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# **Credit When It's Due: Results from the Baseline Study**

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The Office of Community College Research and Leadership (OCCRL) was established in 1989 at the University of Illinois at Urbana-Champaign. OCCRL's primary mission is to use research and evaluation methods to improve policies and programs to enhance community college education and transition to college for diverse learners in Illinois and the United States. OCCRL projects of this office are supported by federal, state, and private and not-for-profit organizations. The contents of OCCRL publications do not necessarily represent the positions or policies of sponsors or the University of Illinois. Comments or inquiries about OCCRL publications are welcome and should be directed to [occr@illinois.edu](mailto:occr@illinois.edu).

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## Introduction

Nationally representative data suggest that 78% of students who transfer from a community college to a university do so without an associate degree (McCormick & Carroll, 1997), yet having an associate degree presumably matters to bachelor's degree recipients according to a new analysis from the National Student Clearinghouse. Shapiro et al. (2013) used National Student Clearinghouse data to show that 72% of community college transfer students who earned an associate degree prior to transfer completed a bachelor's degree compared to only 56% of those without an associate degree. Although descriptive and not causal, these results suggest the impact of associate degree attainment on bachelor's degree attainment is important to the community college-to-university transfer process.

To date, there has been little rigorous study of policies and practices that are directed at assisting students who transfer without the associate degree to attain an associate degree or the bachelor's degree. Research on the transfer process is needed, particularly transfer without the associate degree given that it is the predominant form of community college-to-university transfer and that prior research raises concerns about completion for students who do not attain an associates degree. Understanding whether and how college credits can be applied to credentials is important, both for the students and the higher education systems that enroll them.

A new initiative called "Credit When It's Due" (CWID) is aimed at understanding how higher education systems enable transfer students to receive an associate degree when students meet associate degree requirements after transfer to a 4-year college or university, primarily by transferring credits from the university to the community college. This Office of Community College Research and Leadership (OCCRL) research brief reports results based on the first of a series of studies on the CWID initiative and focuses almost exclusively on pre-CWID policies and transfer students. A complementary Policy Implementation and Impact Study are underway and will report on CWID development and implementation efforts and the impact of CWID on students, respectively, at the end of the grant period.

## Background and Methods

In 2012, five foundations<sup>1</sup> partnered to create the "Credit When It's Due" initiative to support higher education systems and institutions in developing policies and practices that facilitate associate degree attainment for community college students who transferred to 4-year colleges or universities without

<sup>1</sup> The five funders of CWID are the Bill & Melinda Gates Foundation, Helios Education Foundation, Kresge Foundation, Lumina Foundation for Education, and USA Funds.

first obtaining an associate degree but who meet associate degree requirements after transfer. This phenomenon has been labeled "reverse transfer"<sup>2</sup> despite the difference in this definition from the one that has existed in the literature for many years that suggests "reverse transfer" involves the physical movement of students attending 4-year colleges and universities back to enrollment in the community college (Townsend, 2001; Townsend & Denver, 1999). The term "reverse transfer" associated with CWID (and the meaning of the term as used in the remainder of this brief) refers to the post-transfer recognition of college credits that are counted toward conferral of an associate degree after student transfers from a community college to a 4-year college and pursuing a bachelor's degree.

Through the participation of higher education systems or institutions in 12 states (Arkansas, Colorado, Florida, Hawaii, Maryland, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, and Oregon), the CWID research team at the OCCRL conducted a baseline study to understand the background and context for state and institutional changes in policy and practice that include reverse transfer before CWID funds were awarded in 2012. The study identified CWID's potential impact by looking at the characteristics and outcomes of a cohort of students that transferred from a community college to a 4-year college or university in Fall 2007 or Fall 2008 without having obtained an associate degree prior to their transfer. Besides examining college credit and credential attainment, this study documented the transfer policy environment and institutional activities before CWID funds were first awarded in Fall 2012.

The following research questions guided the baseline study and are addressed in this brief:

1. What was the state policy context and environment for transfer prior to CWID implementation?
2. What was the estimated number of reverse transfer-eligible students in the Baseline Cohort?
3. What were the characteristics of reverse transfer-eligible students in the Baseline Cohort?
4. What were the degree completion outcomes of reverse transfer-eligible students in the Baseline Cohort?
5. How did the degree completion outcomes of reverse transfer-eligible students in the Baseline Cohort differ by student characteristics?

To answer these questions, we used a mixed methods design beginning with collecting state policy documents and interviewing state leaders engaged in implementation of the CWID initiative in December 2012 and January 2013.

<sup>2</sup> See [www.luminafoundation.org/newsroom/news\\_releases/2012-10-10.html](http://www.luminafoundation.org/newsroom/news_releases/2012-10-10.html)

Policies were reviewed and analyzed, and interviews were transcribed and coded for salient themes and patterns. We also created a data dictionary and assessed the capacity of the higher education systems and institutions to retrieve and collect historical data on reverse transfer. Based on this analysis, we developed a student-level dataset<sup>3</sup> based on a cohort of students who transferred to CWID-participating universities in each state and tracked students' degree completion outcomes over four years. Eleven states selected a cohort of students who transferred in Fall 2008, and one state selected a student cohort starting Fall 2007 to avoid confounding the results with reverse transfer-type activities that were happening in 2011-2012 just prior to the start of CWID in Fall 2012. Therefore, this baseline study includes cross-sectional data from one cohort of potential transfer students who may be eligible to receive associate degrees, providing an informative data point concerning reverse transfer degree production as current CWID policies move forward in the states. Student-level data were submitted to OCCRL in Spring 2013 and descriptively analyzed. It is important to note that states' reverse transfer implementation approaches will vary and likely include more than a single cohort of fall students. The quantitative estimates provided in this brief are cross-sectional and not intended to reflect states' implementation approach, partially because implementation approaches are still under development and were unknown at the time baseline data were collected. Consequently, the quantitative results in this study are not intended to be used as targets for reverse transfer implementation.

