### STATE BOARD FOR COMMUNITY COLLEGES AND OCCUPATIONAL EDUCATION

January 26, 2022

**TOPIC:** Annual Concurrent Enrollment Report

PRESENTED BY: Landon Pirius, Ph.D., Vice Chancellor for Academic and Student Affairs

**RELATIONSHIP TO THE STRATEGIC PLAN:** Create Education without Barriers through Transformational Partnerships

**EXPLANATION:** In academic year 2020-2021, The Colorado Community College System saw a 5% decline in the number of high school students taking courses that award college credit, largely due to the effects of the pandemic. Overall, 33,112 high school students enrolled in CCCS colleges in academic year (AY) 2020-2021 compared to 34,989 in 2019-2020. In AY 2020-2021, high school students accounted for 29 percent of the annual headcount within CCCS colleges, which is actually an increase over 2019-2020 (25%) demonstrating that the pandemic impacted traditional students at a higher rate. Credit hours attempted by High school students attempted was also affected, although not as much with a 1.2% drop, year-over-year. In 2020-2021, 11.9 percent of all public high school students in Colorado earned some college credit via CCCS compared to 12.6 percent in the previous year.

The matriculation rate of high school students who earned CCCS credit continued to be an area of focus this year. The rate of students who matriculated to CCCS colleges was 31.7 percent of students enrolled at a CCCS college within four years after graduation, slightly less than the previous year (32.6 percent). Additionally, 58.5 percent of concurrent enrollment students go on to attend a four-year university, up marginally from 57.8 percent measured in the year-previous. Combining those two groups of students, we now know that 75 percent of CCCS high school students went on to pursue additional higher education opportunities at either a CCCS college or a four-year university.

This year's report has expanded our efforts to disaggregate data by student demographic and college. A number of figures have been added to provide that additional detail. In addition, this year's report included key year-over-year comparisons. **RECOMMENDATION:** No action required. For information only.

ATTACHMENT(S): Academic Year 2020-2021 High School Students Attending CCCS Colleges ACADEMIC YEAR 2020-2021: HIGH SCHOOL STUDENTS ATTENDING CCCS COLLEGES



# TABLE OF CONTENTS

ystem Overview of High School Students	2
ligh School Students by College	7
Participation by Program	0
Participation by Program and College1	1
Participation by Term	2
Demographics1	3
Credentials Earned	6
Credit Hours Attempted2	0
Academic Studies and Outcomes2	1
Comparison of Course Pass Rates by College2	3
Credits Earned and Tuition Saved2	5
Career and Technical Education2	6
Aatriculation Rates to CCCS Colleges	8
nrollment in a Four-year University and Overall Matriculation	0
ffect of Concurrent Enrollment on Academic Success Measures	3
Aedian Time and Credits to Degree	6
Aedian Wage3	9
Conclusion4	3
Appendix: Methodology4	5
Data Source:	45
Methodology:	45



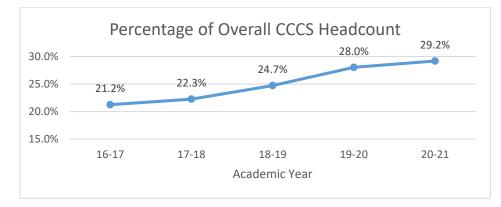
## SYSTEM OVERVIEW OF HIGH SCHOOL STUDENTS

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).

#### Total HS Students Enrolled at CCCS Colleges 40,000 34,989 33,112 35,000 30,048 30,000 27.307 25,444 25,000 20,000 16-17 17-18 18-19 19-20 20-21 Academic Year

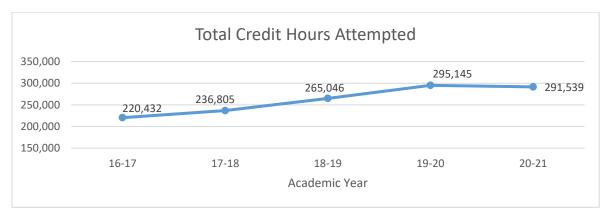
### Figure 1: Number of Unique High School Students by Academic Year

