



EVALUATING TRANSFER STUDENT SUCCESS AND EQUITY

A Primer on Quantitative Data for Two- and Four-Year Institutions

A TACKLING TRANSFER REPORT | 2021



Evaluating Transfer Student Success and Equity:

A Primer on Quantitative Data for Two- and Four-Year Institutions

A TACKLING TRANSFER REPORT | 2021

Authors: William Carroll & Tania LaViolet

Contributing Analysts: Heather Adams, Rebecca Lavinson & McKenzie Maxson

TACKLING TRANSFER

The Aspen Institute College Excellence Program, HCM Strategists, and Sova have joined together through the Tackling Transfer initiative to partner with institutional leaders, policymakers, and practitioners in Minnesota, Texas, and Virginia to dramatically improve transfer outcomes for baccalaureate-seeking students who begin at community colleges. This comprehensive effort incorporates policy, practice, research, and strategic communications to foster the conditions for scaled and measurable improvements for baccalaureate-seeking transfer students, including the large number of students from low income backgrounds and students of color who begin their education at community colleges.

The Aspen Institute College Excellence Program aims to advance higher education practices and leadership that significantly improve student learning, completion, and employment after college—especially for the many students from low-income backgrounds and students of color on American campuses.

HCM Strategists is a public policy and advocacy consulting firm committed to removing barriers and transforming how education is delivered. Our work focuses on developing sound public policy, aligning teaching and learning practices and advancing meaningful accountability and equitable strategic financing. HCM works to support leaders and organizations that prioritize the voices and outcomes of Black, Hispanic, Native American, recent immigrant, low-income and adult students.

Sova focuses on improving the quality and accelerating the pace of complex problem solving in the areas of higher education and workforce development. Animated by a core commitment to advancing socioeconomic mobility for more Americans, Sova pursues its mission through distinctive approaches to will-building, strategic planning, change leadership and process improvement.

Our work on transfer is made possible by the generous support from Ascendium, ECMC Foundation, Joyce Foundation, and the Kresge Foundation.

Acknowledgments

The authors of this work would like to thank the national, state, and institutional transfer leaders and research contacts who generously shared their time, insights, and experiences for the development of this report:

Pam Cavanaugh, Associate Vice Provost for UCF Connect, University of Central Florida

Daryl J. Davis, Assistant Vice President, Analytics and Reporting, Institutional Research, Valencia College

Angela Detlev, Assistant Provost, Institutional Research Office of Institutional Effectiveness and Planning, George Mason University

Gesele Durham, Associate Provost for the Office of Institutional Effectiveness and Planning, George Mason University

John Fink, Senior Research Associate, Community College Research Center

Colleen Gold, Policy Planning Specialist, Office of Institutional Research, Northern Virginia Community College

Barbara Hopkins, Director of Curriculum Development, Northern Virginia Community College

Jennifer L. Nelson, Coordinator of University Transfer and Initiatives, Northern Virginia Community College

Monal Patel, Associate Vice Provost, Institutional Research and Decision Support, Virginia Commonwealth University

Constance W Peyton, Director, Institutional Research, Virginia Commonwealth University

Terese Pratt, Assistant Director, Academic Advising Center and Director of the Transfer Program, University of Utah

Sharon (Sheri) Robertson, Associate Vice President for Academic Affairs and Interim Chief Academic Officer, Northern Virginia Community College

David Shirley, Director, Office of Institutional Effectiveness and Assessment, Old Dominion University

Seth Sykes, Associate Vice Provost for Transfer Initiatives, Virginia Commonwealth University

We are also grateful David Marcus and Taylor Boulware for their thought partnership and editorial expertise on this publication.

Introduction

Imagine this transfer partnership scenario: key senior leaders, faculty, and administrators from a community college and four-year institution pore over transfer student outcomes data—from high-level measures like graduation rates to more granular information like course-level grades in community college. As they sift through the data, they ask, “what is working well? What isn’t?”

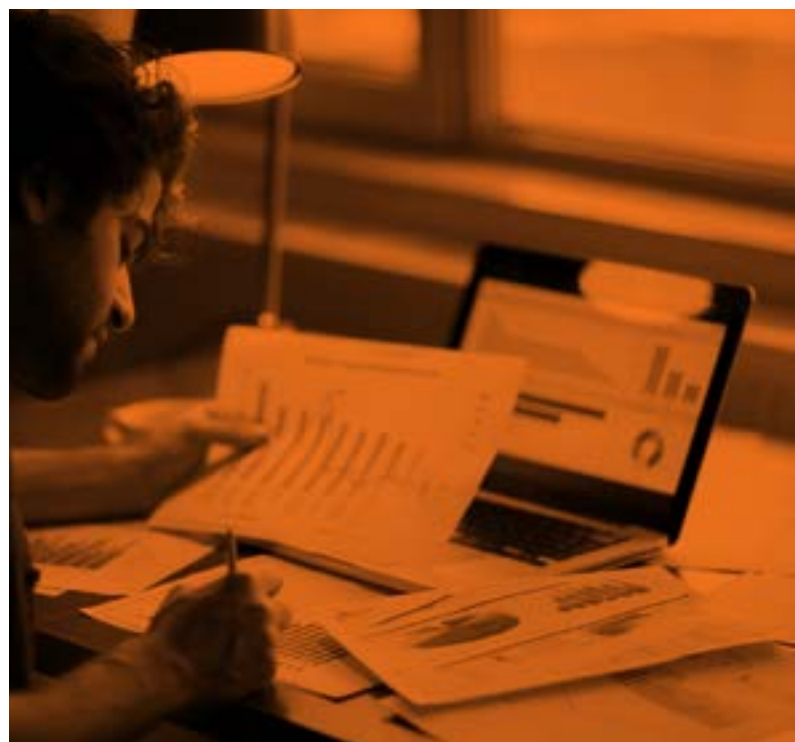
It is an annual exercise essential to realizing ambitious transfer goals and building trust among partners. The data review is also action-oriented—when the data expose areas for improvement, the partners work together to better align curricula and advising to advance shared goals for improved and more equitable transfer student success. This scenario is not fiction. It is exactly what happens between the University of Central Florida (UCF) and Valencia College, which share a comprehensive transfer student outcomes dashboard that is updated every term.