This brief focuses primarily on cross-state results that are reported in three sections: a) The State Environment for Transfer; b) Anticipated CWID Policies and Practices; and c) Baseline Data Analysis. Although there may be variance among states, this brief provides a cross-state summary of baseline data and policies.

### The State Environment for Transfer

Our analysis of state policies and interviews with state higher education system and institutional leaders focused on historical and contemporary transfer policies, including explicit reference to reverse transfer in state policy; current alignment of reverse transfer with state goals and reasons for pursuing the CWID grant; and anticipated issues and concerns with the implementation of CWID-related policies and practices in the future.

<sup>3</sup> Data quality and capacity varied across states, therefore the data included in this report reflect the quality of data maintained in state datasets and shared with OCCRL. A forthcoming report will articulate data quality and data capacity issues encountered in association with this CWID baseline study.

*What was the state policy context and environment for transfer prior to CWID implementation?*

**Most states involved in CWID already had an active history of transfer policy.** An active and robust history of transfer policy and legislation was observed in most states involved in CWID, with examples of historic and present policies promoting student transfer, mobility, and success. Our review of state transfer policies found several states having transfer policies that include the identification and establishment of core transfer curriculum and general education curriculum, the development of common course numbering, the implementation of articulation agreements among institutions and higher education systems, the development of course transfer systems, and the development of transfer networks and task forces.

**Reverse transfer-related legislative policies are evident in half of the states.** Of particular interest to the baseline study is the extent to which a legislative framework for reverse transfer existed prior to CWID. Table 1 (page 3) describes the six states with reverse transfer-related legislative policies and summarizes key sections of these policies. In five of these states, the reverse transfer-related legislation was adopted prior to states' receipt of CWID funding; in Maryland the legislation was adopted in 2013 as part of Senate Bill 740 (College and Career Readiness and College Completion Act of 2013), following receipt of CWID funding. However, reverse transfer was already occurring informally in Maryland, and several reverse transfer pilot projects were launched in 2011 as part of the state's Associate's Degree Award for Pre-Degree Transfer Students (ADAPTS) initiative, supported by a Complete College America Completion Innovation Challenge Grant.

A common feature among the legislative policies in the six states is that the state legislatures charged a higher education agency, board, or institution(s) to develop a reverse transfer process or policy. In three states (Colorado, Michigan, and Florida) reverse transfer policies were articulated, but these policies were not particularly prescriptive with respect to implementation; in the other three states (Maryland, Missouri, and Oregon), some aspects of policy implementation were addressed, but even more minimally than the previously mentioned states. For example, Colorado's policy requires the development of a "notification process" and specifies that students earn 70 credits to be considered for reverse transfer degrees, Michigan's policy requires universities to sign agreements with at least three community colleges, and Florida's policy permits universities to award the Associate of Arts (AA) degree upon completion of minimum degree requirements, if requested by the student.

Table 1  
*State Legislative Policies Related to Reverse Transfer*

State	Legislation	Summary of Legislation Related to Reverse Transfer
Colorado	Senate Bill 12-045 (2012)	<ul style="list-style-type: none"> <li>• Charges the Higher Education Commission to work with two-year and four-year boards to develop and coordinate a “reverse transfer” process</li> <li>• Requires developing a “notification process” for students who accumulate 70 credits at university and who met 2-year residency requirement</li> <li>• Requires implementation by 2013-2014 year</li> <li>• Defines key contents of the notification process</li> </ul>
Florida	Florida Statue 1007.25 (Senate Bill 478 passed in 1971)	<ul style="list-style-type: none"> <li>• Allows students at state universities to request AA degree from the university if student completes the minimum degree requirements</li> </ul>
Maryland	Senate Bill 740 (2013) College and Career Readiness and College Completion Act of 2013	<ul style="list-style-type: none"> <li>• Requires Maryland Higher Education Commission to work with public institutions to develop statewide “reverse transfer” agreement</li> </ul>
Michigan	Act No. 201, Public Acts of 2012	<ul style="list-style-type: none"> <li>• Requires universities to participate in “reverse transfer” agreements with at least three community colleges to receive performance funding</li> <li>• Encourages community colleges to work with universities to establish “reverse transfer” agreements</li> </ul>
Missouri	House Bill 1042 (2012)	<ul style="list-style-type: none"> <li>• Charges the coordinating board to develop a policy to foster “reverse transfer” for students who have met enough hours from a public higher education institution that offers associate degrees and one public four-year institution</li> </ul>
Oregon	House Bill 3521 (2011) - “Transfer Students Bill of Rights and Responsibilities”	<ul style="list-style-type: none"> <li>• Charges agencies to create standards for a “reverse transfer” process</li> </ul>

**Reverse transfer and CWID are closely coupled with states’ college completion agenda and goals.** Many leaders perceived CWID as closely aligned with existing efforts to improve transfer and reach college completion goals. Most states were engaged in efforts such as Project Win-Win and Complete College America that had similar goals of improving student success and college completion. CWID leaders suggested that reverse transfer and CWID efforts could be beneficial to individual institutions and the overall state in terms of improving college completion. In this way, states’ decisions to pursue reverse transfer seemed to be aligned with and built upon state policy goals and priorities to increase college completion.

