



Special Report

Ohio's College Credit Plus Program: A Cost Analysis

December 2023

Updated with Additional Analysis - May 2024

College Credit Plus

Program Cost Study

Initially released in December 2023, this document contains detailed analysis regarding the financial impact of the College Credit Plus program on Public Institutions of Higher Education. The report was rereleased in May 2024 with additional details and analysis. In this update, additional analysis regarding revenue generated from the College Credit Plus program is included. This additional analysis includes different ways to consider College Credit Plus revenue including the impact of actual negotiated rates on revenue generation as well as the maximum amount of potential revenue an institution would be able to generate using the top rates established in Ohio Revised Code.

In 2023, the Ohio Auditor of State's Office (AOS) analyzed the costs of delivering College Credit Plus (CCP) incurred by higher education institutions. This non-audit report presents the results of the CCP cost analysis. CCP is Ohio's dual-enrollment program that allows eligible K-12 students to earn credit in college level classes. This cost analysis is a follow-on to a 2022 performance audit, which made several programmatic recommendations for CCP including an issue for further study directing the Ohio Department of Higher Education (ODHE) and Ohio Department of Education and Workforce (ODEW) to evaluate whether the costs incurred by colleges and universities to deliver CCP align with payments received. AOS sent every public university and community college in Ohio a detailed survey asking them to provide estimates of CCP-related expenses across several cost categories. Their responses were analyzed to identify policy implications regarding the CCP funding formula and to provide transparency into this important program for Ohio's students and taxpayers.

Results Summary

- From the perspective of colleges, the potential tuition revenue under the current statutory caps exceeds the direct instructional costs from enrolling CCP students. Additionally, analyses considered two additional methods to evaluate revenue: actual CCP revenue received and revenue that would be generated if institutions charge the statewide average rates for CCP tuition. Results of these two additional methodologies are in line with the maximum potential revenue analysis; most institutions are shown to cover their direct instructional expense. CCP appears to be financially advantageous to colleges.
- There exists a wide variation in both the amount and types of CCP-related expenses reported by responding institutions. While some of this variation may reflect real differences in underlying program costs, much of the reported variation arises from the different accounting choices and assumptions colleges made when compiling their responses to the AOS survey.

- Attribution of expenses to a program like CCP is a nuanced cost accounting exercise. No participating institution used CCP as a cost-object in their accounting systems. As such, the informed personnel responding to the AOS survey needed to produce CCP allocation judgments and estimates of effort for the first time.
- Higher Education institutions with higher percentages of CCP students benefit proportionally more from the State Share of Instruction (SSI) funding formula component. The zero-sum nature of SSI funding, which is a fixed annual statewide pool, means that institutions benefit from the inclusion of CCP students within the SSI formula to the extent that their share of CCP students exceeds that of other institutions.

Background

In Ohio, students in seventh through twelfth grade can enroll in college courses at little to no cost through College Credit Plus (CCP), a dual enrollment program that allows eligible students to earn college and high school credits simultaneously by taking courses from Ohio colleges or universities. The program is coordinated jointly by the Ohio Department of Education¹ (ODE) and the Ohio Department of Higher Education (ODHE).

Tuition

Public high schools are responsible for paying the college tuition costs of their CCP-enrolled students via deductions from their foundation funding from ODE. The maximum tuition rates colleges are allowed to charge for CCP are set in Ohio law and are generally lower than tuition rates for traditional students. Colleges and high schools regularly negotiate tuition rates below these maximum rate caps. Private school and homeschool students may also participate in CCP, although they are not guaranteed free tuition for all credit hours in the same way public school students are because their funding is fixed by a separate statewide appropriation.

Modes of Instruction

CCP offers four different methods of instruction, only one of which requires attendance on the college campus. The most utilized option for instructional delivery for CCP students is instruction at the high school taught by credentialed school district employees (HI), closely followed by online instruction (OL). In addition to these first two options, students may also attend courses on the college campus (OC), or a college may have an instructor or professor go to the high school to teach a course (CI). Figure 1 below shows the relative CCP participation by mode of instruction along with tuition rate caps for each.

Figure 1: CCP Modalities [AY 2022]

	K-12 Instructor in High School (HI)	College Instructor in High School (CI)	On Campus (OC)	Online (OL)
Tuition Rate per Credit Hour (legal cap*)	\$41.64	\$83.28	\$166.55	\$166.55
Percent of CCP Course Enrollment	40.3%	8.0%	15.4%	36.2%

Source: ODHE and ORC 3365.01

¹ The Ohio Department of Education became a cabinet-level agency and was renamed the Ohio Department of Education and Workforce during this audit as a result of provisions contained in the state’s biennial budget bill, H.B. 33 of the 135th General Assembly.

In all modalities, the tuition is paid to the college providing the course. The varying rate structure is intended to account for the relative differences in costs borne by colleges. In the case of On Campus (OC), which has the highest tuition rate cap, colleges furnish their campus facilities in addition to paying the instructor's salary. The College Instructor in High School (CI) caps tuition rates at half of the amount of On Campus (OC,) as colleges directly pay the instructor salary but no longer furnish facilities. The K-12 Instructor in High School (HI) modality is capped at 25 percent of the On Campus rate because the instructor is on the K-12 payroll rather than the college's payroll. The remaining HI expenses to the college pertain mainly to course development and oversight, as well as general CCP program administrative costs. Online (OL) courses are allowed to charge the same rate as On Campus (OC). Despite online learning not utilizing campus facilities, online delivery may entail additional information technology costs.

The question of which modality is most financially advantageous to the colleges is an interesting one. Later in this report, the analysis will show that the main expense directly attributable to CCP is the cost of instruction. Given this dynamic, it is likely that K-12 Instructor in High School (where the high school is responsible for paying all of the instructor's salary) represents a high-margin revenue source for colleges. This revenue margin could grow even larger after a course is initially developed and some parts of it are re-used in future school years. Online (OL) courses also have the potential to deliver higher margins to colleges than On Campus (OC) due to a lack of classroom booking needs, higher theoretical maximum class sizes, and lower instructor expenses if an asynchronous (i.e. pre-recorded) content delivery method is used. Note that many online courses do utilize fully synchronous (i.e. live stream lecture) content delivery, in which the instructor salary expenses should be on par with the On Campus (OC) modality. This report does not determine the proportion of synchronous versus asynchronous Online (OL) courses statewide, which would be a worthy topic for future study.

Of the modalities, K-12 Instructor in High School (HI) and Online (OL) are the most utilized delivery methods, comprising 76.5 percent of CCP course enrollments during the 2022 academic year. These two modes of instruction appear to be the most economically advantageous to the colleges among the four modalities and have widely differing tuition rate caps.

Funding

Colleges and universities receive payment for the courses taken by CCP participants in two ways. The first is through a transfer of a school district's state foundation funding from ODE. This transfer is based on the specific educational delivery method utilized by participants and the corresponding tuition rate that is either established in legislation or negotiated between a district and a college or university. When a student at a district enrolls in a CCP course, a portion of the foundation funding for that student is transferred to the college or university. This payment is akin to a regular tuition payment, although the cost per credit hour is lower than that of a traditional student.

The second way public colleges and universities receive CCP revenue is through the state funding mechanism known as the State Share of Instruction (SSI) for the education of Ohioans. As with their traditional student counterparts, institutions receive funding credit for the CCP students who complete courses through the program. More detail on SSI can be found below.

There is no specific statewide funding set aside for CCP operations; the state's biennial budget does not include an appropriation to oversee and ensure compliance with CCP program requirements. Any expense associated with the management of this program is absorbed in the general operations budgets of each department and stakeholder.

SSI Funding Calculations

The University Funding Model consists of three primary funding components:

1. Course Completions (aka Completed FTE), which comprises approximately 30% of the distribution;
2. Degree Completion, which comprises 50% of the distribution; and,
3. Set-Asides, if applicable:
 1. Medical model set-aside; and,
 2. Doctoral set-aside.

The Community College Funding Model consists of three primary funding components:

1. Course Completions (aka Completed FTE), which comprises 50% of the distribution;
2. Student progress metrics, known as Success Points, which comprises 25% of the distribution; and,
3. Completion Milestones (degrees, long-term certificates, transfers to 4-year institutions), which comprises 25% of the total.

To determine reimbursement amounts for the course completions and certificate/degree completions, ODHE calculates statewide average modeled costs (using the most recent 3 years of data) by subject area and level of instruction through "Resource Analysis."

For the purposes of SSI calculation, CCP students are treated no differently than traditional students within the funding formula.

Every budget cycle the Ohio General Assembly appropriates a fixed amount of funding to SSI. The SSI money is then allocated to institutions by ODHE based on a complex formula that incorporates institution-specific student outcomes and statewide average costs. Each public college and university reports detailed outcome & cost information to ODHE within the Higher Education Information (HEI) system. That data serves as the basis for the SSI calculations.

Participation

ORC § 3365.02 mandates that all public Ohio colleges, universities, and school districts must participate in CCP. Colleges and universities must report required data to the ODHE Chancellor, feature CCP details on their institution's website, send pre-term notices of admission, and provide academic counseling to CCP participants. Colleges and universities are also responsible for developing model course pathways for high school students. Professional development and classroom observation are required to be provided for CCP courses that are being taught in high schools by school district instructors that have CCP credentials.

School districts must permit students to enroll in CCP, offer counseling to CCP participating students, and provide program information, eligibility requirements, the consequences of not completing a course, and the responsibilities of the student. School districts are also required to promote CCP on their websites, along with providing details of the current agreements with participating colleges and universities.

Students were first able to participate in the program during the 2015-2016 academic year (AY 2016), and the program just completed its eighth year. In the most recent academic year, more than 78,000 students took advantage of the program earning more than 650,000 credit hours. Fifty seven percent of CCP students take only one or two classes each academic year.

Methodology

To solicit stakeholder input toward developing useful questions, AOS hosted informational discussions with select higher education institutional partners, higher education associations, and the Ohio Department of Higher Education (ODHE). These conversations resulted in a survey instrument that was sent to 37 public institutions of higher education. Six institutions provided incomplete or no response to the survey and are excluded from the analysis tables in this report. The partial and no responses came from Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College, and Youngstown State University. Additionally, Shawnee State is excluded from analysis tables due to data quality issues with its submission.

The survey asked institutions to report CCP-related expenses across several categories. These categories included classroom instructional expenses (e.g. instructor salary), per-student support expenses (e.g. admissions and advising), program expenses (e.g. marketing), and institutional overhead expenses.

Institutions were also asked to provide complete schedules of all course sections they offered during the most recent academic year completed (AY 2022). For each course section, institutions reported section credit hours, the number of total students enrolled, and the number of CCP students enrolled. These detailed course schedule tables were necessary for implementing a marginal-cost methodology to calculate classroom instructional expense.

To understand the marginal cost methodology used, consider a college course section comprised of 45 students, only two of which are CCP students. This is a course section that the college would offer irrespective of any CCP student participation, and as such it would be misleading to attribute any part of the instructor's expenses to the CCP program. Conversely, a course section of 25 total students, 20 of whom are CCP students, is a section that would not likely be offered without the CCP student participation. The salary of the instructor in this latter case should be attributed to CCP.

