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



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SYSTEM OVERVIEW OF HIGH SCHOOL STUDENTS

AY 21-22 signaled a rebound in CCCS concurrent enrollment, following a drop in AY 20-21 that was heavily impacted by the pandemic. The number of students taking college courses through CCCS while still in high school surpassed the high-water mark from AY 19-20, as the overall high school headcount grew 13 percent year over year. This is shown in Figure 1. Overall, 37,475 high school students enrolled in CCCS colleges in academic year (AY) 2021-2022. High school students accounted for 33.5 percent of the annual headcount within CCCS colleges (Figure 2), a 4.3 percentage-point increase over the year prior. High school students attempted eight percent more credit hours than last year (Figure 3). In 2021-2022, 9.6 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).

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

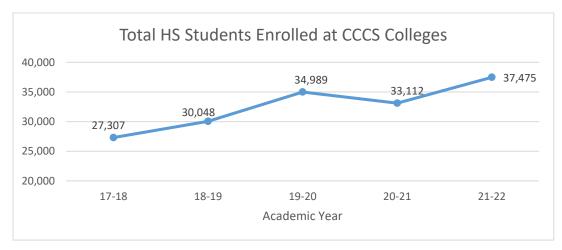


Figure 2- High School Students as a Percentage of Overall CCCS Headcount

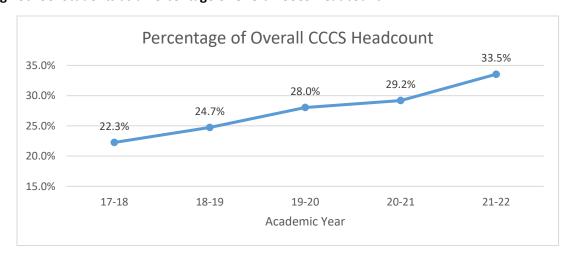




Figure 3 - Total Credit Hours Attempted by CCCS High School Students

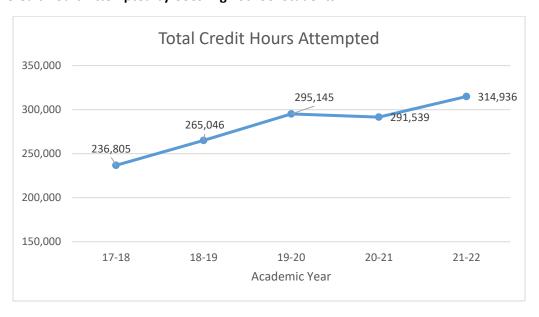


Figure 4.1 - CCCS High School Students Compared to all Colorado Public HS Students

	Fall 2016 Enrollment/ AY 16-17	Fall 2017 Enrollment/ AY 17-18	Fall 2018 Enrollment/ AY 18-19	Fall 2019 Enrollment/ AY 19-20	Fall 2020 Enrollment/ AY 20-21	Fall 2021 Enrollment/ AY 21-22
Public High School ¹						
Total Number of Students	265,329	270,190	273,519	276,730	278,424	280,745
Percent Change Year-to-Year	1.8%	1.8%	1.2%	1.2%	0.6%	0.8%
CCCS HS Students						
Total Number of Students	25,444	27,307	30,048	34,989	33,112	37,475
Percent Change Year-to-Year	12.1%	7.3%	10.0%	16.4%	-5.4%	13.2%
CCCS as of Public High School	9.6%	10.1%	11.0%	12.6%	11.9%	13.3%

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



Figure 4.2 – AY 2021-2022 Demographic Breakdown of CCCS High School Students Compared to all Colorado Public HS Students

	Public F	ligh School	CCCS H	S Students	
Gender	Number	Percentage	Number	Percentage	% Pt. Diff.
Female	137,012	48.8%	20,546	54.8%	6.0%
Male	143,733	51.2%	16,929	45.2%	-6.0%
Race/Ethnicity	Number	Percentage	Number	Percentage	% Pt. Diff.
American Indian or Alaskan Native	1,969	0.7%	211	0.6%	-0.1%
Asian	8,893	3.2%	1,533	4.1%	0.9%
Black or African American	12,388	4.4%	1,379	3.7%	-0.7%
Hispanic	99,102	35.3%	9,327	24.9%	-10.4%
Multiple races	12,224	4.4%	1,806	4.8%	0.5%
Native Hawaiian and Other Pacific Islander	808	0.3%	64	0.2%	-0.1%
Non-Resident Alien (Int'l.)	0	0.0%	1,178	3.1%	3.1%
Unknown	0	0.0%	1,946	5.2%	5.2%
White	145,361	51.8%	20,031	53.5%	1.7%
Students of Color	135,384	48.2%	14,320	38.2%	-10.0%

Figure 4.3 – 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%



High school students enrolled in 103,633 courses in 2021-2022, an increase of 9.2 percent from the previous year (Figure 5). Over half (61.4%) of the high school students enrolled in one or two courses, and 17.1 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 dropped slightly, from 8.9 to 8.5 year over year (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 2021-2022

Number of Courses Taken During the Year	1 Course	2 Courses	3 Courses	4 Courses	5+ Courses	Total
Number of Students	12,888	10,131	4,268	3,783	6,405	37,475
Percentage of Students	34.4%	27.0%	11.4%	10.1%	17.1%	100.0%



Figure 7 - Number of Courses Taken by High School Students

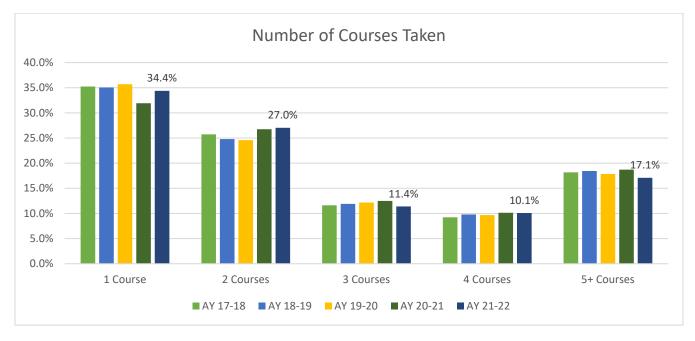


Figure 8 - Average Credit Hours Taken Per High School Student by Academic Year

	AY	AY	AY	AY	AY	AY
	16-17	17-18	18-19	19-20	20-21	21-22
Average Credits Taken by HS Students	8.8	8.8	8.9	8.7	8.9	8.5

Figure 9 - Top Ten Courses Taken by CCCS High School Students: AY 2021-2022

Courses	Number of Course Enrollments	Percentage of all HS Course Enrollments
ENG121	8,524	8.2%
MAT121	5,716	5.5%
ENG122	5,002	4.8%
BUS115	2,650	2.6%
LIT115	2,438	2.4%
MAT122	2,369	2.3%
PSY101	2,143	2.1%
BUS116	2,075	2.0%
COM115	1,856	1.8%
HIS121	1,704	1.6%



HIGH SCHOOL STUDENTS BY COLLEGE

In AY 2021-2022, Front Range Community College had the largest number of high school students, followed by Arapahoe Community College (Figure 10). Community College of Denver 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 49.7 percent at Community College of Aurora to 18.1 percent at Pikes Peak State College (Figures 12 and 13). High school enrollments in eleven out of thirteen CCCS colleges comprised over a quarter of college enrollments. Typically, more high school students tend to register in the spring term than in the fall by a slight margin (Figure 14).