**Most states had functioning reverse transfer pilots before they were awarded CWID funds.** The concept of reverse transfer was developing at a sub-set of higher education institutions within most states prior to CWID funds being awarded, including pilots of reverse transfer programs. Most of these pilots were recent and confined to a small number of institutions, but they were perceived by state leaders as responsible for generating enthusiasm and support for the notion of reverse transfer. These pre-CWID pilot activities may have contributed to the selection of some states for CWID grants, because these states had already demonstrated a commitment to engaging in reverse transfer and ramping up college completion.

Table 2  
*Potential Supports and Barriers Related to Issues Identified by CWID Leaders*

Issues	Example of Potential Supports	Example of Potential Barriers
Data Capacity and Technology	Hawaii: Reverse transfer pilot efforts were partially a result of the development of University of Hawaii's STAR system, an internal degree audit system. Hawaii's leaders observed "the fact that we had STAR available to us... is why we went ahead and started to do it [reverse transfer]."	Maryland: Pilot efforts revealed a need to update the statewide data sharing system and some institutional data systems to allow electronic transcript sharing for degree audits. Leaders perceived that the resources and capacity needed to update these systems were potential barriers.
Existing Transfer Policy	Arkansas: Transfer policies and legislation, such as a core transfer curriculum, and the online Arkansas Course Transfer System have developed to ensure that "more courses transfer and students are more sure of what courses transfer." These policies are complimentary to and support CWID.	Michigan: Historically transfer policies have been institutionally driven via agreements among institutions but only recently has the state legislature intervened to revise transfer agreements that eliminate institutional "provisios" that prohibited transfer.
FERPA	Missouri: Leaders indicated "there are some limitations as far as automatically awarding students degrees," but "there are still ways to follow FERPA and roll out a very robust reverse-transfer process."	Oregon: Leaders reported that, as the State scales up reverse-transfer initiatives, steps will need to be taken to ensure that student permission to share transcript data are obtained through a common application process or other similar tool. As the state scales up, FERPA is "going to be a little bit hairier potentially."
Performance-Based Funding	North Carolina: Performance-based funding was state policy in the past, and now leaders are hopeful that recent progress with state performance measures may make "reverse transfer even more enticing because...it could be an incentive for [community] colleges at least to capture those numbers."	Michigan: Performance-based funding was introduced during the 2012-2013 academic year, and many questions remain regarding how funds will be awarded. Questions concerning the "reality of student movement" between higher education institutions, as is the case in 'reverse transfer' degrees, are not yet resolved. Leaders asked, "In a performance funding formula, how do you adequately incentivize all the players?"

**Several transfer-related issues were expressed by state leaders but interpreted in different ways.** Similar issues were discussed during conversations with state leaders, yet these issues were perceived to influence CWID implementation in different ways (Table 2). Interestingly, issues that were considered in support of or a lever for change by one state higher education system were sometimes viewed as a barrier or challenge to another. The issues discussed most often during our interviews with state leaders included state higher education or institution data capacity, the Family Educational Rights and Privacy Act (FERPA), the alignment of reverse transfer with existing transfer policies, and performance-based funding.

As states proceed with implementation of reverse-transfer policies and programs, it is important to examine how these issues unfold and document how and to what extent they

impact CWID efforts. With the infusion of new innovations and practices related to reverse transfer, these issues may further develop and evolve, and new issues may emerge.

**Anticipated Policies and Practices**

This section addresses three anticipated policies and practices that may impact the number of students who will be eligible to receive reverse-transfer associate degrees once the CWID initiatives are functioning in the 12 states. There are inevitably more than three policies and practices that impact the number of students potentially eligible to receive reverse transfer associate degrees, but these three were identified consistently in conversations with state leaders, and they also emerged as influential in our estimates of the number of reverse transfer-eligible students in the Baseline Cohort. Further, these policies and practices are identified

Table 3  
Anticipated CWID Policies and Practices

State	CWID-Participating Institutions				Residency Requirement
	Receiving Institutions	Sending Institutions	In-State Private Institutions	Out-of-State Institutions	
Arkansas	All public 4-yr	All public 2-yr	No	No	18
Colorado	*Some public 4-yr	All public 2-yr	No	No	15
Florida	*Some public 4-yr	*Some public 2-yr	No	No	15
Hawaii	All public 4-yr	All public 2-yr	No	No	12
Maryland	**All public 4-yr	**All public 2-yr	Yes – Some	No	15
Michigan	All public 4-yr	All public 2-yr	No	No	Locally determined
Minnesota	*Some public 4-yr	All public 2-yr	No	No	20***
Missouri	All public 4-yr	All public 2-yr	Yes – Some	No	15
New York	All SUNY (public) 4-yr	All SUNY (public) 2-yr	No	No	30
North Carolina	*Some public 4-yr	*Some public 2-yr	No	No	16
Ohio	All public 4-yr	All public 2-yr	No	No	20
Oregon	All public 4-yr	*Some public 2-yr	No	No	16 (24 quarter)

\*State intends to scale to most or all institutions in second year of grant or after grant.