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









### 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 School <sup>1</sup>					
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%

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



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

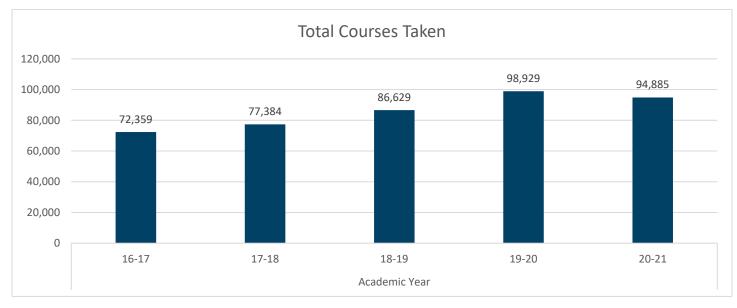
	Public F	ligh School	CCCS H		
Gender	Number	Percentage	Number	Percentage	% Pt. Diff.
Female	136,258	48.9%	18,447	55.7%	6.8%
Male	142,166	51.1%	14,665	44.3%	-6.8%
Race/Ethnicity	Number	Percentage	Number	Percentage	% Pt. Diff.
American Indian or Alaskan Native	1,981	0.7%	165	0.5%	-0.2%
Asian	9,103	3.3%	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 F	ligh School	CCCS H		
Gender	Number	Percentage	Number	Percentage	% Pt. Diff.
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.



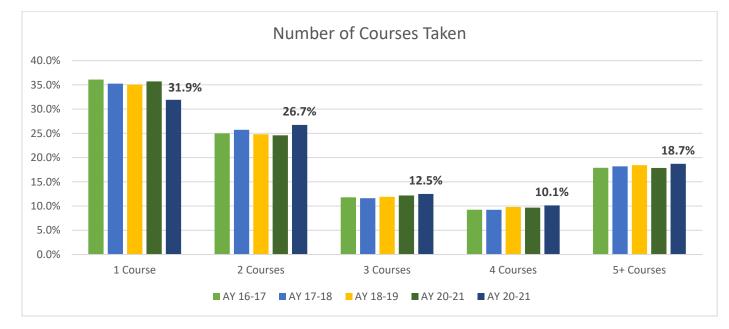
### Figure 5 - Total Courses Taken by CCCS High School Students

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

Number of Courses Taken During the Year		2 Courses	3 Courses	4 Courses	5+ Courses	Total
Number of Students	10,568	8 <i>,</i> 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 8 - Average Credit Hours Taken Per High School Student by Academic Year

	AY	AY	AY	AY	AY
	16-17	17-18	18-19	19-20	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

	ΑΥ	ΑΥ	ΑΥ	AY	ΑΥ
College	16-17	17-18	18-19	19-20	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 <i>,</i> 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 <i>,</i> 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



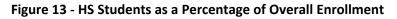
#### Figure 11 – Change from Previous Year in Number of High School Students Enrolled

	ΑΥ	ΑΥ	ΑΥ	ΑΥ	ΑΥ
College	16-17	17-18	18-19	19-20	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

	AY	ΑΥ	ΑΥ	AY	ΑΥ
College	16-17	17-18	18-19	19-20	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%





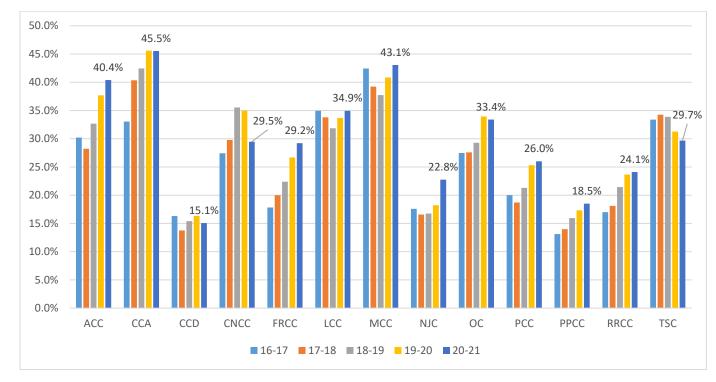


Figure 14 - HS Student Enrollment by Term and College: AY 2020-2021

College	Summer	Fall	Spring	Summer as of Year	Fall as % of Year	Spring as of Year
ACC	121	5,415	5 <i>,</i> 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%