Owing to the above dynamic, the baseline methodology in this report for calculating direct instructional expense is to attribute the instructor's salary to CCP expenses only for those course sections in which more than 50% of the course's enrolled students are CCP students. A sensitivity analysis for thresholds other than 50% is also presented. This subset of methodology only applies to the on-campus (OC) and online (OL) modalities. College instructor in high school (CI) and credentialed high school instructor in high school (HI) sections are typically delivered in CCP-exclusive course sections. For CI sections, the full cost of the instructor compensation is attributed to CCP. For HI sections, no part of the instructor compensation is attributed to CCP, because they are on the K-12 school's payroll.

Revenue from CCP was analyzed in three different ways. First, the report presents a maximum potential revenue from CCP based upon the legal tuition rate limits within each modality. To

derive this number, the maximum statutory allowable tuition rate² for each modality is multiplied by the CCP credit hours institutions reported to AOS in those respective modalities. The AY 2022 CCP credit hours figures used in this calculation were self-reported by higher education institutions as part of the AOS survey. This maximum potential revenue is presented in order to compare the CCP revenue-generation potential among institutions irrespective of the tuition rate pricing decisions chosen by individual institutions. Note that these values will not match the actual CCP tuition received because some institutions opt to discount CCP tuition rates below the statutory allowable caps.

In the second method of presenting CCP revenue, actual CCP tuition revenue from public K-12 schools generated in academic year 2022 (AY 2022) was considered. This information comes from the Ohio Department of Education's CCP Deduction Report; it includes payments for CCP students coming from public K-12 schools, non-public schools, and homeschool CCP students. Deduction Report revenue is calculated based on actual AY 2022 credit hours, but the cash flow is paid to higher education institutions on a trailing basis, arriving in FY 2023. This revenue represents any actual negotiated tuition rates (discounts under the legal CCP tuition caps,) with K-12 partners and CCP students. These negotiated tuition rates varied among higher education institutions, and in some cases varied within a single higher education institution in that different K-12 partners were charged differing reduced rates.

A third method of revenue analysis using statewide average tuition rates was also considered. This method multiplies the individual institutions' reported credit hours by the same set of tuition rates for each modality, those rates being the calculated statewide averages.³ Revenue resulting from this third method generally falls between the revenues produced by the first two methods. This statewide average revenue presentation is useful in that, similar to the maximum potential revenue method, it places institutions on equal footing for the basis of costs comparisons while also acknowledging the practice of discounting CCP tuition rates. In an earlier publication of this report, the statewide average was the only revenue methodology presented.⁴

In this report the calculated revenue using maximum allowable tuition rate caps is the primary basis of comparison. This choice was made in order to show the potential institutions have available to cover their CCP-related costs. The use of the maximum allowable rates also places institutions on equal footing for the basis of comparison. As will be shown later in the report,

² For the Academic Year 2022 under analysis the statutory rates caps were: HI = \$41.64, CI = \$83.28, OC = \$166.55, and OL = \$166.55. ORC 3365.07 also specifies that higher education institutions may not charge CCP students a tuition rate higher than their "standard rate" for enrolled in-state non-CCP students. This additional constraint, where the state cap exceeded the individual institution's standard rate, affected 4 community colleges in our analysis. In those 4 cases, the maximum potential revenue was calculated using their standard rate.

³ For the Academic Year 2022 the statewide average tuition rates were calculated as: HI = \$41.64, CI = \$71.00, OC = \$140.00, and OL = \$125.00.

⁴ This May 2024 publication is being released to extend the analysis of the December 2023 publication to include two additional revenue calculation methodologies.

some higher education institutions do not discount at all from the maximum allowable cap whereas others discount certain modalities by 50 percent or more from the cap.

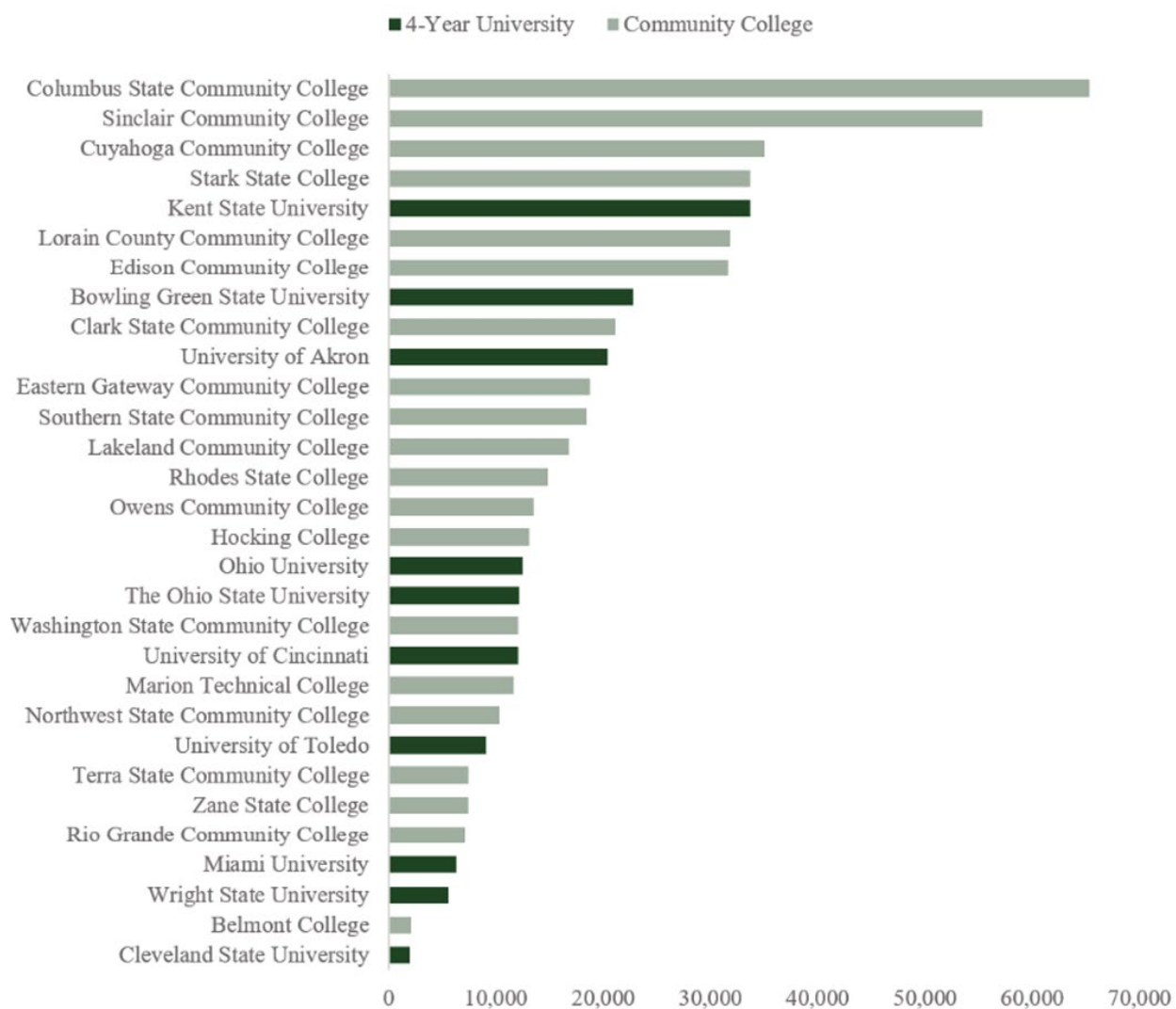
Additional conversations were held with ODHE to understand the impact of CCP on SSI funding. ODHE, at AOS' request, was able to run simulations of their SSI funding formula for all public community colleges under 2 scenarios: one with CCP student enrollment and another hypothetical scenario where colleges had no CCP students enrolled. These results revealed which institutions benefitted the most from CCP within the SSI formula as well as confirming that the CCP percentage composition of the student body is directly associated with the relative SSI benefit from CCP participation.

Analysis

Credit Hours

Figure 2 shows the total amount of CCP credit hours attempted at institutions for the academic year ending in May 2022 as reported to AOS by higher education institutions. These values include all four modes of instruction (on-campus, college instructor in high school, high school instructor in high school, and online.) Throughout this report, dark green bars represent 4-year universities and gray-green bars represent community colleges.

Figure 2: CCP Credit Hours Attempted [AY 2022]



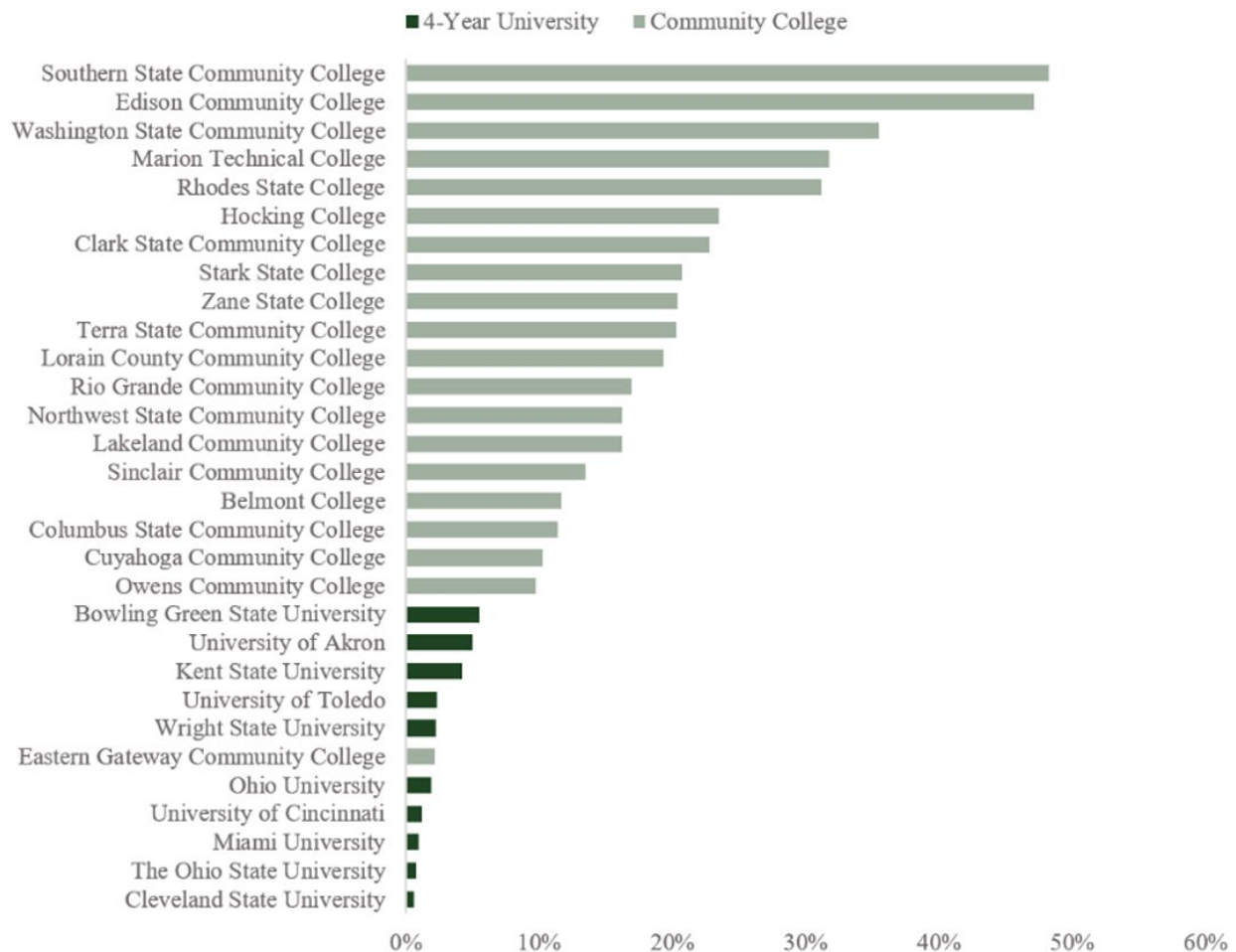
Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the survey: Central State, Cincinnati State, North Central State, Northeast Ohio Medical University, Terra State, and Youngstown State.

