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THE EMERGING ROLE OF PUBLIC HIGHER EDUCATION SYSTEMS IN ADVANCING TRANSFER STUDENT SUCCESS

Results of a National Study

Abstract

Student transfer and credit mobility are inherently issues for public higher education systems to address. Over the past decade, these systems have advanced a range of new policies and practices to support transfer student success such as common general education requirements, transfer pathways in the major, and credit transfer guarantees. This report provides a review of recent system-level transfer-related efforts with data coming from a national survey of system leaders, interviews with experts and a review of grey literature.

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Table of Contents

Executive Summary	4-5
The Transfer "Problem"	6-8
What is a System of Higher Education?	9
Comprehensive vs. Segmented Systems	10
From Systems to Systemness to Transfer Student Success	11
Overview of the Survey	12-15
System Snapshot: SUNY System	13
Stages of Transfer Policy Work	16-17
System Snapshot: University of Wisconsin System	17
Policy Levers Adopted by Higher Education Systems	18
Policy Lever 1: Transfer Credit and/or Course Guarantees	19
Policy Lever 2: Aligning Curriculum	20
Policy Lever 3: Transfer Credit Appeals	21
Policy Lever 4: Reverse Transfer	22
Policy Lever 5: Grading Policies for Transfer	23
Integration of Technology at the System Level to Improve Transfer Student Success	24-25
System Level Data About Transfer	26
Using System Level Data to Address Equity in Transfer	27-28
System Views on Transfer Obstacles	29
Conclusion	30-31
APPENDIX A: Higher Education System/Institution's Stage in Transfer Policy Work	32-33
APPENDIX B: NASH Transfer Commitment Statement	33
References	34
About the Authors	35
List of Figures and Tables	
Figure 1: Map of Survey Respondent Locations	14
Figure 2: Size of Responding Systems by Number of Campuses	15
Figure 3: Size of Responding Systems by Student Enrollment	15
Figure 4: Policy Levers Adopted by Higher Education Systems	18
Figure 5: Student-Level Data Elements Collected by System	26
Figure 6: Categorization of Student Data for Disaggregation	27
Figure 7: Student-Level Data Elements Collected by Systems	27
Figure 8: Resources Available to Under-Served Students	28
Table 1: Percent of Respondents Reporting Activities in Stages of Policy Work	16
Table 2: Areas where Technology could further Student Success	25
Table 3: Data Source Higher Education Systems Use to Track Students Across Institutions	26

Executive Summary

hile most of the focus on "fixing" the transfer problem in higher education has been on articulation agreements and bilateral relationships between institutions, the research suggests that such approaches have not been effective in improving transfer. One of the struggles with prior and continuing approaches to "fixing" transfer is that the work often focuses on how individual institutions want transfer to work rather than responding to how students are actually moving between institutions.

The reality is that nearly all states have opted to use systems to organize their public high education sector and the vast majority of students enrolled in public higher education are enrolled in multi-campus systems; yet these very systems have often been overlooked when it comes to addressing the transfer student crisis. In fact, student transfer and credit mobility are inherently issues for public higher education systems to address – as they sit above the institutions and have a different perch and perspective from which to try to address the various problems with transfer. Systems also have the legal authority to create the policies and the convening power to engage stakeholders from across multiple campuses needed to create more systemic approaches.

Over the past decade, several systems have advanced a range of new policies and practices to support transfer student success such as common general education requirements, transfer pathways in the major, and credit transfer guarantees. This whitepaper provides a review of recent system-level transfer-related efforts with data coming from a national survey of system leaders, interviews with experts and a review of grey literature. The following are key takeaways from the data:

- Nearly all respondents indicated they are actively engaged in work at the system level to improve student and credit mobility within the system.
- Respondents identified five key policy levers most commonly used in their approaches to transfer:
 - Transfer credit and/or course guarantees (78%).
 Many systems have developed policies that enable

- students to move courses that meet general education or major requirements to another institution and have them count toward their general education or major requirements at the receiving institution. This effort is focused on reducing time to degree for transfer students, which can be elongated when their courses only transfer in as electives.
- Aligning Curriculum (61%). Many systems
 have adopted systemwide general education
 frameworks as well as comparable introductory
 courses in certain majors. These efforts are often
 complemented by course guarantee policies
 discussed previously.
- Transfer Credit Appeal (43%). A relatively more recent policy development has been creating system-level structures that allow students to appeal an institution's transfer credit decision. The focus of such efforts are typically on providing parity in how institutions evaluate and award transfer credit throughout the system.
- Reverse Transfer (39%). These policies enable students who leave a community college before earning an associate's degree to transfer credits earned at their new institution back to the community college and, if qualified, be awarded an associate's degree.
- Grading Policies (39%). These policies seek to standardize the minimum grades needed to ensure the transfer of credit between institutions within the system.



- Technology and technology-enabled solutions were identified as an important component of the work that systems are undertaking to support transfer within the system. Technology was identified to support communication of transfer policies; coordination between departments and institutions across technical and functional areas such as admissions, financial aid, and advising; increasing efficiency in credit equivalency decisions and advising tools; and streamlining transcript review.
- Most systems (65%) reported using more than one Student Information System (SIS) across campuses, which created issues for data standardization and sharing.
- Eighty-nine percent of respondents reported that their system tracks individual students across institutions (despite the multiple campus SISs), including collecting data on degrees awarded, course and grade data, and basic academic information. Fewer respondents reported that their cross-campus data system included information on financial aid and general contact information.

- Nearly all systems were making public data disaggregated by race, ethnicity, low SES and gender in order to support discussions around equity in transfer.
- The top five reported resources devoted to equitable transfer include dedicated transfer advisors (93%), dedicated services for historically underserved students (79%), transfer student orientation programs (71%), dedicated courses for transfer students (71%) and faculty engagement (71%).

One of the overall findings was that transfer appears to be an example of how systems of higher education are taking a more active role in student success. Beyond the policy, technology, and data findings provided above, systems are also using their convening authority to diffuse best practices across campuses, create networked-improvement communities that work across campuses to improve student outcomes, and shift the focus of the work from institutions to students. In a word: *Systemness*.



The Transfer "Problem"

rich variety of metaphors have been used to describe the dysfunctional state of the college transfer process: a costly maze, a leaky pipeline, or as Inside Higher Ed would have it, the "Bermuda Triangle," where "transferring students are abused" (Lederman, 2017).

The alarming rhetoric is not without substance. While approximately 80% of community college students aspire to transfer to a four-year institution and earn a bachelor's degree (Community College Research Center, 2015), only 14% of students who entered community college

in Fall 2013 completed a bachelor's degree within six years (Shapiro, Dundar, et al., 2020). Poor transfer student outcomes exacerbate existing equity gaps, as vertical transfer remains an important pathway for upward mobility among traditionally underrepresented students, such as, Black, Hispanic, Indigenous, first-generation, low-income, and returning adult students. While almost one in four Asian students and one in five white transfer students completed a bachelor's degree within six years, only one in ten Hispanic students and one in twelve Black students complete within the same time frame (Shapiro, Dundar, et al., 2017).

If transfer is indeed a broken system, it follows that we must track down the disconnected pieces and repair them. However, herein lies a faulty assumption. Transfer was never a purring engine that blew a gasket nor a watertight pipeline that sprung a leak. In fact, it was never even designed as a system. The U.S. higher education sector is famously flat and decentralized. Institutional diversity produces wide variations in policies; practices; cultures; curricula; and importantly, resources. The misalignment between institutions that produces the perpetual seams in "seamless" transfer is a feature, not a bug, in U.S. higher education.