This wasn’t always the case. The UCF and Valencia story is one of continuous improvement, with their data dashboards symbolic of that philosophy. Long before arriving at course-level data embedded in sophisticated visualizations, the partners started in a place that will resonate with others in higher education: a bold vision and strategy for student success, a set of basic metrics to guide reform efforts, and regular routines to interpret the data collaboratively.

This report provides information to transfer partners aiming to develop data-sharing routines in service of their larger transfer student success and equity strategies. It includes data guides that summarize key quantitative measures that leaders and practitioners from community colleges and four-year universities can use to evaluate how well their institutions and partnerships are serving transfer students, identify areas of opportunity for improvement, and make the case to key stakeholders. The data guides include

detailed definitions, recommended disaggregation, and derivative analyses—all ready to be shared with analysts from institutional research or effectiveness offices.

The report also takes a deeper dive into the data-sharing culture that has helped shape the UCF-Valencia relationship and the nationally acclaimed DirectConnect to UCF® program as an example of how the data can be put into action to support better and more equitable outcomes for transfer students.



The Data-Driven Culture Behind the National Success Story

The University of Central Florida and Valencia College

DirectConnect to UCF® is best known for its programmatic elements: clearly defined academic and nonacademic milestones, personalized coaching, and guaranteed admission to UCF for students from six partnering Florida state colleges. Valencia is UCF's largest transfer partner, sending over 4,500 students each year.

DirectConnect to UCF® is a bona fide success story. In 2019, after 14 years in operation, UCF conferred over 50,000 bachelor's degree through the program. Of those fifty thousand, a total of 28,959 were awarded to students who transferred from Valencia.¹ In a typical graduating class, students from lower-income backgrounds and communities of color are overrepresented in comparison to first-time-in-college (FTIC) graduates.

At the state level, a strong policy environment that supports clear 2+2 programs and applicability of transfer credit certainly helps foster the conditions for DirectConnect's success.² What sets UCF and Valencia apart is a partnership enterprise whose data-driven culture is rivaled only by its unwavering focus on student success and equity for students from historically underrepresented communities.

An Evolving Evaluation Framework Rooted in Shared Goals

"The goals will drive the data," said Jeff Jones, the former vice provost for UCF Connect and UCF Global, who led UCF's DirectConnect efforts from 2013 until his retirement in October 2020.

Stakeholders at both UCF and Valencia have a clear understanding of the goals of DirectConnect. First, through transfer: to prepare more local students—especially those from minoritized backgrounds—

to thrive in a regional economy that is putting a growing premium on bachelor's degrees. And second: to ensure that those students graduate as efficiently as possible to make their education affordable.

The goals have remained a constant north star, but the way UCF and Valencia evaluate their partnership continues to deepen and grow more sophisticated. Until 2014, UCF published annual PDF feedback reports on transfer student outcomes for each of the DirectConnect partners. The reports addressed the diversity of students transferring to UCF; what colleges and majors those students were selecting, and the frequency of major changes; students' GPAs in the first fall and at graduation; and whether and how quickly students were graduating and from which programs.

Alongside the data reports—in a step that is too often overlooked by other transfer partnerships—UCF and Valencia maintained regular routines to examine the data, individually and together. For instance, DirectConnect leaders at UCF currently meet internally once a week, while VPs and provosts from UCF and Valencia meet four times a year to identify opportunities to advance their relationship and processes. Additionally, the presidents, faculty, and administrators across the DirectConnect consortium meet annually to discuss the data and learn from each other's challenges and triumphs.

At Valencia, this routine evaluation increased the demand for more granular transfer student outcomes data. Senior leaders used the feedback reports to shape DirectConnect 2.0, the vision for the next phase of their partnership with UCF and a core part of Valencia's 2016-2021 Impact Plan.

Among the plan's priority objectives were the use of course-level data to support stronger curricular alignment with UCF, and a more robust data partnership with UCF to drive decision making.

Since then, UCF's office of Institutional Knowledge Management moved the PDF reports to cloud-based dashboards that are updated each term. The dashboards include new analyses that help all DirectConnect partners understand relationships between the transfer student academic journey and their outcomes. For instance, partners can use the dashboards to visualize which prerequisite courses at the state colleges best prepare transfer students for success in their UCF pathway, and whether the time elapsed between taking a prerequisite at the state college and the next course in the sequence at UCF is related to student outcomes. The findings are informing curricular alignment and transfer advising processes and structures.