Generally, the largest community colleges are awarding the most CCP credit hours, although Kent State University, Bowling Green State University, and University of Akron also administer a large number of CCP credit hours. The institutions awarding the least amount of CCP credit hours are primarily universities as well as some smaller community colleges. Cleveland State University and Belmont College have the lowest amount of CCP credit hours attempted, but these hours represent a higher percentage of total credit hours for Belmont than it does for Cleveland State.

Below, figure 3 shows CCP credit hours as a percent of total credit hours. The institutions from Figure 2 above with the highest total amount of credit hours (Columbus State Community College, Sinclair Community College, and Cuyahoga Community College) are only in the middle of the range in terms of CCP hours as a percent of total credit hours.

Figure 3: CCP Credit Hours as % of Total Credit Hours [AY 2022]



Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the survey: Central State, Cincinnati State, North Central State, Northeast Ohio Medical University, Terra State, and Youngstown State.

As expected, the four-year universities have the least amount of CCP participation as a percentage of their total enrollment. There is substantial variation in the level of CCP enrollment among community colleges, ranging from less than 10 percent of credit hours at Eastern Gateway to nearly 50 percent at Southern State and Edison. These percentages have major strategic implications for colleges and universities. Institutions with higher percentages of CCP credit hours are more dependent on the program for their budget and therefore need to tailor their programs and instruction toward this particular demographic of students. The growing CCP population may also be masking the decline of traditional students in these institutions. For those institutions with a lower percentage of CCP credit hours, CCP may represent a potential growth area where institutions could target increased enrollment and revenue through marketing efforts and partnerships with K-12 schools.

Revenues vs. Expenses

Higher education institutions receive most of their CCP revenue from public K-12 schools, as these schools are responsible for funding their participating CCP students' tuition. Additionally, there is a separate statewide funding appropriation for participating CCP students who are enrolled in private school and those who are homeschooled.

As referenced in **Methodology**, this analysis will consider CCP revenue from three different perspectives: through a calculation using reported CCP credit hours times maximum allowable tuition cap for each modality, through institutions' actual AY 2022 CCP tuition revenues, and through a calculation using reported CCP credit hours times the statewide average tuition rates for each modality.

The first method, using maximum allowable rates for each modality, shows the maximum potential revenue higher education institutions would have available under current law. The second method, actual AY 2022 tuition revenue represents the actual revenue earned by institutions, considering negotiated rates. The third method shows the potential revenue institutions would generate if they charged tuition at the statewide average rate. None of these three methods account for additional revenue related to the SSI formula.

Figure 4, on the following page shows the revenue figures derived from each methodology.

Figure 4: CCP Revenue Models

Institution	Revenue @ Max Allowable Rates¹	Actual Revenue from ODE Deduction Reports²	Revenue @ Statewide Avg Rates³
Akron University	\$2,266,861	\$1,762,307	\$1,861,157
Belmont College	\$204,402	\$166,375	\$170,785
Bowling Green State University	\$2,305,372	\$2,404,810	\$1,882,236
Central Ohio Technical College	\$1,068,068	\$1,086,989	\$918,329
Clark State Community College	\$1,959,069	\$939,664	\$1,627,706
Cleveland State University	\$286,633	\$250,325	\$236,340
Columbus State Community College	\$8,033,514	\$8,044,766	\$6,321,027
Cuyahoga Community College	\$4,007,768	\$2,440,973	\$3,966,933
Eastern Gateway Community College	\$1,362,768	\$1,147,206	\$1,188,102
Edison Community College	\$2,891,731	\$2,798,960	\$2,411,119
Hocking College	\$765,157	\$783,522	\$683,649
Kent State University	\$4,434,842	\$3,489,856	\$3,572,957
Lakeland Community College	\$2,129,301	\$1,523,582	\$1,961,538
Lorain County Community College	\$2,737,742	\$1,902,924	\$2,614,293
Marion Technical College	\$1,032,722	\$1,049,877	\$861,391
Miami University	\$1,047,183	\$1,028,122	\$810,530
Northwest State Community College	\$1,291,645	\$1,238,024	\$1,023,994
Ohio University	\$2,073,483	\$1,791,087	\$1,640,878
Owens Community College	\$6,811,581	\$857,949	\$5,298,890
Rhodes State College	\$1,095,594	\$1,138,289	\$939,579
Rio Grande Community College	\$1,006,299	\$869,817	\$836,186
Sinclair Community College	\$6,229,648	\$2,665,437	\$5,623,007
Southern State Community College	\$2,077,609	\$2,054,673	\$1,691,575
Stark State College	\$4,851,542	\$1,967,718	\$3,982,447
The Ohio State University	\$2,026,164	\$1,939,891	\$1,616,035
University of Cincinnati	\$1,584,067	\$1,698,118	\$1,270,752
University of Toledo	\$1,331,654	\$1,345,044	\$1,035,600
Washington State Community College	\$1,517,831	\$1,115,104	\$1,249,357
Wright State University	\$1,011,928	\$1,013,508	\$824,624
Zane State University	\$1,409,733	\$1,319,080	\$1,208,056

1. From AY 2022 credit hours reported to AOS. Maximum Allowable Rates: CI=\$83.28, HI=\$41.64, OC=\$166.55, OL=\$166.55
2. AY 2022, from ODE Deduction Report and additional ODE reports on non-public and homeschool revenue.
3. From AY 2022 credit hours reported to AOS. Statewide Average Rates: CI=\$71.00, HI=\$41.64, OC=\$140.00, OL=\$125.00.

Note: Excludes Shawnee State for data quality issues as well as those institutions which did not respond to the CCP course listing component of the survey: Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College and Youngstown State University.

In comparing the results of the actual revenue to the calculated maximum rate method, institutions mainly cluster into two groups: those whose actual revenue is close to the calculated maximum, and those whose actual revenues are significantly less. This difference arises from the fact that institutions tend to either charge rates near the cap and provide very little tuition discounting, or else provide significant discounts from the allowable cap. This split is most pronounced in the Online modality, where several community colleges have a significant number of CCP credit hours but charge rates at roughly 25 percent of the maximum allowable cap. Several institutions noted that these discounts are being provided in a spirit of partnership with K-12 partners, in cases where institutions of higher education feel that actual expenses incurred would be covered at discounted rates.

Institutions' actual revenue should not exceed the maximum potential revenue derived from the rate caps, as a matter of arithmetic. In some cases in the table above, however, the actual revenue does exceed the calculated maximum potential revenue by de minimis amounts. This is likely due slight variations between CCP credit hours paid by ODE and the credit hours institutions reported in the AOS survey.

The relationship between revenue calculated from the statewide average rates and actual revenue depends upon an institution's rate pricing decision relative to the statewide average. Institutions that aggressively discount CCP tuition, such as Sinclair, show a revenue from the calculated average that is substantially higher than actual revenue. Conversely, institutions that do not discount CCP at all such as Central Ohio Technical College, show an actual revenue that exceeds revenue calculated from statewide average rates. **Appendix C** shows the average actual tuition rates charged for each institution in AY2022, by modality.

Instances where actual revenue slightly exceeds calculated maximum potential revenue is likely due to 'true-ups' in the deduction report, as ODE funds this program on a trailing basis and corrections are sometimes needed. This discrepancy could also be explained if institutions under-reported CCP credit hours to AOS in the survey responses. Since the phenomenon was infrequent and the magnitude small, the report does not attempt to discern the exact reason.

For the majority of this report, tables that report revenue and expenditures will be using the revenue figure derived from the maximum allowable tuition rate only. This choice is made to enable consistent comparisons across institutions, and to show the full revenue potential that could be available to offset costs under current law. An additional reason for proceeding with the calculated maximum potential revenue is that the current maximum statutory tuition rates have been in place since 2015, and these rates' effect on the ability of institutions of higher education to cover expenses has not been studied.

Figure 5, on the following page shows CCP maximum potential tuition revenue compared to only direct instruction expenses. Direct instruction expenses are defined as expenses incurred in the classroom, which is almost entirely the instructors' compensation. CCP related expenses that occur outside of the classroom, such as advising and counseling, are not included in direct instruction expenses and will be addressed later. The maximum potential tuition revenue does not include any SSI funding. Column A subtracts direct instruction expense from revenues and

provides a metric of CCP net revenue before wider program support and indirect expenses are considered.

Figure 5: CCP Self-Identified Expenses vs Maximum Potential Revenue
[AY 2022]

Institution	Max Potential CCP Tuition Revenue (SSI Excluded)	Direct Instruction Expense	A) Revenue - Direct Instruction
Akron University	\$2,266,861	\$2,195,914	\$70,947
Belmont College	\$204,402	\$27,518	\$176,883
Bowling Green State University	\$2,305,372	\$1,356,225	\$949,147
Central Ohio Technical College	\$1,068,068	\$1,230,175	(\$162,107)
Clark State Community College	\$1,959,069	\$652,380	\$1,306,689
Cleveland State University	\$286,633	\$42,679	\$243,955
Columbus State Community College	\$8,033,514	\$4,309,354	\$3,724,160
Cuyahoga Community College	\$4,007,768	\$3,692,192	\$315,576
Eastern Gateway Community College	\$1,362,768	\$341,757	\$1,021,011
Edison Community College	\$2,891,731	\$1,517,428	\$1,374,303
Hocking College	\$765,157	\$0	\$765,157
Kent State University	\$4,434,842	\$1,267,761	\$3,167,082
Lakeland Community College	\$2,129,301	\$2,125,530	\$3,771
Lorain County Community College	\$2,737,742	\$1,364,257	\$1,373,485
Marion Technical College	\$1,032,722	\$1,009,897	\$22,824
Miami University	\$1,047,183	\$254,850	\$792,333
Northwest State Community College	\$1,291,645	\$1,175,071	\$116,575
Ohio University	\$2,073,483	\$1,348,576	\$724,907
Owens Community College	\$6,811,581	\$81,137	\$6,730,444
Rhodes State College	\$1,095,594	\$442,837	\$652,757
Rio Grande Community College	\$1,006,299	\$719,422	\$286,877
Sinclair Community College	\$6,229,648	\$3,891,219	\$2,338,429
Southern State Community College	\$2,077,609	\$1,930,577	\$147,031
Stark State College	\$4,851,542	\$2,847,825	\$2,003,717
The Ohio State University	\$2,026,164	\$359,214	\$1,666,950
University of Cincinnati	\$1,584,067	\$388,565	\$1,195,502
University of Toledo	\$1,331,654	\$251,600	\$1,080,054
Washington State Community College	\$1,517,831	\$905,566	\$612,265
Wright State University	\$1,011,928	\$295,353	\$716,575
Zane State University	\$1,409,733	\$1,053,307	\$356,426

Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues as well as those institutions which did not respond to the CCP course listing component of the survey: Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College and Youngstown State University.

Note: CCP Revenue includes only tuition; CCP students contribute additional SSI revenue which is not included in this table.