\*\*All public two-year and four-year institutions will be included in Maryland's statewide reverse transfer agreement, presently under development.

\*\*\*Five community colleges have a 12-credit residency requirement if 8 additional credits are from another MnSCU college or University of Minnesota.

as “anticipated” because they were employed *early* in the grant period, and they may evolve as states proceed with CWID implementation. These three policies relate to: (a) institutions participating in the CWID initiative, (b) residency requirements for the awarding of reverse transfer degrees, and (c) student completion of an associate degree prior to transfer.

Table 3 summarizes the first two of these anticipated CWID policies and practices. The first anticipated policy relates to the type and number of institutions participating in CWID. Of the 12 states, six include all public universities and public community colleges in CWID, suggesting a statewide effort of public institutions to implement reverse transfer. In six states, a sub-set of public universities and/or some

community colleges are participating in CWID, although most of these states report a commitment to scaling up reverse transfer to other public institutions in the second year of the grant or after the grant period ends. At this time, only two states anticipate the involvement of private higher education institutions and no states anticipate the involvement of out-of-state institutions. Across the 12 states, CWID-participating institutions represent more than 200 community colleges and more than 100 universities.

The second anticipated policy and practice relates to the residency requirement, defined as the *minimum* number of credits earned at a sending institution (i.e., community college) prior to transfer to be eligible to receive a reverse transfer associate degree from that sending institution.<sup>4</sup> This residency requirement varies from a low of 12 credits in Hawaii to a high of 30 credits in New York, with most states' residency requirements ranging from 15 to 20 credits.

The third anticipated policy and practice relates to whether or not students completed an associate degree or higher prior to transfer to a CWID-participating university. Only those students who did not complete an associate degree or higher prior to transfer were eligible for a reverse transfer associate degree in our baseline study.

Applying these anticipated policies and practices to the Baseline dataset, students were identified who would have been *potentially* eligible to receive a reverse transfer associate degree in the Baseline Cohort. In other words, we used the three anticipated policies and practices to estimate the potential number of reverse transfer-eligible students who were part of the Baseline Cohort in each state. We use the term *potentially* reverse transfer-eligible because students have the potential but are not guaranteed to receive a reverse transfer associate degree because additional criteria may need to be met after transfer (e.g., earn additional credits, earn the correct package of credits to meet associate degree requirements, and consent to have transcripts exchanged).

### Baseline Data Analysis

Using a historical cohort of transfer students (the vast majority of whom were part of a Fall 2008 cohort) and following these students over a 4-year period, a baseline was established for each state for which to measure the awarding of reverse transfer associate degrees, to estimate the potential number of reverse transfer-eligible students based on the three anticipated CWID policies and practices mentioned above, and to assess the potential impact of reverse transfer policies and practices associated with the CWID initiative.

*What was the estimated number of reverse transfer-eligible students in the Baseline Cohort?*

<sup>4</sup> All states and/or institutions may not use the term "residency requirement."

### The baseline cohort of reverse-transfer eligible students was estimated at approximately 27,000 in 12 states.

To approximate the potential number of reverse transfer-eligible students, we applied the three anticipated CWID policies and practices to datasets received from 12 states. Our estimate included only students (a) who transferred from a CWID-participating community college to a CWID-participating university, (b) whose credits earned prior to transfer to a CWID-participating university was greater than or equal to the states' residency requirement,<sup>5</sup> and (c) who did not earn an associate degree or higher prior to transfer.

As displayed in Table 4, the number of total reverse transfer-eligible students in the 12 states in the Baseline Cohort was 27,247, and this number ranged from a low of 1,078 in Hawaii to a high of 3,770 in Maryland. These results suggest that if reverse transfer policies and programs were operating fully

<sup>5</sup> Most state data systems could not determine whether credits earned prior to transfer were from one community college or more than one community college. Given students' mobility and co-enrollment patterns, it is likely some students in this estimate did not meet the residency requirement at a single community college.

Table 4  
Number of Reverse Transfer-Eligible Students by State

State	Number of Reverse Transfer-Eligible Students
Arkansas	1,057
Colorado	1,739
Florida <sup>***</sup>	2,077
Hawaii	1,078
Maryland <sup>**</sup>	3,770
Michigan <sup>***</sup>	3,148
Minnesota <sup>***</sup>	2,063
Missouri	2,787
New York <sup>***</sup>	2,609
North Carolina <sup>***</sup>	1,223
Ohio <sup>***</sup>	3,032
Oregon <sup>***</sup>	2,664
<b>Total</b>	<b>27,247</b>

<sup>\*\*</sup>Number of credits earned prior to transfer is unknown in Maryland dataset, so all students were coded as meeting residency requirements for the baseline analysis.