To realize DirectConnect's goals fully, UCF and Valencia recognized the need to extend their focus to what happens before students arrive on Valencia's campus. In partnership with the School District of Osceola County and Orange County Public Schools, UCF and Valencia launched the Central Florida Education Ecosystem Database (CFEED), a pre-kindergarten through postsecondary

data-sharing collaborative aimed at identifying concrete actions that can increase student success. Identifiable student-level data sets CFEED apart from earlier data-sharing agreements.³ While UCF and Valencia's evaluative efforts depended on data from past transfer students to improve practice and policy for future transfer students, CFEED is paving the way for real-time interventions.

Future Outlook

UCF and Valencia have sharpened the focus of their broad vision and goals for transfer by identifying aspirational targets for transfer student success and equity. They did this through increased sophistication in evaluating transfer student outcomes data. For instance, UCF included a 75 percent four-year graduation rate goal for transfer students for the 2016-2021 period of its strategic plan.⁴ Valencia incorporated concrete goals for transfer student outcomes and equity as part of its 2021-2030 strategic planning discussions with its board of trustees.⁵ By defining their vision, in purpose and measure, UCF and Valencia can evaluate through data whether they are on track to realizing this progress.



Building Internal Transfer Student Outcomes Reporting Capacity

Many institutions can replicate the routines of data sharing and review between UCF and Valencia. But for some acquiring the data—even the basic elements—that support those routines may be challenging.

Currently, federal reporting requirements do not offer a practical framework for evaluating community college transfer outcomes.⁶ Additionally, state or system-level public reporting often lacks consistency and transparency, especially for outcomes for transfer students of color and from lower-income backgrounds. For these reasons, many two- and four-year institutional leaders must rely on their offices of institutional research or effectiveness to collect, report, and examine fundamental transfer student outcomes data.

We have found starting places that make this work possible in even the most resource-constrained environments. State data reporting, though incomplete, can offer basic, high-level outcomes and allow benchmarking for public (and sometimes private) institutions. Data from the National Student Clearinghouse (NSC), whose datasets trace student enrollment and completion across multiple locations over time, is also a good starting place. Researchers can analyze NSC data using the [Tracking Transfer](#) framework, a set of five common measures that can be used by two- and four-year institutions, as well as states and systems, to evaluate the effectiveness of community college transfer.⁷

Ultimately, institutional leaders can push to develop the more detailed evaluations that can support continuous improvement of transfer strategy, policy, and practice. More specifically, leaders can invest a mix of time, influence, and resources to enable the necessary internal data processes, infrastructure, and capacity. In this

report, we aim to guide that investment. We propose a set of analyses that builds on the foundational *Tracking Transfer* measures and can provide additional context to inform and evaluate institution- or partnership-level transfer reform efforts. We combine insights from several sources:

- **As part of the [Tackling Transfer](#) project:**
 - The state-level transfer goal-setting process in Minnesota, Texas, and Virginia ([see report](#) for further information on goal setting)
 - The design of state- and institution-level transfer data reports for public two- and four-year institutions in Texas and Virginia
- **Semi-structured interviews with institutional experts, primarily from UCF, Valencia, and Virginia two- and four-year institutions**
- **A review of existing literature and a sample of publicly available transfer datasets from states and systems⁸**



Transfer Student Success and Equity Data

Executive Summary of Basic Key Performance Indicators

Use: We recommend the following data for presidents and provosts/Chief Academic Officers to evaluate annually, both with key stakeholders in academic and student affairs at their individual institutions and in collaboration with their two- or four-year counterparts.

Executive-Level Data Disaggregation: It is important to understand who your transfer students are and where the transfer process might have inequities. Where applicable, disaggregate basic measures by—at minimum—whether students completed an associate degree before transferring, demographics (for example, race/ethnicity and income), and for each top transfer partner institutions. Other comparison groups include program/major, full-/part-time status, age, commuter status, first-generation status, veteran students, Deferred Action for Childhood Arrivals (DACA) recipient, student parents status, specialized cohort program participants (e.g., scholarship cohorts, bridge programs), and other groups that may be of interest to leaders in specific institutional contexts.

Two-Year Institution Basic KPIs		Four-Year Institution Basic KPIs	
KEY QUESTIONS	MEASURE	KEY QUESTIONS	MEASURE
<i>How many of our students want to transfer?</i>	Bachelor's intent	<i>How many of our new students transferred from community college?</i>	Annual entering community college transfer-in cohort
<i>Are students taking the early steps associated with transfer success?</i>	College-level math and English completion	<i>How common is prior community college enrollment among our entire student body?</i>	Total annual community college transfer enrollment
<i>How many students are transferring and how long does it take them?</i>	Vertical transfer-out	<i>How well are transfer students being retained?</i>	Fall-to-fall transfer student retention rate
<i>Are students completing associate degrees before transferring?</i>	Associate degree completion prior to transfer	<i>How do transfer students fare academically?</i>	Community college transfer-in cohort GPA
<i>How many credits are students earning before transferring?</i>	Average total credits earned prior to transfer	<i>How many transfer students complete their degrees and how long does it take them?</i>	Community college transfer-in cohort bachelor's completion
<i>How many students are completing bachelor's degrees after transferring?</i>	Transfer-out bachelor's completion	<i>How many credits does it take transfer students to complete their bachelor's degrees?</i>	Average total credits earned, bachelor's completers
<i>How effective is our institution at promoting bachelor's degree completion?</i>	Community college cohort bachelor's completion	<i>How many of our graduates rely on community college transfer pathways?</i>	Bachelor's degrees awarded to transfer students

Operationalizing Transfer Evaluation

The tables in this report provide more detailed guidance for institutional research and effectiveness offices, including suggested data definitions; an expanded set of disaggregated data (for example, major/program level), additional compound or derivative analyses, and other notes that aim to support senior teams, faculty, and administrators in using the data to evaluate institution- and partnership-level transfer practice and policy.