Figure 10 - High School Students by College

	AY	AY	AY	AY	AY
College	17-18	18-19	19-20	20-21	21-22
ACC	5,404	6,349	8,089	7,529	8,631
CCA	4,752	4,819	5,561	4,913	5,465
CCD	1,703	1,810	1,894	1,550	2,756
CNCC	535	622	548	423	619
FRCC	5,623	6,283	7,742	8,192	9,005
LCC	343	315	352	318	312
MCC	702	611	687	729	822
NJC	368	373	361	394	373
OC	480	475	546	509	449
PCC	1,852	2,059	2,448	2,256	2,564
PPSC	2,602	2,982	3,307	3,242	2,966
RRCC	2,146	2,584	2,736	2,434	2,815
TSC	797	766	718	623	698
CCCS Total	27,307	30,048	34,989	33,112	37,475



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

	AY	AY	AY	AY	AY
College	17-18	18-19	19-20	20-21	21-22
ACC	7.6%	17.5%	27.4%	-6.9%	14.6%
CCA	30.5%	1.4%	15.4%	-11.7%	11.2%
CCD	-19.6%	6.3%	4.6%	-18.2%	77.8%
CNCC	15.8%	16.3%	-11.9%	-22.8%	46.3%
FRCC	11.6%	11.7%	23.2%	5.8%	9.9%
LCC	-4.5%	-8.2%	11.7%	-9.7%	-1.9%
MCC	-14.9%	-13.0%	12.4%	6.1%	12.8%
NJC	-8.5%	1.4%	-3.2%	9.1%	-5.3%
OC	-6.1%	-1.0%	14.9%	-6.8%	-11.8%
PCC	7.0%	11.2%	18.9%	-7.8%	13.7%
PPSC	6.2%	14.6%	10.9%	-2.0%	-8.5%
RRCC	1.9%	20.4%	5.9%	-11.0%	15.7%
TSC	2.4%	-3.9%	-6.3%	-13.2%	12.0%
CCCS Total	7.3%	10.0%	16.4%	-5.4%	13.2%

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

	AY	AY	AY	AY	AY
College	17-18	18-19	19-20	20-21	21-22
ACC	28.2%	32.7%	37.7%	40.4%	48.5%
CCA	40.3%	42.5%	45.6%	45.5%	49.7%
CCD	13.8%	15.4%	16.3%	15.1%	26.5%
CNCC	29.8%	35.5%	35.0%	29.5%	39.4%
FRCC	20.0%	22.4%	26.7%	29.2%	33.1%
LCC	33.8%	31.9%	33.7%	34.9%	37.0%
MCC	39.2%	37.7%	40.8%	43.1%	47.5%
NJC	16.6%	16.7%	18.2%	22.8%	20.6%
OC	27.6%	29.3%	34.0%	33.4%	31.0%
PCC	18.7%	21.3%	25.3%	26.0%	27.5%
PPSC	14.0%	15.9%	17.3%	18.5%	18.1%
RRCC	18.1%	21.4%	23.7%	24.1%	28.1%
TSC	34.3%	33.9%	31.3%	29.7%	31.7%
CCCS Total	22.3%	24.7%	28.0%	29.2%	33.5%



Figure 13 - HS Students as a Percentage of Overall Enrollment

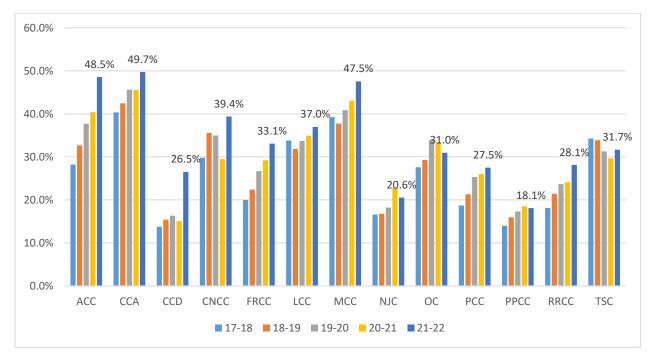


Figure 14 - HS Student Enrollment by Term and College: AY 2021-2022

College	Summer	Fall	Spring	Summer as of Year	Fall as % of Year	Spring as % of Year
ACC	145	6,313	6,401	1.1%	49.1%	49.8%
CCA	92	4,102	4,436	1.1%	47.5%	51.4%
CCD	109	1,808	2,123	2.7%	44.8%	52.5%
CNCC	7	514	453	0.7%	52.8%	46.5%
FRCC	249	6,313	6,670	1.9%	47.7%	50.4%
LCC	15	286	261	2.7%	50.9%	46.4%
MCC	72	731	677	4.9%	49.4%	45.7%
NJC	10	323	301	1.6%	50.9%	47.5%
OC	3	352	370	0.4%	48.6%	51.0%
PCC	21	1,867	1,987	0.5%	48.2%	51.3%
PPSC	146	2,507	2,547	2.8%	48.2%	49.0%
RRCC	28	1,383	2,305	0.8%	37.2%	62.0%
TSC	10	459	586	0.9%	43.5%	55.5%
CCCS Total	907	26,958	29,117	1.6%	47.3%	51.1%



PARTICIPATION BY PROGRAM

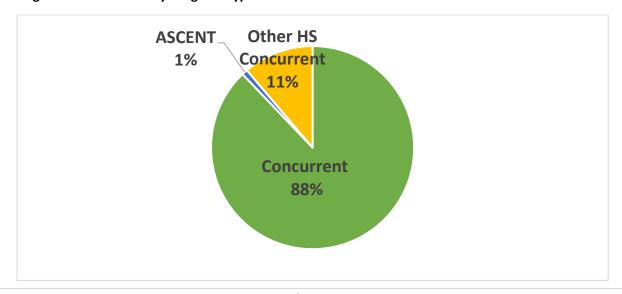
The two most common methods provided by Colorado law for high school students to earn college credit are the concurrent enrollment program and the "Accelerating Students through Concurrent Enrollment" or ASCENT program. However, high school students are not strictly limited to these two methods of enrollment 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 88 percent of high school enrollments system wide in AY 2021-2022 (Figure 15). The ASCENT program accounted for one percent of student enrollments. These are roughly the same percentages as in 2020-2021, when 86 percent of high school students participated through the concurrent program.

Figure 15 - High School Students by Program Type: AY 2021-2022





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 (88 percent) enrolled in CCCS colleges through the concurrent enrollment program. Arapaho Community College had the highest number of students (7,710) in the concurrent program, followed by Front Range Community College (7,455). In terms of course level, a majority (98.8%) of the course enrollment was college level, with only 1.2% in developmental education (Figure 17).

Figure 16 - High School Students by Program and College: AY 2021-2022

			Early		Other HS	%	%	% Early	% P-	% Other
College	Concurrent	ASCENT	College	P-Tech	Concurrent	Concurrent	ASCENT	College	Tech	HS
ACC	7,710	14	765	56	86	89.3%	0.2%	8.9%	0.6%	1.0%
CCA	5,390	57	0	0	18	98.6%	1.0%	0.0%	0.0%	0.3%
CCD	2,148	14	571	0	23	77.9%	0.5%	20.7%	0.0%	0.8%
CNCC	609	0	0	0	10	98.4%	0.0%	0.0%	0.0%	1.6%
FRCC	7,455	130	788	402	230	82.8%	1.4%	8.8%	4.5%	2.6%
LCC	306	4	0	0	2	98.1%	1.3%	0.0%	0.0%	0.6%
MCC	781	0	0	0	41	95.0%	0.0%	0.0%	0.0%	5.0%
NJC	364	0	0	0	9	97.6%	0.0%	0.0%	0.0%	2.4%
OC	441	1	0	0	7	98.2%	0.2%	0.0%	0.0%	1.6%
PCC	2,432	25	0	0	107	94.9%	1.0%	0.0%	0.0%	4.2%
PPSC	1,950	65	820	53	78	65.7%	2.2%	27.6%	1.8%	2.6%
RRCC	2,657	31	70	0	57	94.4%	1.1%	2.5%	0.0%	2.0%
TSC	689	1	0	0	8	98.7%	0.1%	0.0%	0.0%	1.1%
CCCS	32,932	342	3,014	511	676	87.9%	0.9%	8.0%	1.4%	1.8%

