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Uncounted Credits: How Transfer Students Lose Momentum Toward a Bachelor's Degree in Maryland

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Uncounted Credits: How Transfer Students Lose Momentum toward a Bachelor's Degree in Maryland

Yuxin Lin[1] and Stacey Brockman[2]

Transfer student success is a policy priority in Maryland. While "transfer" is a broad term that includes any students who move across postsecondary institutions, "vertical transfer students," those moving from community colleges to four-year colleges and universities, are most common.

Several Maryland policies aim to improve transfer student success. The College and Career Readiness and College Completion Act of 2013 (CCRCCA) directed the Maryland Higher Education Commission (MHEC), in partnership with public colleges and universities, to develop statewide transfer agreements aimed at maximizing credit transferability. Building on that effort, Maryland's 2021 Transfer with Success Act requires colleges and universities to work together to review any denied transfer credits and report them to MHEC each year. Among the first regulatory updates to be implemented in 2022, MHEC increased its oversight over program-specific articulation agreements. MHEC also issued the Transfer Guidance for public institutions to implement and revise their own transfer policies and procedures to comply with the new transfer regulations. Despite these efforts, transfer students continue to face challenges in completing baccalaureate degrees on-time.

Maryland has one of the highest vertical transfer rates in the nation, yet only about 50% of transfer students in the state earn a Bachelor's degree within six years of their community college entry [1]. Earning a Bachelor's degree also takes Maryland transfer students longer—about 3 more semesters and 19 extra credits—compared to non-transfer students who start directly at four-year institutions.[3] Given that nearly a quarter (23%) of all students at Maryland four-year institutions initially enrolled at community colleges, supporting transfer progress and success is a key step towards meeting the state's degree attainment goals [1]."

An obstacle transfer students face is that when they transfer, sometimes their community college credits may not transfer with them. Research defines **credit loss** as when community college credits either do not transfer (denials) or are not applied towards students' four-year degree programs [2, 3]. Losing credits during transfer can slow down students' progress resulting in lost time, resources, and effort for students and institutions, as students retake courses and delay their time to degree [4, 5].

A first step in addressing credit loss is understanding the size of the problem. However, credit loss is hard to measure in Maryland because data on which credits "count" is currently not collected. This report looks at "excess credits"—extra credits earned at community colleges that don't end up counting toward a Bachelor's degree—as a way to estimate credit loss. It's important to note that this report may underestimate the true size of the problem of credit loss because the analyses focused on transfer students who earned Bachelor's degrees, the only group for which it's possible to measure excess credits. Since transfer students who leave college without degrees may face greater challenges, they may also lose even more credits during

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[2] Assistant Professor, Educational Leadership and Policies Studies, Wayne State University.
[3] Authors' calculations using MHEC data from 2018-19 to 2022-23 on the cohorts of students who transferred from one of the 16 community colleges in Maryland to any one of 13 Maryland public four-year institutions and the non-transfer students who had junior standing at Maryland public four-year institutions.

transfer.[4] While it is not a perfect measure, excess credits are still a useful benchmark. The goal of this report is to set a starting point for tracking Maryland's progress in addressing the problem of credit loss[5].

Key terms in this report

- **Credit loss** occurs when community college credits either do not transfer or are not applied towards students' four-year degree programs.
- **Excess credits** in this report refer to community college credits that transfer students who earn Bachelor's degrees take beyond what four-year institutions apply to the student's Bachelor's degree.
- **Transfer students** start at community colleges before moving to four-year institutions, regardless of whether any of their community college credits transferred or whether they earned any degrees before transferring. This report focuses on students transferring to public four-year institutions only. **Bachelor's degree recipients** are students who graduated from Maryland four-year institutions with baccalaureate degrees. This report focuses on students transferring to and earning Bachelor's degrees in public four-year institutions only.

Key Findings

1. Excess credits are a problem facing many Maryland transfer students. Overall, transfer student had about 9 excess credits, roughly the equivalent of three community college classes, which did not count towards their Bachelor's degrees.