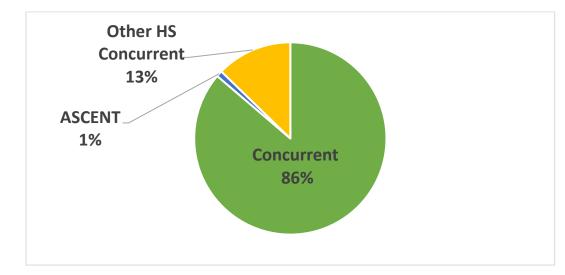
## PARTICIPATION BY PROGRAM

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).

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

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 as	Spring as
	Summer	Fall	Spring	as of Year	% of Year	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

	AY	ΑΥ	AY	AY	AY	AY	ΑΥ	ΑΥ	ΑΥ	ΑΥ
Gender	16-17	17-18	18-19	19-20	20-21	16-17	17-18	18-19	19-20	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

	ΑΥ	ΑΥ	ΑΥ	AY	AY
Race/Ethnicity	16-17	17-18	18-19	19-20	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

Colleg e	American Indian or Alaskan Native	Asian	Black or African America n	Hispanic	Multipl e races	Native Hawaiia n and Other Pacific Islander	Non-Resident Alien (International )	Unknow n	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

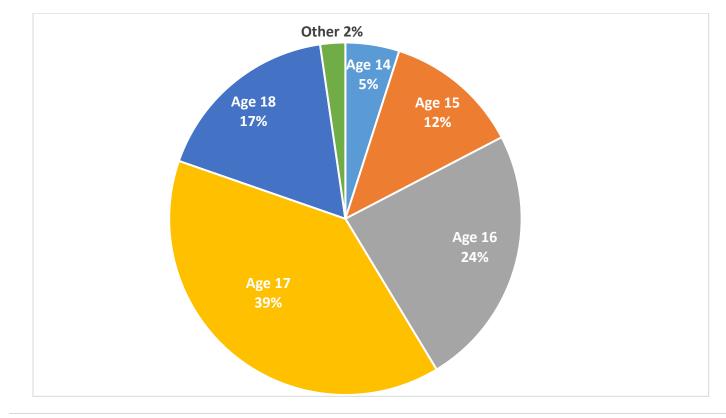
	ΑΥ	ΑΥ	ΑΥ	ΑΥ	ΑΥ	ΑΥ
	18-19	19-20	20-21	18-19	19-20	20-21
Race/Ethnicity:						
Students of Color	10,737	13,079	12,394	35.7%	37.4%	37.4%
Non-Students of Color	19,311	21,910	20,718	64.3%	62.6%	62.6%
First-Generation Status:						
First-Generation	12,777	13,494	11,777	42.5%	38.6%	35.6%
Not First-Generation	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

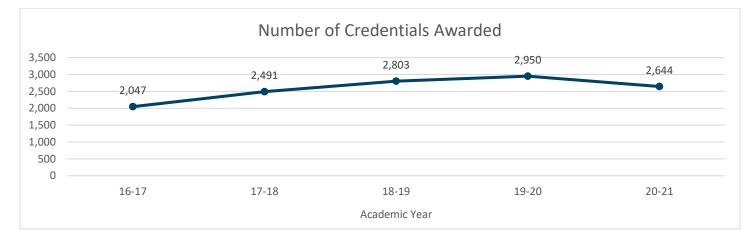




## CREDENTIALS EARNED

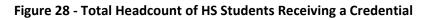
Overall, 2,224 high school students earned a credential in 2020-2021 (Figure 28), and a total of 2,644 awards were granted (Figure 27). Total number of students receiving a credential decreased 2.3 percent from AY 2019-2020. Of all awards granted, 79.3 percent of them were certificates and the majority 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.

