



# Optimizing Reverse Transfer Policies and Processes: Lessons from Twelve CWID States

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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).

This publication was prepared pursuant to a contract awarded by the Bill & Melinda Gates Foundation in October 2012 to OCCRL, College of Education, University of Illinois at Urbana-Champaign. Preliminary research associated with this project was funded by Lumina Foundation in July-September 2012.

**Acknowledgements:**

The authors are extremely grateful to higher education state, system, and institutional leaders who have participated in research needed to produce this paper. We are also grateful to the foundations who generously support the Credit When It’s Due initiative and research. The funders are the Bill & Melinda Gates Foundation, Greater Texas Foundation, Helios Education Foundation, Kresge Foundation, Lumina Foundation, and USA Funds. Finally, we thank Don Hackmann and Matt Giani for their review of prior versions of this paper and acknowledge the formatting and stylistic skills and assistance of Linda Iliff.

**Recommended Citation:**

Taylor, J. L., & Bragg, D. D. (2015, January). *Optimizing reverse transfer policies and processes: Lessons from twelve CWID states*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

## Executive Summary

In 2012, five foundations launched the Credit When It's Due (CWID) initiative that was “designed to encourage partnerships of community colleges and universities to significantly expand programs that award associate degrees to transfer students when the student completes the requirements for the associate degree while pursuing a bachelor’s degree” (Lumina Foundation, 2012, n.p.), also known as “reverse transfer.” This thought paper describes changes that are occurring at the state, system, and institution levels with implementation of reverse transfer in 12 states that were awarded CWID grants in 2012. We describe efforts to optimize reverse transfer in these 12 states. By optimization, we mean policy and program change at any level—state, system, or institution—that yields the largest number of students who are eligible for and able to benefit from reverse transfer. Policy and program change that enables as many deserving students to be conferred reverse transfer associate’s degrees without diminishing quality or otherwise negatively impacting student learning outcomes and program impact is necessary for optimization to be achieved. Thus, optimization is about maximizing student eligibility without overextending precious resources.

Our analysis of optimization is organized according to five dimensions of reverse transfer based on our data collection during the first year of implementation: (a) student identification, (b) consent, (c) transcript exchange, (d) degree audit, and (e) degree conferral and advising. Below is a summary of the five dimensions and a set of working hypotheses related to reverse transfer optimization.

- **Student Identification.** The identification of potentially eligible students involves decisions about which institutions to partner with, establishing eligibility criteria, and determining the frequency and scope of implementation. Eligibility criteria applied early in the reverse transfer process may eliminate students who will eventually qualify if they are allowed to remain in the eligibility pool and are regularly assessed for eligibility.
- **Consent.** Most states require students to actively consent to exchange a transcript and/or confer a degree, and the method of consent takes many forms with various degrees of efficacy. An “opt-out” policy will likely result in larger consent rates among eligible students than an “opt-in” policy. However, most states are pursuing an “opt-in” policy, so an “opt-in” policy that utilizes strategic and persistent communication methods will likely result in a larger number of students who consent to reverse transfer.
- **Transcript Exchange.** Methods to exchange transcripts range from fully electronic, to partially electronic, to manual, and the capacity to efficiently exchange transcripts varies among states and within states. Investing in technologies to facilitate efficient transcript exchange will likely result in increased system and institutional capacity to implement reverse transfer and reach more students.
- **Degree Audit.** The ability to automate the degree audit function is partially dependent on state, system, and institutional technology infrastructure and the adequacy of course equivalency systems and tables. Updating and maintaining course equivalency tables and investing in automated degree audit systems will likely streamline the degree audit process and maximize capacity for automated degree audits.
- **Degree Conferral and Advising.** The extent to which states, systems, and institutions are engaging and advising near-completers varies among states and within states. Engaging near-completers by advising students on courses and credits that they need to attain an associate’s degree en route to the baccalaureate degree will likely result in higher numbers of reverse transfer associate’s degrees.

## Introduction

In 2012, five foundations launched the Credit When Its Due (CWID) initiative that was “designed to encourage partnerships of community colleges and universities to significantly expand programs that award associate degrees to transfer students when the student completes the requirements for the associate degree while pursuing a bachelor’s degree” (Lumina Foundation, 2012, n.p.), also known as “reverse transfer.” Initially, 12 states were funded to develop and implement these reverse transfer programs and policies, and the Office of Community College Research and Leadership (OCCRL) at the University of Illinois at Urbana-Champaign was chosen as the research partner. In late 2013, three states were added to bring the total number of states to 15. At least six additional states have legislation, pending legislation, or statewide initiatives related to reverse transfer.

This thought paper describes changes that are occurring at the state, system, and institution levels with implementation of reverse transfer in the 12 original states. Using qualitative and quantitative data collected from the CWID Implementation Study, we describe efforts related to the optimization of reverse transfer (defined below) in these 12 states. Our initial results suggest that some states are piloting reverse transfer with a limited set of public community college and university partnerships, and others are striving for system-level reforms that eventually may impact all forms of transfer. Understanding what optimization means and how it works is possible because of this variation in implementation approaches among states, and this thought paper explores how states are implementing and optimizing reverse transfer.

## Optimization

What does *optimization* mean? We define optimization as *policy and program change at any level—state, system, or*

*institution—that yields the largest number of students who are eligible for and able to benefit from reverse transfer.* Policy and program change that enables as many deserving students to be conferred reverse transfer associate’s degrees without diminishing quality or otherwise negatively impacting student learning outcomes and program impact is necessary for optimization to be achieved. Thus, optimization is about maximizing student eligibility without overextending precious resources.

With higher education budgets stretched thin, it is important to understand how reverse transfer is being implemented in cost effective ways. States that are participating in CWID are using the seed funding they are receiving from philanthropic organizations to create system changes necessary to implement reverse transfer. No doubt these funds are critical to stimulate this work, but they are short-lived. Our interest in optimization includes understanding the intentionality by which states, systems, and institutions are not only implementing change but also bringing about change that is systemic and sustainable. Efforts to institutionalize system-level change that extends reverse transfer to the largest number of students who can benefit, including extending change to state transfer and articulation policies, is an aspect of optimization that interests us, and that will be the subject of a forthcoming thought paper.