2. While many transfer students have little to no excess credit—with nearly all of their community college coursework applying toward their bachelor's degrees—others lose a substantial share, with more than half of their credits failing to apply.

3. Students who earned more than 60 community college credits[6] and those with long gaps between their community college and four-year enrollments had the most excess credits.

[4] Excess credits can only be measured for transfer students who graduate and so this report focuses on the subgroup of transfer students who earn Bachelor's degrees. Only about 6 in 10 students who transfer to Maryland public four-years earn Bachelor's degrees within four years of transfer [6], and students who leave college without degrees may face even greater challenges. By focusing on successful transfer students, this report may underreport the true size of the problem of credit loss.

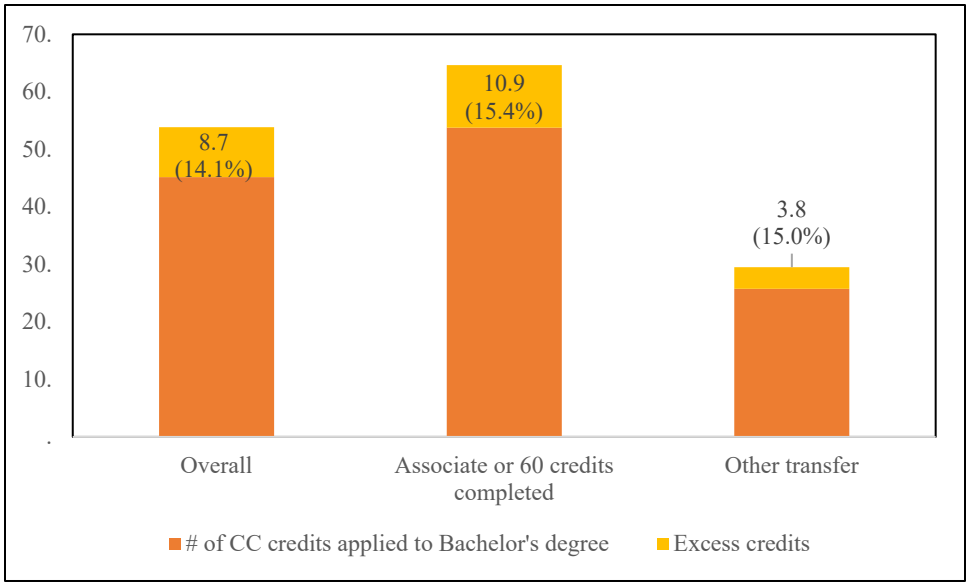
[5] This analysis primarily uses data that reflect student transfer before the implementation of the Transfer with Success Act.

[6] As per the regulation (COMAR 13B.06.02.06), a student transferring from a community college to a public four-year institution should not be denied general admission if "*the student has completed an associate's degree or at least 60 credit hours*".

Finding 1. Excess credits are a problem facing many Maryland transfer students. Overall, transfer student had about 9 excess credits, roughly the equivalent of three community college classes that did not count towards their Bachelor's degrees.

Maryland transfer students who earned Bachelor's degrees had about 9 excess credits, the equivalent of about three community college courses. Transfer students earned an average of 54 community college credits in total, meaning that about 15% of their community college credits were "excess" and did not count towards a Bachelor's degree. In Maryland, students are encouraged to earn Associate degrees prior to transfer. On average, students who earned Associate degrees or accumulated 60 credits before transfer earned about 65 credits in total, about 11 credits (15%) of which did not count, meaning that this group lost about one fulltime term of their community college progress. Although Associate degree earners accumulated a greater number of excess credits on average, the proportion of unused credits relative to their total coursework is comparable to that of non-Associate transfer students (14%).