As shown in Figure 5, nearly all institutions show a positive maximum potential CCP net revenue value. This means that at the state tuition caps institutions would not be losing money as a result of enrolling CCP students in courses and suggests that incremental CCP class enrollment is financially advantageous to the colleges.

The table on the following page, Figure 6, replicates Figure 5, but rather than presenting maximum potential CCP revenue at the state rate caps it shows the actual revenue institutions earned (as reported in the ODE Deduction Report.) This provides information on whether institutions were covering their direct instructional expenses at the actual rates charged, which for some institutions included discounts. As with Figure 4, these revenues do not include any SSI impact.

Figure 6: CCP Self-Identified Expenses vs Actual Revenue [AY 2022]

Institution	Actual Revenue from ODE Deduction Reports (Excludes SSI)	Direct Instruction Expense	A) Revenue - Direct Instruction
Akron University	\$1,762,307	\$2,195,914	(\$433,607)
Belmont College	\$166,375	\$27,518	\$138,857
Bowling Green State University	\$2,404,810	\$1,356,225	\$1,048,585
Central Ohio Technical College	\$1,086,989	\$1,230,175	(\$143,186)
Clark State Community College	\$939,664	\$652,380	\$287,284
Cleveland State University	\$250,325	\$42,679	\$207,646
Columbus State Community College	\$8,044,766	\$4,309,354	\$3,735,412
Cuyahoga Community College	\$2,440,973	\$3,692,192	(\$1,251,219)
Eastern Gateway Community College	\$1,147,206	\$341,757	\$805,449
Edison Community College	\$2,798,960	\$1,517,428	\$1,281,532
Hocking College	\$783,522	\$0	\$783,522
Kent State University	\$3,489,856	\$1,267,761	\$2,222,095
Lakeland Community College	\$1,523,582	\$2,125,530	(\$601,948)
Lorain County Community College	\$1,902,924	\$1,364,257	\$538,667
Marion Technical College	\$1,049,877	\$1,009,897	\$39,980
Miami University	\$1,028,122	\$254,850	\$773,272
Northwest State Community College	\$1,238,024	\$1,175,071	\$62,953
Ohio University	\$1,791,087	\$1,348,576	\$442,511
Owens Community College	\$857,949	\$81,137	\$776,812
Rhodes State College	\$1,138,289	\$442,837	\$695,452
Rio Grande Community College	\$869,817	\$719,422	\$150,395
Sinclair Community College	\$2,665,437	\$3,891,219	(\$1,225,782)
Southern State Community College	\$2,054,673	\$1,930,577	\$124,096
Stark State College	\$1,967,718	\$2,847,825	(\$880,107)
The Ohio State University	\$1,939,891	\$359,214	\$1,580,677
University of Cincinnati	\$1,698,118	\$388,565	\$1,309,553
University of Toledo	\$1,345,044	\$251,600	\$1,093,444
Washington State Community College	\$1,115,104	\$905,566	\$209,538
Wright State University	\$1,013,508	\$295,353	\$718,155
Zane State University	\$1,319,080	\$1,053,307	\$265,773

Source: Expenses from Ohio Public Colleges & Universities; Revenue from ODE Deduction Report and additional ODE reports on non-public and homeschool revenue.

Note: Excludes Shawnee State for data quality issues as well as those institutions which did not respond to the CCP course listing component of the survey: Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College and Youngstown State University.

Note: CCP Revenue includes only tuition; CCP students contribute additional SSI revenue which is not included in this table.

Whereas Figure 5 reported only a single institution with direct instructional expenses exceeding the maximum potential revenue, the table above shows six institutions where direct instructional expenses exceed actual revenue earned. Five of these six institutions are community colleges. Most institutions, however, do show the actual revenues they received are sufficient to cover direct instructional expenses related to CCP. Considering SSI revenues are not even captured in this table, it can be concluded that higher education institutions are generally recovering their direct instructional expenses even when offering discounted tuition rates.

The table on the following page, Figure 7, is the same presentation as the previous two, but uses the third revenue calculation methodology derived from statewide average tuition rates. This provides information on whether institutions could cover their direct instructional expenses charging tuition rates equal to the statewide average.

Figure 7: CCP Self-Identified Expenses vs Revenue Calculated with Statewide Average Rates [AY 2022]

Institution	Revenue from Statewide Avg Rate (Excludes SSI)	Direct Instruction Expense	A) Revenue - Direct Instruction
Akron University	\$1,861,157	\$2,195,914	(\$334,757)
Belmont College	\$170,785	\$27,518	\$143,267
Bowling Green State University	\$1,882,236	\$1,356,225	\$526,011
Central Ohio Technical College	\$918,329	\$1,230,175	(\$311,846)
Clark State Community College	\$1,627,706	\$652,380	\$975,326
Cleveland State University	\$236,340	\$42,679	\$193,662
Columbus State Community College	\$6,321,027	\$4,309,354	\$2,011,673
Cuyahoga Community College	\$3,966,933	\$3,692,192	\$274,741
Eastern Gateway Community College	\$1,188,102	\$341,757	\$846,345
Edison Community College	\$2,411,119	\$1,517,428	\$893,691
Hocking College	\$683,649	\$0	\$683,649
Kent State University	\$3,572,957	\$1,267,761	\$2,305,196
Lakeland Community College	\$1,961,538	\$2,125,530	(\$163,992)
Lorain County Community College	\$2,614,293	\$1,364,257	\$1,250,036
Marion Technical College	\$861,391	\$1,009,897	(\$148,506)
Miami University	\$810,530	\$254,850	\$555,680
Northwest State Community College	\$1,023,994	\$1,175,071	(\$151,077)
Ohio University	\$1,640,878	\$1,348,576	\$292,302
Owens Community College	\$5,298,890	\$81,137	\$5,217,754
Rhodes State College	\$939,579	\$442,837	\$496,742
Rio Grande Community College	\$836,186	\$719,422	\$116,764
Sinclair Community College	\$5,623,007	\$3,891,219	\$1,731,788
Southern State Community College	\$1,691,575	\$1,930,577	(\$239,002)
Stark State College	\$3,982,447	\$2,847,825	\$1,134,623
The Ohio State University	\$1,616,035	\$359,214	\$1,256,821
University of Cincinnati	\$1,270,752	\$388,565	\$882,187
University of Toledo	\$1,035,600	\$251,600	\$784,000
Washington State Community College	\$1,249,357	\$905,566	\$343,791
Wright State University	\$824,624	\$295,353	\$529,271
Zane State University	\$1,208,056	\$1,053,307	\$154,750

Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the survey: Central State, Cincinnati State, North Central State, Northeast Ohio Medical University, Terra State, and Youngstown State.

Note: CCP Revenue includes only tuition; CCP students contribute additional SSI revenue which is not included in this table.

Note: Avg Statewide Negotiation Rates: CI = \$71.00, HI = \$41.64, OC = \$140.00, OL = \$125.00

As with the prior table that used actual revenue received, there are six institutions whose direct instructional expenses exceed revenue calculated with the statewide average tuition rates. Again, five of the six institutions are community colleges. Most institutions are shown to recover their direct instructional expenses, before even considering the effects of SSI.

It is important to note that the direct CCP instruction expenses represent only a small fraction of the institutions' total annual expenditures. For example, Akron's \$2,195,914 in direct CCP instruction is 0.8% of its \$271,550,000 total annual expenditure. This approximate ratio holds across most institutions.

Tables from this point forward will again revert back to the baseline methodology of presenting revenue from the maximum potential revenue perspective (i.e. revenue is calculated based on the statutory CCP tuition caps for each modality and credit hours as reported by institutions.)

Figure 8 on the following page supplements Figure 5 by incorporating the Support and Indirect Expenses reported by responding institutions. Examples of Support and Indirect Expenses include the cost of admissions staff, academic advising, course development, and technology licenses. These expenses are subtracted from the Revenue minus Direct Instruction value in the third column to produce a net CCP revenue after support and indirect expense, listed in the last column. Therefore, the figure represents the self-reported net financial impact of the CCP program after accounting for classroom and program related expenses before SSI.

Figure 8: CCP Self-Identified Expenses vs Revenue:
With Support & Indirect [AY 2022]

Institution	Max Potential CCP Tuition Revenue	Direct Instruction Expense	A) Revenue - Direct Instruction	Support + Indirect Expense	B) Revenue - (Direct & Support & Indirect)
Akron University	\$2,266,861	\$2,195,914	\$70,947	\$93,191	(\$22,244)
Belmont College	\$204,402	\$27,518	\$176,883	\$50,227	\$126,656
Bowling Green State University	\$2,305,372	\$1,356,225	\$949,147	\$643,718	\$305,429
Central Ohio Technical College	\$1,068,068	\$1,230,175	(\$162,107)	\$717,699	(\$879,806)
Clark State Community College	\$1,959,069	\$652,380	\$1,306,689	\$959,650	\$347,039
Cleveland State University	\$286,633	\$42,679	\$243,955	\$90,631	\$153,324
Columbus State Community College	\$8,033,514	\$4,309,354	\$3,724,160	\$3,759,866	(\$35,706)
Cuyahoga Community College	\$4,007,768	\$3,692,192	\$315,576	\$2,206,874	(\$1,891,298)
Eastern Gateway Community College	\$1,362,768	\$341,757	\$1,021,011	\$369,996	\$651,015
Edison Community College	\$2,891,731	\$1,517,428	\$1,374,303	\$2,478,349	(\$1,104,046)
Hocking College	\$765,157	\$0	\$765,157	\$159,145	\$606,012
Kent State University	\$4,434,842	\$1,267,761	\$3,167,082	\$251,671	\$2,915,410
Lakeland Community College	\$2,129,301	\$2,125,530	\$3,771	\$943,706	(\$939,935)
Lorain County Community College	\$2,737,742	\$1,364,257	\$1,373,485	\$2,859,200	(\$1,485,715)
Marion Technical College	\$1,032,722	\$1,009,897	\$22,824	\$627,043	(\$604,218)
Miami University	\$1,047,183	\$254,850	\$792,333	\$1,102,829	(\$310,496)
Northwest State Community College	\$1,291,645	\$1,175,071	\$116,575	\$30,658	\$85,916
Ohio University	\$2,073,483	\$1,348,576	\$724,907	\$0	\$724,907
Owens Community College	\$6,811,581	\$81,137	\$6,730,444	\$205,967	\$6,524,477
Rhodes State College	\$1,095,594	\$442,837	\$652,757	\$337,744	\$315,013
Rio Grande Community College	\$1,006,299	\$719,422	\$286,877	\$74,636	\$212,241
Sinclair Community College	\$6,229,648	\$3,891,219	\$2,338,429	\$1,770,528	\$567,901
Southern State Community College	\$2,077,609	\$1,930,577	\$147,031	\$97,000	\$50,031
Stark State College	\$4,851,542	\$2,847,825	\$2,003,717	\$3,268,387	(\$1,264,670)
The Ohio State University	\$2,026,164	\$359,214	\$1,666,950	\$268,646	\$1,398,304
University of Cincinnati	\$1,584,067	\$388,565	\$1,195,502	\$441,036	\$754,466
University of Toledo	\$1,331,654	\$251,600	\$1,080,054	\$383,625	\$696,429
Washington State Community College	\$1,517,831	\$905,566	\$612,265	\$89,786	\$522,479
Wright State University	\$1,011,928	\$295,353	\$716,575	\$180,722	\$535,853
Zane State University	\$1,409,733	\$1,053,307	\$356,426	\$343,390	\$13,036

Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues as well as those institutions which did not respond to the CCP course listing component of the survey: Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College and Youngstown State University.