Two-Year Institution Transfer Student Success and Equity Basic Dataset Details

Appendix
Two-Year Institution Transfer Student Success and Equity Basic Dataset Details

Measure Name	Measure Description	Recommended Disaggregation*	Suggested Derivative or Compound Analysis	Notes
Bachelor's intent	The count and proportion of students in the degree-seeking, first-time-in-college entering cohort* who self-report an interest in attaining a bachelor's degree.	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	In addition to providing important and early student-level information to advisors, data on bachelor's intent, especially when disaggregated by demographics, can be used to make the case to four-year partners that transfer from community college can support enrollment, diversity, and equity goals. Students can self-report bachelor's intent through the application process. An alternative to self-reported data is enrollment in a transfer-oriented degree or course-taking pattern. The advantage to self-reported bachelor's intent is that it does not exclude students who enroll in degrees that are not considered toward transfer.
College-level math and English completion	The count and proportion of the entering cohort who receive a passing and transferable grade in college-level math and English by the end of their first year of community college.	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	Course completion should be reported for math only, English only, and math and English in combination. Most four-year institutions will only allow students to transfer courses with a C- grade or higher. We recommend counting students who receive a passing and transferable grade in a college-level math and/or English course by the end of their first year. Two-year institutions may need to determine if there is divergence between what they and their four-year partners consider "college-level" what each considers a passing grade, and the implications these differences may have for the course being an indicator of transfer success.
Vertical transfer rate	The count and proportion of students in the entering cohort that transferred to a four-year institution within two, three, and up to six years from community college entry.	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	Top-line disaggregation: four-year institutions by transfer students enrolled from the two-year institution. Six-year transfer-out data are available through the NCC. The proportion or rate of transfer should be calculated based on a denominator that includes all entering degree-seeking students, not just the students who indicate bachelor's intent upon entry. This approach leaves a wide net to include all students who may aspire to a bachelor's degree that state indicators of bachelor's intent may not fully capture.

Four-Year Institution Transfer Student Success and Equity Basic Dataset Details

Four-Year Institution Transfer Student Success and Equity Basic Dataset Details

Measure Name	Measure Description	Recommended Disaggregation*	First-time-in-college (FTIC) comparison	Suggested Derivative or Compound Analysis	Notes
Annual entering community college transfer-in cohort	Count of new students enrolled at the four-year institution as of the fall survey date who transferred in from a two-year institution.	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	✓	Top-line sending institutions* by two-year transfer student enrollment. Two-year transfer enrollment as a proportion of entering class (first year + transfer).
Total annual community college transfer enrollment	Count of the total number of new and continuing students enrolled at the four-year institution as of the fall survey date who transferred in from a two-year institution.	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	✓	Proportion of total enrollment made up of students who transferred from two-year institutions.
Fall-to-fall transfer student retention rate	The proportion of students in a community college transfer-in cohort who were still enrolled the following fall.	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	✓	Some institutions may consider reporting equivalent measures for spring- or summer-start transfer students.
Community college transfer-in cohort GPA	Average cumulative GPA of two-year transfer students over time (e.g., at enrollment, after first term, first year, and at graduation).	✓ Demographic Academic Major	✓ Annual Level First-time-in-college	✓	When combined with program-level disaggregation, four-year institutions can work in partnership with two-year schools to align curricula where transfer student performance could improve.

See [Appendix](#) for full tables

Setting up for success:

Using institutional transfer goals to audit basic data processes and systems

Institutional data systems may not include key identifiers for community college transfer students.⁹ As institutional leaders determine their transfer student success and equity goals, they should ask for an audit of whether their institutions's data collection, entry, and warehousing systems would support the reporting and evaluation of their desired outcomes. Questions might include:

1. What transfer student data are being collected and entered into the customer relationship management (CRM) or student information (SIS) systems?
2. What quality control mechanisms are in place to ensure transfer student data are being reliably captured?
3. At four-year institutions, are those responsible for data entry including fields such as transfer student's origin institution name and type, their incoming GPAs, or how many credits students are transferring in? What sources of data (for example, registrar transcript evaluation, admissions, financial aid) need to be accessed and/or integrated to perform desired assessments?
4. At two-year institutions, how and when is bachelor's intent captured? How are transfer and bachelor's completion being tracked, overall and by student destination?

Building on the Basics

The Need for Complementary Qualitative Data

The proposed quantitative measures can indicate only whether transfer milestones in the aggregate are being met—not how or why. Complementary qualitative data from student focus groups and surveys that assess transfer student experiences are essential to building an understanding of the numbers and how they relate to transfer practice and policy. Collection of qualitative data should include a range of transfer student perspectives—including those who intended to but did not transfer or complete their bachelor's—and interrogate multiple aspects of transfer student experiences across two- and four-year institutions, such as knowledge and usage of services, perception of supports and challenges, and indicators of life circumstances not typically captured by student information systems. Starting points include existing survey instruments, such as the Survey of Entering Student Engagement (SENSE),¹⁰ the Community College Survey of Student Engagement (CCSSE),¹¹ and the National Survey of Student Engagement (NSSE),¹² all of which can be used to assess prospective or current transfer student engagement, an important marker of student experiences.