Figure 1. About one fulltime term of community college credits did not "count" towards Maryland transfer student Bachelor's degree recipients' degrees



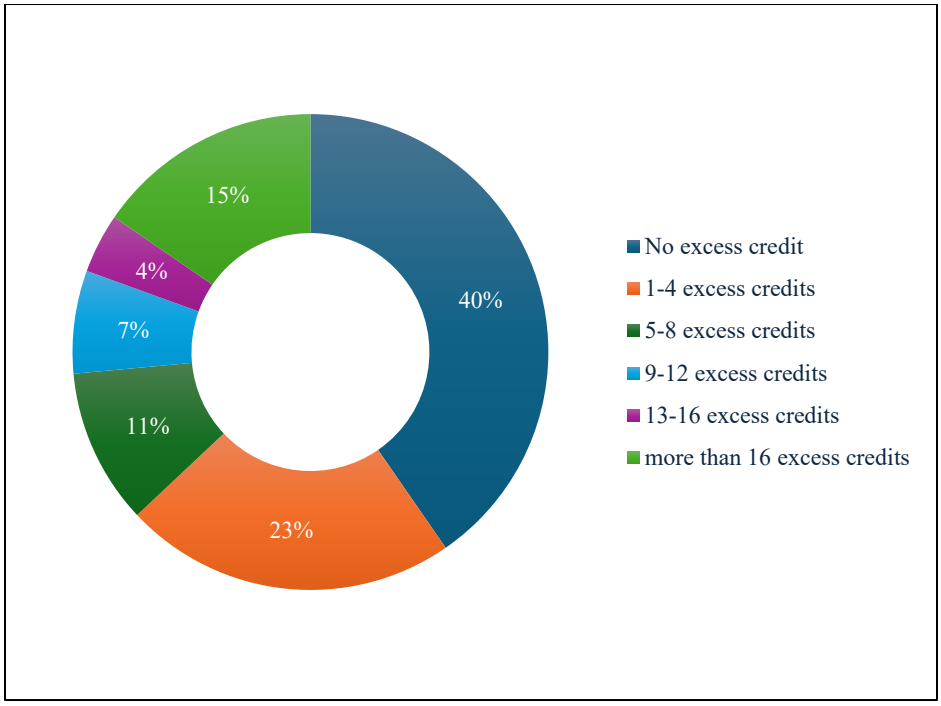
Note. This figure shows how many community college credits did and did not count towards Bachelor's degrees for transfer students who earned Associate degrees prior to transfer (N = 13,386) and other transfer students (N = 5,929).

Finding 2. While many transfer students have little to no excess credit—with nearly all of their community college coursework applying toward their bachelor's degrees—others lose a substantial share, with more than half of their credits failing to apply.

The amount of unused community college credit among transfer students differs widely. Many (40%) transfer student had no excess credits, meaning that all of their community colleges credits counted towards their Bachelor's degrees. Another 23% of transfer student had only 1-4 excess credits (about 8% of their total community college credits), meaning that they only lost about one community college course's worth of progress. While many transfer student had few to no excess credits, however, some had far more. About 11% of transfer student had 9-16 excess credits (equal to between three and five community college courses). Meanwhile, 15% had more than 16 excess credits. In the sample, students in the top 10th percentile of the distribution have averaged 50 excess credits, which is equivalent to approximately 17 community college courses or about four full-time terms. These students effectively "lost" about 66% of the community college credits they earned.

There were also some differences in excess credits along the lines of student race. Overall, 60% of transfer students had at least one excess credit. Among these students, fewer white students experienced excess credits. 57% of White students had at least one excess credit, compared to 62% of Hispanic students, 63% of Black students, 61% of Asian students, and 59% of multiracial students. Notably, Black students had the highest average of excess credits at 16 or 27% of the community college credits they earned. White students averaged 15 excess credits, while multiracial students averaged 14. Both Hispanic and Asian students averaged 13 credits each.