Figure 17 - HS Course Enrollment by Course Level: AY 2021-2022

Course Level	Course Enrollments	% of Total HS Courses		
Developmental Ed	1,247	1.2%		
College Level	102,386	98.8%		
Total	103,633	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 2021-2022

	Summer	Fall	Spring	Summer as of Year	Fall as % of Year	Spring as of Year
Number of HS Students	907	26,958	29,117	1.6%	47.3%	51.1%

Figure 19- Number of High School Students by Term and Program: AY 2021-2022

Program	Summer	Fall	Spring	Summer as % of Year	Fall as % of Year	Spring as of Year
Concurrent	273	23,345	25,327	0.6%	47.7%	51.7%
ASCENT	2	358	306	0.3%	53.8%	45.9%
Other HS Concurrent	632	3,255	3,484	8.6%	44.2%	47.3%
Total	907	26,958	29,117	1.6%	47.3%	51.1%

Figure 20 - Number and Percentage of Credit Hours by Term

						Fall as	
					Summer as	% of	Spring as
Academic Year	Summer	Fall	Spring	Total	% of Year	Year	% of Year
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 19-20	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%
AY 21-22	3,900.00	147,001.50	164,034.25	314,935.75	1.2%	46.7%	52.1%



DEMOGRAPHICS

Over the last five years, an average of 54 percent of the high school students identified as female (Figure 21). In AY 2021-2022, high school students at CCCS colleges self-reported as 53.5 percent white. Otero College had the highest proportion of Hispanic students (48.1%), followed by Community College of Denver at 45.4 percent (Figure 23). The percentage of students of color has stayed fairly flat, hovering within a percentage point of 38% for the last three years (Figure 24). The percentage of first-generation college students have dropped slightly in the past few years, ranging from 38.6% in 2019-2020 to 34.7% in 2021-2022. The percentage of students of color in 2021-2022 ranged from 19 to 62 percent at CCCS colleges (Figure 25). Community College of Denver had the highest proportion of students of color as well as 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									
Gender	17-18	18-19	19-20	20-21	21-22	17-18	18-19	19-20	20-21	21-22
Female	14,788	16,033	19,018	18,447	20,546	54.2%	53.4%	54.4%	55.7%	54.8%
Male	12,519	14,015	15,971	14,665	16,929	45.8%	46.6%	45.6%	44.3%	45.2%
Total	27,307	30,048	34,989	33,112	37,475	100.0%	100.0%	100.0%	100.0%	100.0%

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

	AY	AY	AY	AY	AY
Race/Ethnicity	17-18	18-19	19-20	20-21	21-22
American Indian or Alaskan Native	0.5%	0.5%	0.5%	0.5%	0.6%
Asian	3.6%	3.5%	3.9%	3.9%	4.1%
Black or African American	3.4%	3.6%	3.7%	3.5%	3.7%
Hispanic	24.4%	23.7%	24.6%	24.7%	24.9%
Multiple races	4.2%	4.2%	4.5%	4.6%	4.8%
Native Hawaiian and Other Pacific Islander	0.3%	0.2%	0.3%	0.2%	0.2%
Non-Resident Alien (International)	2.3%	2.1%	2.6%	1.5%	3.1%
Unknown	9.9%	10.5%	7.0%	6.3%	5.2%
White	51.5%	51.6%	53.0%	54.8%	53.5%



Figure 23 - Percent of CCCS High School Student Population by Race/Ethnicity and by College, AY21-22

College	American Indian or Alaskan Native	Asian	Black or African American	Hispanic	Multiple races	Native Hawaiian and Other Pacific Islander	Non-Resident Alien (International)	Unknown	White	Students of Color
ACC	0.5%	5.4%	1.8%	11.9%	5.0%	0.2%	1.0%	6.0%	68.3%	24.7%
CCA	0.3%	6.8%	12.8%	31.7%	5.6%	0.4%	9.1%	4.3%	29.1%	57.6%
CCD	0.5%	3.2%	8.7%	45.4%	4.7%	0.1%	13.1%	2.6%	21.8%	62.5%
CNCC	0.6%	0.3%	0.0%	13.1%	4.8%	0.3%	0.8%	4.7%	75.3%	19.2%
FRCC	0.5%	4.0%	0.9%	26.0%	4.2%	0.1%	1.7%	5.3%	57.4%	35.6%
LCC	1.6%	0.0%	1.0%	35.9%	1.6%	0.0%	1.6%	1.6%	56.7%	40.1%
MCC	0.6%	0.5%	1.7%	28.7%	2.7%	0.0%	2.2%	2.3%	61.3%	34.2%
NJC	0.5%	1.3%	0.0%	16.6%	1.9%	0.0%	0.5%	2.1%	76.9%	20.4%
OC	0.7%	1.1%	1.3%	48.1%	2.7%	0.0%	0.4%	5.1%	40.5%	53.9%
PCC	1.6%	1.1%	1.3%	30.2%	3.8%	0.2%	0.3%	6.8%	54.7%	38.2%
PPSC	0.5%	3.0%	3.8%	20.8%	8.5%	0.2%	0.6%	4.2%	58.3%	36.9%
RRCC	0.6%	3.7%	1.0%	20.7%	4.4%	0.1%	0.7%	5.9%	62.9%	30.5%
TSC	0.9%	1.6%	0.6%	42.8%	2.3%	0.0%	0.7%	14.8%	36.4%	48.1%

Figure 24- Demographic Breakdown, Three-year Trend

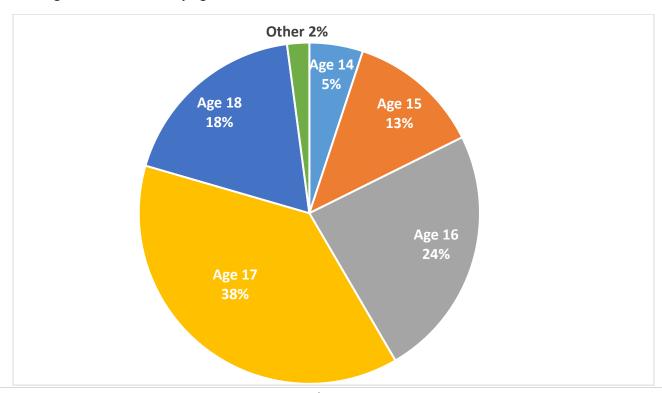
	AY	AY	AY	AY	AY	AY
	19-20	20-21	21-22	19-20	20-21	21-22
Race/Ethnicity:						
Students of Color	13,079	12,394	14,320	37.4%	37.4%	38.2%
Non-Students of Color	21,910	20,718	23,155	62.6%	62.6%	61.8%
First-Generation Status:						
First-Generation	13,494	11,777	13,002	38.6%	35.6%	34.7%
Not First-Generation	21,495	21,335	24,473	61.4%	64.4%	65.3%
Pell Eligibility:						
Pell Eligible	324	286	223	0.9%	0.9%	0.6%
Not Pell Eligible & Didn't File FAFSA	34,665	32,826	37,252	99.1%	99.1%	99.4%



Figure 25 - Number and Percentage of Demographic Characteristics by College: AY 2021-2022

College	Students of Color	Percent of Students of Color	First- Generation	Percent of First- Generation	Pell Eligible	Pct. Pell Eligible
ACC	2,131	24.7%	1,503	17.4%	15	0.2%
CCA	3,146	57.6%	2,538	46.4%	34	0.6%
CCD	1,724	62.5%	1,546	56.1%	23	0.8%
CNCC	119	19.2%	272	43.9%	0	0.0%
FRCC	3,209	35.6%	2,930	32.5%	48	0.5%
LCC	125	40.1%	164	52.6%	7	2.2%
MCC	281	34.2%	423	51.5%	7	0.9%
NJC	76	20.4%	168	45.0%	4	1.1%
OC	242	53.9%	248	55.2%	4	0.9%
PCC	980	38.2%	1,149	44.8%	21	0.8%
PPSC	1,093	36.9%	987	33.3%	36	1.2%
RRCC	858	30.5%	812	28.8%	18	0.6%
TSC	336	48.1%	262	37.5%	6	0.9%

Figure 26 - High School Students by Age: AY 2021-2022





CREDENTIALS EARNED

Overall, 2,568 high school students earned a credential in 2021-2022 (Figure 28), and a total of 3,009 awards were granted (Figure 27). The total number of students receiving a credential increased by 15.5 percent from AY 2020-2021. Of all awards granted, 80.3 percent of them were certificates, the majority of which were one-year awards (Figure 29). Even though only 3.2 percent of the credentials earned were AAS degrees, it's worth noting that the number of recipients increased by 53 percent over last year.