<sup>\*\*\*</sup>Baseline dataset submitted to OCCRL did not include all public 2-year and 4-year colleges in state higher education system.



in Fall 2008, the number of reverse transfer-eligible students in the Baseline Cohort who would meet these three criteria is 27,247. It is important to recall this estimate means these students are *potentially* reverse transfer-eligible and *not guaranteed* to be reverse transfer-eligible, as students may need to meet additional criteria to be eligible to receive a reverse transfer associate degree. Thus, the number of reverse transfer-eligible students reported in Table 4 may overestimate the actual number of reverse transfer associate degrees that would be awarded, depending on the ways in which policies and programs develop during the course of the CWID initiative. Further, this estimate only represents one cohort of students who transferred in Fall 2008; this number would be larger if the sample included multiple cohorts of students. Our ongoing research on reverse transfer implementation is revealing that several states are pursuing multiple cohorts of students, so it is likely that the number of potentially eligible students will be larger in some states.

*What were the characteristics of reverse transfer-eligible students in the Baseline Cohort?*

**On average, students who were reverse transfer-eligible reflected the characteristics of the average college students, as reported by the National Center for Education Statistics.** Slightly more female (53%) than male (47%) students were reverse transfer-eligible, and nearly three quarters of the reverse transfer-eligible students were age 18 to 24 (74%).

Figure 3 shows that about a quarter (27%) of the reverse transfer-eligible students received the Pell Grant in Fall 2008. Further, Figure 4 (page 8) shows that approximately two-thirds (68%) of the reverse transfer-eligible students were White, 10% were Black, 6% were Hispanic, and 6% were Asian or Pacific Islander. Figure 5 (page 8) shows that the majority was enrolled full-time during their first semester at the university. The characteristics of the

reverse transfer-eligible students are relatively similar to the characteristics of the average college student according to data from the Digest of Education Statistics. For example, 57% of all college students are female and 61% are White (National Center for Education Statistics, 2011a; 2011b).

**Nearly two-thirds (65%) of reverse transfer-eligible students in six states transferred with more than 45 college-level credits, suggesting many students earned or were close to earning the number of college credits typically needed for an associate degree.** Figure 6 (page 8) displays the distribution of credits earned prior to transfer for reverse transfer-eligible students in the Baseline Cohort. This figure presents data for six states (Arkansas, Colorado, Florida, Hawaii, New York, and Ohio) that provided the most complete and reliable data on college credits earned prior to transfer; the figure is based on 9,682 students in these six states. Results show 42% of the total group earned 60 or more credits prior to transfer, the number of credits typically needed to earn an associate degree, and another 23% earned between 45 and 60 credits, suggesting these students lack only 15 credits needed to earn the 60 credits typical of many associate degrees. These two groups account for nearly two-thirds of the reverse transfer-eligible students in the six states.

*What were the degree completion outcomes of reverse transfer-eligible students in the Baseline Cohort?*

**Almost half of the reverse transfer-eligible students did not complete a credential four years after transfer, suggesting a relatively large pool of students that could benefit from reverse transfer policies and practices.** We examined the degree completion outcomes of reverse transfer-eligible students to determine what proportion of students achieved an associates or a bachelor's degree by Spring 2012. As displayed in Figure 7 (page 9), 52% of the reverse transfer-eligible students completed a bachelor's

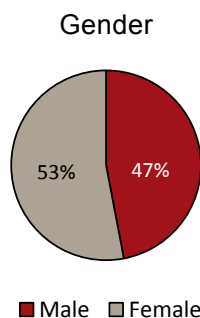


Figure 1. Bachelor's degree completion by gender.

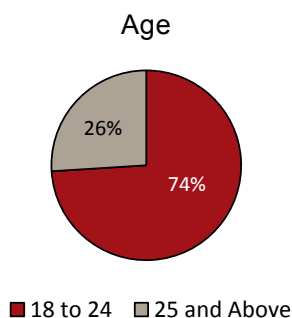


Figure 2. Bachelor's degree completion by age.

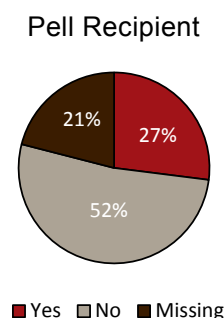


Figure 3. Bachelor's degree completion by Pell recipient (first term after transfer).

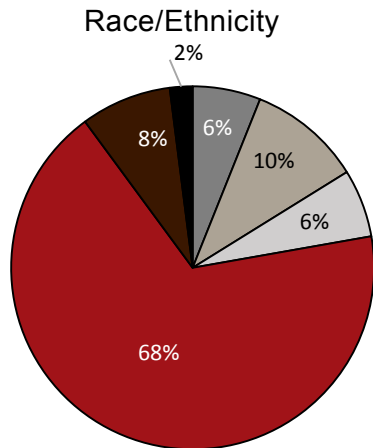


Figure 4. Bachelor's degree completion by race/ethnicity.