## Method and Organization

Our analysis of reverse transfer optimization is based on qualitative and quantitative data collected from the CWID Implementation Study, and these data are instrumental in helping us formulate working hypotheses to continue our exploration of reverse transfer with all 15 states. In particular, this paper draws from the data we collected from phone and in-person interviews with state, system, and institutional leaders, as well as document analysis of policies and procedures collected from the 12 initial CWID states. For further description of each state’s reverse transfer implementation policies, we refer you to our CWID

### CWID STATES

Arkansas	Maryland	North Carolina
Colorado	Michigan	Ohio
Florida	Minnesota	Oregon
Georgia*	Missouri	Tennessee*
Hawaii	New York	Texas*

\*Joined CWID initiative in late 2013

website and individual state profiles<sup>1</sup>.

The core content of this paper is organized according to five dimensions of implementation of reverse transfer: (a) student identification, (b) consent, (c) transcript exchange, (d) degree audit, and (e) degree conferral and advising (Figure 1). Whereas these dimensions are listed and presented in a linear fashion, we caution readers to understand that these dimensions can and often do vary between states and in some cases vary within states. This is because numerous states do not centralize reverse transfer but rather allow institutional control over these policies and procedures. For example, among the five dimensions, consent is listed second but some states and institutions implement consent after the degree audit is conducted.

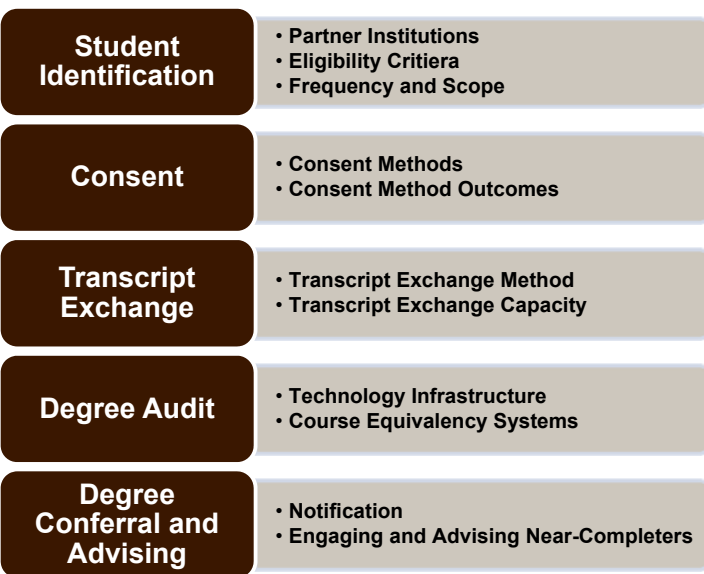


Figure 1. Five reverse transfer dimensions.

What follows is a discussion of these five dimensions and how implementation policies and processes optimize reverse transfer. Throughout the paper, we use numerous examples from state, systems, and institutional policies and practices to illustrate these five dimensions. These examples are not meant to be exhaustive or comprehensive, as there are hundreds of community colleges and universities engaging in reverse transfer practices within the 12 states. We selected examples from many CWID states to illustrate how the five dimensions are being implemented in a variety of contexts. Because implementation is ongoing in most states, these examples of policy and practice may further develop and evolve; however, there is value in seeing a range of approaches and perspectives in different locations at this early stage of implementation of reverse transfer

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### Student Identification

An important dimension of reverse transfer optimization is the identification of students who are potentially eligible to be conferred an associate’s degree. Three aspects of this dimension are: (a) partner institutions, (b) eligibility criteria, and (c) timing and scope.

### Partner Institutions

Most of the 12 states in CWID currently limit their reverse transfer initiatives to their in-state public community colleges and universities. With the exception of Colorado, Maryland, and Missouri, no states have involved in-state private institutions in reverse transfer, and no states are systematically implementing reverse transfer with out-of-state institutions (public or private).<sup>2</sup> Consequently, it is unclear exactly how many transfer students would be eligible to participate in reverse transfer because institutional involvement has been limited thus far. However, using states that generated datasets that included the universe of all transfer students, our CWID baseline study<sup>3</sup> estimated approximately 20-30% of potentially eligible reverse transfer students originate from in-state private or out-of-state public or private institutions (Taylor, Makela, Bragg, Ruud, & Bishop, 2013). This analysis suggests the number of students who are currently excluded from reverse transfer is considerable and points to ways to optimize student eligibility. The Lumina Foundation recently awarded a grant to the National Student Clearinghouse to assist states, systems, and institutions with addressing this gap through enhanced technology.<sup>4</sup> In the early adoption phase of CWID, we recognize the practical reasons for limiting student participation to public in-state institutions; however, our results suggest states that are able to engage private and out-of-state institutions will reach more eligible students. Further, as student awareness of reverse transfer increases, students transferring from institutions not currently participating in reverse transfer, such as in-state private and out-of-state institutions, are likely to seek access to reverse transfer. Providing the same level of access to reverse transfer associate’s degrees for these students as public students is a logical way to extend the

<sup>2</sup> See Implementation Profiles, <http://occr.illinois.edu/projects/cwid/>, for a list of participating institutions.

<sup>3</sup> The baseline study involved a cohort of Fall 2008 first-time transfer students in 2013 to obtain an estimate of student eligibility prior to implementation of CWID. Results of the CWID baseline study are available at <http://occr.illinois.edu/files/Projects/CWID/Baseline%20Study%20Brief.pdf>.

<sup>4</sup> <http://nscnews.org/as-many-as-two-million-students-could-receive-associate-degrees-through-national-student-clearinghouses-reverse-transfer-project/>

potential benefits of CWID.

