's average of 13.3 credit hours per student was the highest of the thirteen colleges. Figure 33 details credit hours taken by high school students at CCCS colleges as well as average credits per student, broken down by college.

**Figure 33 - 2018-2019 CCCS High School Credits
Attempted and Average Credits by Institution**

College	HS Credit Hours	All CCCS Credit Hours	HS as % of Total	Average Credit Hours Per Student
ACC	42,122	180,374	23.4%	6.6
CCA	41,356	129,237	32.0%	8.6
CCD	15,025	147,797	10.2%	8.5
CNCC	6,042	22,802	26.5%	9.7
FRCC	51,608	336,752	15.3%	8.3
LCC	3,967	16,706	23.7%	12.8
MCC	5,874	20,337	28.9%	10.5
NJC	3,250	33,143	9.8%	9.0
OJC	4,292	26,312	16.3%	9.3
PCC	20,384	127,459	16.0%	9.9
PPCC	39,508	269,933	14.6%	13.3
RRCC	22,376	160,913	13.9%	9.0
TSJC	6,737	34,259	19.7%	8.8
Total	262,538	1,506,021	17.4%	8.6

ACADEMIC STUDIES AND OUTCOMES

The success rates for all high school students across the Colorado Community College System has consistently been around 90 percent for the last five years (Figure 34). Figure 35 shows that when broken down by program type, more students were successful in Concurrent Enrollment (91.5%) than ASCENT (85.3%) or other programs (86.6%). In examining the course success data in Figure 36, Pell eligible students lagged behind slightly in success rates at 83.8%.

Figure 34 - System Wide Course Success Rates for High School Students, AY 2014-2015 through 2018-2019

Academic Year	Successful Courses ³	Total Courses	Success Rate
2015	53,461	59,215	90.3%
2016	56,550	62,200	90.9%
2017	63,885	70,374	90.8%
2018	70,352	77,678	90.6%
2019	77,461	85,523	90.6%

Figure 35 - High School Student Course Success by Program Type – AY 2018-2019

Course Outcome	Concurrent	ASCENT	Other	Concurrent	ASCENT	Other
Successful ('C' or Better)	61,947	2,481	13,033	91.5%	85.3%	86.6%
Non-Successful	5,728	429	2,010	8.5%	14.7%	13.4%
Total	67,675	2,910	15,043	100.0%	100.0%	100.0%

³ A course success in this report entails receiving a grade of 'C' or better. Unsuccessful courses include withdrawals.

Figure 36 – HS Course Success Rates by Demographic Grouping, AY 2018-2019

Demographic Group	Successful Courses	Total Courses	Success Rate
Students of Color	26,859	30,639	87.7%
Non Students of Color	50,605	54,988	92.0%
Pell Eligible	1,371	1,636	83.8%
Non Pell Eligible	76,092	83,992	90.6%
First Generation	33,866	38,746	87.4%
Non First Generation	43,597	46,882	93.0%
Overall	77,463	85,628	90.5%

Figure 37 - HS Course Success Rates by Demographic Group: AY 2018-2019

College	All HS Students	Students of Color	First Generation	Male	Female	Pell Eligible
ACC	94.0%	92.8%	92.1%	92.5%	95.2%	83.9%
CCA	87.0%	85.5%	84.7%	83.8%	88.9%	83.6%
CCD	81.0%	79.8%	79.3%	75.8%	84.5%	74.8%
CNCC	90.0%	86.4%	89.5%	89.5%	91.1%	100.0%
FRCC	90.0%	88.3%	86.6%	89.0%	91.5%	79.3%
LCC	96.0%	96.1%	95.3%	96.4%	96.3%	92.8%
MCC	94.0%	92.2%	92.5%	93.3%	93.8%	88.5%
NJC	96.0%	95.1%	94.1%	96.9%	95.1%	85.0%
OJC	92.0%	90.8%	90.3%	90.4%	93.8%	100.0%
PCC	92.0%	90.1%	90.5%	90.1%	93.6%	94.0%
PPCC	89.0%	84.8%	85.1%	86.4%	90.3%	81.6%
RRCC	94.0%	93.2%	91.7%	92.9%	95.7%	92.0%
TSJC	94.0%	93.5%	92.4%	94.5%	94.1%	83.3%
Total	90.5%	87.7%	87.4%	88.7%	91.9%	83.8%