Figures 30.1 and 30.2 provide number of credentials awarded and total headcount by college. In AY 2021-2022, 36% of the students who received a credential were from Front Range Community College. In the same academic year (Figure 31.1), white students received the highest number of credentials (1,612, 53.6%), followed by Hispanic students (854, 28.4%). Figure 31.3 show the proportion of credentials awarded by college and demographic grouping.

Figure 27 - Number of Credentials Awarded to High School Students

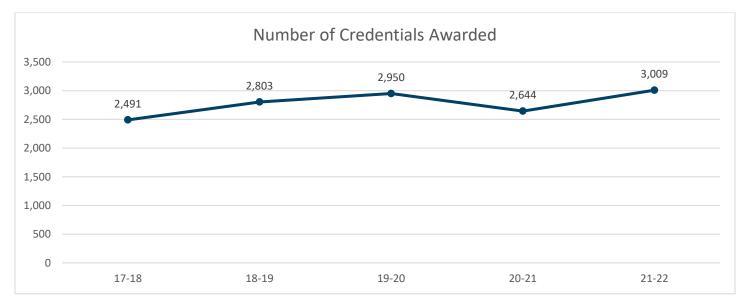




Figure 28 - Total Headcount of HS Students Receiving a Credential

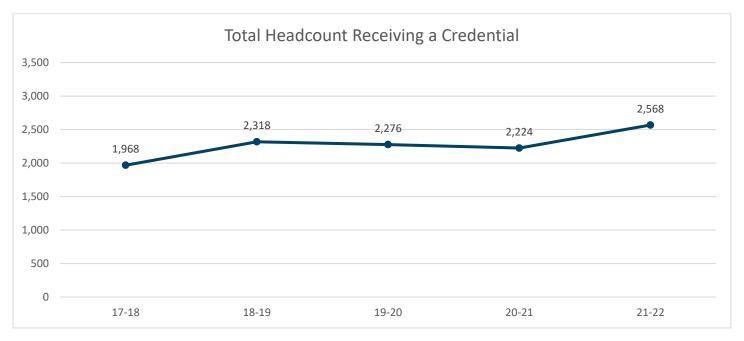


Figure 29 - Number and Type of Credentials Earned by High School Students

Award Type	20-21 Awards	21-22 Awards	Percent of all Awards Granted	Change from 20-21
1-year certificate	2,030	2,342	77.8%	15.4%
2-year certificate	67	74	2.5%	10.4%
Total Certificates	2,097	2,416	80.3%	15.2%
Associate of Applied Science	62	95	3.2%	53.2%
Associate of Arts	253	273	9.1%	7.9%
Associate of Science	146	134	4.5%	-8.2%
Associate of General Studies	86	91	3.0%	5.8%
Total Degrees	547	593	19.7%	8.4%
Total Awards	2,644	3,009	100.0%	13.8%



Figure 30.1 - Number of Credentials Awarded by College

Number of Credentials Awarded	AY 17-18	AY 18-19	AY 19-20	AY 20-21	AY 21-22
ACC	211	274	187	194	241
CCA	40	27	34	50	80
CCD	70	81	68	67	68
CNCC	24	30	20	13	22
FRCC	761	776	1,067	1,105	1,111
LCC	48	30	37	37	24
MCC	89	46	30	67	43
NJC	3	11	10	29	19
OC	28	31	14	35	5
PCC	251	237	271	225	208
PPSC	292	487	468	345	487
RRCC	620	721	697	445	669
TSC	54	52	47	32	32
Total	2,491	2,803	2,950	2,644	3,009

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

Total Headcount Receiving a Credential	AY 17-18	AY 18-19	AY 19-20	AY 20-21	AY 21-22
ACC	206	268	185	187	237
CCA	40	27	34	50	77
CCD	70	80	64	66	63
CNCC	23	29	16	13	19
FRCC	484	600	743	880	928
LCC	37	28	33	35	23
MCC	65	37	25	46	37
NJC	3	8	8	20	15
OC	28	31	14	35	5
PCC	212	216	208	185	176
PPSC	252	368	336	280	343
RRCC	508	582	569	395	620
TSC	40	44	41	32	25
Total	1,968	2,318	2,276	2,224	2,568



Figure 31.1 - Number of Credentials Awarded by College and by Race/Ethnicity: AY 2021-2022

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	15	4	38	8		5	17	153	66
CCA		3	10	33	2	3	8	4	17	51
CCD		2	2	35			26	2	1	39
CNCC				1	1				20	2
FRCC	2	28	7	380	51	2	26	89	526	470
LCC				10					14	10
MCC	2		1	19				1	20	22
NJC				4					15	4
OC				1					4	1
PCC	2	5		63	3			13	122	73
PPSC	1	19	9	82	36	1	3	28	308	148
RRCC	3	25	3	166	22		5	40	405	219
TSC	1			22				2	7	23
cccs	12	97	36	854	123	6	73	196	1,612	1,128

Figure 31.2 - Number of Credentials Awarded by College and by Demographic: AY 2021-2022

Colleges	All Credentials	Students of Color	Non- Students of Color	First- Generation	Not First Generation	Male	Female	Pell Eligible
ACC	241	66	175	69	172	80	161	3
CCA	80	51	29	48	32	19	61	11
CCD	68	39	29	51	17	16	52	1
CNCC	22	2	20	11	11	8	14	
FRCC	1111	470	641	486	625	667	444	6
LCC	24	10	14	14	10	16	8	
MCC	43	22	21	29	14	12	31	
NJC	19	4	15	13	6	14	5	
OC	5	1	4	2	3	2	3	
PCC	208	73	135	109	99	109	99	3
PPSC	487	148	339	202	285	204	283	5
RRCC	669	219	450	198	471	315	354	4
TSC	32	23	9	14	18	8	24	
CCCS	3,009	1,128	1,881	1,246	1,763	1,470	1,539	33



Figure 31.3 - Proportion of Credentials Awarded by College and by Demographic: AY 2021-2022

Colleges	Students of Color	Non- Students of Color	First- Generation	Not First Generation	Male	Female	Pell Eligible
ACC	27%	73%	29%	71%	33%	67%	1%
CCA	64%	36%	60%	40%	24%	76%	4%
CCD	57%	43%	75%	25%	24%	76%	4%
CNCC	9%	91%	50%	50%	36%	64%	0%
FRCC	42%	58%	44%	56%	60%	40%	1%
LCC	42%	58%	58%	42%	67%	33%	0%
MCC	51%	49%	67%	33%	28%	72%	0%
NJC	21%	79%	68%	32%	74%	26%	0%
OC	20%	80%	40%	60%	40%	60%	0%
PCC	35%	65%	52%	48%	52%	48%	1%
PPSC	30%	70%	41%	59%	42%	58%	1%
RRCC	33%	67%	30%	70%	47%	53%	1%
TSC	72%	28%	44%	56%	25%	75%	0%
cccs	37%	63%	41%	59%	49%	51%	1%



CREDIT HOURS ATTEMPTED

System-wide, students carried an average of 8.5 credit hours over the course of the AY 2021-2022 (Figure 32). Pikes Peak State College's average of 13.1 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 62.2 percent. Credit hours taken by high school students are over 40% of total credit hours at five of the thirteen colleges. Front Range Community College high school students took the largest number of credit hours, followed by Pikes Peak State College and then by Arapahoe Community College.