While Figure 5 indicates that nearly all institutions would have a positive maximum potential CCP net revenue value when accounting only for direct classroom expenditure, after accounting for support and indirect expenses in Figure 6, the number of institutions with a positive CCP net revenue value drops to about 68%. The main takeaway from these two figures is that certain institutions are reporting expenses in such a way that they are claiming to be operating CCP at a loss. A key caveat and limitation of this table, however, is that when inputting the indirect & support expenses in the AOS survey institutions were afforded wide latitude and discretion. As will be shown in the following section, the latitude afforded by the survey instructions resulted in a wide variation in the institutions' interpretations for what should be included in the support and indirect expense category. As such, there was a wider variation in values reported under indirect and support expenses compared to direct instruction expenses.

Figure 8 on the previous page compares support and indirect expenses to the maximum potential revenue methodology only. **Appendix D** presents the same table using the two additional revenue methodologies, actual revenue received and revenue calculated from the average statewide tuition rate.

The AOS survey also provided the opportunity for institutions to report on institutional overheads and make an allocation of these overheads to their CCP program. In almost all responses, reported overhead allocations greatly exceeded the specific provisions for direct classroom and indirect and support expenses. The nature of overhead costs is that they represent expenses needed to keep the institution afloat irrespective of decisions made within individual programs such as CCP. Overhead costs are also unavoidable, contingent on any programmatic decisions related to CCP. As such allocated overhead values are not useful or appropriate for this type of cost analysis and thus, are not reported.

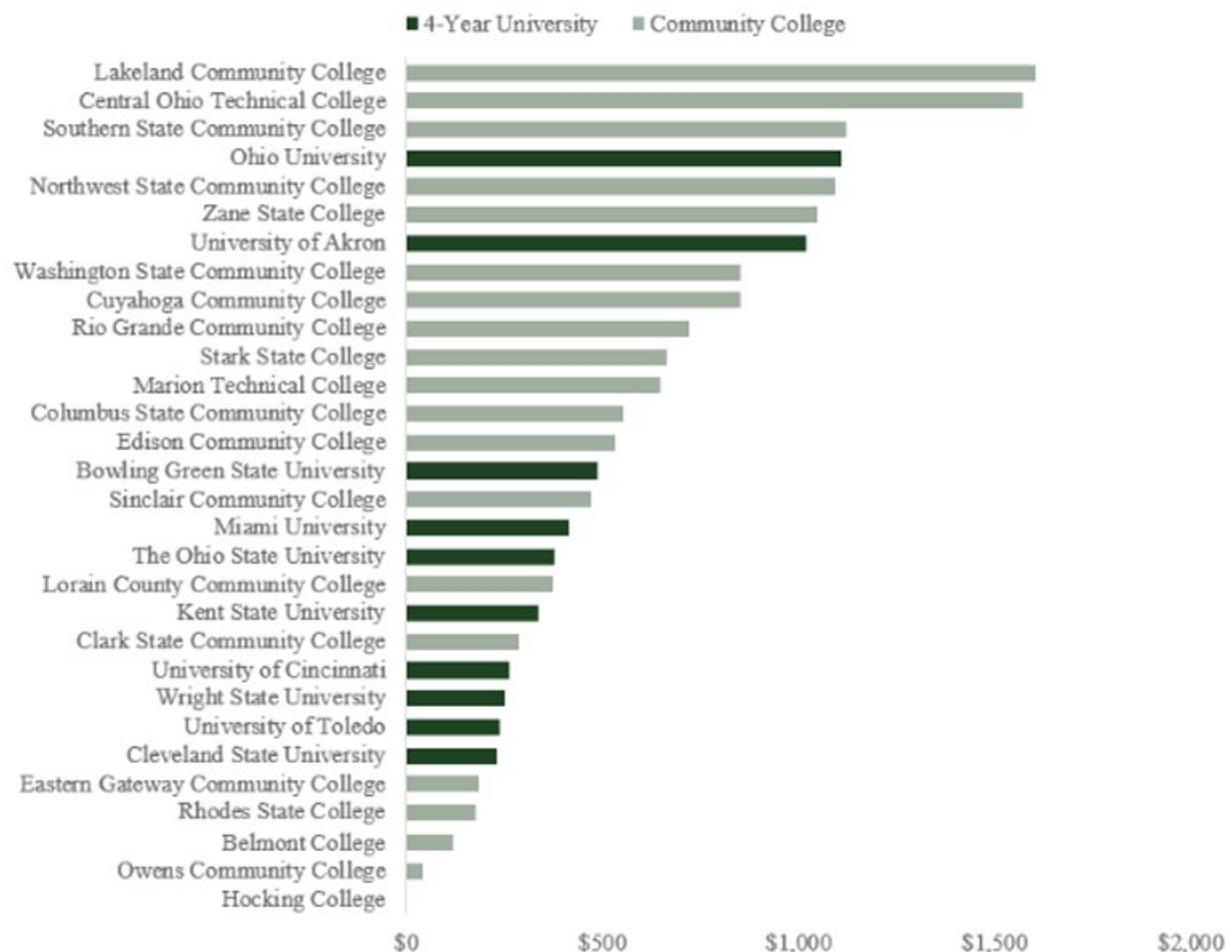
It is worth noting that institutions can benefit from CCP in a way not directly shown by the above financials. Institutions can benefit from CCP via a recruiting channel. Participating students may return to an institution after graduating high school, at which point institutions would capture regular tuition from matriculating students. Ohio State's partnership with Dublin City Schools is an example of a high school and university that have formalized such an arrangement.

The results in Figures 5 and 6 do not account for the revenue received from state funding sources as determined by the SSI formula. For every tuition dollar received, Ohio institutions receive, on average, roughly fifty to sixty-five cents in SSI formula funding, depending on the sector of the institution. Due to complexities in the SSI calculation, this is addressed during a later section in this report.

Expense Categories

The following figure shows the costs reported by institutions for direct classroom expenses. Cost values are presented on a per-CCP-student basis.

Figure 9: Direct Classroom Expenses per Student [AY 2022]



Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the CCP course listing component of the survey: Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College and Youngstown State University.

Direct classroom expenses at responding institutions averaged \$1,007 per student with a standard deviation of \$721. The direct classroom expenses calculated from institutions' responses are lower than the indirect and overhead categories and varies among institutions. The two main causes of variation in classroom expenses are as follows:

- 1) The number of on-campus and online classes where CCP students form the majority of particular course sections, and
- 2) Variation in the average professor salary.

The expense values arising from the number of course sections where CCP students form the majority are mainly the result of CCP enrollment (see Methodology for a detailed discussion of this calculation). The attribution of direct instructional expenses to CCP are only being taken for course sections in which more than 50 percent of the students are CCP students. The logic behind this assumption is that without this level of CCP participation, the course sections would not have been offered.

To present a sensitivity analysis on this variable, the results for two alternative methodologies were calculated:

Methodology 1: CCP costs are attributed to courses in which CCP students comprise more than 25 percent of the course section,

Methodology 2: CCP costs are attributed to courses in which CCP students comprise more than 75 percent of the course section. Moving the threshold from a baseline of 50 percent to 75 percent CCP seats reduced direct costs by an average of 40 percent.

On average, the 25 percent threshold approximately doubled the direct costs when compared to the 50 percent baseline. Individual values for the responding institutions are given in the sensitivity Figure 8 below.

Figure 10: Sensitivity Analysis of Direct Classroom Expense Methodology

Institution	DIRECT INSTRUCTIONAL EXPENSE PER STUDENT		
	Baseline: (CCP >50% course composition)	Sensitivity A: (CCP >25% course composition)	Sensitivity B: (CCP >75% course composition)
Belmont College	\$122	\$578	\$91
Bowling Green State University	\$490	\$1,027	\$224
Central Ohio Technical College	\$1,127	\$1,157	\$479
Clark State Community College	\$286	\$1,009	\$74
Cleveland State University	\$232	\$387	\$232
Columbus State Community College	\$554	\$1,124	\$421
Cuyahoga Community College	\$850	\$2,055	\$582
Eastern Gateway Community College	\$187	\$187	\$187
Edison Community College	\$531	\$1,119	\$204
Hocking College	\$0	\$0	\$0
Kent State University	\$339	\$839	\$171
Lakeland Community College	\$1,603	\$6,229	\$380
Lorain County Community College	\$374	\$986	\$227
Marion Technical College	\$647	\$1,018	\$518
Miami University	\$414	\$1,440	\$199
Northwest State Community College	\$1,094	\$2,219	\$495
Ohio University	\$1,108	\$2,800	\$841
Owens Community College	\$41	\$207	\$32
Rhodes State College	\$178	\$381	\$105
Rio Grande Community College	\$722	\$1,574	\$415
Sinclair Community College	\$472	\$1,187	\$280
Southern State Community College	\$1,122	\$1,911	\$538
Stark State College	\$664	\$1,054	\$555
The Ohio State University	\$379	\$1,006	\$330
University of Akron	\$1,019	\$1,656	\$740
University of Cincinnati	\$263	\$759	\$156
University of Toledo	\$239	\$1,165	\$28
Washington State Community College	\$854	\$1,752	\$317
Wright State University	\$252	\$680	\$198
Zane State College	\$1,049	\$1,760	\$474

Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the survey: Central State, Cincinnati State, North Central State, Northeast Ohio Medical University, Terra State, and Youngstown State.

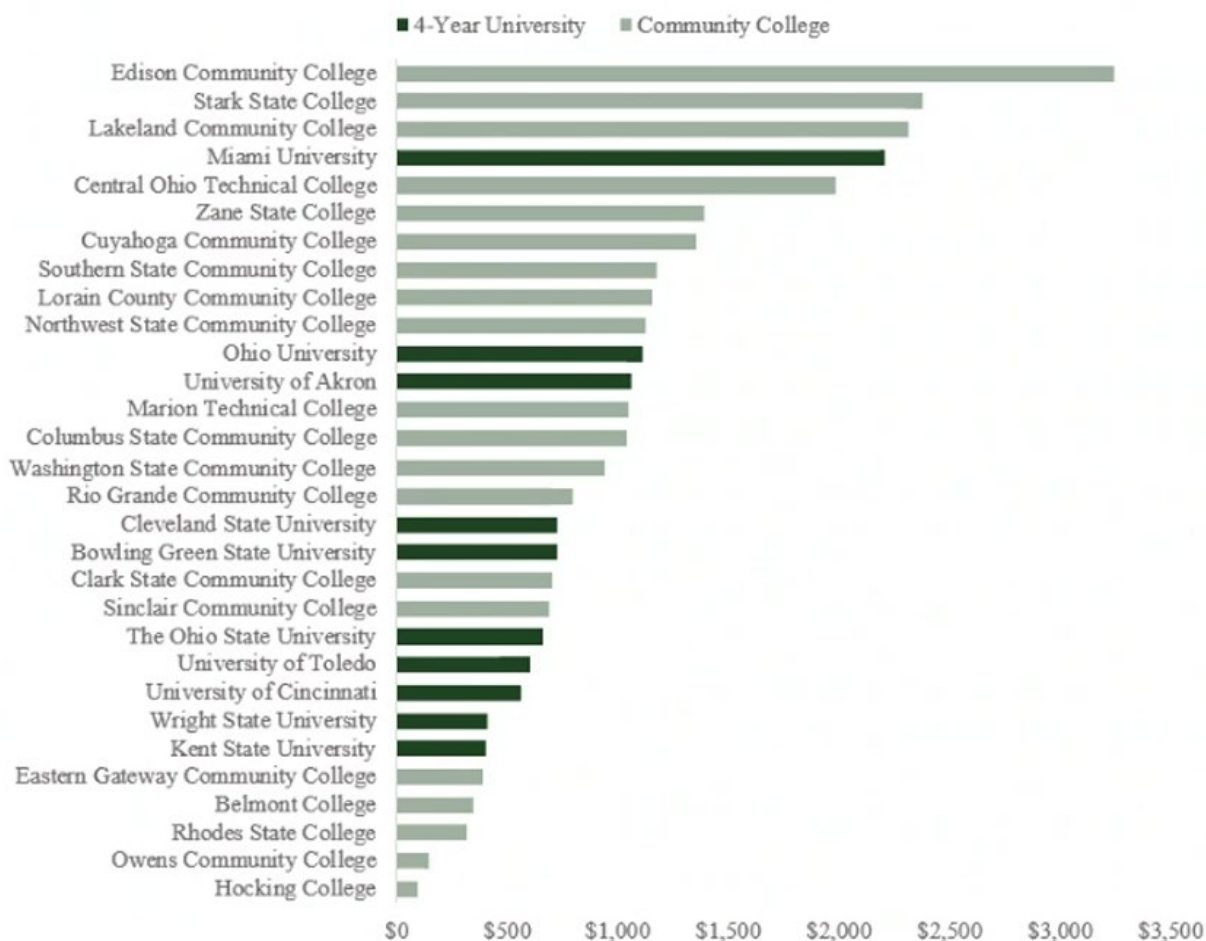
Note: Above table applies only to the online and on-campus delivery modalities.