**Eligibility Criteria**

Identifying potential candidates for reverse transfer involves states and institutions developing eligibility criteria. Among the 12 initial states implementing CWID, a diverse set of criteria is being adopted to determine which students are potentially eligible, with the three most common criteria

being:

- the student met the institutional residency requirement (ranging from 12 credits to 45 credits),
- the student earned a specific number (or a range) of cumulative college credits (typically greater than or equal to 50 or 60 credits), and
- the student transferred to the university without earning an associate’s or higher degree (Table 1).

Table 1  
Minimum Eligibility Criteria to Identify Potential Student Candidates for Reverse Transfer

State	Criteria on Student Eligibility for Reverse Transfer
<b>Arkansas</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating institution (ranges from 15 to 21 college credits)</li> <li>• Student earned 16 or 17 courses (~45 college credits) toward the associate’s degree</li> </ul>
<b>Colorado</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating community college (≥ 15 college credits)</li> <li>• Student earned ≥ 70 cumulative college credits</li> </ul>
<b>Florida</b>	<p>Suggested state criteria:</p> <ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating community college (≥15 college credits)</li> <li>• Student completed 36 credit hour general education requirements</li> <li>• Student completed ≥ 60 cumulative college credits</li> <li>• Student is in good academic standing at the community college and the university</li> </ul>
<b>Hawaii</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating community college (≥12 college credits)</li> <li>• Student completed ≥ 61 cumulative college credits</li> <li>• Student has ≥ 2.0 GPA from participating community college</li> </ul>
<b>Maryland</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree or higher</li> <li>• Student completed ≥ 15 cumulative college credits prior to transfer</li> <li>• Student is in good standing at the 2-year and 4-year institution with a GPA of 2.0 or higher</li> </ul>
<b>Michigan</b>	<ul style="list-style-type: none"> <li>• No state policy; but institutional residency requirements range from 12 to 45 college credits.</li> </ul>
<b>Minnesota</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate in arts degree</li> <li>• Student met residency requirement at a participating community college (≥ 12 college credits)</li> <li>• Student does not have an academic suspension on record</li> <li>• Student has not applied to graduate with a bachelor’s degree</li> </ul>
<b>Missouri</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating community college (≥ 15 college credits)</li> </ul>
<b>New York</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student earned ≥ 24 college credits at a participating community college and/or met community college residency requirement (varies)</li> </ul>
<b>North Carolina</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating community college (≥ 16 college credits)</li> <li>• Student transcript evaluation occurs between 50 and 90 cumulative credit hours</li> </ul>
<b>Ohio</b>	<ul style="list-style-type: none"> <li>• Student does not have an earned associate’s degree</li> <li>• Student met residency requirement at a participating community college (≥ 20 college credits)</li> <li>• Student completed ≥ 45 cumulative college credits</li> <li>• Student has ≥ 2.0 GPA from the university</li> <li>• Student enrolled at a university with intended degree of bachelor’s</li> </ul>
<b>Oregon</b>	<ul style="list-style-type: none"> <li>• No state policy; institutional residency requirement is ≥ 16 semester credits or 24 quarter credits</li> </ul>

**Residency Requirement.** The residency requirement is defined as the number of college credits needed from an institution of higher education (typically a community college in the context of CWID) for the student to be conferred a degree by that institution. The most variation across states appears in the residency requirement, which ranges from a low of 12 credits to a high of 45 credits (the residency requirement varies within states that do not have a statewide policy). Our data suggest that the basis for residency criteria is a combination of regional accreditor specifications and institutional policy, and these criteria can change over time. In fact, the residency criteria have changed in some states over the course of CWID implementation due to changes made by regional accreditors. For example, Missouri lowered the residency requirement from 30 to 15 credits after the Higher Learning Commission (HLC) modified its policy on residency, citing reverse transfer as the impetus for the change.<sup>5</sup> The implication of a low residency requirement such as 12 or 15 credits (rather than a high residency requirement) is that it expands the pool of students who are potentially eligible for reverse transfer.

**Cumulative College Credits.** The basis for the second most common criterion is a philosophy that we characterize as “credit right now,” whereby states and institutions are predominantly interested in students who, at the time of their identification, are at or near the number of cumulative college credits needed for an associate’s degree, typically about 60 credits. The philosophy associated with this policy is that universities and community colleges can concentrate degree audit efforts on students who are most likely to have earned the credits needed for the associate’s degree. This approach, while logical in the context of fulfilling the spirit of CWID, neglects transfer students who matriculate with a substantial number of cumulative college credits but are below 60 credits (or the number determined by the policy noted in Table 1).

If states and institutions were to identify students whose cumulative college credits were slightly below the number identified in Table 1, the number of potentially eligible students could increase substantially. For example, Florida and Hawaii’s policies identify students as eligible once they have earned greater than or equal to 60 or 61 cumulative college credits, respectively. Were states and institutions able to identify students as eligible with 40 or 50 cumulative college credits, for example, and monitor their progress over time, the states would undoubtedly also increase the number of reverse transfer associate’s degree awardees. We characterize this alternative “developmental” approach as “credit when ready” in that students’ eligibility is regularly monitored en route to the bachelor’s degree, resulting in

regular degree audits until students’ meet associate’s degree requirements, complete their bachelor’s degree, or opt-out of reverse transfer. Though limited among the CWID states, this approach is being employed at some institutions. For example, at Grand Valley State University in Michigan, students are identified after their transfer to the university (regardless of the number of cumulative college credits) and advised on the courses they need to complete to receive the associate’s degree while moving along their pathway to the baccalaureate. Regular assessment of student credit attainment toward the associate’s degree using processes such as semester auditing of reverse transfer eligibility may enhance a state’s reverse transfer approach.

**Prior Degree Completion.** The third most common criterion refers to students who have not previously earned an associate’s or bachelor’s degree. Most states and institutions do not confer additional associate’s degrees to students who have already earned an associate’s or higher degree. However, an exception to this criterion is being made in states and institutions that are auditing for specific associate’s degree types. For example, if the state is conducting audits for Associate of Science (AS) degrees and students transferred having completed Associate of Applied Science (AAS) degrees, some states would identify these students as potentially eligible for reverse transfer associate’s degrees because they did not previously complete AS degrees.