Figure 32 - CCCS High School Credits Attempted and Average Credits by College: AY 2021-2022

College	HS Credit Hours	All CCCS Credit Hours	HS as of Total	Average Credit Hours Per Student
ACC	62,526	124,431	50.2%	7.2
CCA	47,350	80,463	58.8%	8.7
CCD	18,550	79,010	23.5%	6.7
CNCC	5,866	13,435	43.7%	9.5
FRCC	66,882	203,727	32.8%	7.4
LCC	3,985	8,214	48.5%	12.8
MCC	9,421	15,158	62.2%	11.5
NJC	4,133	15,322	27.0%	11.1
OC	3,710	14,491	25.6%	8.6
PCC	22,899	69,562	32.9%	9.4
PPSC	38,715	138,098	28.0%	13.1
RRCC	25,363	78,352	32.4%	9.0
TSC	5,537	20,107	27.5%	7.9
CCCS Total	314,936	860,366	36.6%	8.5



ACADEMIC STUDIES AND OUTCOMES

The course pass rates for all high school students across the Colorado Community College System have consistently been around 89-90 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 (90%) than students in ASCENT (85.3%) or other programs (83.3%). 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	AY	AY	AY	AY
	17-18	18-19	19-20	20-21	21-22
Number of Courses Passed	71,216	78,105	88,961	84,933	92,032
Total Courses	79,077	86,647	98,957	94,902	103,637
Success Rate	90.1%	90.1%	89.9%	89.5%	88.8%

Figure 34 - High School Student Course Pass Rate by Program Type - AY 2021-2022

	Concurrent	ASCENT	Other HS Concurrent
Number of Courses Passed	75,893	2,188	13,951
Total Courses	84,321	2,566	16,750
Success Rate	90.0%	85.3%	83.3%



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	92.3%	94.8%	89.5%	95.3%	93.3%	94.8%	98.4%
CCA	86.2%	86.1%	84.7%	87.6%	85.4%	86.7%	87.2%
CCD	76.5%	87.0%	75.2%	87.5%	79.9%	81.1%	68.0%
CNCC	88.3%	90.8%	87.7%	92.2%	87.8%	92.2%	-
FRCC	84.7%	91.5%	83.4%	91.9%	88.8%	89.3%	82.2%
LCC	94.7%	95.5%	94.3%	96.1%	93.2%	96.3%	97.9%
MCC	80.3%	90.5%	84.2%	89.3%	87.1%	86.3%	66.7%
NJC	81.7%	91.1%	85.9%	91.9%	90.3%	88.6%	96.2%
OC	85.3%	90.0%	84.1%	91.5%	88.8%	87.0%	96.2%
PCC	80.4%	85.2%	81.9%	84.9%	85.3%	82.2%	84.6%
PPSC	82.9%	86.3%	79.3%	87.9%	85.4%	84.9%	74.1%
RRCC	93.1%	94.9%	93.3%	94.7%	93.5%	95.1%	91.9%
TSC	89.0%	90.5%	88.5%	90.5%	86.7%	92.1%	87.5%
CCCS Total	85.6%	90.8%	84.2%	91.4%	88.6%	89.0%	83.6%



COMPARISON OF COURSE PASS RATES BY COLLEGE

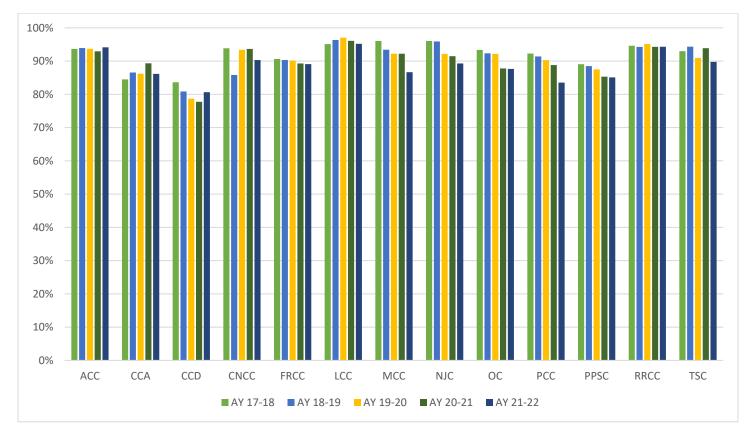
Course pass rates at seven out of thirteen CCCS colleges met or exceeded the overall system level of 88.8 percent in 2021-22. Lamar Community College had the highest course pass rate at 95.2 percent.

Figure 36 - Course Pass Rates of HS Students by College

	AY	AY	AY	AY	AY
Colleges	17-18	18-19	19-20	20-21	21-22
ACC	93.6%	93.9%	93.7%	92.9%	94.1%
CCA	84.5%	86.6%	86.2%	89.3%	86.2%
CCD	83.6%	80.9%	78.7%	77.8%	80.6%
CNCC	93.8%	85.8%	93.4%	93.7%	90.3%
FRCC	90.6%	90.3%	90.2%	89.3%	89.1%
LCC	95.1%	96.4%	97.0%	96.1%	95.2%
MCC	96.0%	93.4%	92.2%	92.2%	86.6%
NJC	96.0%	95.9%	92.2%	91.5%	89.3%
OC	93.4%	92.3%	92.2%	87.8%	87.6%
PCC	92.3%	91.4%	90.3%	88.8%	83.5%
PPSC	89.1%	88.5%	87.5%	85.3%	85.1%
RRCC	94.6%	94.3%	95.1%	94.3%	94.3%
TSC	93.0%	94.3%	91.0%	93.9%	89.8%
CCCS Total	90.4%	90.2%	90.0%	89.6%	88.8%



Figure 37 - Comparison of Pass Rates by College





CREDITS EARNED AND TUITION SAVED

High school students earned 288,676 credits in 2021-2022, which was 93 percent of the 308,344 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 2021-2022, 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 \$153.35 (after COF) per credit hour in 2021-2022, concurrent enrollment, Early College, ASCENT and P-Tech students and their families saved \$44.27 million in college tuition costs for earned credit hours, which is an increase of 10% from AY 2020-2021 (Figure 38).

Figure 38 - Tuition Saved by Academic Year

	AY	AY	AY
	19-20	20-21	21-22
Concurrent Enrollment & ASCENT:			
Attempted Credit Hours	286,691	284,438	308,344
Earned Credit Hours	271,939	263,137	288,676
Tuition (after COF)	\$148.9	\$153.35	\$153.35
Tuition Saved	\$40,491,717	\$40,352,059	\$44,268,503



CAREER AND TECHNICAL EDUCATION

Career and technical education (CTE) accounted for 37.4 percent of high school course enrollments in 2021-22 (Figure 39). Success rates for students taking CTE courses, on average, was higher than the average for all high school students at 91.2 percent compared to 88.8. 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 2021-22, were Introduction to Business, Personal Finance, and Principles of Marketing (Figure 40).