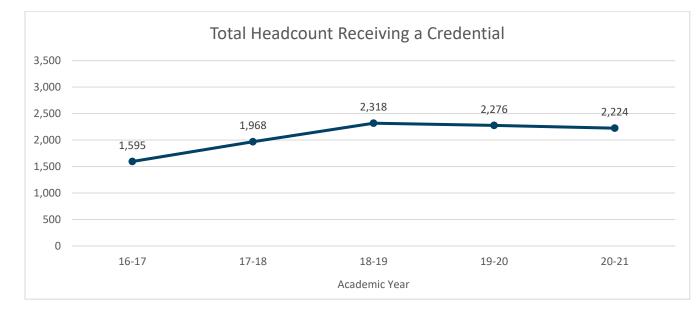
Figures 30.1 and 30.2 provide number of credentials awarded and total headcount by college. In AY 2020-2021, almost 40% of the students who received a credential were from Front Range Community College, which accounts for 42 percent of total credentials awarded. In the same academic year (Figure 31.1), 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 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

	ΑΥ	ΑΥ	ΑΥ	ΑΥ	AY
Number of Credentials Awarded	16-17	17-18	18-19	19-20	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

	ΑΥ	AY	AY	AY	AY
<b>Total Headcount Receiving a Credential</b>	16-17	17-18	18-19	19-20	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
РРСС	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.

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

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



## 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

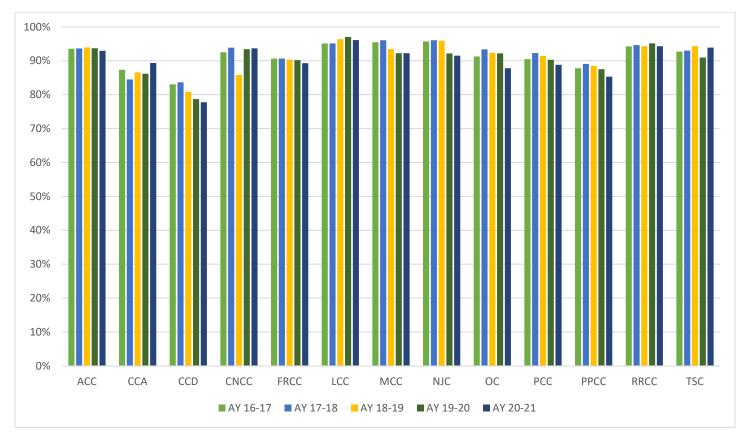
Course pass rates at seven out of thirteen CCCS colleges met or exceeded the overall system level of 90 percent in 2020-21, while six colleges had a pass rate of lower than 90 percent (Figures 36 and 37). Lamar Community College had the highest course pass rate at 96 percent, while Community College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

	ΑΥ	ΑΥ	ΑΥ	ΑΥ	ΑΥ
Colleges	16-17	17-18	18-19	19-20	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 36 - Course Pass Rates of HS Students by College



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

	ΑΥ	ΑΥ	ΑΥ
	18-19	19-20	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).

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 39 - CTE Course Enrollments and Completions Rates by College



### 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 fouryear 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%).