Our research also suggests that the idea of a large-scale conferral of associate’s degrees to individuals who already hold bachelor’s degrees or higher is not being contemplated by CWID states. Interestingly, Michigan’s Governor Snyder recently received an associate’s degree via reverse transfer despite already holding a higher credential.<sup>6</sup> Presumably intended to highlight the state’s support of reverse transfer, the Governor’s receipt of this degree raises the question of whether other citizens with bachelor’s degrees or higher will be eligible to be conferred reverse transfer associate’s degrees. We speculate that conferring associate’s degrees to individuals who have already earned a higher credential, whether they be influential leaders or not, may boost a state’s degree-attainment numbers in the short run but may eventually overwhelm system capacity and more importantly, undermine the integrity of the associate’s degree and the reverse transfer initiative.

Beyond these criteria, some institutions and states apply additional eligibility criteria at the time of identification of students for reverse transfer, including but not limited to (a) the student is in good academic standing at the university and/or community college based on grade point average

<sup>5</sup> Assumed Practice B.1.B: <http://policy.ncahlc.org/Policies/assumed-practices.html>

<sup>6</sup> See <http://www.freep.com/story/news/local/michigan/2014/09/22/gov-snyder-gets-long-awaited-associate-degree-kcc/16077413/>

(GPA), (b) the student does not have a financial hold, and (c) the student meets general education requirements or other degree requirements determined by the institution. The effects of these additional criteria on the number of potentially eligible students remain to be seen, but applying these criteria in the initial identification of eligible students likely excludes students who might otherwise meet degree requirements. Project Win-Win, which represents a related effort to audit the credits of students who stopped-out prior to receiving a degree, advised against excluding students who have financial holds, students missing curricular pieces, and students with disciplinary holds before the institution audits the degree (Adelman, 2013). Rather, Adelman suggests using these criteria to prioritize students for degree audits rather than restricting them from eligibility for the degree.

### Frequency and Scope

Finally, two aspects of student identification include *when and how often* to identify students and *which students* to include. Related to the former, many states and institutions have piloted reverse transfer and have finished one or two rounds of implementation. After piloting, several states are engaging in conversations or making the decision to sustain reverse transfer by implementing it on an annual or semester basis. The critical factor here is institutional capacity to confer reverse transfer associate's degrees. Although annual implementation is likely more manageable and cost-effective, implementing a reverse transfer process each semester is likely to yield larger numbers of students who are eligible, including students who may, for example, not be eligible initially but reach the credit threshold before the annual implementation cycle reoccurs. With only one reverse transfer audit per year, some students undoubtedly will be delayed or overlooked altogether in obtaining a reverse transfer associate's degree. A delay in degree conferral may also result in students lacking interest in pursuing the associate's degree or may heighten the chances of their stopping-out or dropping-out without ever having the opportunity to attempt to secure the degree.

Another aspect of student identification refers to scope in terms of how far back institutions and states mine their databases for students who are potentially eligible. Within the 12 CWID states, we see extensive variation in data-mining activity. For example, one state is mining student records for the past 20 years, whereas another is focusing exclusively on new transfer students who enrolled at universities in the Fall 2013 semester. The decisions about how far back to seek eligible students appear to rest on many factors, including data capacity and resource issues. States that mine historical records to identify eligible students undoubtedly will generate larger numbers than those that target a single cohort of new transfer students in a recent semester or year, but the benefits of this strategy

are short-lived. The impact of efforts to sweep historical data depends on the quality of data systems, including the availability of contact information for students who exited higher education, sometimes long ago, and the ability of state and institutional leaders to maximize lessons about how to implement reverse transfer policy over the long term. Even if successful in generating substantial numbers initially, states and institutions will need to find ways to sustain reverse transfer policies and processes for the long term.

### Consent

The consent dimension refers to the ways in which states and institutions offer students the opportunity to participate in reverse transfer. In this section, we review various consent methods with an eye toward optimization of reverse transfer.

#### Consent Methods

It is nearly impossible to address student consent relative to reverse transfer without a discussion of the federal Family Educational Rights and Privacy Act (FERPA) law, because FERPA is a primary impetus for the consent process. A key issue with FERPA and reverse transfer is that many, although not all, universities do not have the authority to send student transcripts to community colleges for the purpose of reverse transfer without student consent. Our research suggests that states and institutions differ in their interpretation of FERPA as applied to reverse transfer, leaving no clear consensus on what is legal and what is not. The United States Department of Education (USDE) has communicated to the field that it intends to release new FERPA guidelines that will clarify student consent pertaining to reverse transfer, but these guidelines have not been released. In lieu of this issuance, several states reported that they have sought assistance from the USDE's Privacy Technical Assistance Center (PTAC) to address reverse transfer in their particular state and system contexts, and they report guidance from PTAC has influenced their student consent policies. These guidelines have moved several states toward the adoption of an "opt-in" policy, but not all states have adopted this approach.

The dominant approach to consent that we have observed is an "opt-in" policy whereby students *actively affirm* consent to have their transcripts sent from a university to a community college and/or to have an associate's degree conferred. Note, we point out that consent applies to both transcript exchange and degree conferral, as is discussed more fully below. Despite the trend toward adoption of "opt in" due to FERPA, a few states and institutions have adopted an "opt-out" policy whereby if students do not *actively deny* consent, they are assumed to have consented, and these students' degrees are audited and/or conferred. Although we do not have the expertise or authority to comment on



the legality of the “opt-in” or “opt-out” approaches, intuitional and anecdotal evidence suggest that the “opt-out” policy will yield a larger number of associate’s degree conferrals than the “opt-in” policy. Though attractive to increase numbers, it is logical to assume that states and institutions will avoid policies that jeopardize their meeting FERPA requirements.