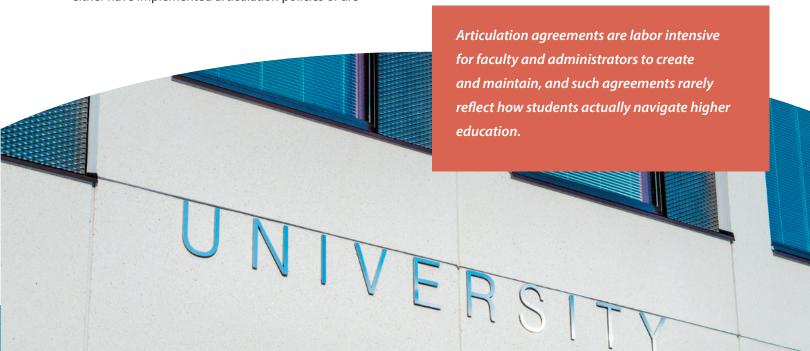
And the transfer problem is not new, nor has it escaped the attention and resources of the higher education sector. Going back decades, many states, systems, and institutions have enacted sweeping policy changes and invested significant resources in supporting transfer student success. Unfortunately, results have shown little improvement, and transfer students are still paying the price—literally. The question is not whether transfer remains a problem, but why the problem persists to such a degree despite extensive efforts to fix it.

In fact, one of the struggles with prior and continuing approaches to "fixing" transfer is that the work often focuses on how institutions want transfer to work rather than responding to how students are actually moving between institutions. Academic program articulation agreements between and among institutions have been a common strategy to facilitate student transfer. The assumption is that academic program articulations will solve transfer credit problems for students by creating "roadmaps" that align curricula and detail how courses will transfer and apply to the degree. Many states and public higher education systems either have implemented articulation policies or are

in the process of doing so. But the reality is that—with thousands of such arrangements between colleges and universities nationwide—transfer environments remain complex, difficult for students to navigate, and ultimately up to the whim of the campuses involved.

Program articulations are typically conceived as "2+2" models, where students complete their first two years of full-time study at a community college and earn an associate degree before transferring to a four-year institution to complete the remaining two years of a bachelor's program. Articulation agreements are labor intensive for faculty and administrators to create and maintain, and such agreements rarely reflect how students actually navigate higher education. This model does not accommodate the realities of student enrollment patterns, and research has shown that they have had limited impact on transfer student outcomes (Spencer, 2019). According to one study, only 8% of all community college transfer students who completed a bachelor's degree followed a 2+2 enrollment pattern, and 63% did not spend two years at the community college before transferring (Fink, 2017). It should not be surprising, then, that a strategy that does not align with student behaviors has not produced the intended results.

Some multicampus higher education systems have begun to take a different approach to addressing the student transfer issue. In part, the leaders of these systems have realized that system administrators have a different perspective than those at the campus level, allowing them to look across multiple campuses and create policy and practices that may better reflect how data have shown students move between and among campuses. In fact, unlike other collaborative efforts,



higher education systems have the governing structure to enact policy reforms across multiple colleges. This multi-institutional approach may be key to accommodating the wide variations in individual student trajectories between and among multiple sectors and campuses.

Fortunately, this system-level work is well underway.

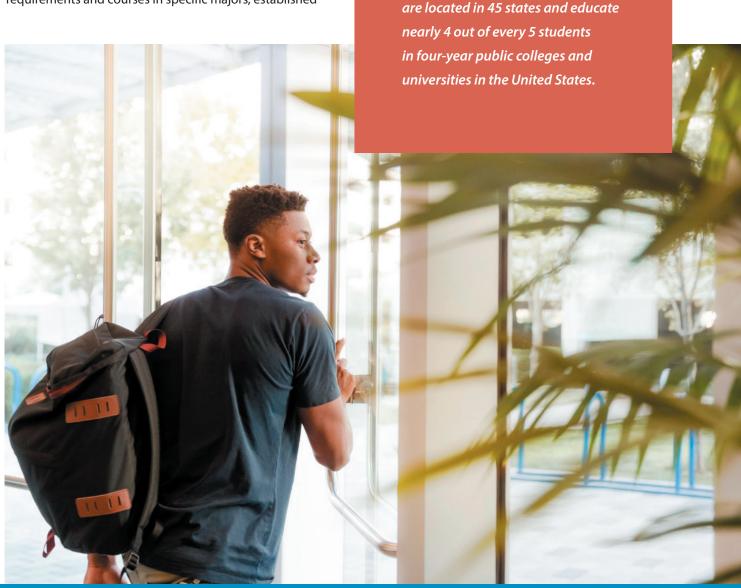
Take, for example, the Seamless Transfer initiative at the State University of New York (SUNY), one of the earliest such system-level efforts (Bringsjord et al. 2017). When the SUNY Office of the Provost analyzed transfer data from across all 64 campuses, the data showed that approximately half of all baccalaureate graduates in the system had earned credits from at least two institutions, and often more. Moreover, the data indicated that students transferred multi-directionally, highlighted the most common multi-institutional degree paths, and indicated which credits were most likely to be lost during transfer. As a result, the SUNY Board of Trustees passed a comprehensive policy that aligned general education requirements and courses in specific majors, established

credit caps, and implemented other technology and advising supports for transfer students.

A five-year assessment showed that student completion rates increased, time-to-degree decreased, and the number of credits at graduation decreased.

From California to New York and Texas to Wisconsin, public systems are advancing efforts to improve the student transfer experience. And, in some states, such as Wisconsin and Maryland, we have seen the development of intersystem transfer initiatives to support students' movement between campuses across different systems.

Public systems of higher education



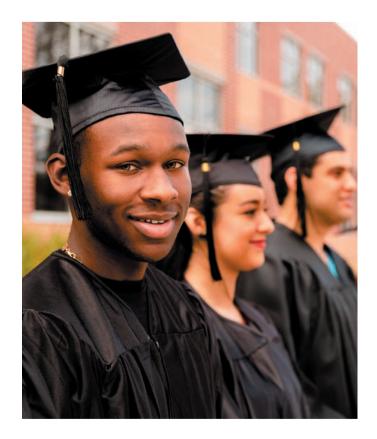
What is a System of Higher Education?

Systems of higher education are the primary ways in which states have opted to organize their public higher education sectors. These are collections of institutions that are governed by a single governing board and typically report to a separate administrative structure, or system administration.

Public systems of higher education exist in 45 states and served 78% of all students in public 4-year higher education in the country in the 2020-2021 academic year. Stated another way, 4 out of every 5 students enrolled in public four-year higher education are part of a system (IPEDS, 2021).

Some states may have a single system overseeing all public higher education in the state such as with the North Dakota University System or have multiple systems, with Texas just creating its seventh system. They can range in size, with the Southern Illinois University system having two campuses, while the State University of New York system having 64 campuses. At least 17 systems are comprised of both two-year and four-year institutions.

Systems, however, are often overlooked in the higher education landscape. Students and faculty operate at the campus level. Courses and degrees are administered at the campus level. Even the federal government collects data based on institutions (not systems) through the Integrated Postsecondary Data System (IPEDs). In fact, in a review of several histories of higher education in the



United States, Lane (2013) discovered that systems were barely mentioned, even though systems have operated in some form or fashion for more than a century.

Yet, today, it seems that systems are increasingly important in the advancement of various student success efforts, including student transfer and credit mobility.

Comprehensive vs. Segmented Systems

There are generally two types of systems, segmented and comprehensive.

Segmented systems are comprised of similar institutional types, such as all two-year institutions or all four-year institutions. In California, for example, there are essentially three systems—one for research universities, one for comprehensive and polytechnic institutions, and one for the community colleges.