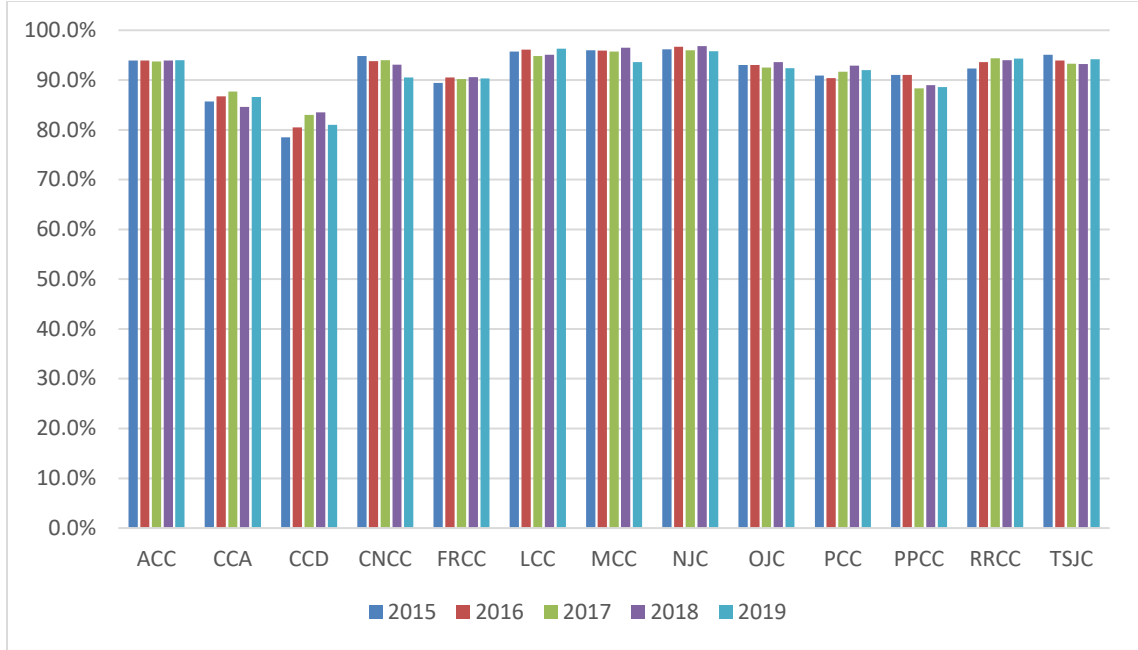
COMPARISON OF COURSE SUCCESS RATES BY COLLEGE

Course success rates at ten of the CCCS colleges met or exceeded the overall system level of 90.5 percent in 2018-19, while only three had less than 90.5 percent. Lamar Community College had the highest course success rate at 96.3 percent, while Community College of Denver registered an 81 percent success rate, similar to the preceding four-year numbers (Figure 38 & 39).

Figure 38 - Course Success Rates of HS Students by Institution, AY 2014-2015 through 2018-2019

College	2015	2016	2017	2018	2019
ACC	93.9%	93.9%	93.7%	93.9%	94.0%
CCA	85.7%	86.7%	87.7%	84.6%	86.6%
CCD	78.5%	80.5%	83.0%	83.5%	81.0%
CNCC	94.8%	93.8%	94.0%	93.1%	90.5%
FRCC	89.4%	90.5%	90.2%	90.6%	90.3%
LCC	95.7%	96.1%	94.8%	95.1%	96.3%
MCC	96.0%	95.9%	95.7%	96.5%	93.6%
NJC	96.2%	96.7%	96.0%	96.8%	95.8%
OJC	93.0%	93.0%	92.5%	93.6%	92.4%
PCC	90.9%	90.4%	91.7%	92.9%	92.0%
PPCC	91.0%	91.0%	88.3%	89.0%	88.6%
RRCC	92.3%	93.6%	94.4%	94.0%	94.3%
TSJC	95.1%	93.9%	93.3%	93.2%	94.2%
Total	90.2%	90.9%	90.8%	90.5%	90.5%