Figure 2. Many Maryland transfer student Bachelor's degree recipients had few or no excess credits while others had far more

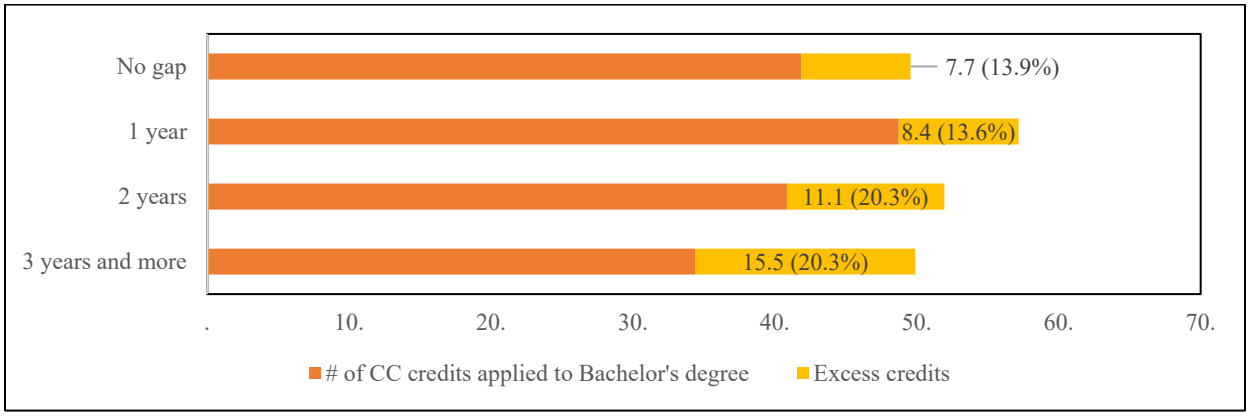


Note. This figure shows the number of excess credits earned by transfer student Bachelor's degree recipients (N = 19,315).

Finding 3. Students who earned more than 60 community college credits and those with long gaps between their community college and four-year enrollments had the most excess credits.

Maryland Bachelor's degree recipients who transferred to four-year institutions directly after attending community colleges had more of their credits applied to their Bachelor's degrees than students with gaps between their community college and four-year enrollments. Those who transferred seamlessly – within 0-1 years of enrolling at community colleges – had approximately eight excess credits, or about 14% of their community college credits. Bachelor's degree graduates with longer gaps between their community college and four-year enrollments had fewer of their community college credits applied to their degrees. Students with 2-year gaps prior to transfer "lost" about 20% of their credits, with an average of 11 excess credits, or about one full-time term of coursework. Students with the longest gaps applied the smallest share of their credits. Bachelor's degree graduates with gaps of 3 or more years averaged 16 excess credits, or about 32% of their community college coursework.

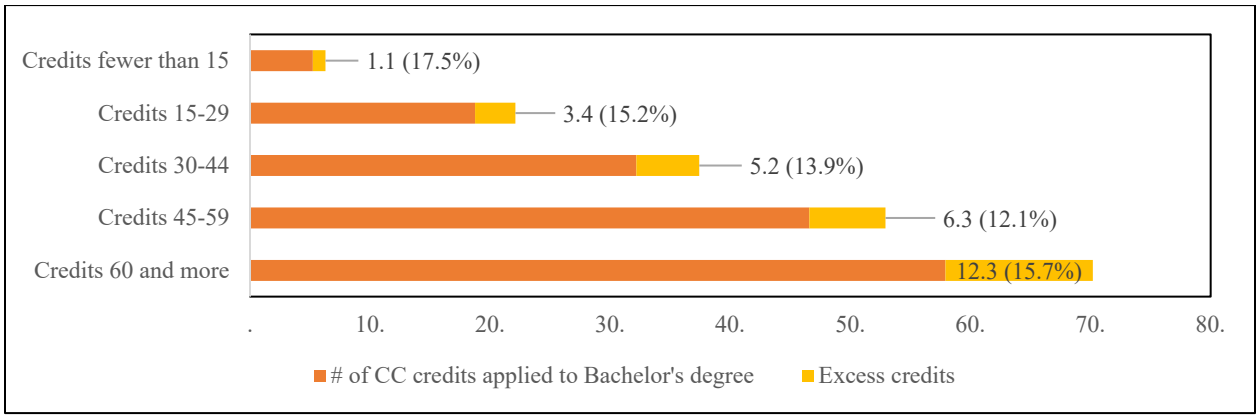
Figure 3. Transfer student Bachelor's degree recipients with longer gaps between community college and four-year enrollment had more excess credits



Note. This figure shows the number of excess credits earned by transfer student Bachelor's degree recipients broken down by the length of time between enrolling at a community college and transferring to a four-year institution.