In contrast, *comprehensive* systems have multiple types of institutions within one system, such as the Minnesota State College and University System, which governs both two-year and four-year institutions.

Taking a closer look at system responses gives us a perspective of how systems with and without community colleges are tackling transfer:

58% of responses were from systems that only included four-year schools, and 42% of responses were from systems that included community colleges. This difference is important to highlight because of the critical role that community colleges play in transfer student success. Prior research has found that among new first-time community college students, the desire to transfer is especially strong, with as many as eight in ten intending to transfer and earn a baccalaureate degree (Handel & Williams, 2012). Additionally, community college students represent 49% of all students who complete undergraduate degrees (National Student Clearinghouse Research Center, 2017). Systems that included community colleges were less likely, however, to report that they were engaging transfer partners compared to systems that only included fouryear institutions (40% vs. 50%, respectively).

All respondents from systems that included community colleges reported a common general education framework, compared to 85% of those from systems that did not include community colleges. Comprehensive systems (in which two-year and four-year institutions exist within same system) such as Connecticut, Hawai'i, Minnesota, Montana, New York (CUNY and SUNY), Tennessee (TBR), and Utah were substantially more likely to have developed and/or implemented transfer-focused policies than systems consisting only of four-year schools (90% vs. 69%).

From Systems to Systemness to Transfer Student Success

Over the last decade, several multi-campus higher education systems have undertaken initiatives specifically designed to enhance student success.

Examples of such initiatives include improving online learning, redesigning math pathways, and using predictive analytics to improve advising (Gagliardi & Lane, 2022). The area where there has probably been the most activity, though, has been in developing cross-campus policies and practices to support student transfer and credit mobility. In fact, transfer is inherently a system-level problem.

While systems are able to identify and scale best practices across campuses or leverage assets of many campuses to take on specific challenges related to student success, the focus still largely remains on the relationship between an institution and a student. Transfer, however, is based on the mobility of students and credits between campuses, which means that institutional-level responses are not likely to create a seamless transfer process. Even if two institutions are able to figure out a bilateral relationship that works, that one fix only covers a very, very small proportion of transfer students nationwide. This is why some systems of higher education have undertaken efforts to create policies and practices that apply to multiple campuses as well as advance data and technological infrastructures to support these efforts. The result, in some cases, is to move from a patchwork of articulation agreements and bilateral relationships to multi-campus policy frameworks that seek to simplify and streamline the transfer process for students within the system, regardless of where they transfer from or transfer to.

Activities such as transfer fall under a new wave of system-level efforts taking place under the banner of systemness, or the "ability of a system of higher education to coordinate activities of its constituent campuses so that, on the whole, the system behaves in a way that is more powerful and impactful than what can be achieved by individual campuses along" (Zimpher, 2013, p. 28). This movement toward systemness reflects a change in orientation about how systems view their work, which has historically been about allocating, coordinating, and regulating and has evolved to included visioning, facilitating, and leading (Lane, 2013).

To guide this work, the National Association of System Heads (NASH) created a new initiative to guide system-level work on student transfer and credit mobility. This work included the adoption of seven principals to guide this work (see Appendix B) as well as the creation of the NASH Transfer Network, which brings together system leaders across the country to share and advance systemefforts in this area.

Overview of the Survey

To better understand the emerging role of public higher education systems in transfer student success, this study was conducted on behalf of the National Association of System Heads (NASH).

The survey data were collected in February 2020, prior to the start of the pandemic. Representatives of state agencies and system offices that oversee higher education systems across the country were asked to share information about policy work being done within their systems to facilitate transfer student success. It was analyzed with the assistance of the Center for Human Services Research at the University at Albany (SUNY).

The disruptions caused by the pandemic within the higher education pipeline will surely reverberate for years to come in ways that will require further research to understand. However, it is worth examining prepandemic trends, as COVID-19 disruptions have only exacerbated and accelerated the existing equity gaps that affect transfer students, and the work of systems to address these inequities will continue (National Student Clearinghouse, 2022).

This report seeks to provide insights into the state of transfer student policies and activities across and within systems, as well as identify barriers to and facilitators of transfer student success at the system level. Responses from different types of systems were compared when the number of respondents allowed—system characteristics of interest included number of campuses, geographic region, and whether the system included community colleges.

Survey responses were received from 24 systems and four state agencies, more than half of all NASH members and around 40% of all systems in the nation (see **Figure 1**, pg 14). However, the small total number precludes the use of inferential statistics such as significance testing. These analyses should perhaps best be considered exploratory in nature and more like a collection of qualitative case studies than a quantitative statistical analysis, especially regarding any subgroup numbers (for example, regional breakouts) which sometimes fall to numbers of five or less for certain subgroups. These subgroups analyses should be regarded as suggestive rather than conclusive. For this reason, the data sources for questions and subgroups responding to questions are featured prominently throughout the report.

On a related note, the reader should be aware that many states have more than one higher education system. Texas, for example, had six different systems at the time of the survey, and New York had two systems. Therefore, in the regional breakouts, numbers of systems do not necessarily reflect the numbers of states.

System Snapshot: SUNY System

Supporting transfer students across sectors has been a particular area of focus for SUNY in recent years. Transfer students are a large and important student population—both nationally and at SUNY. For all students who earned an undergraduate degree at SUNY institutions in 2018–2019, 48% of baccalaureate degrees and 30% of associate degrees were awarded to transfer students. During academic year 2018–2019, nearly 50,000 students transferred to SUNY campuses.

SUNY students move in complex patterns between the system's sectors. While the majority of transfer students (55%) do follow the traditional two- to four-year "vertical transfer" pathway, 16% transfer from two-year institution to two-year institution, another 16% transfer from four-year to two-year, and the remaining 13% transfer between four-year institutions. Therefore, SUNY's policies aim to support "omnidirectional" transfer, so that wherever a student begins and wherever they aim to go, supports are in place to help them navigate the system effectively.

SUNY's Seamless Transfer Policy (implemented for fall 2015), supports omnidirectional transfer by aligning curricular requirements across all sectors to address barriers to transfer student success. Key features of the policy include:

- All A.A., A.S., and bachelor's degree programs must include the SUNY General Education curriculum, which includes 7 of 10 areas and 30 credits of general education, which are completed in the first 60 credits of a program.
- Common courses in the major (Transfer Paths) for the most popular transfer disciplines. There

- are currently 60 transfer paths created by SUNY faculty groups, involving over 1,300 faculty members to date.
- SUNY maintains a database of General Education (over 16,000 courses) and Transfer Path courses in the major (over 23,000 courses). These courses are guaranteed for transfer with a grade of C or better.
- The policy also instituted credit caps of 64 credits for associate degrees and 126 credits for baccalaureate degrees.

Assessment is also an important element of the policy. While SUNY does not yet have a full six years of post-implementation data, early results are promising.

- The percentage of two-year to four-year transfers increased by 6% (49% to 55%).
- The percentage of students transferring with completed associate degrees increased by 5% (41% to 46%).
- Student outcomes data have also shown statistically significant improvements in student outcomes for associate degree completion rates, time-to-degree, credits at completion, and on-time (four-year) baccalaureate completion. Importantly, underrepresented minority students saw greater than gains in all student outcomes.
- However, equity gaps remain between underrepresented minority students and all students, and between transfer and nontransfer students for on-time baccalaureate completion.