The methods used to seek student consent have been diverse, and many states, systems, and institutions continue to experiment with different methods. A common consent method is for the university to send one or more emails directly to currently enrolled transfer students to obtain their consent. Other common methods used to obtain consent from currently enrolled students include postcards, letters, and phone calls. To more effectively reach a larger number of students, some states and institutions are adopting processes and technologies that allow them to secure consent from all transfer students at the time they enter a university. For example, the University of South Florida integrated consent into the transfer student admission application so that all transfer students have the opportunity to consent to reverse transfer upon admission to the university. Further, North Carolina is experimenting with technology within universities’ student portal systems so when students login to register for classes, a pop-up screen prompts them to consent to reverse transfer, if they are eligible. Similarly, the University of Missouri—St. Louis recently integrated consent into eligible students’ Blackboard accounts, prompting them to consent when they login. These consent methods streamline and automate the consent process, including reducing the need for paper signatures. Processes such as these help to routinize and institutionalize student consent, improving the sustainability of reverse transfer.

### Consent Method Outcomes

The efficacy of various consent methods is an issue we are investigating in our student-level data analysis for the CWID impact study, but our qualitative data already suggest that some practices are more effective than others as evidenced by higher rates of consent among students. For example, the University of Hawaii system’s “opt-out” policy yields very high response from students, with administrators reporting that no students have declined to participate in reverse transfer thus far.

Looking more closely at “opt-in” policies that dominate most states, we see that systems and institutions that have used “opt-in” via email and/or U.S. mail have yielded consent rates (defined as the percentage of students who affirmatively consent to participate) that range from less than 10% to approximately 50%, although most states report rates within the 10-25% range. For example, 13,860 students were contacted by email to participate in reverse transfer in Michigan between

January 1, 2013 and August 30, 2014, resulting in a consent rate of 13% (1,804 students). In Ohio, 1,464 of the 6,307 students contacted during the first round of implementation in 2013 opted-in, resulting in a 23% consent rate.

Although we do not yet have empirical evidence of the effects of various consent policies and processes on consent rates, some approaches seem logical. For example, states that emailed or communicated with students only once reported relatively modest results, prompting us to wonder what might happen if students received multiple (even just two or three) emails. Our research provides anecdotal evidence that states that used multiple emails and/or communications within a short period of time had higher consent rates. For example, North Carolina identified over 8,000 eligible students and contacted these students using email four weeks in a row with the following results: 2,487 students responded to an email sent the first week, 1,161 students responded to an email sent the second week, 1,114 students responded to an email sent the third week, and 505 students responded to an email sent the fourth week. These results show the number of respondents in weeks 2-4 more than doubled the initial respondents in week 1, suggesting one email is insufficient to obtain consent from many students who are potentially eligible for reverse transfer.

Also, in an effort to increase student consent, some states spent considerable time crafting messaging that is clear and compelling to students, resulting in messages that incentivize student response. For example, some states provided information about the purpose of reverse transfer, the value of securing a reverse transfer associate’s degree in terms of employability, and the value of the associate’s degree as a fallback credential should the student not complete a bachelor’s degree.<sup>7</sup> Some states also emphasized modest or no cost associated with securing the degree, capitalizing on student sensitivity to the cost of obtaining a higher education credential.

Another way to increase the consent rate is to offer students incentives to participate. Though implementation of this strategy was not common among the CWID states, several universities in North Carolina offered students a financial incentive (e.g., a drawing for \$50 cash prize), and a few universities offered students priority registration. Results on the effects of these strategies will be available in our forthcoming impact study.

As noted, consent methods are an important factor in the optimization of reverse transfer, and the range in consent rates to opt-in policies that we see among CWID states is concerning because it can influence the ultimate number of associate’s degrees conferred. Strategies such as

<sup>7</sup> See state resources on state pages to view available sample consent letters and language: <http://occr1.illinois.edu/map/>

institutionalizing consent, repeated communication with students, targeted messaging, and technology solutions may offer the best potential to improve consent rates. Underlying all of these methods, however, is a philosophical question about the extent to which students can or should be aware of and engaged in the reverse transfer process, and states and institutions are grappling with this philosophical question. Whereas some argue a college degree of any type is valuable, the low consent rates reported under “opt-in” policies may reflect the fact that some students do not want an associate’s degree. For some students, the value of an associate’s degree may not be understood, and for others, an associate’s degree may introduce financial or other problems. For example, some systems and institutions have reported that receiving an associate’s degree en route to a bachelor’s degree may impact students’ eligibility for private scholarships or may impact international students’ Visa status. Students who find themselves in these circumstances would understandably decline the associate’s degree in lieu of sustaining their enrollment at the baccalaureate level.

### Transcript Exchange

Reverse transfer requires community colleges to acquire students’ university transcripts (or educational records) in order to audit students’ degrees, which typically requires the exchange of a transcript or transcript data. To a large extent, the exchange of transcripts is dependent on state, system, and institutional technology infrastructure and capacity. This section describes the transcript exchange methods that are utilized in states and states’ transcript exchange capacity, and characterizes these technologies in terms of their impact on the optimization of reverse transfer.

#### Transcript Exchange Methods

The methods in which transcripts are exchanged vary but can be categorized in three primary ways: (a) fully electronic, (b) partially electronic, and (c) manual. Fully electronic is the most efficient method because it enables systems and institutions to send and receive fully electronic records most easily and expeditiously. That is, the university transmits transcripts or transcript data directly to the community college or via a third party application (developed internally or by a private vendor) that serves as a platform for community colleges to electronically access and process transcript data. Arkansas, Florida, Hawaii, Minnesota, and Ohio are examples of states that use this method (specific systems are highlighted in Table 2 in the “Transcript Exchange Capacity” section). Although developing and maintaining electronic transcript exchange requires some manual programming, sending and receiving transcripts does not require manual efforts associated with printing and mailing transcripts and transcript data entry.

Partial electronic exchange requires both technology and manual activity. For example, institutions that participated in Missouri’s reverse transfer pilot registered for the National Student Clearinghouse’s (NSC) PDF transcript exchange service wherein the university produced a transcript, converted it to PDF, and sent it to the community college using the NSC platform. The manual component is on the front end of the process to convert transcripts to PDF format and on the back end when the community college receives the transcript. Some community colleges did not have the technology to automatically read PDF transcripts, so transcript records had to be entered manually into community college student information systems.