Figure 39 - Comparison of Success Rates by College, AY 2014-2014 through 2018-2019



CREDITS EARNED/TUITION SAVED

High school students earned 236,343 credits in 2018-2019, which was 90 percent of the 262,537 credit hours attempted. As with the number of course enrollments, the vast majority of credit hours were earned by concurrent enrollment and ASCENT students. With resident tuition of \$148.90 (after COF) per credit hour in 2018-2019, concurrent enrollment and ASCENT students and their families potentially saved \$35.1 million in college tuition costs for earned credit hours.

CAREER AND TECHNICAL EDUCATION

Career and technical education accounted for 36.1 percent of high school course enrollments in 2018-19. Success rates for students taking CTE courses, on average, was higher than the average for all high school students at 93.6 percent. Note that Red Rocks Community College has a significantly higher percentage of CTE courses due to their extensive work with Warren Tech in Jeffco Public Schools (Figure 40). The top three CTE courses taken by high school students system-wide in 2018-19 were Introduction to Business, Introduction to PC Applications and Personal Finance (Figure 41).

Figure 40 - CTE Course Enrollments and Completions Rates by Institution

College	AY 2019 CTE Courses	All Courses Taken by HS Students	CTE as % of all HS Courses	Success Rate for CTE Courses
ACC	6,397	13,830	46.3%	95.3%
CCA	1,543	12,822	12.0%	95.0%
CCD	732	4,892	15.0%	85.8%
CNCC	460	1,870	24.6%	89.3%
FRCC	6,059	16,448	36.8%	92.7%
LCC	354	1,336	26.5%	95.8%
MCC	575	1,926	29.9%	94.6%
NJC	208	1,082	19.2%	96.2%
OJC	314	1,348	23.3%	88.5%
PCC	2,894	6,890	42.0%	95.3%
PPCC	4,763	12,710	37.5%	90.4%
RRCC	6,023	8,310	72.5%	95.2%
TSJC	556	2,164	25.7%	94.8%
Total	30,878	85,628	36.1%	93.6%

Figure 41 - Top CTE Courses Taken by High School Students: AY 2018-2019

AY 2019 Course Total	Course	Course Description
1,750	BUS 115	Business
1,151	CIS 118	Computer Information Systems
1,111	BUS 116	Business
694	CRJ 110	Criminal Justice
635	MAR 216	Marketing
578	HPR 178	Health Professional
485	NUA 101	Nursing Assistant
484	CSC 119	Computer Science
461	NUA 170	Nursing Assistant
358	HWE 100	Health & Wellness

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 the academic year 2014-2015. Students were counted as having matriculated if they enrolled as a non-high school student in a CCCS college at any point from 2014-2015 through spring 2019. A total of 6,652 unique high school students from the 2014-2015 cohort subsequently enrolled at any CCCS college over the next four academic years; a matriculation rate of 32.2 percent (Figure 43 & 44). It is important to note that the total number of students who matriculated increased over the last few years, but the percentage decreased slightly.

Figure 42 and Figure 43 display high school student matriculation rates by college. When arrayed by institution, high school students matriculated to the *same* CCCS college where they earned credit within four years 25.8 percent of the time. Students were more likely, however, to matriculate to any school in the Colorado Community College System, as this occurs within four years 32.2 percent of the time.