The above analysis shows the calculation for direct instructional expense to be sensitive to the methodological choices used to attribute costs to CCP students. Moving from the baseline threshold of 50 percent CCP course composition to 25 percent CCP course composition, increases the amount of direct instruction expenses at all institutions. These values ranged from roughly a 50 percent increase in expenses (Cleveland State) to roughly a 300 percent increase in expenses (Toledo). Conversely, moving to a threshold of 75 percent CCP course composition reduces the amount of direct instructional expense attributed to CCP students, in most cases by roughly 50 percent.

It is important to note the zero-values in the case of Hocking College and Terra State. This arises from the fact that these institutions did not have *any* course sections in which CCP students formed the majority of a class.

Figure 11 supplements direct instructional expense by layering on indirect program expenses on a per-student basis. These values represent the self-reported total cost of educating CCP students.

Figure 11: Direct and Indirect Expense per Student [AY 2022]



Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the CCP course listing component of the survey: Central State University, Cincinnati State Community College, North Central State Community College, Northeast Ohio Medical University, Terra State Community College and Youngstown State University.

The mean value in the chart above is \$1,036 and the standard deviation is \$726. The top schools - Edison, Stark, and Miami - identified and attributed more non-classroom expenses to the CCP program.

As mentioned, there was a wide variance in the amount of indirect expenses institutions reported. Categories of indirect expenses reported by most institutions included advising, library, tutoring, admissions, and CCP marketing expenses. Some institutions, however, reported expenses that stretched the spirit of the request for *CCP-related* indirect costs (i.e. one reporting institution

allocated costs of an enterprise IT project; another allocated all institution-wide indirect expenses to CCP). The dubious value of reported indirect cost figures demonstrates the need for standardization in any future cost-reporting requirements in the statewide CCP program.

As reflected in the figure on the previous page, community colleges generally reported higher per-student values for the indirect expenses. However, it is worth noting that the lowest five institutions for direct and indirect expenses per student were all community colleges with a relatively small CCP participation rate.

SSI Simulation

As previously discussed, CCP students are counted in the same manner as traditional students within the SSI funding formula. Thus, CCP students affect the amount of revenue institutions receive from SSI funding.

Due to the interrelated zero-sum nature of the SSI formula, it is impossible to say how much SSI funding a single institution's CCP students are generating. While there is not a fixed amount of SSI funding tied to a single CCP student, the institution's allocation depends upon its performance relative to the aggregate sum of all institutions. This means that the addition or removal of CCP students at one institution directly impacts the SSI funding levels at all other institutions, as the SSI formula distributes a fixed sum of money across all institutions.

Though it is not possible to attach a precise value to SSI-per-student, AOS undertook an analysis to explore the magnitude and direction of CCP participation on SSI. The two main questions the analysis sought to answer were:

1. Which institutions are benefiting **the most** from CCP as a function of the zero-sum SSI calculation?
2. Which institutions are benefiting **the least** from CCP as a function of the zero-sum SSI calculation?

To understand the impact of CCP on institutions' State Share of Instruction (SSI) funding, ODHE produced a scenario analysis. Due to complexities arising from formula variations for two-year and four-year institutions, this analysis explored only the impact on community colleges. ODHE ran funding simulations for two distinct scenarios:

- a) The 2023 funding received based on current CCP enrollment; and,
- b) A hypothetical scenario where institutions had all CCP enrollment removed.

Subtracting the resulting funding differences between these two scenarios isolates the impact of CCP enrollment on institutional SSI revenue.

Figure 12 displays the results of ODHE’s simulation for scenario b, removing CCP student enrollment on Ohio’s community colleges. The institutions showing a positive value in the fourth column, Difference, can be said to have benefited from CCP with respect to their SSI funding.

Figure 12: ODHE SSI Simulation [FY 2023]

Institution Name	Total FY 2023 SSI allocation (Actual)	SSI allocation without CCP Students (Simulation)	Difference	Total FY 2023 SSI allocation % change
Edison State	\$11,517,938	\$8,008,420	\$3,509,518	30.50%
Southern State	\$7,592,522	\$5,385,155	\$2,207,367	29.10%
Zane State	\$6,887,396	\$5,824,570	\$1,062,826	15.40%
Washington State	\$6,822,813	\$5,857,921	\$964,893	14.10%
North Central	\$9,345,542	\$8,073,169	\$1,272,373	13.60%
James Rhodes St.	\$10,288,536	\$9,156,923	\$1,131,613	11.00%
Clark State	\$16,156,172	\$14,540,727	\$1,615,445	10.00%
Central Ohio	\$11,589,281	\$10,683,467	\$905,814	7.80%
Marion Tech	\$7,680,203	\$7,147,710	\$532,494	6.90%
Terra State	\$6,271,982	\$6,128,264	\$143,718	2.30%
Lorain County	\$30,181,034	\$29,555,121	\$625,913	2.10%
Lakeland	\$18,431,005	\$18,163,913	\$267,092	1.40%
Stark State	\$31,294,938	\$31,459,877	(\$164,939)	-0.50%
Sinclair	\$56,431,185	\$57,283,844	(\$852,659)	-1.50%
Rio Grande	\$5,929,539	\$6,052,855	(\$123,316)	-2.10%
Cincinnati State	\$28,346,312	\$29,167,368	(\$821,056)	-2.90%
Columbus State	\$77,911,943	\$80,605,265	(\$2,693,323)	-3.50%
Hocking	\$10,522,299	\$11,074,454	(\$552,155)	-5.20%
Northwest State	\$12,206,399	\$12,924,261	(\$717,862)	-5.90%
Cuyahoga	\$64,418,341	\$68,709,519	(\$4,291,178)	-6.70%
Eastern Gateway	\$19,386,074	\$20,798,738	(\$1,412,664)	-7.30%
Belmont	\$3,585,446	\$3,896,440	(\$310,995)	-8.70%
Owens State	\$25,666,103	\$27,965,022	(\$2,298,919)	-9.00%
Total	\$478,463,002	\$478,463,002	\$0	0.00%
Total amount reallocated (negatives)			(\$14,239,066)	
Total amount reallocated (positives)			\$14,239,066	

As shown in the figure above, the total of the Difference column is \$0. Displaying the net redistributive effect across community colleges from CCP as it relates to SSI funding. Institutions with positive difference values, such as Edison State, would have had less SSI funding available if the school did not have CCP enrollment. Other schools with negative difference values, such as Owens State, would have received more SSI funding in the absence of CCP.

It is worth noting the small absolute size of this SSI funding impact arising from CCP. Among the 23 community colleges, the State of Ohio distributed over \$478M in total SSI allotment. Removing CCP students in the allotment formula resulted in only \$14M in funding being reallocated among these colleges, only 3 percent of the total allotment.

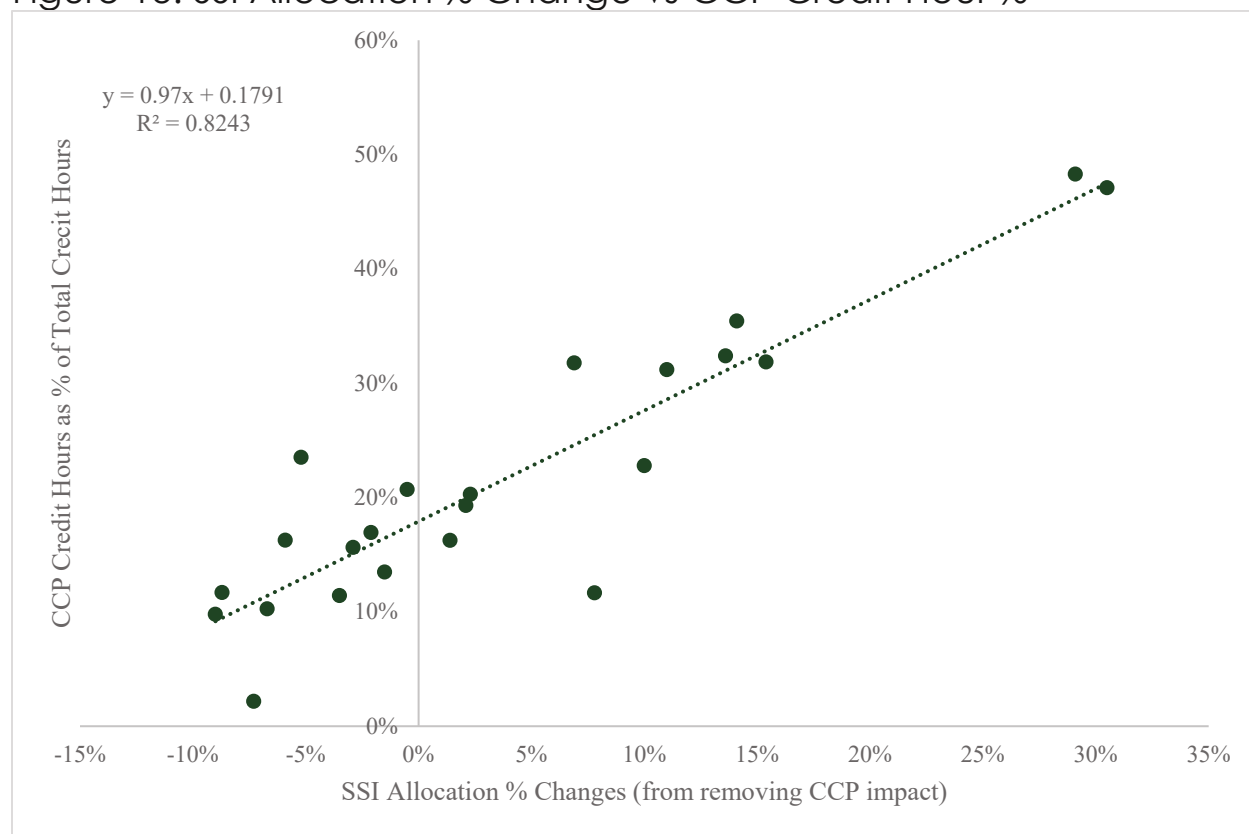
Further, even institutions that experience a negative redistribution of SSI arising from CCP are still receiving significant state funding from the SSI formula (totaling \$478M for community colleges.) Across four-year universities, SSI amounts to roughly 30 percent of revenue received, with the remainder of revenue coming from tuition and fees. At community colleges, the SSI percentage of revenue is higher, at roughly 40 percent of all revenue for CCP students.⁵

The factor determining whether a community college gains or loses SSI funding in this simulation was the percentage of CCP credit hours in relation to an institution's total credit hours, as shown in the analysis below.