Another strong example of qualitative transfer data is the biennial University of California Undergraduate Experience Survey, which collects responses on student satisfaction and engagement and, more recently, food insecurity and homelessness.¹³ The UC System analyses, which are available by individual campus level, can be filtered to focus on transfer students; this brings crucial visibility to the experiences of a student population that is too often underrecognized and underserved.

Next Frontiers

Formative Evaluation

In this report, we recommend analyses that are summative in nature, aiming to support the improvement of future transfer practice and policy. Formative evaluation of transfer practice, such as assessments after transfer advising appointments or A-B testing of transfer student communications campaigns, are an additional layer of assessment that can support current and prospective transfer students in real time. For instance, University of Utah advisors at Salt Lake Community College administered a survey at the conclusion of transfer advising appointments to test student understanding of articulation agreements. Scores indicated room for greater clarity, which led to changes to the transfer advising training manual and student-facing resources.

Benchmarking at the State and National Level

Unless adopted by states or systems, institutional adoption of the recommended evaluation framework would not allow for cross-institutional or peer comparisons, which are often used to understand relative effectiveness and build support among key stakeholders. One promising development: the expansion of the NSC's Postsecondary Data Partnership (PDP), which allows users to evaluate and benchmark institutional outcomes and equity, including for transfer students. The PDP provides interactive data dashboards and visualization by combining NSC data with transcript and demographic data that is self-reported by institutions in a standardized format. The PDP's transfer measures are still in the earlier phases of development, especially for four-year institutions. Still, the PDP should be able to support widespread tracking and benchmarking of critical transfer student outcomes in the coming years.

In the meantime, scaled adoption of these institution-level recommendations can help lay the groundwork for future transfer outcomes benchmarking opportunities at the system, state, and national levels.

Advanced Institutional Measures

We have seen many examples of more advanced analyses that two- and four-year institutions can pursue individually and in partnership to inform their efforts to improve transfer student success. Examples include:

- Evaluating whether students are meeting the Early Momentum Metrics recommended by CCRC; these are early milestones strongly associated with increased likelihood of transfer and completion, especially for historically underserved student populations.^{14,15}
- Using degree audits to measure credit applicability to degree requirements, such as the work being piloted by the City University of New York's Articulation of Credit Transfer project.¹⁶
- Tracking whether community college students that have entered a structured transfer pathway (for example, a specific major/pre-major as opposed to an unstructured general studies or transfer associate degree) are completing the right classes that support timely transfer and completion in the program.¹⁷
- Assessing critical transfer practices at both the two- and four-year institutions, such as the proportion of students that have met with a transfer advisor or used transfer advising services at particular milestones (such as after their first semester or after completion of 30 credits).¹⁸
- Understanding the impact of major change patterns on community college transfer student outcomes at the two- and four-year level.¹⁹
- Evaluating post-high school college enrollment, student success, credit accumulation and transfer, and credit applicability to degree requirements for dual enrollment students.²⁰

Conclusion

For most institutions, the scope and sophistication of UCF and Valencia's transfer student outcomes evaluation may be an aspirational state. Yet the underlying transfer partnership culture of data-driven decision-making and continuous improvement is universally replicable. We hope this guide provides a strong point of reference for two- and four-year institutions as they reform their data systems. In doing so, they can bring greater visibility to community college transfer students, a critical part of ensuring greater success and equity.

Appendix

Two-Year Institution Transfer Student Success and Equity Basic Dataset Details

Measure Name	Measure Description	Recommended Disaggregation*					Suggested Derivative or Compound Analyses	Notes
		Demographics	Enrollment Intensity	Program/Major ^A	Award Level	Destination Institution		
Bachelor's intent	The count and proportion of students in the degree-seeking, first-time-in-college entering cohort ^B who self-report an interest in attaining a bachelor's degree	✓	✓	✓				<p>In addition to providing important and early student-level information to advisors, data on bachelor's intent, especially when disaggregated by demographics, can be used to make the case to four-year partners that transfer from community college can support enrollment, diversity, and equity goals.</p> <p>Students can self-report bachelor's intent through the application process. An alternative to self-reported data is enrollment in a transfer-oriented degree or course taking pattern. The advantage to self-reported bachelor's intent is that it does not exclude students who enroll in degrees that are not oriented toward transfer.</p>
College-level math and English completion	The count and proportion of the entering cohort who receive a passing and transferrable grade in college-level math and English by the end of their first year of community college	✓	✓	✓			<p>Transfer-out and bachelor's completion by math/English course completion</p>	<p>Course completion should be reported for math only, English only, and math and English in combination.</p> <p>Most four-year institutions will only allow students to transfer courses with a C grade or higher. We recommend counting students who receive a passing and transferrable grade in a college-level math and/or English course by the end of their first year.</p> <p>Two-year institutions may need to determine if there is divergence between what they and their four-year partners consider "college-level," what each considers a passing grade, and the implications those differences may have for the course being an indicator of transfer success.</p>
Vertical transfer-out	The count and proportion of students in the entering cohort that transferred ^C to a four-year institution within two, three, and up to six years from community college entry	✓	✓	✓		✓	<p>Top five destination four-year institutions by transfer students enrolled from the two-year institution</p>	<p>Six-year transfer-out data are available through the NSC.</p> <p>The proportion or rate of transfer should be calculated based on a denominator that includes all entering degree-seeking students, not just the students who indicate bachelor's intent upon entry. This approach casts a wide net to include all students who may aspire to a bachelor's degree that static indicators of bachelor's intent may not fully capture.</p>