The more credits that transfer students completed prior to transfer, the greater the degree of excess credit that they experienced. Transfer students who earned 15 or fewer credits averaged just 1 excess credit, whereas students who completed 60 or more community college credits were unable to apply 12 credits, on average, to their Bachelor's degrees. When considered as a proportion of total credits attempted, however, a different pattern emerges: excess credits follow a U-shaped pattern. Students who completed 15 or fewer credits and those who earned 60 or more credits both "lost" about 18 and 16%, respectively. By contrast, transfer students who earned 45-59 credits averaged only 6 excess credits, meaning that they lost only about 12% of their community college coursework.

Figure 4. Excess credits varied with the number of community college credits earned by transfer student Bachelor's degree recipients



Note. This figure shows the number of excess credits earned by transfer student Bachelor's degree recipients broken down by the total number of community college credits earned.

Conclusions

To strengthen transfer pathways, more work must be done to understand and address credit loss. This analysis finds that excess credits are widespread: approximately 60% of Maryland transfer student Bachelor's degree recipients had at least one community college credit that did not apply toward their degree requirements. For some students, the number of unused credits was substantial—15% accumulated more than 16 excess credits, equivalent to more than a full-time term of coursework. Notably, the data also reveal disparities by race: Black transfer students were more likely than their white peers to accrue excess credits. These patterns point to potential structural inequities and inefficiencies in the transfer process. Further analysis is needed to identify the drivers of excess credit accumulation and to assess its impact on student outcomes, including time to degree and college affordability.

Efforts to streamline and accelerate the transfer process may improve credit applicability for Maryland students. The analysis found that those who transferred more quickly from community colleges to four-year institutions were more likely to have their credits count toward a bachelor's degree. In contrast, students who had gap years before transfer faced a higher risk of losing credits, as older coursework may no longer align with four-year program requirements or be accepted under institutional policies. These findings highlight the importance of timely transfer and suggest that policies supporting early advising, clear transfer pathways, and credit portability could reduce credit loss and improve degree efficiency.

Direct measures of credit loss are essential for improving transfer success. While excess credits offer some insight into the issue of credit loss, they provide only a partial picture as they can only be tracked for students who successfully complete Bachelor's degrees. In addition, one limitation of the study is that it does not disentangle the excess credits by credit type or course type. To fully understand the size of the problem of credit loss, and to see how credit loss may impact transfer student outcomes, it is crucial to collect student-level data on denied and accepted transfer courses, in accordance with the Transfer with Success Act.

Data on transfer course denials would allow institutions and MHEC to highlight successes in streamlining transfer pathways. At the same time, granular student-level data would prevent colleges from being mistakenly perceived as having worse outcomes when course-level data is assessed in aggregate. Without transcript-level data, it is impossible to differentiate between student-driven factors, such as major changes, and institutional policies that influence course transfer rates.

Any reason to mention ARTSYS or systems like it that help break down barriers on course equivalencies?

Beyond the data on transfer course denials, MHEC and institutions could make better use of the existing resources. For example, the Maryland's Articulation System (ARTSYS) provides rich information about course equivalencies across institutions. Combining ARTSYS course equivalency data with student-level transcript and enrollment records can reveal discrepancies between what ARTSYS suggests and what actually transfers, informing efforts to improve consistency and accountability in transfer policy.

Data and Methodology

The calculation of excess credits primarily relied on MHEC's External Credit Collection (ECS), a unique data collection that tracks credits received from other sources and applied to the awards earned by undergraduate students from Maryland public institutions.[7][8] The study sample included students who transferred from Maryland community colleges to Maryland public four-year institutions between the academic years 2018-19 and 2022-23. It focused specifically on those who completed a Bachelor's degree from the same institution to which they transferred, with graduation occurring between the academic years 2020-21 and 2022-23.