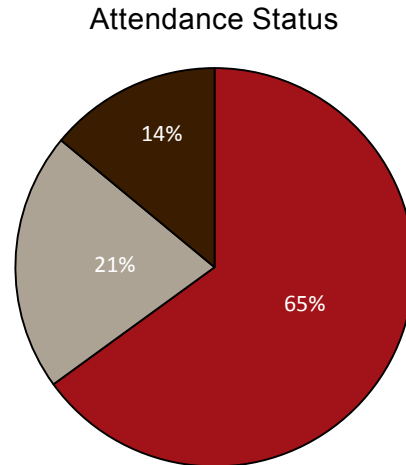


Figure 5. Bachelor's degree completion by attendance status (first term after transfer).

degree or higher by Spring 2012 and the remaining 48% did not complete a bachelor's degree by this time<sup>6</sup>. Although a relatively small percentage of students (15%) were still

enrolled at the 4-year college or university to which they transferred in Fall 2008 and some may go on to finish their bachelor's degree, the results suggest many of these students may not complete a bachelor's degree.

<sup>6</sup> Figure 7, Figure 8, and Table 5 exclude 2,916 of the 27,247 reverse transfer-eligible students in two states because data were not submitted to OCCRL at the student-level and these variables could not be calculated.

Figure 8 reveals 5% of the reverse transfer-eligible students completed an associate degree but no bachelor's degree,

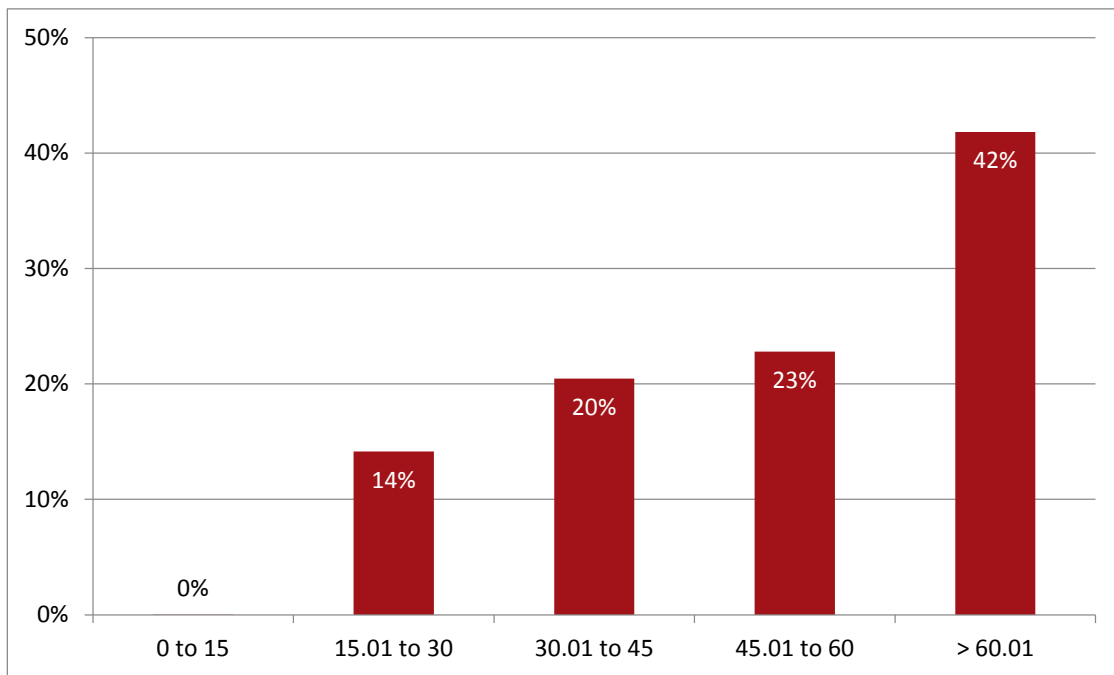


Figure 6. Credits earned prior to transfer for reverse transfer-eligible students in six states in the Baseline Cohort.

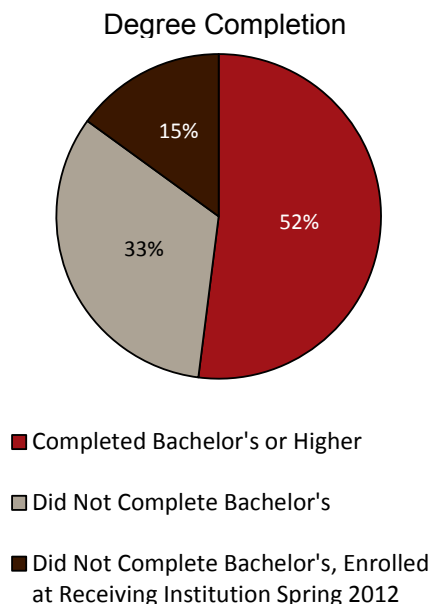


Figure 7. Bachelor's degree completion and enrollment status by Spring 2012.

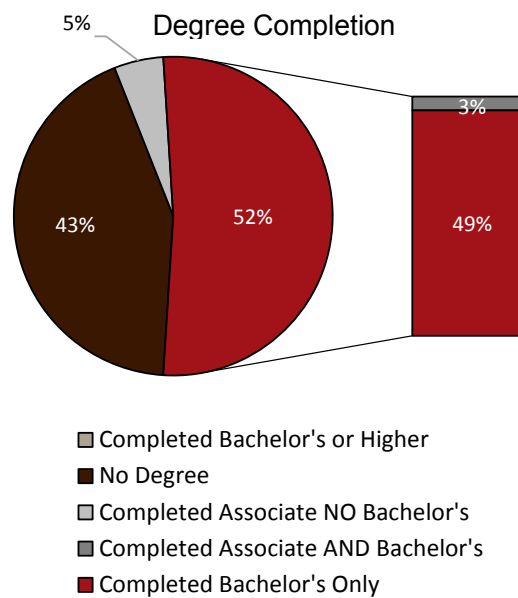


Figure 8. Bachelor's and associate degree completion status by Spring 2012.

and 3% completed an associate degree and a bachelor's degree. These results show a very small proportion of reverse transfer-eligible students earn an associate degrees after transfer and suggest a sizeable proportion of students who may be eligible for and potential beneficiaries of the CWID initiative.