Two-Year Institution Transfer Student Success and Equity Basic Dataset Details

Measure Name	Measure Description	Recommended Disaggregation*					Suggested Derivative or Compound Analyses	Notes
		Demographics	Enrollment Intensity	Program/Major ^A	Award Level	Destination Institution		
Associate degree completion prior to transfer	The count and proportion of students who transferred within two, three, and six years who also earned an associate degree before transferring	✓	✓	✓	✓	✓	Top five destination four-year institutions by transfer students with associate degrees who enrolled from the two-year institution	Evidence shows that students who complete their associate degree before transferring are more likely to attain a bachelor's degree.
Average total credits earned prior to transfer	The average total credits earned at the two-year institution by students who transferred to a four-year institution in a given academic year	✓	✓	✓	✓	✓		<p>Credit accumulation totals at the point of transfer, especially when disaggregated by award level, allow community colleges to assess efficiency and cost to transfer students.</p> <p>We recommend including developmental/non-college-level education credits in the count to get a more accurate picture of the duration and cost of enrollment, and breaking down the credits by college- vs. non-college level when possible. As an alternative, community colleges might also consider comparing the number of college-level credits earned to all credits attempted for transfer students.</p> <p>Community colleges that enroll large numbers of students with prior International Baccalaureate® (IB) or Advanced Placement (AP) courses may need to consider additional analyses that specify credit origin.</p>
Transfer-out bachelor's completion	The count and proportion of four-year transfer students who completed a bachelor's degree within six years of starting at the community college	✓	✓	✓	✓	✓	Top five destination institutions by bachelor's completion rate	<p>This measure evaluates whether students complete bachelor's degrees after transferring from community college.</p> <p>Six-year bachelor's completion data are available through the NSC.</p>
Community college cohort bachelor's completion	The count and proportion of degree-seeking students in the entering cohort that completed a bachelor's degree at any four-year institution within six years of starting at the community college	✓	✓	✓	✓			This compound measure evaluates bachelor's completion across the full entering community college cohort. Using bachelor's intent as a baseline, it gives a sense of how effective transfer efforts are at supporting students in attaining their goals.

Two-Year Institution Transfer Student Success and Equity Basic Dataset Details

* *Recommended Disaggregation (full description):*

1. *Demographics (race/ethnicity, Pell-eligibility, age, first-generation status, etc.),*
2. *Enrollment Intensity (full-time, part-time),*
3. *Program/Major (e.g., Engineering, Associate of Transfer Arts or Science, Applied Associate),*
4. *Award Level (Associate Degree completion vs. non completion),*
5. *Destination Institution.*

When possible, institutions should explore where cross tabulation may be informative (for example, transfer enrollment by program disaggregated by race/ethnicity).

^A *At many community colleges, transfer degree programs are generic, focusing on general education courses without differentiating pathways to different majors. For these analyses to inform equity reforms and curricular alignment, colleges need to evaluate more specific programmatic pathways within general associate degrees. We recommend conducting these analyses at increasing levels of specificity, starting with broader categories of awards/associate degrees (such as AA, AS, AAS, Direct Transfer Agreements/Associate Degrees for Transfer), and moving toward evaluating areas of study (such as Social Sciences or Life Sciences) and, ideally, even more specific majors (such as early childhood education or biology) within those degrees.*

^B *For the purposes of this guide, we adapt the Jenkins and Fink (2017) definition of the entering cohort to include degree-seeking, first-time-in-college (FTIC) students who started at the college in a given academic year (as opposed to a fall start), including part-time students but excluding current and prior high school dual enrollment students. In the absence of more reliable institutional data on students' degree intentions, we recommend the paper's definition of degree-seeking students as those who "meet either of the following two conditions:*

1. *They enrolled full-time for at least one term within 12 months of starting or*
2. *they enrolled at least half-time for any two terms within 18 months of starting postsecondary."* We also strongly recommend conducting a distinct analysis of Dual Enrollment student outcomes, as reflected in the "Advanced Measures" section.

^C *Jenkins and Fink (2017) counted a community college student as having transferred if they ever enrolled at a four-year institution for at least one term during a given tracking period.²¹*