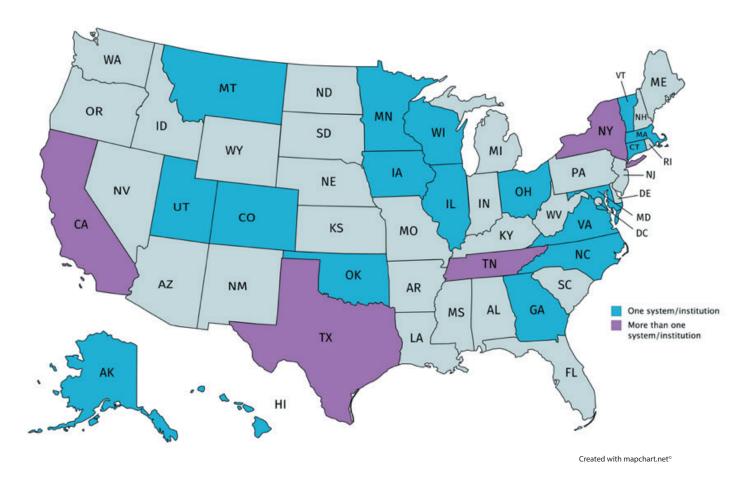
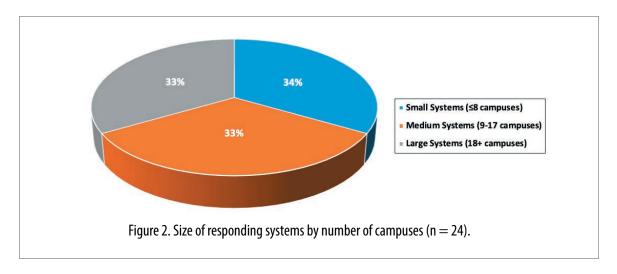


Figure 1. Map of survey respondent locations.

Respondents from the South and West regions of the United States were most heavily represented (39% and 25%, respectively), while responses from the Northeast and Midwest each constituted 18%.¹

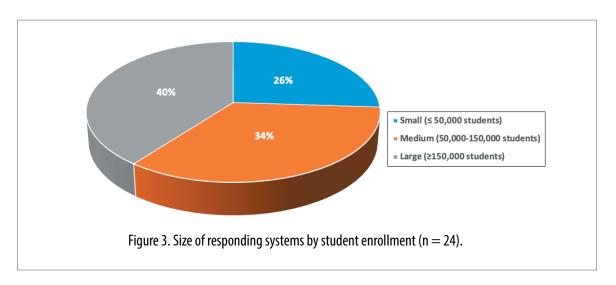
¹ This geographic representation was fairly similar to NASH membership overall, but with a modest overrepresentation of systems in the West (which constitute 17% of NASH members) and the Northeast (which constitute 14% of NASH members). Systems in the Midwest constitute 22% of NASH membership.



System size² by number of campuses³ ranged from two to sixty-four campuses, with the University of North Texas system (one of several systems in Texas) being the smallest and the State University of New York system being the largest. For analytic purposes, system size was classified into three categories based on the number of campuses in the system, as shown in **Figure 2** (small \leq 8; medium 9–17; large 18+).

System size⁴ by student enrollment in thousands ranged from ten (Vermont State Colleges) to 430 (California State University). As with number of campuses, size by enrollment was classified into three categories (small \leq 50,000; medium = 50,000–150,000; large > 150,000), as shown below in **Figure 3**.

The majority of responses (58%) were from systems⁵ that only include four-year campuses, but 42% of responses were from systems that include community colleges.⁶



- 2 The size of the four state agencies that responded to the survey ranged from three to twenty-nine campuses.
- 3 The smallest systems in the NASH membership were substantially underrepresented among survey respondents. Only five of the twenty-one NASH systems that include fewer than eight campuses responded to the survey. In contrast, eight of the fifteen NASH members with eight to seventeen campuses and all seven of the NASH members with eighteen or more campuses responded. In addition, three of the non-NASH respondents were also in the largest category by number of campuses (Virginia, Ohio, and Oklahoma).
- 4 The four state agencies that responded ranged in size from 89,000 to 525,000 students.
- 5 Of the four state agencies that responded, three included two-year institutions, and one included only four-year institutions.
- 6 This response rate was an overrepresentation compared to NASH membership. Only 29% of the 41 NASH member systems include two-year colleges.

Stages of Transfer Policy Work

Respondents were asked to identify where their system stood in regard to seven roughly sequential stages of policy work.

Respondents were instructed to mark all options that applied with the acknowledgment that policy work could be proceeding in parallel stages (hence, responses are not mutually exclusive). As summarized in Table 1 below, more than 40% of survey respondents reported activities in these three stages: data collection, policy development, and engaging transfer partners. More than 30% of survey respondents were in these stages: implementation, policy revision, and post-implementation assessment. Only 8% of respondents indicated that they were in the pre-policy planning stage.

Table 1. Percent of respondents reporting activities in stages of policy work (n = 24)

Activity	Respondents (%)		
Pre-policy planning	8		
Data collection	42		
Implementation	38		
Policy development	42		
Post-implementation assessment	33		
Policy revision	38		
Engaging transfer partners	46		

7 See Appendix A for detailed system/agency-level responses.

These stages were collapsed into a single summary variable that reflected the most advanced stage a respondent indicated: Pre-implementation (pre-policy planning and/or data collection), Implementation (implementation and/or policy development), or Postimplementation (post-implementation assessment and/or policy revision). Engaging transfer partners (e.g., internal stakeholders, such as faculty, provosts, and other campus leaders) was something that could occur within any of these stages of policy development, so this activity was considered separately.

Interestingly, the systems with the largest *number* of campuses were the least likely to be reporting engagement with transfer partners (25%) compared to small and medium systems (50% and 63%, respectively). This finding may reflect one of the key challenges in transfer policy work, as communication and coordination across institutions is notoriously difficult to establish and maintain. The findings for engagement of transfer partners by student enrollment showed the opposite trend—the smallest systems were the least likely to be engaging transfer partners (25%), while the medium and large systems were more likely to be engaging transfer partners (57% and 56%, respectively).

System Snapshot: University of Wisconsin System

Since 2018, the University of Wisconsin System (UWS) has invested in technology, established policy and shared statements and agreements, and renewed transfer practices to meet changing system and student needs in the state. Among the most significant aspects of this work is the creation of an Inter-System Steering Committee to establish a vision, create a transfer agreement, and examine and renew policies related to the flow of students between the UWS and the Wisconsin Technical College System (WTCS). A joint statement, approved by the boards of both systems, provides direction for a shared vision, common language, shared responses to state-legislated mandates, and student support in the transfer experience. The System also sponsors convenings for representatives from the Wisconsin Association of Independent Colleges and Universities (WAICU), the Tribal colleges in Wisconsin, and the UWS to provide a support network and to advance the work of transfer.

The UWS recently renewed the Universal Transfer Credit Agreement, a state-mandated agreement between the UWS and the WTCS, WAICU, and the Tribal colleges in Wisconsin. Through this agreement, up to 72 credits that will transfer between the two major higher education systems in the state, with options for the WAICU and Tribal colleges to join in parts of the agreement. The courses in the agreement fall mostly under general education and in most cases will allow students to transfer at junior-level standing.