*How did the degree completion outcomes of reverse transfer-eligible Students in the Baseline Cohort differ by student characteristics?*

**Bachelor's degree completion differs by student characteristics.** An association was found between student characteristics and bachelor's degree completion by Spring 2012. Table 5 (page 10) reveals a statistically significant association ( $p < .001$ ) between race/ethnicity, gender, age, and Pell recipient status and bachelor's degree completion. Specifically, about 53% of White and 55% of Asian or Pacific Islander students completed a bachelor's degree compared to 50% of Hispanic students, 45% of American Indian/Alaskan Native students, and 35% of Black students. Moreover, the completion rate for female students (51%) was slightly higher than the completion rate for male students (49%).

Looking at age, adult students tended to complete a bachelor's degree at a lower rate than their younger peers, with only 44% of students aged 25 and above earning a bachelor's degree compared to about 53% of students aged 18 to 24. Slightly more students who received a Pell grant during their first term of enrollment at the receiving 4-year institution completed a bachelor's degree than students who did not receive a Pell grant in their first term of college

enrollment, revealing a positive outcome for students receiving Pell grants. Although, this result is likely related to the large number of missing data and/or state variation.

Although preliminary, these degree attainment outcomes by student characteristics deserve further analysis as the CWID initiative evolves. These early results may suggest inequities in degree completion outcomes among sub-groups of reverse transfer-eligible students that deserve attention in the formulation of future policy and practice.

**College credit attainment prior to transfer is related to bachelor's degree attainment after transfer.** Figure 9 (page 11) displays bachelor's degree completion by the number of credits earned prior to transfer for the six states that provided the most complete and reliable data on this variable. Again, based on datasets provided by six states (Arkansas, Colorado, Florida, Hawaii, New York, and Ohio) for 9,682 students, results show a statistically significant relationship between the number of credits earned prior to transfer and bachelor's degree completion ( $\chi^2 = 165.62$ ,  $p < .001$ ). That is, reverse transfer-eligible students who earned more credits prior to transfer tended to have higher bachelor's degree completion four years after transfer than students earning fewer credits prior to transfer.

### Discussion of Major Findings and Future Research

The baseline study results reveal several themes pertaining to reverse transfer policy implementation. First, reverse transfer policy and practice tend to be situated in an historic context of state policy activity focused on improving transfer

Table 5  
Differences in Bachelor's Degree Completion Outcomes by Student Characteristics

Variable	Completed Bachelor's Degree	Did Not Complete Bachelor's Degree	$\chi^2$
Average	52%	48%	
Race/Ethnicity			$\chi^2 = 299.95^{***}$
American Indian/Alaskan Native (n=192)	45%	55%	
Asian or Pacific Islander (n=1,542)	55%	45%	
Black (n=2,523)	35%	66%	
Hispanic (n=1,352)	50%	50%	
Nonresident (n=229)	48%	52%	
White (n=16,720)	53%	47%	
Missing (n=2,437)	49%	51%	
Gender			$\chi^2 = 24.09^{***}$
Female (n=13,163)	51%	48%	
Male (n=11,813)	49%	51%	
Missing (n=19)	42%	58%	
Age			$\chi^2 = 163.36^{***}$
18 to 24 (n=18,430)	53%	47%	
25 and Above (n=6,520)	44%	56%	
Missing (n=45)	50%	50%	
Pell Recipient			$\chi^2 = 33.28^{***}$
Yes (n=8071)	52%	48%	
No (n=10,456)	48%	52%	
Missing (n=5,804)	52%	48%	