Last, a purely manual transcript exchange involves almost no electronic function in the exchange process. Typically, the university sends a paper copy of the transcript to the community college and the community college manually processes the transcript and inputs transcript data into the college’s student information system. Whereas many states are moving away from a manual process, we saw manual transcript exchanges used in Maryland, Michigan, and Oregon, for example.

Efficient management of the transcript exchange process is extremely important because of the increased volume of transcripts that institutions are exchanging as a result of reverse transfer. The increased exchange activity has implications for registrars’ offices that are responsible for processing transcripts. Logically, electronic transcript exchange systems that provide greater capacity for processing transcripts can more efficiently process eligible students than manual or even partially electronic systems.

#### Transcript Exchange Capacity

Assuming that electronic transcript exchange is a desirable method for facilitating reverse transfer, then technology capacity is critical to optimizing reverse transfer, and the states and state systems vary widely as to the current state of transcript exchange technology. Whereas Arkansas, Florida, Hawaii, Minnesota, and Ohio use electronic transcript exchange systems that are fully electronic to facilitate the efficient movement of transcript data (Table 2), other states do not. However, even in states with fully electronic transcript exchange systems, transcript exchanges are restricted to institutions within state systems (i.e., public in-state institutions), with only a few exceptions, so there are still capacity limitations. A few states involved in CWID lack a system-level electronic transcript exchange mechanism (e.g., Michigan, Maryland, and New York), and they have not elected to use their CWID funding to invest in them.



Exemplifying states that are engaged in technology advancements to build capacity or leverage existing technology capacity, Colorado identified a private vendor to facilitate the system's exchange of transcripts. Despite challenges in getting this technology to work initially, system officials report the technology has become operational, thus helping the state to proceed with CWID. Missouri is another state that is improving technology capacity to optimize reverse transfer. Specifically, NSC's PDF transcript exchange system was used in the pilot, and the state recently committed to using NSC's fully electronic transcript exchange system in Spring 2015. Prior to receiving the CWID grant, North Carolina began developing a Student Data Mart (SDM), which supports the transmission of transcript-level data between the universities and community colleges.

### Degree Audit

Ultimately, students' eligibility for reverse transfer depends on the results of an audit that determines if they meet associate's degree requirements. Similar to the transcript exchange process, a key aspect of the degree audit is the capacity of the state, system, or institutions to audit degrees efficiently. This capacity manifests in at least two ways: technology infrastructure and course equivalency systems. Optimization of the reverse transfer process is discussed from these vantage points.

### Technology Infrastructure

Similar to student consent and degree audits, system and institutional capacity to execute degree audits rests

Table 2  
*Electronic Transcript Exchange Systems in CWID States*

State	Electronic Transcript Exchange System Description
Arkansas	Arkansas uses a third-party system, the Standardization of Postsecondary Education Data Exchange (SPEEDE) server operated by NSC to facilitate transcript exchange. SPEEDE is a fully electronic transcript exchange system that individual institutions use to both send and receive electronic transcripts.  See: <a href="http://speedeserver.org/">http://speedeserver.org/</a>
Florida	Transcript exchange in Florida is facilitated by the Florida Automated System for Transferring Educational Records (FASTER). FASTER is used statewide by K-12 institutions and higher education to electronically exchange transcripts and records.  See: <a href="http://www.floridastudentfinancialaid.org/FASTER/index.htm">http://www.floridastudentfinancialaid.org/FASTER/index.htm</a>
Hawaii	The University of Hawaii (UH) system developed and built the STAR system, which is a cloud-based technology that interfaces and communicates with all UH campus student information systems in real time. STAR allows the system to access students' transcripts and records without the need to send paper transcripts for the purpose of reverse transfer.  See: <a href="https://www.star.hawaii.edu:10012/includes/PDFs/student/StarOverview.pdf">https://www.star.hawaii.edu:10012/includes/PDFs/student/StarOverview.pdf</a>
Minnesota	The MnSCU system uses an internally developed electronic transcript exchange system called eTranscript to exchange transcripts among MnSCU institutions. The system pulls transcript data from Degree Audit Reporting System (DARS) to generate the eTranscript.  See: <a href="http://www.mnscu.edu/board/policy/329.html">http://www.mnscu.edu/board/policy/329.html</a>
Ohio	Ohio uses the Ohio Articulation and Transfer Clearinghouse (ATC) to exchange electronic transcripts among Ohio state-assisted institutions within the state.  See: <a href="https://www.ohiohighered.org/transfer/atc">https://www.ohiohighered.org/transfer/atc</a>

largely on technology infrastructure. A robust technology infrastructure allows systems and institutions to reduce the need for labor-intensive and manual degree audits. Although an individual may manually verify the results of an automated degree audit, technology that can quickly assess and audit students' transcripts against associate's degree requirements is important to optimizing reverse transfer.

One of the strongest degree audit technologies among the initial 12 CWID states is the STAR system developed and used by the University of Hawaii (UH) system. STAR is a cloud-based system that interfaces with the student information systems at all seven community colleges and three universities in the UH system. For the purpose of reverse transfer, a coding routine was developed to assess students' existing coursework against the requirements of an associate's degree, and this coding routine is executed each semester for all students who meet the reverse transfer eligibility requirements. Because the STAR system continuously communicates with all campus student information systems that house students' course-level information, the coding routine quickly assesses each student's coursework against their associate's degree requirements. In addition to the automated degree audit function, STAR features a student portal whereby students can monitor their own progress toward a current degree and perform "what if" scenarios to determine progress toward other degree types, such as the associate's degree.<sup>8</sup>

A commercial product with degree audit functions similar to STAR is Ellucian's DegreeWorks, and the State University of New York (SUNY) system is using its CWID grant to support the ongoing adoption of DegreeWorks. This product allows institutions to automate the degree audit process and enables students to assess progress toward their current degree and other degrees of interest to them. A similar commercial product used by Minnesota State Colleges and Universities (MnSCU) is CollegeSource Inc's u.achieve/DARS. Similar to DegreeWorks in New York, the product automates the degree auditing process and allows students to view their progress towards degree completion.