Information about transfer courses is housed in the Transferology platform, which is student facing and accessible to transfer personnel. This investment represents significant support by the UWS to ensure that transfer information is accurate; current; and accessible to students, families, and university staff. Academic advisors

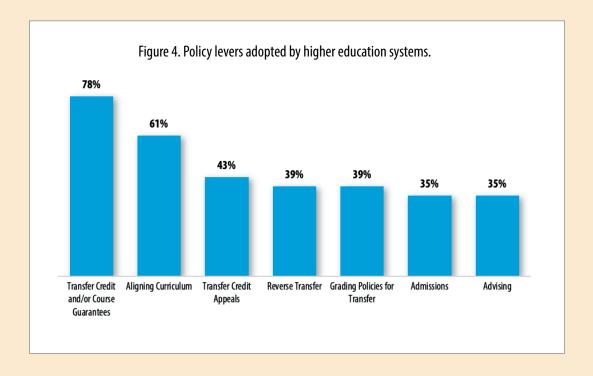
use Transferology to help students see how courses, exams, and/or military learning experiences transfer in the UWS, WTC, and Tribal college systems, which improves transparency in the transfer process and assists students in making educated decisions about transferring credit. Academic advisors use TransferologyLab, an extension of Transferology for staff, to access course equivalencies and create bundles of a student's coursework to show different transfer scenarios. Transferology helps students explore options about which they may not have known and makes the transfer process more seamless and easier to navigate for students and advisors. Student support for transfer is also provided through adoption and implementation of the EAB Navigate program and a 360 Advising model. The universities also participated in a 15 to Finish campaign to assist students in completing more credits before transfer.

A renewal of the UWS Board of Regents policy related to transfer supports the alternative means through which students may be awarded credit, such as through prior learning assessments, external testing, and articulation agreements. The Board policy drives the revisions in the System level policy to clarify the award of credit and transfer credit—two viable pathways to transfer in the state. A guaranteed transfer pathway and policy were created to ensure that students from within the UWS could transfer to any other university in the system. Transfer policies also support the development of numerous articulation agreements to help students to complete baccalaureate-level programs after attending associate degree-granting institutions. (Special thanks to Dr. Carleen Vande Zande, from the University of Wisconsin System, for contributing this section.)

Policy Levers Adopted by Higher Education Systems

majority (78%) of respondents reported that their higher education systems have developed specific policies to address transfer student success (n =23). All the respondents indicated that these policies resided at the system level, while 89% reported that their policies also resided at the state level, 83% reported that their policies resided at the campus level, and 50% reported that there were policies at all three levels.

As **Figure 4** shows, the policy levers most commonly adopted by higher education systems focused on transfer credit and/or course guarantees (78%), followed by aligning curriculum (61%), transfer credit appeals (43%), reverse transfer (39%) and grading policies for transfer (39%). In this white paper, we briefly discuss only the top five policy levers.



Policy Lever 1: Transfer Credit and/or Course Guarantees

Students tend to earn more credits

complete a degree and/or simply

stop short of earning a degree in

than the minimum needed to

many cases because of policies at campuses that lead to unsuccessful credit transfer and/or course guarantees (Zeidenberg 2012). One of the most widespread policies relating to guaranteeing credits and/or courses is transfer between campuses within a system. These policies have, historically, contained holes that allowed receiving campuses to accept transfer credits as electives—without guaranteeing they would count toward degree requirements—or to create additional restrictions that made it difficult for students to transfer credits. As part of the effort to improve transfer, systems have been working to create greater alignment of curricula (also see policy lever 2), standardize how credits can move among campuses in the system, and devise more clear guidance to ensure that appropriate credits are counted toward a student's degree requirements after transfer.

Twenty-two systems reported that efforts were being led to develop common, transferrable coursework in majors that would allow for guaranteed transfer and/or courses. At CUNY this policy lever has been adopted as courses taken and passed

for credit at one CUNY institution must transfer for credit at any other CUNY college:

- Courses that fulfill a required Common Core requirement at any CUNY college will transfer for required Common Core credit at any other CUNY college
- Courses that fulfill a Flexible Common Core requirement at any CUNY college will transfer for Flexible Common Core credit at any other CUNY college
- Courses that fulfill a College Option requirement at any CUNY college will transfer for College Option credit at any other CUNY college

In the University of Hawaii System (UH), existing articulation and transfer policies are being revised in the following substantive ways. Through UH's STAR system, students who begin at a two-year campus can "pin" a pathway to a four-year campus and map out not only the courses they need but the optimal point of transfer. UH is also implementing a new Transfer Evaluation System to ensure that upon acceptance of a transfer credit at one campus, that credit transfers to all campuses. In addition, UH is establishing a systemwide articulated General Education curriculum and translating a prior set of practices into a system-wide policy.

Survey responses showed that 89% of comprehensive systems reported that their systems were leading such efforts, compared to 69% of respondents from segmented

EXAMPLES:

- · City University of New York
- Colorado State University System
- · State University of New York
- Tennessee Board of Regents
- University of Hawaii System
- · University of North Carolina System
- University of Wisconsin System
- Utah System of Higher Education
- · Vermont State Colleges

systems. Only 57% of respondents from the smallest systems by campus size were working on policies related to transfer credit guarantees, compared to 88% of respondents from medium-sized systems and 86% of those from large systems.

The findings shifted when system size was measured by student enrollment—83% of the systems with the fewest students were working on transfer student guarantees compared to 71% of the medium-sized and 78% of the largest systems by student enrollment.

Policy Lever 2: Aligning Curriculum

Curricular alignment has risen in popularity as a system-wide policy over the last decade. It is usually categorized by (1) general education courses and (2) courses in the major. Many systems have adopted system-wide general education frameworks and are standardizing requirements across campuses, with some going so far as having common course numbering for general education courses. The survey data showed the following trends.

Common General Education

framework: 91% of systems responded "yes" and 9% responded "no" to having a common general education framework. All the largest systems reported a common general education framework, compared to 88% of both the medium-sized and the smallest systems.

Common course numbers:

42% of respondents reported that their system had common course numbers, but it was also observed that comprehensive systems are far more likely to report having common course numbers (70%) than segmented systems that only include four-year schools (21%). Respondents from large and medium-sized systems were also more likely to report common course numbers (both 50%) than those from small systems (25%).

Under this policy lever, campuses are often required to accept successfully completed general education requirements or at least not make students retake courses in an area that was already completed. A second effort has been to create systemwide alignment in majors. This policy typically applies to an agreement on lower division courses in a major that can be transferred between campuses. Most typically this type of alignment has required two-year campuses to

EXAMPLES:

- Board of Regents, State of Iowa
- California State University System
- Utah System of Higher Education
- University of Wisconsin System
- · University System of Maryland
- University of Alaska System

align with four-year campuses, though a small number of systems are working to adjust curriculum at both two-year and four-year campuses, recognizing that students now move multidirectionally.



Policy Lever 3: Transfer Credit Appeals

As a means of providing oversight and ensuring compliance with transfer policies, some systems have instituted processes through which students may appeal campus-level decisions regarding the acceptance and/or application of transfer credit. A system-level credit appeals process may be offered in addition to campus-level appeals. In the case of SUNY, for example, students must appeal to the receiving campus before appealing to the SUNY system provost. SUNY also offers campus-to-campus appeals, whereby campuses can appeal regarding matters relating to the implementation of transfer policies, such as the guarantee of specific courses from another SUNY campus, or if the courses are determined to be academically insufficient by the receiving campus. Overall, 43% of the systems reported offering transfer credit appeals.

As a policy lever, transfer credit appeals offer both benefits and limitations. First, transfer credit appeals can serve as a corrective for individual students who may be experiencing difficulties in transferring credits and having them applied appropriately to degree. Given the decentralized nature of campuses and systems, staff members or academic departments may not be aware of transfer policies or may be unwilling to follow them. Providing a mechanism for students to challenge decisions on a case-by-case basis can help achieve compliance and

consistency for individual students. Second, transfer credit appeals can help resolve issues in a timely manner, such that decisions will not negatively impact a student's academic career. Many types of oversight, such as analytics based on historical student data, have such a lag in reporting that problems cannot be resolved in time to help individual students. Finally, successful appeals may serve as "case law," where the decision in a single case can serve as a model for similar cases in the future. For example, if an academic department has a pattern of rejecting coursework from a particular discipline or sending campus, a decision that reverses one case can uncover these biased practices and allow reforms to ensure that students do not experience similar situations in the future.