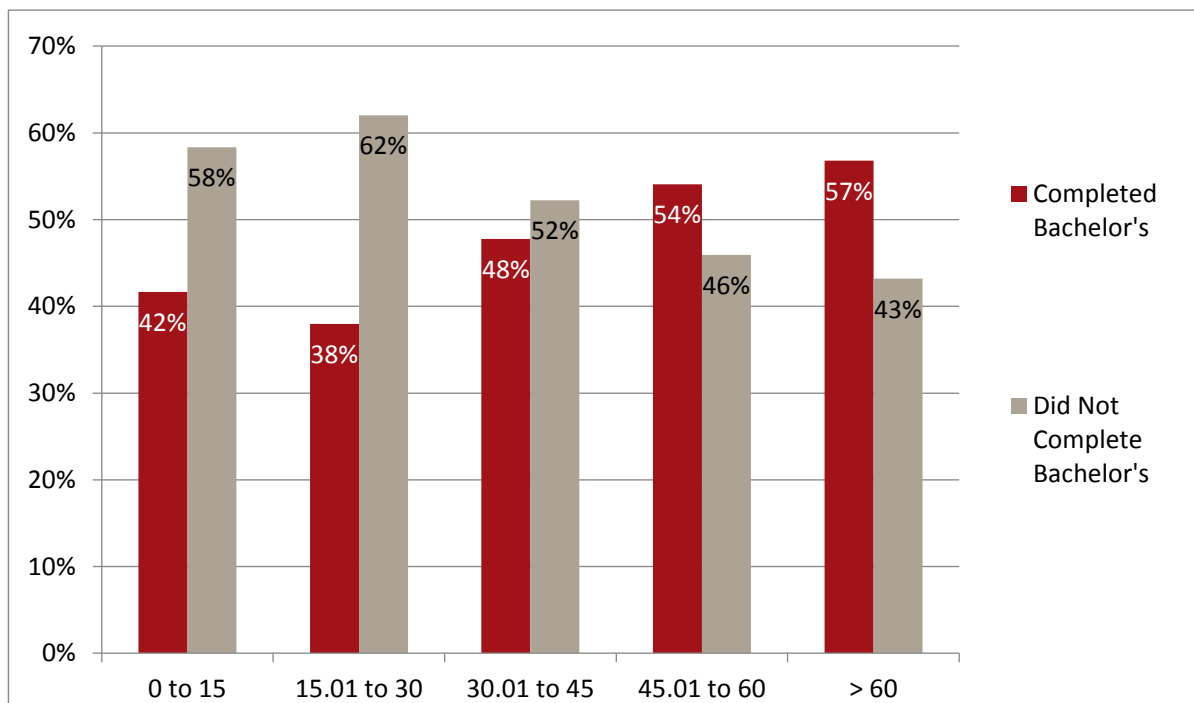


Figure 9. Bachelor's degree completion by credits earned prior to transfer for reverse transfer-eligible students from six states in the Baseline Cohort.

and increasing college degree attainment. Alignment of CWID with Project Win-Win and Complete College America was pervasive and synergistic, according to numerous education leaders leading CWID initiatives. Second, transfer and college completion are important priorities for the states selected for CWID, and many leaders identified reverse transfer as a natural extension of the policy changes already underway in their states. These state leaders suggested reverse transfer was well aligned with other state efforts at increasing the ease of transfer, implementing common course numbering, and encouraging partnerships between 2- and 4-year higher education institutions. Third, half of the states have a legislative mandate to develop a reverse transfer process. Finally, different states approached similar issues in different ways in their initial implementation of CWID-related policies and practices. For example, analysis of the potential impact of FERPA varied among the states, with some moving quickly to adopt student consent and others are taking a more measured approach to changing procedures.

Results of this baseline study suggest sizeable numbers of *potential* students who would have been eligible for reverse transfer associate degrees had CWID-related policies and practices been operating in Fall 2007 or Fall 2008, amounting to over 27,000 in 12 states. At the time of the baseline study, few reverse transfer-eligible students

attained an associate degree after transferring to a 4-year college or university, despite the fact that a large percentage (65%) transfers with 45 or more college credits. Assuming a semester format, these students were within 15 credits or less or one semester of a typical 60-credit associate degree. Bachelor's degree attainment was evidenced for about half of the Baseline Cohort, and attainment of the bachelor's degree was related to the number of college credits transferred to the 4-year college or university; the more college credits transferred the greater likelihood of bachelor's degree attainment. Preliminary analysis also shows differences in bachelor's degree attainment by race/ethnicity, gender, income, and age for reverse transfer-eligible students, suggesting additional inferential analysis is needed.

This study provided a valuable background for future analyses that examine the outcomes of students who are eligible for and who receive reverse transfer associate degrees after implementation of CWID. This research has revealed conditions prior to CWID implementation, enabling the documentation of changes associated with new reverse transfer policies and the rigorous study of transfer associated with CWID, including the awarding of associate and bachelor's degrees.

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## Appendix

### Definition of Terms

**Anticipated CWID Policies and Practices:** The terms “policies” and “practices” are applied to states, systems, and institutions, depending on the context. Our use of the term “policies” refers to formal legislative policies, as well as those policies pertaining to state, system and institutional functions and administrative rules.

**Baseline Cohort:** Students who transferred from a CWID-participating sending institution to a CWID-participating receiving institution in Fall 2008, with the exception of Maryland which used a Fall 2007 cohort.

**Credits:** College-level semester credits.

**CWID-Participating Institution:** The associate and baccalaureate degree-granting institutions that were identified as participating in the state's CWID initiative.

**Dataset:** The complete data file submitted from the state to OCCRL for the baseline study.

**Receiving Institution:** The baccalaureate degree-granting institution (i.e., university) to which students transferred in the Fall 2008.

**Residency Requirement:** The minimum number of credits earned prior to transfer a student needs from a sending institution(s) (i.e., community college) to be eligible to receive a reverse transfer associate degree from that sending institution. If students attended more than one institution prior to transfer, many state data systems did not have the ability to determine the number of credits received from each institution.

**Reverse Transfer-Eligible Students:** (a) who transferred from a CWID-participating community college to a CWID-participating university, (b) whose credits earned prior to transfer to a CWID-participating university was greater than or equal to the states' residency requirement, and (c) who did not earn an associate degree or higher prior to transfer.

**Sending Institution:** Any institution that a student attended prior to transfer in Fall 2008.

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