The UH, SUNY, and MnSCU systems are somewhat unique among the CWID states in that the public community colleges and universities are within the same system, which facilitates the capacity for a centralized degree audit process. This centralized process is not currently feasible in states such as Michigan or Oregon wherein community colleges and universities reside in different systems. In these states and others in the U.S., there is no centralized agency or organization with the technology and data to perform degree audits across systems and institutions.

<sup>8</sup> See <https://www.star.hawaii.edu:10012/includes/PDFs/student/StarOverview.pdf>

### Course Equivalency Systems

Another component of the degree audit capacity that influences optimization is course equivalency systems. Historically, some states have invested in transfer and articulation policies that include enhanced course equivalencies among community colleges and universities (Ignash & Townsend, 2001), but some states have not. For example, the state of Florida has common course numbering for all public community colleges and universities<sup>9</sup>, so course equivalencies within the state are readily identifiable. Though not all, many states have general education transfer packages that ensure the portability of general education courses among institutions of higher education within the state. The Ohio Transfer Module, the Minnesota Transfer Curriculum, and the Maryland General Education Program are examples of state transfer and articulation agreements that allow students to easily transport general education courses and credits across institutions. However, some states such as Missouri only recently adopted a "statewide core transfer library of at least 25-lower division courses" (Missouri HB 1042), and interestingly, this new general education policy was part of the same legislation that mandated reverse transfer.

Even when states have common course numbering or a general education core, the infrastructure for maintaining course equivalencies is important to consider. Some states have developed state-level course equivalency systems and tables (e.g., Ohio and Hawaii), and some use external vendors such as USelect or CollegeSource's Transfer Evaluation System to maintain course equivalencies. These technologies provide the infrastructure to support degree audits and are necessary for the identification of course equivalencies for all transfer students. As part of New York's CWID efforts, course equivalencies were analyzed among the community colleges and revealed large gaps in community college course equivalency tables. As a result, significant attention has been paid to updating course equivalency tables within the SUNY system, resulting in thousands of new course equivalencies that support reverse transfer as well as transfer generally.

In addition to course equivalency tables, reverse transfer has prompted new ways of articulating courses not previously considered (and not necessarily desired) to optimize reverse transfer. For example, some states and institutions are considering new course equivalencies and course waivers such that upper-division courses fulfill requirements toward the associate's degree, including elective and general education credit, as well as credit obtained in upper-division courses in the major. Our interviews with state leaders in

<sup>9</sup> See [http://scns.fldoe.org/scns/public/pb\\_index.jsp](http://scns.fldoe.org/scns/public/pb_index.jsp)

Minnesota and Florida, for example, suggest that institutions and states are considering new course substitutions specifically for the purpose of reverse transfer. In Hawaii, the UH system uses a competency-based framework that focuses on existing general education competencies<sup>10</sup> to articulate upper-division courses toward associate's degree requirements, which was used for the purpose of reverse transfer. Hawaii reported that this action is significantly expanding the number of students who are being conferred associate's degrees via reverse transfer. Further, this process is not based on course-to-course articulation but rather a competency-based model that reflects broad disciplinary categories.

In Ohio, Columbus State Community College (CSCC) reported that approximately 80% of the degrees conferred via reverse transfer required course substitutions, in part due to the fact that many of the upper-division courses transferred to CSCC from the university were not articulated in CSCC's existing course equivalency tables. These substitutions were reported to take CSCC a significant amount of time to contact departments and faculty at the university to acquire course syllabi and course descriptions. However, now that new equivalencies are entered into CSCC's course equivalency tables, future students' transcripts will be articulated automatically.

Using a different approach but working toward a similar end goal as Hawaii and Ohio, the University of North Carolina (UNC) system engaged in a mapping process that articulated several university courses with up to three community college courses to increase flexibility when community colleges audit students' degrees for reverse transfer. Each community college received a transcript report from UNC that included course equivalencies for each reverse transfer eligible student, many of which had not previously been articulated. This approach has had the initial benefit of optimizing the number of students that meet associate's degree requirements by expanding course equivalencies, and it may eventually improve articulation processes for all transfer students by showing how competencies are sufficiently comparable to count toward a bachelor's degree.

### Degree Conferral and Advising

This dimension focuses on the degree conferral process, which involves notifying students and institutions about degrees conferred and engaging and advising students who are "near-completers." How states and institutions have optimized this dimension of reverse transfer is also discussed.

#### Notification

If and when students meet all the requirements to be conferred an associate's degree, community colleges typically notify

them that their degrees are being conferred, and the degrees are recorded on the community college transcript. Some community colleges report that students receive an email or letter in the mail notifying them of the degree conferral, but other community colleges go further by inviting reverse transfer students to a commencement ceremony. Anecdotal data suggest some students are excited to attend commencement ceremonies, while others have little interest in participating. Either way, the practice of inviting students to commencement ceremonies may communicate the importance and value of the associate's degree, and make its presence known to other, future students. This method of recognizing reverse transfer associate's degrees through commencement appears to add minimal institutional costs and yet, have potential benefits. By linking student accomplishments to degree recognition, community colleges may be able to communicate the value of reverse transfer associate's degrees to other potential students. To this end, many community colleges are waiving graduation application fees so that students can receive their associate's degrees without cost. For low-income students, this policy may make the difference between getting a degree, or not.

Beyond notifying students, in many states the universities are requesting that community colleges report degree conferrals back to them so that students' university records can be updated. This notification process is important because it not only enables accurate data recording but also ensures that the universities do not include the same students in determining eligibility for reverse transfer in subsequent semesters. Efficiencies are created when systems and institutions can focus on students who remain eligible to benefit from reverse transfer.

#### Engaging and Advising Near-Completers

As noted earlier in this paper, Project Win-Win identified students who were close to meeting degree requirements as "near-completers" (Adelman, 2013), a term that is also useful in the reverse transfer context. Engaging near-completers is a helpful strategy to maximize the number of potential reverse transfer students who may be within a few credits or courses of receiving an associate's degree. For students who are near-completers, institutions in several states (although certainly not all states) are identifying courses and requirements for which students are deficient and communicating those requirements to students via email or a written letter. In some cases, advisors at the universities are counseling students on needed requirements to complete the associate's degree. Grand Valley State University exemplifies an institution that is pursuing this strategy. At the state level, Arkansas and Ohio provided templates of letters and/or emails for institutions to send to near-completers with information about the courses they need to complete to receive an associate's degree.