**Figure 42 - High School Matriculation Rates at Same College
Within Four Academic Years, 2014-2015 HS Cohort**

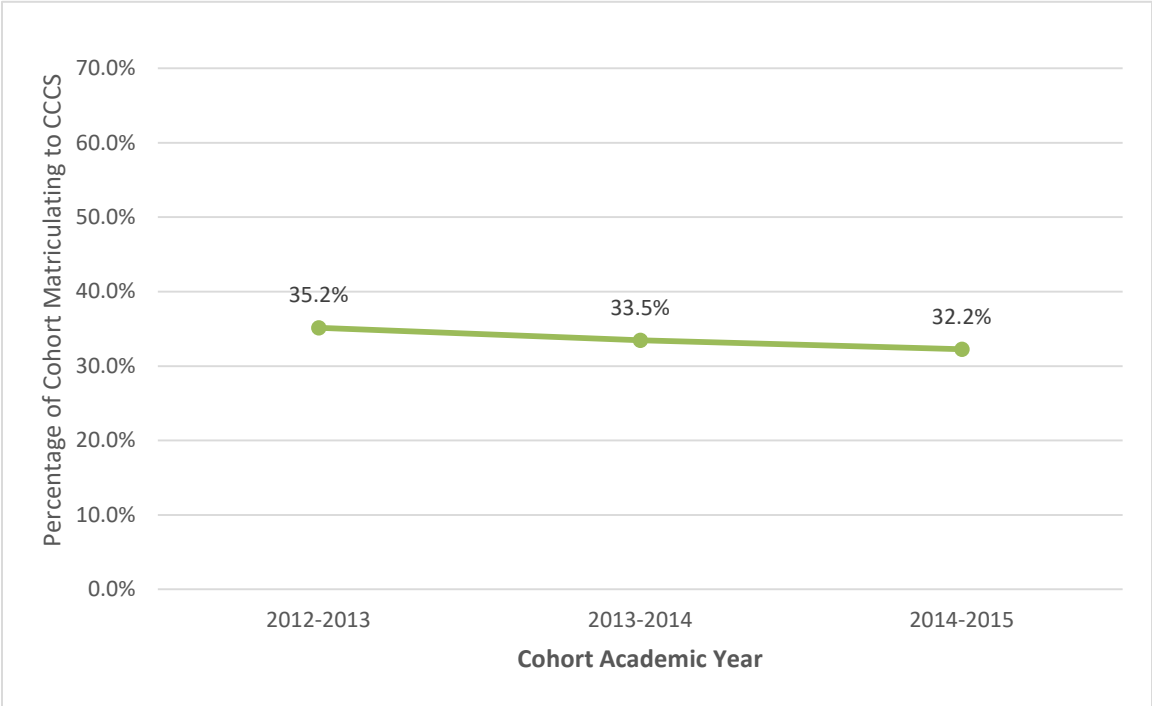
College	Total HS Students 2014-2015	# of Students Matriculated to Same CCCS College Within Four Years	Matriculation Rate Within Four Years
ACC	3,578	586	16.4%
CCA	3,226	522	16.2%
CCD	2,418	487	20.1%
CNCC	500	119	23.8%
FRCC	3,266	984	30.1%
LCC	378	157	41.5%
MCC	803	282	35.1%
NJC	403	172	42.7%
OJC	567	221	39.0%
PCC	1,251	403	32.2%
PPCC	2,018	699	34.6%
RRCC	1,527	477	31.2%
TSJC	697	211	30.3%
Total	20,632	5,320	25.8%

**Figure 43 - High School Matriculation Rates at any CCCS College
Within Four Academic Years, 2014-2015 HS Cohort**

College	Total HS Students 2014-2015	# of Students Matriculated to Any CCCS College Within Four Years	Matriculation Rate Within Four Years
ACC	3,578	898	25.1%
CCA	3,226	849	26.3%
CCD	2,418	650	26.9%
CNCC	500	142	28.4%
FRCC	3,266	1,087	33.3%
LCC	378	174	46.0%
MCC	803	361	45.0%
NJC	403	188	46.7%
OJC	567	249	43.9%
PCC	1,251	456	36.5%
PPCC	2,018	737	36.5%
RRCC	1,527	606	39.7%
TSJC	697	255	36.6%
Total	20,632	6,652	32.2%