Figure 39 - CTE Course Enrollments and Completions Rates by College

College	AY 21-22 CTE Courses	All Courses Taken by HS Students	CTE as a Percent of all HS Courses	Success Rate for CTE Courses
ACC	10,097	20,957	48.2%	95.4%
CCA	2,023	15,039	13.5%	91.2%
CCD	1,073	5,831	18.4%	86.0%
CNCC	421	1,784	23.6%	94.1%
FRCC	7,807	21,459	36.4%	91.5%
LCC	392	1,330	29.5%	91.3%
MCC	1,130	3,175	35.6%	90.2%
NJC	279	1,361	20.5%	93.2%
OC	311	1,237	25.1%	86.2%
PCC	3,293	7,872	41.8%	82.9%
PPSC	4,574	12,401	36.9%	81.4%
RRCC	6,650	9,412	70.7%	95.8%
TSC	659	1,779	37.0%	93.8%
CCCS Total	38,709	103,637	37.4%	91.2%



Figure 40 - Top CTE Courses Taken by High School Students: AY 2021-2022

AY 21-22 Course Total	Course	Course Description
2,650	BUS115	Introduction to Business
2,075	BUS116	Personal Finance
952	MAR216	Principles of Marketing
949	CIS118	Intro PC Applications
800	CRJ110	Intro to Criminal Justice
576	MGD111	Adobe Photoshop
503	NUA101	Nurse Aide Health Care Skills
495	ASE120	Basic Auto Electricity
490	HWE100	Human Nutrition
488	CSC119	Intro to Programming



MATRICULATION RATES TO CCCS COLLEGES

To ascertain the rate at which high school students later matriculate to CCCS colleges after high school, a four-year cohort model was used to allow for progression through high school for students at varying grade levels (freshman through senior). Thus, the cohort used in the following matriculation rates included high school students enrolled in CCCS courses during AY 2017-2018. Students were counted as having matriculated if they enrolled as a non-high school student in a CCCS college at any point from 2017-2018 through spring 2022.

A total of 8,068 unique high school students from the 2017-2018 cohort subsequently enrolled at any CCCS college over the next four academic years; a matriculation rate of 29.5 percent (Figure 42). This is down slightly from 31.7 percent for the 2016-2017 cohort.

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 23.9 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, 29.5 percent of the time.

Figure 41 - High School Matriculation Rates at Same College within Four Academic Years, 2017-2018 HS Cohort

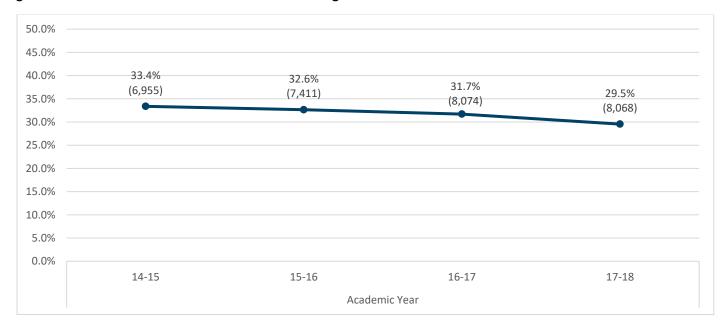
College	Total HS Students 17-18	Number of Students Matriculated to Same CCCS College Within Four Years	Matriculation Rate
ACC	5,404	831	15.4%
CCA	4,752	736	15.5%
CCD	1,703	381	22.4%
CNCC	535	115	21.5%
FRCC	5,623	1,642	29.2%
LCC	343	143	41.7%
MCC	702	212	30.2%
NJC	368	158	42.9%
OC	480	177	36.9%
PCC	1,852	520	28.1%
PPSC	2,602	803	30.9%
RRCC	2,146	609	28.4%
TSC	797	210	26.3%
CCCS Total	27,307	6,537	23.9%



Figure 42 - High School Matriculation Rates at any CCCS College within Four Academic Years, 2017-2018 HS Cohort

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College	Total HS Students 17-18	College Within Four Years	Rate
ACC	5,404	1,198	22.2%
CCA	4,752	1,204	25.3%
CCD	1,703	479	28.1%
CNCC	535	138	25.8%
FRCC	5,623	1,778	31.6%
LCC	343	167	48.7%
MCC	702	297	42.3%
NJC	368	169	45.9%
OC	480	202	42.1%
PCC	1,852	579	31.3%
PPSC	2,602	849	32.6%
RRCC	2,146	765	35.6%
TSC	797	243	30.5%
CCCS Total	27,307	8,068	29.5%

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 29.5 percent of 2017-2018 students enroll at a CCCS college within four years after graduation. Additionally, 59.8 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 75.2 percent of 2017-2018 CCCS high school students went on to pursue additional higher education opportunities at either a CCCS college or a four-year university, which was roughly the same as the 2016-2017 cohort. While roughly 25% of 2017-2018 students didn't pursue additional higher education opportunities, 20.2% of the cohort was employed between 2017 and 2021, with a total matriculation and employment rate of 95.4% (Figure 44.2). Figure 45 reflects that same information broken down by college.

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

Year Over Year Matriculation Comparison	High School Cohort	Matriculated at CCCS Institution	Matriculated to Four- Year School	Overall Matriculation (Either CCCS or Four-Year)	CCCS Matriculation Rate	Four-Year School Matriculation Rate	Overall Matriculation Rate
2016-2017 CCCS High School Cohort (matriculated by 2021)	25,444	8,074	14,875	19,074	31.7%	58.5%	75.0%
2017-2018 CCCS High School Cohort (matriculated by 2021)	27,307	8,068	16,320	20,528	29.5%	59.8%	75.2%
Y/Y Difference	1,863	-6	1,445	1,454	-2.2%	1.3%	0.2%
Y/Y Perc. Increase	7.3%	-0.1%	9.7%	7.6%	-6.9%	2.2%	0.3%

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

2017-2018 CCCS High School Cohort	Matriculated at CCCS Institution	Matriculated to Four- Year School	Overall Matriculation (Either CCCS or Four-Year)	Not Matriculated but Employed	CCCS Matriculation Rate	Four-Year School Matriculation Rate	Overall Matriculation Rate	Matriculation and Employment Rate
27,307	8,068	16,320	20,528	5,516	29.5%	59.8%	75.2%	95.4%

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

College	Total 2017- 2018 CCCS High School Cohort	Matriculated to CCCS Institution	Matriculated to Four-Year School	Overall Matriculation (Either CCCS or Four-Year)	Not Matriculated but Employed	CCCS Matriculation Rate	Four-Year School Matriculation Rate	Overall Matriculation Rate (CCCS or Four-Year)	Matriculation and Employment Rate
ACC	5,404	1,198	4,036	4,542	740	22.2%	74.7%	84.0%	97.7%
CCA	4,752	1,204	2,995	3,590	875	25.3%	63.0%	75.5%	94.0%
CCD	1,703	479	771	1,064	337	28.1%	45.3%	62.5%	82.3%
CNCC	535	138	311	392	124	25.8%	58.1%	73.3%	96.4%
FRCC	5,623	1,778	3,327	4,206	1,254	31.6%	59.2%	74.8%	97.1%
LCC	343	167	176	269	54	48.7%	51.3%	78.4%	94.2%
MCC	702	297	471	597	94	42.3%	67.1%	85.0%	98.4%
NJC	368	169	223	313	39	45.9%	60.6%	85.1%	95.7%
OC	480	202	213	336	109	42.1%	44.4%	70.0%	92.7%
PCC	1,852	579	851	1,219	547	31.3%	46.0%	65.8%	95.4%
PPSC	2,602	849	1,319	1,799	698	32.6%	50.7%	69.1%	96.0%
RRCC	2,146	765	1,088	1,545	532	35.6%	50.7%	72.0%	96.8%
TSC	797	243	539	656	113	30.5%	67.6%	82.3%	96.5%
CCCS	27,307	8,068	16,320	20,528	5,516	29.5%	59.8%	75.2%	95.4%

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. University of Colorado Denver (12.3%) was the most popular 4-year college to which students matriculated (Figure 48), followed by Colorado State University (11.3%) and Metropolitan State University of Denver (9.8%).