However, transfer credit appeals present several limitations. To submit an appeal, students must be aware of the policies in the first place. They must also understand not only the transfer appeals policies, but the applicable campus- or systemlevel policies that would support the appeal, such as transfer credit guarantees for general education or courses in the major. In addition, even if students are aware of the policies and understand them, they may be hesitant to "confront" their receiving campus by questioning the authority of local academic decision makers. Therefore, the most vulnerable students are less likely to benefit from the transfer credit appeals process, either through lack of knowledge of the policies

EXAMPLES:

- City University of New York
- State University of New York
- University of North Carolina System
- Utah System of Higher Education
- Minnesota State College & Universities
- Montana University System

themselves or a hesitancy to employ them. Transfer credit appeals are also limited by organizational structure. In cases where there is a single board or administration with academic authority over both the sending and receiving institutions, effective transfer credit appeals are possible. But if the transfer occurs between systems without a single governing board (e.g., a community college system and a university system), then the lack of authority would likely prohibit overturning an academic decision at the campus level.

In any case, transfer credit appeals are one policy lever that may improve transfer student success, but the limitations also may explain why less than half of systems indicated that they are using them. More research would be helpful to understand how or if the implementation of transfer credit appeals benefit students.

Policy Lever 4: Reverse Transfer

Reverse transfer allows students who have successfully earned credits at a community college and subsequently transfer to a four-year college before earning an associate degree to transfer credits earned at the four-year college back to the community college for the purpose of earning an associate degree.

Note that the policy lever described here refers only to transferring credits, not situations in which students themselves transfer from a four-year to a two-year institution. The survey results indicated that 20 systems were participating in a reverse transfer program, and the majority of these programs were managed centrally at the system level.

Reverse transfer was more common among comprehensive systems that include two-year schools (90%) vs. segmented systems with only fouryear schools (79%). Seventeen of the 20 respondents who said their campuses were participating in a reverse transfer program answered a further question about the types of reverse transfer programs in which they were currently engaged: national program (12%), statewide program (59%), system-wide program (47%), and local agreements between campuses (35%). Respondents were asked to select more than one option so their system engagement in reverse transfer programs could be simultaneously at all four levels.

Reverse transfer offers several benefits to students. Far too many students earn credits and stop out of higher education without earning a credential, as experienced by the more than 36 million "some college,

no degree" students (Shapiro, Ryu, et al., 2019). While not all these students would meet the requirements of an associate degree, those who do could benefit from degree completion, in such ways as increased earning potential and employment opportunities. Research has also shown that earning an associate degree through reverse transfer was a significant predictor of bachelor's degree completion within two years for students enrolled in college and pursuing a baccalaureate degree (Taylor & Giani, 2019). Reverse transfer is also a tool that may help to close equity gaps, as Black, Latinx, Indigenous, and low-income students often begin their postsecondary education at community colleges and are most vulnerable to stopping out without earning a credential (Pocai & Davis, 2021).

Yet, bringing reverse transfer programs successfully to scale has proven challenging. For students who have stopped out of higher education, communication can be difficult given institutional access to accurate, upto-date contact information. Students may also have financial or academic holds on their accounts, preventing them from obtaining transcripts and other documentation needed to facilitate processing, although to address this issue, NY Governor Hochul recently declared SUNY would no longer withhold transcripts due to financial holds on student accounts. Even if students are successful in applying for reverse transfer, it is difficult to meet degree requirements. Students may not have earned enough credits at the awarding campus (commonly 30 credits at a community college), or the credits earned at the four-year campus do not align and meet the associate degree requirements. This misalignment

EXAMPLES:

- Massachusetts Department of Higher Education
- State University of New York
- University of Illinois System
- University of Wisconsin System
- University of Hawaii System

is compounded by limitations in advising resources at both sending and receiving institutions.

Several national initiatives have aimed to understand and improve reverse transfer, including Project Win-Win and Credit When It's Due. These two initiatives helped to advance the field in developing best practices for reverse transfer. Taken together, the Institute for Higher Education Policy (n.d.) reports that over 20,000 associate degrees were awarded through these initiatives at 556 institutions in 17 states. While impressive in the aggregate, these results amount to only about 36 degrees awarded, on average, per institution. Given the amount of labor and expense involved in developing the infrastructure needed to process reverse transfer at scale, the initial return on investment appears to be minimal. However, recent advances in technology, advising practices, and policies hold promise that reverse transfer can be improved going forward, and the survey results indicate that the majority of systems are working toward that end by using this policy lever.

Policy Lever 5: Grading Policies for Transfer

When applying for transfer, a question that frequently comes up concerns the grades required to transfer coursework and which types of credit are included in the GPA. This policy lever adopted by systems focuses on the requirement for the minimum grades that can be accepted for transfer across campuses. Thirty-nine percent of survey respondents indicated that their systems are involved in practices to improve transfer student success

through this policy lever. For credits to successfully transfer, institutions typically create minimum grade requirements for transferring credit into the institution, into a major, or as general education requirements. The most common minimum grade requirement is "C" (2.0) unless nontransfer students are held to a higher grade in a similar course. For example, if an economics class requires a C to pass, transfer students should have a C or higher grade in their transfer class. If a higher grade (B) is required in a major course, a B or higher may be required for the transfer course to

In addition, the course has to be similar in content and/or learning outcomes to be accepted at the transferring institution. However, while grades are critical in meeting transfer requirements, they are usually not factored in as part of the transfer student's GPA (American Council on Education, n.d.).

In the past year during the pandemic, concerns have been raised about colleges' expansion of pass/fail grade options, which could obstruct successful transfer in the future, as pass/fail grades are usually not quaranteed for transfer. 8

8 There is anecdotal evidence that some systems extended transfer guarantees to pass/fail grades during COVID-impacted terms, though comprehensive data about the number of systems doing this or the impact was not available at the time of publication.



Integration of Technology at the System Level to Improve Transfer Student Success

systems are adopting and integrating technology solutions to advance transfer policy goals. Technology solutions can range from simple forms of communications to predictive analytics advising software. Respondents indicated that their systems are employing technology to better understand and communicate transfer policies; coordinate between departments and institutions across technical and functional areas such as admissions, financial aid, and advising; increase efficiency in credit equivalency decisions and advising tools; and streamline transcript review.



One challenge cited in technology standardization is the variability in student information systems (SIS) across campuses. Most systems (65%) reported using more than one SIS across campuses. The most commonly cited SIS was Ellucian's Banner system (16 respondents), while 11 respondents used home-grown systems, and 7 cited Oracle Peoplesoft. Variability in SIS platforms were more common in four-year systems (67%) than two-year systems (63%), as well as large (71%) and medium-sized (80%) systems. Small systems were less likely to use more than one SIS (50%).

Despite the lack of standardization in SIS across campuses, most systems (89%) reported developing workarounds that allowed them to track individual students across institutions. In addition, 96% of respondents reported that they can compare and analyze completion and success metrics for transfer students across institutions within the system. These findings indicate that a considerable effort has been expended by systems to patch together the infrastructure necessary to perform analytics across disparate technology systems and their accompanying data nomenclature. Respondents reported additional

investments in student-facing technology supports, such as Ellucian's Degree Works and Transfer Finder, CollegeSource TES and Transferology, as well as homegrown solutions.