There was a marked disparity between the five metro-area colleges and the other eight schools in regard to matriculation rates. On average, 35 percent of high school students attending non-metro colleges matriculated to the same institution after high school compared to 16.3 percent to the five Denver metro colleges, indicating that location could have a significant impact on high school students' likelihood to return as an undergraduate student. This disparity remained consistent when accounting for matriculation at any CCCS college, as 25 percent of students later enrolled at metro colleges compared to 40 percent of high school students attending the other eight colleges around the state. While the matriculation rate has remained flat to this point, CCCS is holding trainings with college personnel from Communications, Recruitment, Advising and Concurrent Enrollment offices in order to identify strategies to increase matriculation rates.

Figure 44 - Matriculation of HS Students to CCCS Colleges over Time



ENROLLMENT IN A FOUR YEAR COLLEGE AND OVERALL MATRICULATION RATE OF CCCS HIGH SCHOOL STUDENTS

In researching matriculation rates of high school students who took CCCS courses, we have widened the scope to include four-year colleges and universities. Using the cohort model described above, we know that 32.2 percent of students enroll at a CCCS college within four years after graduation. Additionally, 58.3 percent of those students go on to attend a four-year institution. Combining those two groups of students, we now know that nearly 75 percent of CCCS high school students go on to pursue additional higher education opportunities at either a CCCS college, a four-year institution or both (Figure 45). Figure 46 reflects that same information broken down by institution, with Arapahoe Community College, Northeastern Junior College, Morgan Community College, Lamar Community College and Trinidad State Junior College logging the highest composite matriculation rates.

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

Total 2014-2015 CCCS 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
20,632	6,652	12,030	15,439	32.2%	58.3%	74.8%

Figure 46 - Overall Matriculation of CCCS High School Students within Four Years, By CCCS College

College	Total 2015 CCCS High School Cohort	Matriculated to 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 (CCCS or Four-Year)
ACC	3,578	898	2,755	3,076	25.1%	77.0%	86.0%
CCA	3,226	849	2,128	2,523	26.3%	66.0%	78.2%
CCD	2,418	650	831	1,228	26.9%	34.4%	50.8%
CNCC	500	142	253	341	28.4%	50.6%	68.2%
FRCC	3,266	1,087	1,987	2,514	33.3%	60.8%	77.0%
LCC	378	174	202	303	46.0%	53.4%	80.2%
MCC	803	361	517	669	45.0%	64.4%	83.3%
NJC	403	188	250	346	46.7%	62.0%	85.9%
OJC	567	249	257	399	43.9%	45.3%	70.4%
PCC	1,251	456	604	885	36.5%	48.3%	70.7%
PPCC	2,018	737	1,018	1,445	36.5%	50.4%	71.6%
RRCC	1,527	606	771	1,132	39.7%	50.5%	74.1%
TSJC	697	255	457	578	36.6%	65.6%	82.9%
Total	20,632	6,652	12,030	15,439	32.2%	58.3%	74.8%

In examining the demographics of those students who matriculated to either a CCCS college or a four-year institution, Pell eligible students were more likely to enroll in a CCCS college, as were first-generation and students of color. Additionally, in Figure 46, non-resident aliens, Hispanic and multiple race students were more likely to attend a CCCS college.

Figure 47 - Overall Matriculation within Four Years by Demographic Groupings: AY 2014-2015 High School Cohort

Demographic Grouping	% Matriculating to CCCS within Four Years	% Matriculated to Four Year School	Overall Matriculation Rate (CCCS or Four-Year School)
Non Students of Color	31.3%	60.5%	76.1%
Students of Color	34.0%	54.0%	72.4%
Not Pell Eligible	31.9%	58.5%	74.8%
Pell Eligible	60.2%	41.0%	76.7%
Non First Generation	29.7%	70.8%	83.0%
First Generation	34.9%	45.0%	66.2%