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%
<b>CCCS Total</b>	25,444	6,474	25.4%

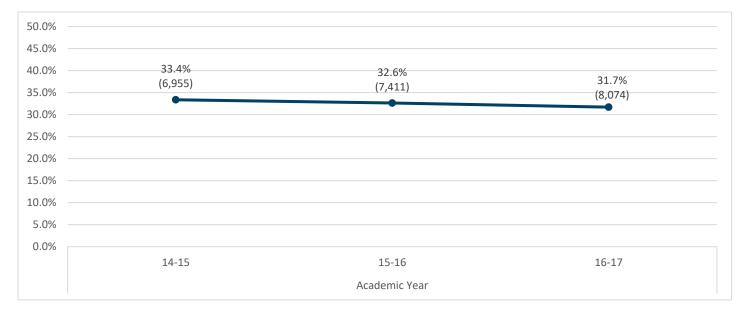
Figure 41 - High School Matriculation Rates at Same College within Four Academic Years, 2016-2017 HS Cohort



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

	Total HS Students	Number of Students Matriculated to any	Matriculation
College	16-17	CCCS College Within Four Years	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%
<b>CCCS</b> 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, 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%.

Year Over Year Matriculation Comparison	High School Cohort	Matriculated at CCCS Institution	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 44.1 - Overall Matriculation of CCCS High School Students within Four Years with Year-Over-Year Comparison

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

2016-2017	Matric. at	Matric. to	<b>Overall Matric.</b>	Not Matric.	CCCS	Four-Year	Overall	Matric. and
CCCS High	CCCS	Four-Year	(Either CCCS or	but	Matric.	School	Matric.	Employment
<b>School Cohort</b>	Institution	School	Four-Year)	Employed	Rate	Matric. Rate	Rate	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%
МСС	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%
00	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	ov Demographic Groupings: AY 20	016-2017 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	2017	Matric. to CCCS Institution	Four-Year	Matric.		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 deceased 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 (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).

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

#### 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	<b>Graduation Rate</b>
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.

	AY 18-19	AY 19-20	AY 20-21
Median Time to Degree:			
Previous Concurrent Enrollment <sup>2</sup>	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

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

<sup>2</sup> 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 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, and Pikes Peak 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 program at most of the urban colleges (namely Arapahoe Community College, and Pikes Peak Community College) cumulated less credit

	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
РРСС	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
РРСС	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).

	Calendar Year	Calendar Year	Calendar Year	Calendar Year	Calendar Year	Calendar Year
Employment Status	2013	2014	2015	2013	2014	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 57 – Employment Status by Calendar Year



#### 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 <i>,</i> 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

	Calendar Year	Calendar Year	Calendar Year
Type of Credential	2013	2014	2015
Certificate (< 1 Year) <sup>3</sup>			
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) <sup>4</sup>			
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 <i>,</i> 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%

<sup>3</sup> Certificate (< 1 Year) includes CER1 and CER1N</li>
<sup>4</sup> 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%.

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 <i>,</i> 337	\$33,811	\$37,700
5-Year	\$39,361	\$42 <i>,</i> 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%

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



### 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:

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

**<u>Career and technical education (CTE)</u>**: CTE courses are identified using course attribute.

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

<u>Course level</u>: 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.

<u>Course pass rate</u>: 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).

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

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

<u>Credits attempted</u>: 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.

<u>Graduation rate</u>: 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.

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

<u>High school program</u>: 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.

<u>High school students</u>: 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.

<u>Matriculation to CCCS colleges</u>: 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.

<u>Matriculation to four-year universities</u>: 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.

<u>Median credits to degree</u>: 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.

<u>Median time to degree</u>: 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 3<sup>rd</sup> quarter to 6<sup>th</sup> quarter after graduation. Year three wage is the sum of earnings from 11<sup>th</sup> quarter to 14<sup>th</sup> quarter after graduation. Year five wage is the sum of earnings from 19<sup>th</sup> quarter to 22<sup>nd</sup> 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 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 6<sup>th</sup> quarter after graduation are excluded from year one wage calculation; graduates who are employed less than five quarters by the end of 14<sup>th</sup> quarter or by the end of 22<sup>nd</sup> quarter are excluded in year three wage and year five wage calculation. Graduates who earned less than the state minimum wage are also excluded.

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

#### Figure 61 – Wage calculation for spring 2012 cohort

**<u>Race/ethnicity</u>**: IPEDS's definition of race/ethnicity is used in this report.

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