Four-Year Institution Transfer Student Success and Equity Basic Dataset Details

Measure Name	Measure Description	Recommended Disaggregation*					First-time-in-college (FTIC) comparison	Suggested Derivative or Compound Analyses	Notes
		Demographics	Enrollment Intensity	Award Level	Program/Major ^A	Sending Institution			
Annual entering community college transfer-in cohort	Count of new students enrolled at the four-year institution as of the fall survey date who transferred in from a two-year institution	✓	✓	✓	✓	✓		Top five sending institutions ^B by two-year transfer student enrollment. Two-year transfer enrollment as a proportion of entering class (first-year + transfer)	The transfer-in cohort will be the denominator for future indicators such as the transfer student retention rate and graduation rates. We recommend counting all students who transferred in from a community college, including those who attended multiple institutions before enrolling at the four-year institution.
Total annual community college transfer enrollment	Count of the total number of new and continuing students enrolled at the four-year institution as of the fall survey date who transferred in from a two-year institution	✓	✓	✓	✓	✓		Proportion of total enrollment made up of students who transferred from two-year institutions	Some institutions may consider reporting equivalent measures for spring- or summer-start students.
Fall-to-fall transfer student retention rate	The proportion of students in a community college transfer-in cohort who were still enrolled the following fall	✓		✓	✓	✓	A direct comparison would be the persistence rates of transfer and FTIC students after achieving junior status.		Some institutions may consider fall-to-spring or other retention metrics that include sizeable populations of non-fall start transfer students.
Community college transfer-in cohort GPA	Average cumulative GPA of two-year transfer students over time (e.g., at enrollment, after first term, first-year, and at graduation)	✓		✓	✓	✓			When combined with program-level disaggregation, four-year institutions can work in partnership with two-year schools to align curricula where transfer student performance could improve.

Four-Year Institution Transfer Student Success and Equity Basic Dataset Details

Measure Name	Measure Description	Recommended Disaggregation*					First-time-in-college (FTIC) comparison	Suggested Derivative or Compound Analyses	Notes
		Demographics	Enrollment Intensity	Award Level	Program/Major ^A	Sending Institution			
Community college transfer-in cohort bachelor's completion over time	The proportion of students in a community college transfer-in cohort who complete a bachelor's degree within two, three, four, and more than four years of entry	✓		✓	✓	✓	A direct comparison would be the graduation rates of transfer and FTIC students after achieving junior status.	Top five sending institutions by graduation rate	
Average total credits earned, baccalaureate completers	Average total credits to degree for bachelor's degree graduates in a given academic year who were community college transfer students	✓		✓	✓	✓	✓	Average credits earned at the four-year institution only, baccalaureate completers	This measure requires combining the credits earned at the four-year institution with credits transferred in. To assess progression, some institutions may also calculate average terms to graduation.
Bachelor's degrees awarded to transfer students	The count and proportion of the institution's bachelor's degree graduates in a given academic year who were community college transfer students	✓		✓	✓	✓			The count or proportion of bachelor's degrees awarded each year as a result of transfer can be a powerful measure to share with local leaders, industry partners, trustees, faculty and administrators that signals the impact of transfer on the institutional mission.

* Recommended Disaggregation (full description):

1. Demographics (race/ethnicity, Pell-eligibility, age, first-generation status, etc.),
2. Enrollment Intensity (full-time, part-time),
3. Program/Major (e.g., Engineering, Associate of Transfer Arts or Science, Applied Associate),
4. Award Level (Associate Degree completion vs. non completion),
5. Destination Institution.

When possible, institutions should explore where cross tabulation may be informative (for example, transfer enrollment by program disaggregated by race/ethnicity).

Four-Year Institution Transfer Student Success and Equity Basic Dataset Details

^A At many community colleges, transfer degree programs are generic, focusing on general education courses without differentiating pathways to different majors. For these analyses to inform equity reforms and curricular alignment, colleges need to evaluate more specific programmatic pathways within general associate degrees. We recommend conducting these analyses at increasing levels of specificity, starting with broader categories of awards/associate degrees (such as AA, AS, AAS, Direct Transfer Agreements/Associate Degrees for Transfer), and moving toward evaluating areas of study (such as Social Sciences or Life Sciences) and, ideally, even more specific majors (such as early childhood education or biology) within those degrees.

^B We recommend that institutions create business rules to identify sending institutions consistently. For instance, some students may transfer from a community college but may have earned most of their credits at a different community college. As a starting point, we recommend defining the “sending institution” as the last community college at which the student was enrolled.