Figure 46 - Overall Matriculation within Four Years by Demographic Groupings: AY 2017-2018 High School Cohort

Demographic Grouping	% Matriculating to CCCS within Four- Years	% Matriculated to Four-Year School	Overall Matriculation Rate (CCCS or Four- Year School)
Students of Color	31.6%	54.8%	72.6%
Non-Students of Color	28.3%	62.6%	76.6%
First-Generation	33.1%	45.5%	65.9%
Not First-Generation	26.6%	71.8%	83.0%

Figure 47 - Overall Matriculation of CCCS High School Students within Four Years by Race/Ethnicity: AY 2017-2018 High School Cohort

Race/Ethnicity	2017-2018 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)
American Indian or Alaskan Native	135	32	74	92	23.7%	54.8%	68.1%
Asian	979	271	750	855	27.7%	76.6%	87.3%
Black or African American	925	258	610	720	27.9%	65.9%	77.8%
Hispanic	6,662	2,244	3,245	4,609	33.7%	48.7%	69.2%
Multiple races	1,134	306	712	867	27.0%	62.8%	76.5%
Native Hawaiian and Other Pacific Islander	75	25	43	56	33.3%	57.3%	74.7%
Non-Resident Alien (International)	615	174	206	326	28.3%	33.5%	53.0%
Unknown	2,707	666	1,746	2,074	24.6%	64.5%	76.6%
White	14,075	4,092	8,934	10,929	29.1%	63.5%	77.6%
CCCS Total	27,307	8,068	16,320	20,528	29.5%	59.8%	75.2%



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
UNIVERSITY OF COLORADO DENVER	2,472	12.3%
COLORADO STATE UNIVERSITY	2,279	11.3%
METROPOLITAN STATE UNIVERSITY OF DENVER	1,966	9.8%
UNIVERSITY OF COLORADO BOULDER	1,945	9.7%
UNIVERSITY OF COLORADO COLORADO SPRINGS	1,146	5.7%
UNIVERSITY OF NORTHERN COLORADO	991	4.9%
COLORADO MESA UNIVERSITY	632	3.1%
COLORADO SCHOOL OF MINES	484	2.4%
COLORADO STATE UNIVERSITY - PUEBLO	433	2.2%
ADAMS STATE UNIVERSITY	364	1.8%



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 2020 cohort for retention, and the fall 2019 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 percent of the time, compared with 43.9 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. Students who participated in a concurrent enrollment program at Trinidad State College and Northeastern Junior College had the highest retention rate at 71.7 and 69.7 percent respectively (Figure 50). In terms of graduation rate, students with previous concurrent enrollment graduated 29.9 percent of the time, compared with 20.1 percent for students with no concurrent enrollment (Figure 51.1). Compared to last year, graduation rate of students with concurrent enrollment decreased 2.1 percentage points while their counterpart's graduation rate decreased 2.2 percentage points (Figure 51.2). This is likely due to the Fall 2019 graduation cohort being affected by the height of the pandemic in 2020.

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

Past High School Dual Enrollment	Fall 2020 Cohort	Retained Fall 2021	Fall-to-Fall Retention Rate
Previous Concurrent Enrollment	2,633	1,421	53.97%
No Previous Concurrent Enrollment	7,738	3,394	43.86%
Total	10,371	4,815	46.43%

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

Past High School Dual Enrollment	Fall 2019 to Fall 2020 Retention Rate	Fall 2020 to Fall 2021 Retention Rate	Y/Y Pct. Pt. Diff
Previous Concurrent Enrollment	54.1%	54.0%	-0.1
No Previous Concurrent Enrollment	45.1%	43.9%	-1.2
Total	46.8%	46.4%	-0.4



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

College	Fall 2020 Cohort	Previous Concurrent Enrollment Retention Rate	No Previous Concurrent Enrollment Retention Rate	Difference (Pct. Pt.) in Retention Rate for Prior Concurrent Enrollment
ACC	1,164	55.56%	43.00%	12.56
CCA	676	50.85%	44.55%	6.30
CCD	1,165	37.70%	36.04%	1.66
CNCC	146	50.00%	40.74%	9.26
FRCC	2,652	57.10%	44.54%	12.55
LCC	181	54.79%	53.70%	1.09
MCC	234	61.54%	54.49%	7.05
NJC	303	69.72%	55.15%	14.57
OC	207	48.78%	53.01%	-4.23
PCC	622	35.37%	39.07%	-3.71
PPCC	1,755	55.97%	42.57%	13.40
RRCC	969	51.79%	47.02%	4.76
TSC	297	71.72%	55.56%	16.16
CCCS Total	10,371	53.97%	43.86%	10.11

Figure 51.1 - Graduation Rates by Past HS Concurrent Enrollment

Past High School Dual Enrollment	Fall 2019 Cohort	Graduated by Summer 2022	Graduation Rate
Previous Concurrent Enrollment	2 301	687	29.9%
No Previous Concurrent Enrollment	9 729	1,959	20.1%
Total	12,030	2,646	22.0%

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

Past High School Dual Enrollment	Fall 2018 Cohort Graduated by Summer 2021 Graduation Rate	Fall 2019 Cohort Graduated by Summer 2022 Graduation Rate	Y/Y Pct. Pt. Diff	Y/Y Pct. Increase Decrease
Previous Concurrent Enrollment	32.0%	29.9%	-2.1	-6.7%
No Previous Concurrent Enrollment	22.3%	20.1%	-2.2	-9.7%
Total	23.9%	22.0%	-1.9%	-8.1%



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

College	Fall 2019 Cohort	Previous Concurrent Enrollment Graduation Rate	No Previous Concurrent Enrollment Graduation Rate	Difference (Pct. Pt.) in Graduation Rate for Prior Concurrent Enrollment
ACC	1,078	24.6%	16.8%	7.85
CCA	1,009	24.3%	15.1%	9.21
CCD	1,472	15.9%	10.5%	5.48
CNCC	177	41.7%	30.5%	11.17
FRCC	2,728	27.1%	22.7%	4.40
LCC	200	48.8%	39.0%	9.79
MCC	186	36.5%	25.0%	11.49
NJC	376	60.7%	40.7%	20.08
OC	229	44.6%	31.7%	12.91
PCC	725	23.9%	20.4%	3.53
PPCC	2,379	37.1%	14.5%	22.66
RRCC	1,143	22.6%	23.7%	-1.16
TSC	328	51.3%	51.2%	0.08
CCCS Total	12,030	29.9%	20.1%	9.72



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 2019/2020 – AY 2021/2022) were used for both time to degree and credits to degree calculation. Reverse transfers were excluded. One academic year was divided into two terms, with summer and fall semesters in one term (0.5) and spring in another (0.5). Students who enrolled in both summer and spring semesters, for example, were counted as one academic year. Students enrolled more than 10 academic years were considered as an outlier and were removed from the final calculation. In the median credits to degree calculation, only institution-earned credits were included.

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

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

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

	AY	AY	AY
	19-20	21-21	21-22
Median Time to Degree:			
Previous Concurrent Enrollment ²	2	2	2
No Previous Concurrent Enrollment	3	3	3
Median Credits to Degree:			
Previous Concurrent Enrollment	64	64	64
No Previous Concurrent Enrollment	65	64	63.5

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



Figure 54 shows the breakdown by degree type. In AY 2021-2022, 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 accumulated roughly the same amount of credits 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 5 credits more than students without concurrent enrollment, their time to degree was 0.5 years shorter. Figure 55 demonstrates that there is a slight variance among schools in terms of time to degree. Depending on the college, it may take 2.5 years vs 2 years to obtain the same degree for past participants in concurrent enrollment.