Nineteen respondents provided narrative responses to a question about in what areas technology could further student success.

As Table 2 shows, these responses were wide-ranging, with only two areas mentioned by more than two respondents. Four of the respondents mentioned better understanding and communication of transfer policies, and four mentioned coordination between departments and institutions (e.g. admissions, financial aid, advising).

Taken together, the results capture technology in the transfer space as evolving to meet system policy goals, while constrained by variability in core infrastructure across campuses. More research and investment is needed to develop the tools required to effectively support transfer student success.

Table 2. Areas where technology could further student success (n = 19)

Area	Respondents (n)
Better understanding and communication of transfer policies	4
Coordination between departments and institutions (admissions, financial aid, advising)	4
Efficient replication of credit equivalency decisions	2
Streamlining transcript review	2
Efficient advising tools (e.g. finding shortest paths to degree)	2
Accelerating transfer credit evaluation	1
Analytics	1
Identifying students who could benefit from reverse transfer	1
Statewide portal for transfer students	1
Common information system across institutions	1
Need funding to utilize existing technology	1
Increase efficiency and timeliness of current tools	1

System Level Data About Transfer

Eighty-nine percent of respondents (n = 18) reported that their system tracks individual students across institutions. One respondent reported that their system did not, and one respondent did not know. Eighty-two percent of respondents (n = 17) indicated that their system records students who earned college credits in high school as transfer students. Twelve percent said their system does not. One respondent did not know.

Seventy-nine percent of our survey respondents reported that their institution/system/state has already developed a common definition of a transfer student, while 17% said that they had not, and 4% said they did not know. While the definitions of transfer students may be similar, establishing a standard definition of a transfer student would remove some of the ambiguities that complicate the transfer maze. Of note, all the respondents from comprehensive systems reported having developed a common definition of transfer student, compared to 64% of respondents from segmented systems that included only four-year schools. Similarly, all respondents from the largest systems reported a common definition, compared

to 75% of those from medium-sized systems and 63% of those from the smallest systems. We speculate that this pattern could be due to a high degree of overlap of large systems and comprehensive systems that contain community colleges.

Fourteen respondents provided responses to the open-ended question about what data source their system uses to track students across institutions. While answers varied widely, eight of

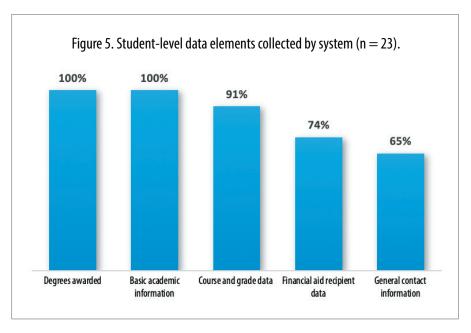
9 By student enrollment, medium-sized systems were least likely to have developed a common definition of transfer students (57%), compared to 88% of the smallest and 89% of the largest systems.

Table 3. Data sources used to track students across institutions (n = 14)

Source	Respondents (n)			
Own system or state system	8			
National Student Clearinghouse	2			
Banner	1			
UAchieve	1			
SLDS	1			

these respondents (57%) mentioned either their own system level or state system. See Table 3 above for full breakdown of qualitative responses.

Twenty-three respondents answered the series of questions about what student unit data elements were collected (**Figure 5**). Nearly all respondents reported that their system collected data on degrees awarded, course and grade data, and basic academic information. Fewer respondents reported that their system included data on financial aid awards and general contact information.



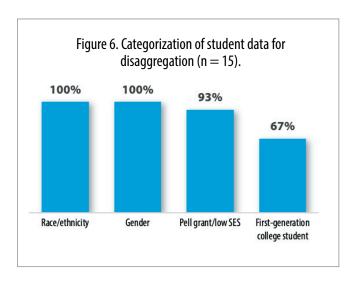
Using System Level Data to Address Equity in Transfer

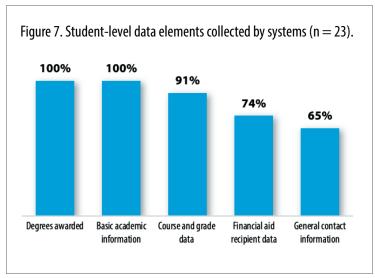
While the problems associated with transfer (e.g., loss of credits, lack of clear transfer pathways, inadequate advising and extended time to degree) have gained attention, what is often less discussed is how these problems unduly affect students from underserved and underrepresented backgrounds.

Research shows that serious inequities exist in the transfer process that disproportionally impact students of color (Khan 2020; Shapiro, Dundar, et al., 2017). These inequities are also noticeable for low-income students, who are far more likely to start at less-expensive community colleges and then transfer. Inequities are further widened in STEM fields for transfer students of color, women, students with mental health issues and/ or learning disabilities, first-generation students, and students from low socioeconomic backgrounds (Wang, 2020).

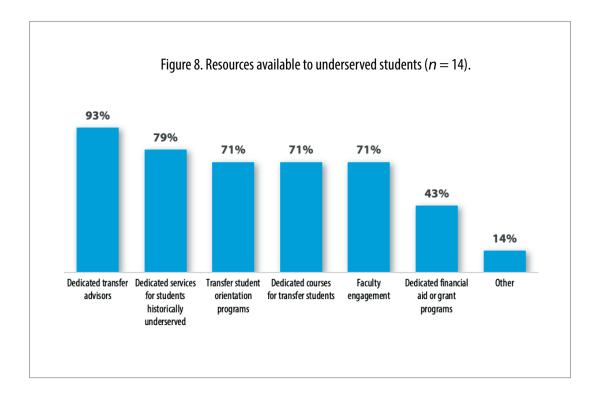
Through our survey, we found that systems are using and categorizing system-level disaggregated data to address equity in transfer. In fact, 96% of respondents (n = 23) reported that their system made student success data public, while 4% (n = 1) did not. Additionally, systems are recording and reporting data disaggregated by race, ethnicity, low SES and gender. These data are then used to create transfer student equity plans from racially minoritized, underserved, Pell grant/low SES, and first-generation students.

Figure 6 presents responses from 15 systems on how student data were categorized in disaggregation. All respondents reported that data were disaggregated by race/ethnicity and by gender, and 93% reported that data were disaggregated by Pell grant/low SES. Sixty-seven percent reported that data was disaggregated by first-generation college student status.





Twenty-three respondents answered the series of questions about what student unit data elements were collected. As illustrated in Figure 7, nearly all respondents reported that their system collected data on degrees awarded, course and grade data, and basic academic information. Fewer respondents reported that their system included data on financial aid receipt and general contact information.



We also asked survey respondents about resources for underserved minority students in their systems that would ensure a smooth transition during the transfer experience (**Figure 8**).

Only 14 respondents answered this question (it is unclear how many respondents skipped the question vs. did not have any of these resources available). Half of the respondents who replied to this question indicated that they were assessing these programs, while 14% said they were not, and 36% said they did not know.

As illustrated in Figure 8 above, the top five reported resources especially devoted for equitable transfer include dedicated transfer advisors (93%), dedicated services for historically underserved students (79%), transfer student orientation programs (71%), dedicated courses for transfer students (71%) and faculty engagement (71%).

The reality is that for student transfer to be addressed in a meaningful and equitable way, we need to better understand how students—especially those from underserved and underrepresented communities—are experiencing transfer, and then create a multilevel ecosystem that supports transfer student success. This process includes not only making resources available to underserved student populations on a greater scale, but also collecting more detailed data and using these data to evaluate the impact of various policies on improving transfer student success, equitably.