Endnotes

- 1 “DirectConnect to UCF to Award 50,000th Degree,” UCF Today, May 28, 2021, <https://www.ucf.edu/news/directconnect-ucf-award-50000th-degree/>.
- 2 Danielle Zaragoza, “The State of State Transfer Policy: A Typology to Evaluate Transfer and Recognition of Learning Policies,” A Tackling Transfer Report, 2021, <https://tacklingtransfer.org/research-tools/>.
- 3 Suzanne Wilson Summers, “Regional Data-sharing Agreements: The Central Florida Education Ecosystem Database,” Higher Education Today, February 5, 2021, <https://www.higheredtoday.org/2021/02/05/regional-data-sharing-agreements-central-florida-education-ecosystem-database/>.
- 4 “Creating Our Collective Impact: An Overview of Our Promises and Strategies,” University of Central Florida, <https://www.ucf.edu/strategic-plan/files/2017/07/Creating-Our-Collective-Impact-rev072017.pdf>.
- 5 “Strategic Plan,” Valencia College, <https://valenciacollege.edu/about/strategic-plan/goal-3.php>.
- 6 The federal Integrated Postsecondary Education Data System (IPEDS) requires four-year institutions to indicate the number of students transferring each year. However, reporting does not distinguish between students who transferred in from a two- or four-year institution. Similarly, two-year institutions report to IPEDS the number of students who transfer out, but that reporting does not differentiate between students who transfer to another community college from those who end up at a four-year institution. Furthermore, since they are not “first time in college” (FTIC) students, transfers are not counted in IPEDS graduation surveys.
- 7 “Tracking Transfer,” Community College Research Center at Columbia University and National Student Clearinghouse, January 15, 2016, <https://www.aspeninstitute.org/publications/tracking-transfer/>.
- 8 “50-State Comparison: Statewide Longitudinal Data Systems,” Education Commission of the States, last modified January 27, 2020, <https://www.ecs.org/state-longitudinal-data-systems/>; “2018 Transfer Summary,” Colorado Department of Higher Education, https://highered.colorado.gov/Publications/Reports/Enrollment/FY2018/2018_Transfer_Summary.pdf; “College to University – Transfer Feedback,” State Council of Higher Education for Virginia, accessed date, <https://research.schev.edu/info/Reports.Guide-to-the-Transfer-Feedback-Reports>; “Current Student Data Book by Subject,” CUNY Office of Institutional Research, <http://www.cuny.edu/about/administration/offices/oira/institutional/data/current-student-data-book-by-subject/#retention>; “Data Dashboards,” Education Data and Research Center, The State of Washington Office of Financial Management, <https://erdc.wa.gov/data-dashboards>; “DHE Data Center,” Massachusetts Department of Higher Education, <https://www.mass.edu/datacenter/home/home.asp>; “Fall Enrollment at a Glance,” The Regents of the University of California, <https://www.universityofcalifornia.edu/infocenter/fall-enrollment-glance>; “Outcomes,” Management Information Systems Data Mart, California Community College’s Chancellor’s Office, <https://datamart.cccco.edu/outcomes/Default.aspx>; “Search Reports,” Texas Higher Education Coordinating Board, <https://www.highered.texas.gov/reports/>; “Top 5 Majors of UNC System Bachelor’s Degree Graduates in 2019-20,” The University of North Carolina System, <https://www.northcarolina.edu/impact/stats-data-reports/>.

- 9 Shanna Smith Jagers and Marcos D. Rivera, "Responding in the Moment: Practices to Advance a Next-Generation Transfer System," The Aspen Institute College Excellence Program, https://highered.aspeninstitute.org/wp-content/uploads/2020/11/Aspen-CEP_Next-Gen-Transfer-Practice.pdf.
- 10 Linda Garcia and Courtney Adkins, "What Community College Students Tell Us About Transfer," Inside Higher Ed, June 17, 2021, <https://www.insidehighered.com/blogs/tackling-transfer/what-community-college-students-tell-us-about-transfer>.
- 11 Garcia and Adkins, "What Community."
- 12 A.C. McCormick, S.A. Sarraf, A. BrckaLorenz, Haywood, A.M., "Examining the Transfer Student Experience: Interactions with Faculty, Campus Relationships, and Overall Satisfaction," Paper presented at Association for the Study of Higher Education Annual Conference, Vancouver, Canada, November 2009. <http://hdl.handle.net/2022/23846>.
- 13 "Student Basic Needs," The Regents of the University of California, <https://www.universityofcalifornia.edu/infocenter/student-basic-needs>.
- 14 Clive R. Belfield, Davis Jenkins, and John Fink, "Early Momentum Metrics Leading Indicators for Community College Improvement," CCRC Research Brief, Community College Research Center, July 2019, <https://ccrc.tc.columbia.edu/media/k2/attachments/early-momentum-metrics-leading-indicators.pdf>.
- 15 Yuxin Lin, Maggie P. Fay, and John Fink, "Stratified Trajectories: Charting Equity Gaps in Program Pathways Among Community College Students," Community College Research Center, December 2020, <https://ccrc.tc.columbia.edu/publications/stratified-trajectories-program-pathways.html>.
- 16 Martin Kurzweil, Cindy Le, Alexandra W. Logue, "Ithaca S+R to Expand Transfer Improvement Efforts With CUNY," Ithaca S+R, December 15, 2020, <https://sr.ithaka.org/blog/ithaka-sr-to-expand-transfer-improvement-efforts-with-cuny/>.
- 17 John Fink and Davis Jenkins, "Unpacking Program Enrollment s and Completions With Equity in Mind," Community College Research Center, June 2020, <https://ccrc.tc.columbia.edu/publications/unpacking-program-enrollments-completion-equity.html>.
- 18 Tackling Transfer Policy Advisory Board, "The Transfer Reset: Rethinking Equitable Policy for Today's Learners," A Tackling Transfer Report, 2021, <https://tacklingtransfer.org/wp-content/uploads/2021/08/The-Transfer-Reset.pdf>
- 19 Vivian Liu, Soumya Mishra, and Elizabeth M. Kopko, "Major Decision: The Impact of Major Switching on Academic Outcomes in Community Colleges" Research in Higher Education 62, (2021): 498–527, doi.org/10.1007/s11162-020-09608-6.
- 20 John Fink, Davis Jenkins, and Takeshi Yanaguira, "What Happens to Students Who Take Community College 'Dual Enrollment' Courses in High School?," Community College Research Center, September 2017, <https://ccrc.tc.columbia.edu/publications/what-happens-community-college-dual-enrollment-students.html>.
- 21 John Fink and Davis Jenkins, "How to Measure Community College Effectiveness in Serving Transfer Students," CCRC Analytics, December 2017, <https://ccrc.tc.columbia.edu/media/k2/attachments/measure-community-college-effectiveness-transfer.pdf>.