⁵ Arriving at 40 percent of community college revenue involves several adjustments to ODHE's "resource analysis" model, which supply the calculations for statewide SSI payments. First, special purpose fees and property tax revenues are subtracted from modeled costs. Secondly, the numerator is adjusted to reflect that 25% of CCP funding comes from degree, certificate, and transfer completions, which are a small number for the CCP student demographic.

Figure 13 demonstrates the monetary impact on SSI of removing CCP students versus the CCP credit hours as a percentage of total credit hours. Each dot on the scatterplot represents one community college.

Figure 13: SSI Allocation % Change vs CCP Credit Hour %



The trend line and R-squared value of 0.8243 indicate that the CCP-impact on SSI funding is very closely correlated to the CCP percent composition of the student body. Institutions with a higher percentage of CCP students claim a higher relative gain from having CCP students included in the SSI formula. These relative SSI-beneficiaries from CCP are indicated in the furthest right section of the graph, past the 0 percent indicator. The threshold at which institutions flip from relative gain to loss from CCP is approximately at the level where CCP credit hours fall below 17 percent of the institution's total credit hours. ⁶

⁶ Note that this break-even level of participation is dependent on overall statewide CCP participation. If total statewide CCP participation increased, then so would the break-even participation level.

Conclusions

Our analysis of the survey response yielded several conclusions, presented below.

Defining CCP Costs Depends Upon Accounting Assumptions

The “costs” of CCP are not easily defined as a single number, as the mode of instruction is an important factor. Some costs vary directly with the number of classes CCP students enroll in (such as instructors’ salaries), whereas other costs vary in proportion to the total number of CCP students attending an institution (such as the size of admissions and advising staff). Certain other costs are related to CCP but will be fixed costs rather than tied to CCP student enrollment (such as a marketing budget). Institutional overhead costs (including back-office departments, leadership salaries, and physical plant) could also be allocated in part as a CCP expense. Institutions where CCP made up a relatively high percentage of their overall enrollment stated a preference for considering these overheads as part of their CCP costs.

To be able to separately analyze these different approaches, we grouped the response data into three broad categories:

- A. Marginal Classroom Instructional Expenses
- B. Indirect & Fixed CCP Program Expenses
- C. Allocated Institutional Overheads

Categories A and B combine to constitute the total amount of costs specifically attributable to CCP. However, looking at Category A in isolation is also instructive, as it can be used to calculate the ‘contribution margin’ of CCP students when subtracted from course revenue. In other words, how profitable each new enrollment is to the college.

Reported CCP Costs Vary Widely

There is a wide variation in the total amount of costs and in the line-items reported by responding institutions in each of the three categories above. This variation is a byproduct of no standardized accounting ruleset existing across the state to allocate expenses to CCP as a specific cost object. Caveats in comparing responses across institutions from this survey are warranted for this reason.

Direct classroom instructional expenses had the least variation, whereas allocated overheads had the most variation. Given the limited amount of time for the engagement, we were not able to individually follow up with each institution to delve further into their allocation choices, despite this having a notable impact on reported results.

Institutions appear to be receiving CCP revenue sufficient to cover direct costs.

The marginal classroom instructional costs (i.e. compensation for instructors) experienced by colleges is very low for CCP students. This is due to:

Efficient • Effective • Transparent

1. Colleges do not pay for the high school teachers instructing under the HI modality – though they do incur costs associated with curriculum development and oversight of instructors.
2. Few college-instructor-led on-campus (OC) or online classes (OL) are composed of a majority of CCP students. (i.e. these classes would likely run and thus have costs incurred even without CCP student participation.)

High CCP participation institutions gain revenue under the SSI formula.

The SSI (State Share of Instruction) contribution to college revenue arising from CCP students is a zero-sum calculation. In the absence of CCP, certain institutions would experience less formula funding than they currently receive, whereas other institutions would receive more funding than they currently receive. This zero-sum dynamic also holds across other components of the SSI funding formula beyond CCP.

ODHE ran a simulation showing the net revenue impact to all institutions if there were no CCP enrollment in the academic year ending May 2022. Those institutions that are currently “benefiting” from CCP within their formula funding are those with the highest percent of CCP credit hours as a percentage of their institution’s total credit hours. Therefore institutions ignore CCP at their own peril: if some Ohio institutions increase CCP participation, and other institutions hold CCP enrollment flat, the latter institutions will lose out on state funding from the SSI formula.

In closing we note that CCP students comprise a significant percentage of higher educational enrollment, especially in Ohio’s community colleges. CCP students contribute to institutions’ financial bottom line both directly (as in the revenue vs. cost estimates shown in this report) and via the SSI formula. It is therefore important, especially in light of declining traditional student enrollment, for the long-term fiscal health of Ohio higher education for institutions and policy-makers to understand the net cost of this unique student segment and to incorporate CCP into recruiting plans.

Appendix A: CCP Cost Survey (as sent to higher education institutions)

COLLEGE CREDIT PLUS COST SURVEY

Intro Page – General Question

The following survey is designed to collect information that will help the Auditor of State analyze higher education institutions' expenses associated with delivering College Credit Plus. Answering some of the questions will necessarily involve estimations—while we ask that you provide the most accurate information possible, responses will not be audited or result in penalties.

All public institutions of higher education are receiving this survey, and results & analysis will be shared back with participants in some form.

Q: Has your institution completed any quantitative analysis to determine costs of offering classes to CCP students? This could be either an itemized estimate of individual costs or an allocation of overall institution costs to the CCP program.

If Yes, please provide a brief narrative on your methodology and if available attach supporting documents.

---***Attach File HERE***---

File Attached (Y/N?) ____

File Name:

Part 1 – CCP Enrollment & Courses Offered

1. For the academic year that ended May/June 2022, how many unique College Credit Plus **students** did you serve across all modalities? _____
2. For the academic year that ended May/June 2022, please provide:
 - a. A full list of courses that ran during the year (ideally all courses, but responses may be filtered to include only those courses with at least one CCP student)
 - b. For each of the above courses, provide
 - course credit hour value
 - course modality (e.g. OC = on campus, OL = online, CI = at high school with college instructor, HI = at high school with high school instructor)
 - c. For each of the above courses, a count of **total** students enrolled
 - d. For each of the above courses, a count of **CCP** students enrolled

You may upload in your own report format or utilize the example below:

Example Table

Course Title or #	Course Section	Credit Hours	Modality	Total Headcount	CCP Headcount
Bio 101	Fall A	3	OC	26	5
Bio 101	Fall B	1	HI	15	15
Math 200	Spring A	3	OC	20	1
Etc.					

---***Attach File HERE***---

File Attached (Y/N?) ____

File Name:

Part 2 – Instructor Related

3. What percent of classes are taught by adjunct instructors? Please exclude high school teachers under the HI modality.
4. What is the average salary & teaching load for tenured and tenure track (ie full-time, permanent) teaching faculty?
5. What is the average rate of pay per credit hour for part-time/adjunct instructors?

Part 3 – CCP Program Expenses

This section will ask you to estimate staff effort and costs associated with CCP support functions. The AOS realizes these inputs are best-estimates and any use by our office will be mindful of the associated limitations.

Please feel free to either:

- a. *Use the Annual Hours per CCP Student & Staff Hourly Rate of Pay columns to build up the Annual Expense estimate, or*
- b. *Skip directly to the Annual Expense column if you prefer to use another estimation methodology (e.g. you may have full time staff dedicated to CCP).*

Part A: Costs tied to a single CCP student

6. For every new CCP student enrolled in the college, how many hours do staff spend on the following:

Annual Costs reoccurring every year a CCP student maintains enrollment:

Function	Annual Hours per CCP Student	Staff Hourly Rate of Pay	Annual Expense	Comments
Advising				
Library				
Student Life				
Disabilities Services				
Tutoring				
Other (please specify)				
Other (please specify)				
Other (please specify)				

One-Time Costs associated with onboarding a new CCP applicant/enrollee:

Function	Annual Hours per CCP Student	Staff Hourly Rate of Pay	Annual Expense	Comments
Admissions				
Assessment/ Student Eligibility				
Other (please specify)				
Other (please specify)				
Other (please specify)				
Admissions				
Other (please specify)				
Other (please specify)				

Part B: Program Costs

7. For CCP program costs that do not scale in proportion to the number of students (e.g. marketing the program), please provide a list of functions and an annual cost estimate.

Program Function	Annual Expense	Description of Efforts (optional)
Marketing		
Course Development		
Instructor Credentialling		
Faculty Observation		
Information Nights		
Other (please specify)		
Other (please specify)		
Other (please specify)		
Other (please specify)		

Part C - Technology

8. For every CCP student enrolled in the college, what are the per-head technology, system, or subscription licenses is the college paying? List product & per-head cost*:

Product	Cost-per-Seat	Notes/comments

*This question is only intended to capture those tech expenses explicitly attributable to seat-based licenses. Please do not allocate enterprise system or software costs that are not paid for on a per-set basis.

Part 4 – Special Subsidies

9. Please list any type of subsidy for expenses incurred by your institution, but waived for CCP students.

Subsidy Type	Annual Expense	Notes/comments
Waived Lab Fees		
Other Waived Course Fees		
Professional Development for HS Instructors		
Other (please specify)		
Other (please specify)		
Other (please specify)		
Other (please specify)		

Part 5 – Administrative Overheads

10. In your institution's most recent submission to IPEDS, what was the total **dollar amount** of Institutional Support reported?

Closing

11. If we have any questions about information received, who should we contact? Please provide name, email address, and/or phone number.

Appendix B: Example Response for Support & Indirect Expense (anonymized)

Below is an anonymized response that is representative of some of the types of response and format received back from institutions.

CCP Program Expense Response: Institution X

Function	Annual Hours per CCP Student	Staff Hourly Rate of Pay	Annual Expense	Comments
Advising			\$698,715	All advising work is centrally located in K-12 Partnerships.
Library			\$341,452	Estimated allocation of library costs based on percentage of students that are CCP.
Student Life			\$0	
Disabilities			\$71,867	
Services				
Tutoring			\$43,819	In-person and virtual tutoring.
Other (Early			\$17,000	Portion of staff salary dedicated to
Alert Systems				administrative efforts for uploading early
Administration)				alert warnings into high school portals.
Other (Supp.			\$34,000	An innovative practices program where
Instructional				the College hires high school students to
Costs)				serve as peer tutors. A coordinator
				supervises this process.
Other (Student			\$96,196	
Accounting)				
Other			\$550,600	Develop CCP partnerships, process CCP
(Administrative/				teacher applications, administrative
Operations)				support. registrar CCP
				Support, etc.
Other			\$141,333	
(Bookstore)				
Other			\$64,256	CCP enrollment systems operations,
(Data/Systems				institutional effectiveness, etc.
Management)				
Other (Strategic			\$26,946	The Senior Director over K-12
Support)				Partnerships meets regularly with
				multiple leaders across the College to
				ensure CCP students' needs are met.