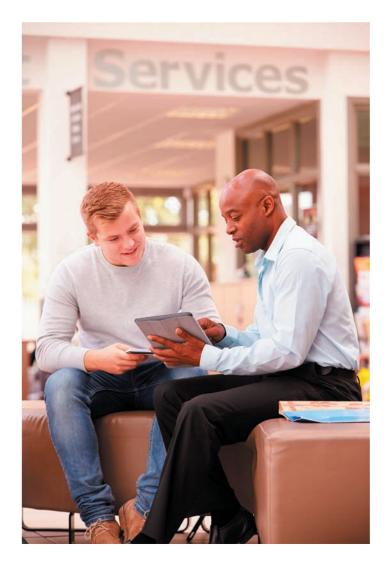
System Views on Transfer Obstacles

In our survey, we asked respondents to identify the most vexing challenge in the transfer puzzle. The reported obstacles included misperceptions of difficulty in transferring, maintenance of course equivalencies, timely evaluation of transfer credits, data access, aligning curricula across institutions, and collaboration across institutions.

Some of these challenges can be addressed through advances in technology, which may open opportunities for policy innovations. For example, building and maintaining equivalencies may be addressed by recent developments in machine learning. With funding from the Bill & Melinda Gates Foundation, SUNY and UC Berkeley have recently formed a partnership to test this methodology at SUNY campuses. If successful, this strategy may be scaled to address data gaps, particularly at under-resourced institutions, and eventually allow for greater individualization of transfer pathways for students.

We then presented respondents with this question and invited them to share their thoughts on it: If systems could fix one problem related to transfer, what would it be?

Responses included developing transfer pathways among a wide range of institutions with differing missions, better communication and advising regarding the transfer process and timelines, developing a general education program that can transfer as a block or as individual courses, creating a data portal that includes all credits a student has earned and a calculator for non-collegiate learning, expanding the pipeline of transferready students across a broader range of community colleges, flexibility in acceptance of credit, and systemwide course numbering.



Conclusion

his report presents a snapshot of efforts to support transfer student success across 24 public higher education systems and four state agencies in 20 states. A long journey lies ahead to fix transfer, and through this paper we have illustrated the scope, scale, and complexity of systems across the country as they have adopted policies to improve transfer student success. This paper is a step in promoting further discussion and research.

It should be noted that the survey was completed just prior to the outbreak of the pandemic. It remains to be seen if higher education systems will change their policies and strategies to reflect disruptions in the education pipeline. To that end, these results can serve as a useful snapshot to examine a 'pre/post-pandemic' analysis for future research.

As this report confirms, higher education systems are aware of the problems within the transfer process and are already trying to fix them. What we want to call attention to is the collective power of systems in coming together to improve transfer student outcomes and close equity gaps. Additionally, to meaningfully improve transfer student outcomes, systems need to place students at the center, meeting them where they are and where they transfer while accommodating the large differences in individual student trajectories between and among multiple sectors and campuses.

Finally, we must remember that, as is the case for students, one size does not fit all for higher education systems. While many of the problems are common, each system operates within its own political and organizational environment. These local contexts inform what is possible and practical in terms of system policies and practices. As the survey results show, systems vary in terms of the policy levers they employ and where they are in the cycle of development and implementation of transfer policies. Ongoing research is needed to track these activities, their successes, and their challenges. NASH looks forward to continued engagement from the field to understand the needs of transfer students and how public systems of higher education can work together to meet them.

It will be critical to engage in ongoing assessment to identify and share successful policy levers, as well as to acknowledge those strategies that may not be worth investment.

Looking for More Information?

More information about NASH's transfer initiatives can be found at https://ts3.nashonline.org/transfer/.

Those interested in joining the NASH Transfer Network are invited to reach out to network coordinator, Dr. Dan Knox, at dan@nash-dc.org.



APPENDIX A: Higher Education System/Institution's Stage in Transfer Policy Work

Institution/System	Pre- Policy	Data Collection	Implementation	Policy Development	Post- Implementation	Policy Revision	Engaging Transfer Partners
Oklahoma State Regents for Higher Education		Х	Х		Х	Х	Х
State Council of Higher Education for Virginia		Х	Х	Х		Х	Х
Board of Regents, State of Iowa			Х		Х		Х
California State University					Х		Х
City University of New York (CUNY)	X	Х	Х	X	Х	Х	
Colorado State University System		Х					
Connecticut State Colleges and Universities		Х	Х		Х		Х
Massachusetts Department of Higher Education		Х	Х		Х	Х	Х
Minnesota State Colleges & Universities		Х					
Montana University System				Х			
State University of New York					Х		
Tennessee Higher Education Commission			Х	Х	Х		Х
Texas A&M University System							
The Ohio Department of Higher Education	Х	Х	Х	Х	Х	Х	Х
University of Alaska System			Х	Х			х
University of California	Х	Х	Х	Х			Х
University of Hawaii System						Х	Х
University of Illinois		Х				Х	Х
University of North Carolina System		Х	Х		Х	Х	Х

Institution/System	Pre- Policy	Data Collection	Implementation	Policy Development	Post- Implementation	Policy Revision	Engaging Transfer Partners
University of North Texas System				Х			
University of Tennessee System				Х			
University of Texas System		Х					
University of Wisconsin System			Х			Х	Х
University System of Georgia				Х			
University System of Maryland						Х	
Utah System of Higher Education		Х	Х			Х	х
Vermont State Colleges				Х	Х	X	

APPENDIX B: NASH Transfer Commitment Statement

NASH has identified the following seven components of a "transfer-affirming and transfer receptive culture."

- Holistic Transfer Student Success Model: Ensuring inclusive, quality and student-centric academic and extra-academic support specifically designed for transfer students, including advising, math success, and high-impact practices.
- *Equity Focused*: Prioritizing and incorporating equity goals and outcomes for all phases of the transfer continuum/lifecycle.
- Dual Credit: Contextualizing and ensuring quality and equity in dual enrollment and dual credit systems as critical gateways in complex transfer landscapes now impacted by COVID-19.
- Advancing Technology: Supporting the development and sustainability of student-facing technology tools and platforms designed to accelerate transfer by enhancing credit portability and applicability to majors.
- *Transfer Analytics*: Advancing transfer analytics as a new and increasingly important frontier, albeit rife with challenges around data-sharing and FERPA, platforms, capacity, etc.
- *Faculty Engagement*: Promoting the role of faculty in transfer student success, including advising, mentoring, credit evaluation, etc.
- Assessment: Analyzing and assessing transfer models, including data and interventions with
 evidence of success, across systems and states, and with attention to student populations
 disaggregated by race/ethnicity, income, gender, first-generation status, geography, and other
 characteristics.

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Lane, J., Khan, M., and Knox, D. (2021), The Emerging Role of Public Higher Education Systems in Advancing Transfer Student Success: Results of a National Survey. Adelphi, MD: National Association of System Heads.



NASH National Association of System Heads

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The Power of Systems

Through the National Association of System Heads (NASH), higher education system leaders have come together to author and adopt The Power of Systems: Advancing Prosperity for the Nation. With it, a network of systems is being created, working collaboratively in improvement cycles to deliver impact for student success at scale, with particular emphasis on the redress of inequities and the promotion of economic and social mobility for all. Our Agenda actualizes the power of "systemness:" moving beyond competition within and across systems and towards integrated services, seamless student transfer and credit mobility, shared academic programming and predictive data analytics in service to our students. It charts a compelling, collaborative vision for sustainable

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