Figure A illustrates the definition of excess and the data processing. Transfer student's credit records from previous community college enrollments (right pie chart) were compared with the external credits linked to those colleges in the ECS (left pie chart).[9] If a student's total credits from those colleges surpassed the external credits applied to their degree, they were considered to have excess credits[10]. For each transfer student, the proportion of excess credits is determined by dividing the credits that did not apply toward their bachelor's degree (excess credits) by the total number of community college credits earned that are eligible to count toward degree requirements[11]. It is important to note that the ECS aggregates the total credits applied to a degree, rather than the credits earned from specific courses. This study does not provide insight into which courses ultimately do not apply toward degrees. Consequently, any excess credits identified in this analysis point to credit loss from two sources: transferability and applicability. In other words, if a student has excess credits, it suggests that credits earned at community colleges either are not transferred or are not applied toward their Bachelor's degree.

[7] Additional data sources used included MHEC's Enrollment Information System (EIS), External Credit System (ECS), End of Term System (EOTS), and Degree Information System (DIS)

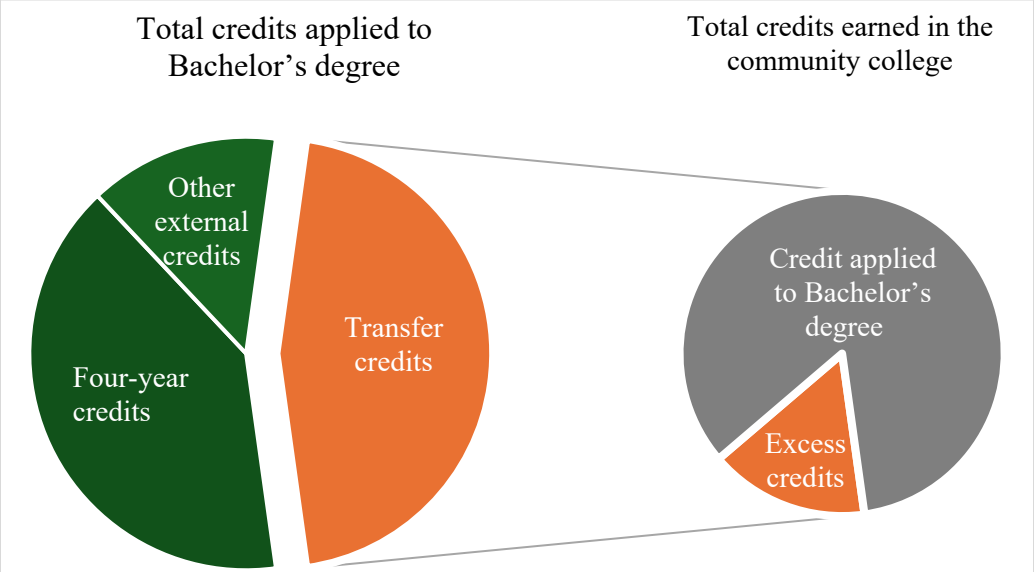
[8] It's important to note that ECS only captures data on those who complete an award or degree, as it's reported solely for those who have had degree audits performed/completed an award. It is an incomplete data collection on credit transfer, as it does not contain data on those students who transfer but do not complete an award.

[9] If students earned credits from a community college and completed a Bachelor's degree, but no credits from that community college were reported as being applied to the degree in the ECS, it was assumed that zero credits from that community college were applied to the degree. This situation can occur for various reasons beyond simply not transferring or applying credits. For instance, students may not have requested the transfer of their earned credits from the community college. Additionally, inconsistencies in identification or missing data may also contribute to this issue.

[10] In the analysis, there are rare instances where students applied more credits to their degrees than they earned from community colleges. To address this, the minimum value of excess credits was set to zero, rather than allowing for negative values of excess credits.

[11] The average proportion of excess credits is calculated by averaging the proportion of credits for each student, which is slightly different from the result of dividing the average amount of excess credits by the average amount of total community college credits earned.

Figure A. Excess credits definition



Note: this chart is conceptual and does not reflect the real values.

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