Source: Ohio Public Colleges & Universities

Appendix C: Actual CCP Tuition Rate Charged by Modality AY 2022

Institution	CI	HI	OC	OL
Akron University	\$83.28	\$41.64	\$165.94	\$83.24
Belmont College	\$83.28	\$41.64	\$164.08	\$165.77
Bowling Green State University	\$83.28	\$41.64	\$164.08	\$165.77
Central Ohio Technical College	\$83.28	\$41.64	\$166.55	\$166.55
Clark State Community College	\$41.64	\$41.64	\$42.21	\$42.42
Cleveland State University	N/A	\$41.64	\$166.55	\$166.55
Columbus State Community College	\$83.28	\$41.64	\$166.55	\$166.55
Cuyahoga Community College	\$43.89	\$41.64	\$82.72	\$82.25
Eastern Gateway Community College	\$66.52	\$41.64	\$131.64	\$134.03
Edison Community College	\$83.28	\$41.64	\$166.55	\$166.55
Hocking College	N/A	\$41.64	\$166.55	\$166.55
Kent State University	\$80.95	\$41.64	\$137.12	\$141.35
Lakeland Community College	\$64.91	\$41.64	\$105.53	\$105.88
Lorain County Community College	\$52.48	\$41.64	\$79.45	\$79.54
Marion Technical College	\$83.28	\$41.64	\$166.55	\$166.55
Miami University	N/A	N/A	\$166.55	\$166.55
Northwest State Community College	N/A	\$41.64	\$166.03	\$166.50
Ohio University	\$83.28	\$41.64	\$166.55	\$161.01
Owens Community College	\$68.22	\$41.64	\$120.11	\$74.34
Rhodes State College	\$83.28	\$41.64	\$166.55	\$166.55
Rio Grande Community College	\$78.08	\$41.64	\$145.26	\$145.59
Sinclair Community College	\$41.64	\$41.64	\$45.32	\$44.06
Southern State Community College	\$83.28	\$41.64	\$166.55	\$166.55
Stark State College	\$78.31	\$41.64	\$118.18	\$46.94
The Ohio State University	N/A	N/A	\$166.55	\$166.55
University of Cincinnati	\$83.28	\$41.64	\$166.55	\$166.55
University of Toledo	\$83.28	\$41.64	\$166.45	\$164.27
Washington State Community College	\$82.89	\$41.64	\$125.86	\$119.26
Wright State University	\$83.28	\$41.64	\$166.55	\$166.55
Zane State University	\$83.28	\$41.64	\$166.55	\$69.27

Source: ODE Deduction Report FY 2023

Note: Weighted Average by Credit Hour

Highlighted cells indicate entries where institutions are charging tuition rates materially below the statewide allowable caps. Most of these instances occur in community colleges, indicating that these institutions are making CCP rate pricing decisions that are driven by factors beyond the direct financial impact.

Appendix D: Support & Indirect Expense Tables Compared to Actual Revenues and Revenues Calculated with Average Statewide Negotiated Rate

This appendix presents two tables to supplement Figure 6 on page 19 of the report. While the table on page 19 calculated the impact of support & indirect expenses on the maximum potential revenue only, the two additional tables in this appendix analyze support & indirect expense in relation to the other two revenue methodologies use in this report: actual revenues and revenue calculated from the average statewide tuition rates.

While the tables on the following pages indicate that most institutions have a positive CCP net revenue value when accounting only for direct classroom expenditure, after accounting for support and indirect expenses in on p 40, the number of institutions with a positive CCP net revenue value drops to about 50%. The main takeaway from these two figures is that certain institutions are reporting expenses in such a way that they are claiming to be operating CCP at a loss. As stated regarding similar tables in the body of this report, however a key caveat and limitation is that when inputting the indirect & support expenses in the AOS survey institutions were afforded wide latitude and discretion.

CCP Self-Identified Expenses vs Actual Revenue: With Support & Indirect [2022 AY]

Institution	CCP Tuition Revenue (AY 2022 Actual)	Direct Instruction Expense	A) Revenue - Direct Instruction	Support + Indirect Expense	B) Revenue - (Direct & Support & Indirect)
Akron University	\$1,762,307	\$2,195,914	(\$433,607)	\$93,191	(\$526,798)
Belmont College	\$166,375	\$27,518	\$138,857	\$50,227	\$88,630
Bowling Green State University	\$2,404,810	\$1,356,225	\$1,048,585	\$643,718	\$404,867
Central Ohio Technical College	\$1,086,989	\$1,230,175	(\$143,186)	\$717,699	(\$860,885)
Clark State Community College	\$939,664	\$652,380	\$287,284	\$959,650	(\$672,366)
Cleveland State University	\$250,325	\$42,679	\$207,646	\$90,631	\$117,015
Columbus State Community College	\$8,044,766	\$4,309,354	\$3,735,412	\$3,759,866	(\$24,454)
Cuyahoga Community College	\$2,440,973	\$3,692,192	(\$1,251,219)	\$2,206,874	(\$3,458,093)
Eastern Gateway Community College	\$1,147,206	\$341,757	\$805,449	\$369,996	\$435,453
Edison Community College	\$2,798,960	\$1,517,428	\$1,281,532	\$2,478,349	(\$1,196,817)
Hocking College	\$783,522	\$0	\$783,522	\$159,145	\$624,377
Kent State University	\$3,489,856	\$1,267,761	\$2,222,095	\$251,671	\$1,970,424
Lakeland Community College	\$1,523,582	\$2,125,530	(\$601,948)	\$943,706	(\$1,545,654)
Lorain County Community College	\$1,902,924	\$1,364,257	\$538,667	\$2,859,200	(\$2,320,533)
Marion Technical College	\$1,049,877	\$1,009,897	\$39,980	\$627,043	(\$587,063)
Miami University	\$1,028,122	\$254,850	\$773,272	\$1,102,829	(\$329,557)
Northwest State Community College	\$1,238,024	\$1,175,071	\$62,953	\$30,658	\$32,295
Ohio University	\$1,791,087	\$1,348,576	\$442,511	\$0	\$442,511
Owens Community College	\$857,949	\$81,137	\$776,812	\$205,967	\$570,845
Rhodes State College	\$1,138,289	\$442,837	\$695,452	\$337,744	\$357,708
Rio Grande Community College	\$869,817	\$719,422	\$150,395	\$74,636	\$75,759
Sinclair Community College	\$2,665,437	\$3,891,219	(\$1,225,782)	\$1,770,528	(\$2,996,310)
Southern State Community College	\$2,054,673	\$1,930,577	\$124,096	\$97,000	\$27,096
Stark State College	\$1,967,718	\$2,847,825	(\$880,107)	\$3,268,387	(\$4,148,494)
The Ohio State University	\$1,939,891	\$359,214	\$1,580,677	\$268,646	\$1,312,031
University of Cincinnati	\$1,698,118	\$388,565	\$1,309,553	\$441,036	\$868,517
University of Toledo	\$1,345,044	\$251,600	\$1,093,444	\$383,625	\$709,819
Washington State Community College	\$1,115,104	\$905,566	\$209,538	\$89,786	\$119,752
Wright State University	\$1,013,508	\$295,353	\$718,155	\$180,722	\$537,433
Zane State University	\$1,319,080	\$1,053,307	\$265,773	\$343,390	(\$77,617)

Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the survey: Central State, Cincinnati State, North Central State, Northeast Ohio Medical University, Terra State, and Youngstown State.

CCP Self-Identified Expenses vs Revenue from Statewide Average Rates: With Support & Indirect [2022 AY]

Institution	CCP Tuition Revenue (Statewide Avg Rate)	Direct Instruction Expense	A) Revenue - Direct Instruction	Support + Indirect Expense	B) Revenue - (Direct & Support & Indirect)
Akron University	\$1,861,157	\$2,195,914	(\$334,757)	\$93,191	(\$427,948)
Belmont College	\$170,785	\$27,518	\$143,267	\$50,227	\$93,040
Bowling Green State University	\$1,882,236	\$1,356,225	\$526,011	\$643,718	(\$117,707)
Central Ohio Technical College	\$918,329	\$1,230,175	(\$311,846)	\$717,699	(\$1,029,545)
Clark State Community College	\$1,627,706	\$652,380	\$975,326	\$959,650	\$15,676
Cleveland State University	\$236,340	\$42,679	\$193,662	\$90,631	\$103,031
Columbus State Community College	\$6,321,027	\$4,309,354	\$2,011,673	\$3,759,866	(\$1,748,193)
Cuyahoga Community College	\$3,966,933	\$3,692,192	\$274,741	\$2,206,874	(\$1,932,133)
Eastern Gateway Community College	\$1,188,102	\$341,757	\$846,345	\$369,996	\$476,349
Edison Community College	\$2,411,119	\$1,517,428	\$893,691	\$2,478,349	(\$1,584,658)
Hocking College	\$683,649	\$0	\$683,649	\$159,145	\$524,504
Kent State University	\$3,572,957	\$1,267,761	\$2,305,196	\$251,671	\$2,053,524
Lakeland Community College	\$1,961,538	\$2,125,530	(\$163,992)	\$943,706	(\$1,107,697)
Lorain County Community College	\$2,614,293	\$1,364,257	\$1,250,036	\$2,859,200	(\$1,609,164)
Marion Technical College	\$861,391	\$1,009,897	(\$148,506)	\$627,043	(\$775,549)
Miami University	\$810,530	\$254,850	\$555,680	\$1,102,829	(\$547,149)
Northwest State Community College	\$1,023,994	\$1,175,071	(\$151,077)	\$30,658	(\$181,735)
Ohio University	\$1,640,878	\$1,348,576	\$292,302	\$0	\$292,302
Owens Community College	\$5,298,890	\$81,137	\$5,217,754	\$205,967	\$5,011,786
Rhodes State College	\$939,579	\$442,837	\$496,742	\$337,744	\$158,998
Rio Grande Community College	\$836,186	\$719,422	\$116,764	\$74,636	\$42,128
Sinclair Community College	\$5,623,007	\$3,891,219	\$1,731,788	\$1,770,528	(\$38,740)
Southern State Community College	\$1,691,575	\$1,930,577	(\$239,002)	\$97,000	(\$336,002)
Stark State College	\$3,982,447	\$2,847,825	\$1,134,623	\$3,268,387	(\$2,133,765)
The Ohio State University	\$1,616,035	\$359,214	\$1,256,821	\$268,646	\$988,175
University of Cincinnati	\$1,270,752	\$388,565	\$882,187	\$441,036	\$441,151
University of Toledo	\$1,035,600	\$251,600	\$784,000	\$383,625	\$400,374
Washington State Community College	\$1,249,357	\$905,566	\$343,791	\$89,786	\$254,005
Wright State University	\$824,624	\$295,353	\$529,271	\$180,722	\$348,549
Zane State University	\$1,208,056	\$1,053,307	\$154,750	\$343,390	(\$188,640)

Source: Ohio Public Colleges & Universities

Note: Excludes Shawnee State for data quality issues and those institutions which did not respond to the survey: Central State, Cincinnati State, North Central State, Northeast Ohio Medical University, Terra State, and Youngstown State.