Figure 48 - Overall Matriculation of CCCS High School Students within Four Years by Race/Ethnicity: AY 2014-2015 High School Cohort

Race/Ethnicity	Total HS Students 2014-2015	Matriculated to CCCS Within Four Years	Matriculated to Four-Year School Within Four Years	Matriculated to Either CCCS or Four-Year School Within Four Years	% Matriculated to CCCS	% Matriculated to Four Year School	Overall Matriculation Rate (CCCS or Four-Year School)
American Indian or Alaskan Native	134	30	47	63	22.4%	35.1%	47.0%
Asian	633	169	490	558	26.7%	77.4%	88.2%
Black or African American	799	231	500	609	28.9%	62.6%	76.2%
Hispanic	4,649	1,693	2,261	3,225	36.4%	48.6%	69.4%
Multiple races	812	267	495	630	32.9%	61.0%	77.6%
Native Hawaiian and Other Pacific Islander	42	12	25	31	28.6%	59.5%	73.8%
Non-Resident Alien (International)	523	226	134	299	43.2%	25.6%	57.2%
Unknown	1,197	223	558	682	18.6%	46.6%	57.0%
White	11,843	3,801	7,520	9,342	32.1%	63.5%	78.9%
Total	20,632	6,652	12,030	15,439	32.2%	58.3%	74.8%

Those Concurrent Enrollment students who attended a four-year college after graduation were most likely to attend the institutions found in Figure 49.

Figure 49 - 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	1,697	11.5%
UNIVERSITY OF COLORADO DENVER	1,610	10.9%
METROPOLITAN STATE UNIVERSITY OF DENVER	1,453	9.8%
UNIVERSITY OF COLORADO BOULDER	1,422	9.6%
UNIVERSITY OF COLORADO COLORADO SPRINGS	966	6.5%
UNIVERSITY OF NORTHERN COLORADO	910	6.1%
COLORADO STATE UNIVERSITY - PUEBLO	636	4.3%
COLORADO MESA UNIVERSITY	418	2.8%
COLORADO SCHOOL OF MINES	302	2.0%
ADAMS STATE UNIVERSITY	248	1.7%

EFFECT OF CONCURRENT ENROLLMENT ON STUDENT SUCCESS MEASURES

To examine the effect Concurrent Enrollment has on student outcomes after high school, retention and college 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 2017 cohort for retention, and the fall 2016 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 institution while still in high school retained 57.7 percent of the time, compared with 47.4 percent for those that never dual enrolled while in high school (Figure 50). Previous concurrently enrolled high school students also graduated from college 34 percent of the time, compared with 18.8 percent for students who never concurrently enrolled while in high school (Figure 51).

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

Past High School Enrollment	Fall 2017 Cohort ⁴	Retained Fall 2018 ⁵	Fall-to-Fall Retention Rate
No Previous Concurrent Enrollment	9,767	4,633	47.4%
Previous Concurrent Enrollment	2,104	1,215	57.7%
Total	11,871	5,848	49.3%

⁴ Fall cohort includes 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.

⁵ Students count as retained if they enrolled in fall 2018, or graduated at any point from fall 2017 through summer 2018.

Figure 51 – College Graduation Rates by Past HS Concurrent Enrollment

Past High School Concurrent Enrollment	Fall 2016 Cohort	Graduated by Summer 2019	Graduation Rate
No Previous Concurrent Enrollment	9,521	1,788	18.8%
Previous Concurrent Enrollment	1,614	548	34.0%
Total	11,135	2,336	21.0%

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 number of high school students enrolling in Concurrent Enrollment, ASCENT and other programs continues to grow at a rapid rate. These students continue to successfully complete their courses at high rates. Increasing proportions of students are earning credentials while still in high school. 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.

High school enrollment at CCCS institutions now accounts for 24.5 percent of student enrollment. While the matriculation rate of high school students lingers slightly above 30 percent, CCCS is dedicated to increasing that number through training and teamwork.

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. 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 institutions and beyond is crucial to understanding the dynamics of the high school student population and strategically planning for student success.