<sup>10</sup> See <http://www.catalog.hawaii.edu/corerequirements/>

Engaging near-completers is a promising optimization strategy in that it increases the number of students who may ultimately receive an associate's degree, but the impact of this approach is partially dependent on state and institutional eligibility criteria. If the bar is set higher on eligibility criteria based on cumulative college credits (e.g., a "credit right now" approach), many near-completers may not make the eligibility list because the system or institution is not auditing their transcript. Alternatively, if the bar is set lower on eligibility criteria based on the number of cumulative college credits, systems and institutions are more likely to identify students who are near-completers. The case of Minnesota offers insights into careful implementation of this strategy, however. As a representative of CWID in Minnesota wrote in a recent blog on the OCCRL's CWID website,<sup>11</sup> the system's initial eligibility criteria were set too low, resulting in an extremely large number of manual degree audits that did not result in associate's degree conferral. As a result, the process was not perceived as sustainable.

Somewhat unique, the "developmental" approach used by Grand Valley State University goes beyond the "near-completers" population by identifying and advising students who are as far as 30 credits away from the associate's degree. The relative costs and benefits of this approach remain to be determined, but the strategy of advising more transfer students about associate's degree requirements has the potential to expand the number of reverse transfer associate's degrees, especially when system policies do not discourage transfer prior to associate receipt. If states have strong articulation agreements and course equivalencies, then, in theory, much of the general education coursework that transfer students take at the university should transfer back and apply toward a reverse transfer associate's degree.

As noted above, although some states and institutions engage near-completers, some do not. In fact, some institutions are intentional about *not* communicating remaining associate's degree requirements to students. Some officials speculate that if university students who enroll in courses that count toward the associate's degree also learn of the reverse transfer associate's degree, they may veer off track of getting their bachelor's degree, possibly incentivizing them to drop out of a baccalaureate path. They suggest that advising university students of courses that apply toward an associate's degree may confuse them, possibly causing them to question whether they are on track for a baccalaureate.

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<sup>11</sup> See <http://occril.illinois.edu/minnesota-develops-automatic-reporting-process-to-further-refine-reverse-transfer-degree-eligibility/>

To this end, we recommend the best test cases for conferring associate's degrees at varied points along the associate-to-baccalaureate degree pathway may reside in states that grant authority of universities to confer associate's degrees and community colleges to confer bachelor's degrees. Status such as Arkansas and Florida where this type of degree-granting authority exists may provide fertile ground for testing credit attainment toward the associate's and bachelor's degrees, as well as students' varied perceptions of the potential value of these degrees as a function of their collegiate experience.

### Moving Forward

This paper has focused on several dimensions of reverse transfer policies and processes, and it highlights how policies and processes may be influencing results in terms of the number of students who are eligible for and benefiting from reverse transfer. We used initial qualitative and quantitative data to examine how state and institutional policies and processes optimize the number of students who are reverse transfer eligible, and the number of students who have earned reverse transfer associate's degrees thus far. We have identified potential points of optimization that states and institutions may be able to leverage, including improvements in course equivalency systems.

Importantly, CWID has spurred experimentation on transfer and articulation across a sizeable number of states on an unprecedented level, revealing changes in policies and processes that appear important to achieving full-scale implementation of reverse transfer. Our observations at this early stage of CWID is that states have varied in their investment of funding, resulting in equally wide-ranging approaches to implementation. Most states have found implementation to take longer than they originally had planned, with state leaders expressing gratitude for patience of funders to see how new policies and programs play out.

This paper has highlighted the need for leaders of state systems and institutions to understand how reverse transfer policies and processes impact potentially eligible students and also suggests that leaders think broadly about how all transfer students may be affected by system changes aligned with reverse transfer. Numerous policies and processes may be related to the optimization of transfer generally and to the sustainability of systemic change, including policies guiding the integration of student consent into college admission applications and the leveraging of technologies that support the efficient and effective flow of transcript information between systems and institutions. Should these changes associated with reverse transfer take hold, they may improve transfer for all students who matriculate (or swirl) through higher education. Research

dismissing the idea that transfer is limited to a linear trajectory from community college to university was published many years ago (see, for example, Adelman, 1999; de la Santos & Wright, 1989; Townsend & Dever, 1999), suggesting state and institutional changes that recognize varied and nuanced patterns of college course-taking are long overdue.

Moving forward, our research will continue to examine the implementation and sustainability of reverse transfer policies and programs, including conducting more in-depth qualitative and quantitative analysis that help us to understand the impact of the CWID initiative. To facilitate this work, we end this paper with four working hypotheses that have been generated through our thinking about the optimization of reverse transfer.

- Eligibility criteria applied early in the reverse transfer process eliminate students who will eventually qualify if they are allowed to remain in the eligibility pool and are regularly assessed.
- An “opt-out” policy will likely result in larger consent rates among eligible students than an “opt-in” policy. However, most states are pursuing an “opt-in” policy, so an “opt-in” policy that utilizes strategic and persistent methods and that uses technology to obtain consent will likely result in a larger number of students who consent to reverse transfer.
- Investing in technologies to facilitate efficient transcript exchanges, to automate degree audits, and to ensure course equivalencies will result in larger numbers of students who qualify for reverse transfer associate’s degrees.
- Engaging near-completers by advising students on courses and credits that they need to attain an associate’s degree en route to the baccalaureate degree will result in higher numbers of reverse transfer associate’s degrees.

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### CWID Products

The following products are available on OCCRL’s CWID Website: <http://occril.illinois.edu/projects/cwid/resources/>

- CWID Baseline Study Report
- CWID Implementation Profiles
- All or Nothing? Midpoint Credentials for Students Who Stop Short of the Baccalaureate Degree

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