Figure 54 – Median Time and Credits to Degree by Past HS Concurrent Enrollment and by Degree Type, AY 2021-2022

	AA/AS	AAS	AGS
Median Time to Degree:			
Previous Concurrent Enrollment	2	2.5	2
No Previous Concurrent Enrollment	3	3	3
Median Credits to Degree:			
Previous Concurrent Enrollment	63	71	61.8
No Previous Concurrent Enrollment	63	66	61



Figure 55 – Median Time to Degree by Past HS Concurrent Enrollment and by College, AY 2021-2022

College	Previous Concurrent Enrollment	No Previous Concurrent Enrollment
ACC	2.5	3
CCA	2	3
CCD	2.5	3
CNCC	2.5	2.5
FRCC	2.5	3
LCC	2	2
MCC	2	3
NJC	2	2
OC	2	2
PCC	2.5	3
PPSC	2	3
RRCC	2.5	3
TSC	2	2

Figure 56 – Median Credits to Degree by Past HS Concurrent Enrollment and by College, AY 2021-2022

College	Previous Concurrent Enrollment	No Previous Concurrent Enrollment
ACC	63	62
CCA	63	64
CCD	64	63
CNCC	67	61
FRCC	62	63
LCC	67	58.3
MCC	69.5	67
NJC	64.3	64.8
OC	61	53
PCC	66	65
PPSC	65.8	65
RRCC	67	64
TSC	67	57.5



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 2016 includes graduates from spring 2016, summer 2016, and fall 2016. Two thresholds are implemented: (1) number of quarters employed, and (2) state minimum wage (see Appendix for details). As a result, about 26% of 2016 graduates were included in year one wage calculation, around 36% were included in year three wage calculation, and nearly 43% were included in year 5 wage calculation (Figure 57).

Of the 2016 graduates who previously participated in a concurrent enrollment program, 76.2% were employed in year one after graduation, 72.8% employed in year three, and 66.5% employed in year five (Figure 57). The median wage for all graduates started at \$28,571 in year one after graduation and increased to \$45,916 in year five (Figure 58).

Figure 57 – Employment Status by Calendar Year

	Calendar Year	Calendar Year	Calendar Year	Calendar Year	Calendar Year	Calendar Year
Employment Status	2014	2015	2016	2014	2015	2016
1-Year						
Employed & Met Threshold	685	841	955	25.9%	27.8%	26.0%
Employed & Didn't Meet Threshold	1,317	1,462	1,841	49.7%	48.4%	50.2%
Not Employed or No Wage Data	647	718	871	24.4%	23.8%	23.8%
3-Year						
Employed & Met Threshold	991	1,149	1,323	37.4%	38.0%	36.1%
Employed & Didn't Meet Threshold	923	1,020	1,347	34.8%	33.8%	36.7%
Not Employed or No Wage Data	735	852	997	27.7%	28.2%	27.2%
5-Year						
Employed & Met Threshold	1,192	1,252	1,572	45.0%	41.4%	42.9%
Employed & Didn't Meet Threshold	620	751	864	23.4%	24.9%	23.6%
Not Employed or No Wage Data	837	1,018	1,231	31.6%	33.7%	33.6%
Total Number of Students	2,649	3,021	3,667			



Figure 58 – Median Wage by Year

Years after Graduated	Calendar Year 2014	Calendar Year 2015	Calendar Year 2016
1-Year	\$23,069	\$23,340	\$28,571
3-Year	\$34,250	\$35,409	\$39,396
5-Year	\$44,101	\$41,986	\$45,916
Pct. Change from 1-Year to 3-Year	48.5%	51.7%	37.9%
Pct. Change from 1-Year to 5-Year	91.2%	79.9%	60.7%

2016 graduates earning an AAS had the highest median wage (Figure 59) in Year 5. The Year 1 median wage of AAS graduates was also the highest at over \$40,000. The greatest difference in year one wages vs year five was those with AGS degrees, as those students earned \$23,234 more in median annual wages.



Figure 59 – Median Wage by Credential Type

	Calendar Year	Calendar Year	Calendar Year
Type of Credential	2014	2015	2016
Certificate (< 1 Year) ³			
1-Year	\$21,211	\$20,931	\$25,113
3-Year	\$31,373	\$32,469	\$36,864
5-Year	\$41,608	\$39,491	\$44,760
Pct. Change from 1-Year to 3-Year	47.9%	55.1%	46.8%
Pct. Change from 1-Year to 5-Year	96.2%	88.7%	78.2%
Certificate (1-2 Year) ⁴			
1-Year	\$30,516	\$33,219	\$37,700
3-Year	\$39,955	\$45,475	\$44,583
5-Year	\$46,919	\$48,701	\$49,810
Pct. Change from 1-Year to 3-Year	30.9%	36.9%	18.3%
Pct. Change from 1-Year to 5-Year	53.8%	46.6%	32.1%
AAS			
1-Year	\$37,609	\$34,574	\$40,376
3-Year	\$43,450	\$44,188	\$46,531
5-Year	\$51,850	\$48,119	\$51,740
Pct. Change from 1-Year to 3-Year	15.5%	27.8%	15.2%
Pct. Change from 1-Year to 5-Year	37.9%	39.2%	28.1%
AA/AS			
1-Year	\$20,803	\$20,768	\$23,535
3-Year	\$34,119	\$33,080	\$37,789
5-Year	\$45,776	\$41,144	\$42,983
Pct. Change from 1-Year to 3-Year	64.0%	59.3%	60.6%
Pct. Change from 1-Year to 5-Year	120.1%	98.1%	82.6%
AGS			
1-Year	\$24,149	\$22,857	\$25,846
3-Year	\$43,233	\$34,604	\$44,883
5-Year	\$48,153	\$44,880	\$49,080
Pct. Change from 1-Year to 3-Year	79.0%	51.4%	73.7%
Pct. Change from 1-Year to 5-Year	99.4%	96.4%	89.9%

 $^{^{3}}$ Certificate (< 1 Year) includes CER1 and CER1N

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



Health Professions and Related Clinical Sciences (e.g., Phlebotomy, Nursing Assistant, Veterinary Assistant, Medical Assisting) was the most popular certificates for students who previously participated in a concurrent enrollment program, followed by Mechanic and Repair Technologies/Technicians certificates (e.g., Auto Technician, Engine Performance Technician, Diesel Mechanics) (Figure 60). The median wage of 2016 graduates from both programs started in the lower \$30,000s. By year five, health professionals were earning over \$42,000 and those in Mechanic and Repair were earning over \$49,000.

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

Median Annual Wage	Calendar Year 2014	Calendar Year 2015	Calendar Year 2016
Health Professions and Related Clinical			
Sciences (CIP: 51xxxx)			
1-Year	\$23,798	\$22,574	\$33,629
3-Year	\$31,671	\$29,963	\$39,246
5-Year	\$41,773	\$38,804	\$42,768
Pct. Change from 1-Year to 3-Year	33.1%	32.7%	16.7%
Pct. Change from 1-Year to 5-Year	75.5%	71.9%	27.2%
Mechanic and Repair Technologies/Technicians (CIP: 47xxxx)			
1-Year	\$20,491	\$20,688	\$31,282
3-Year	\$33,811	\$37,700	\$44,170
5-Year	\$42,476	\$42,276	\$49,531
Pct. Change from 1-Year to 3-Year	65.0%	82.2%	41.2%
Pct. Change from 1-Year to 5-Year	107.3%	104.4%	58.3%



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.

Career and technical education (CTE): 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.

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



<u>Fall-to-fall retention 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 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 3rd quarter to 6th quarter after graduation. Year three wage is the sum of earnings from 11th quarter to 14th quarter after graduation. Year five wage is the sum of earnings from 19th quarter to 22nd quarter (Q) after graduation. For example, spring 2012 cohort graduated in May 2012 (Figure 61). Their median year one wage is the median of earnings from Q1 2013 to Q4 2013, median year three wage is the median of earnings from Q1 2017 to Q4 2017.

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

Figure 61 – Wage calculation for spring 2012 cohort

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

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

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