



THE TRANSFER OPPORTUNITY CALCULATOR

Estimating Impact on Equitable Enrollment and Institutional Revenue at Four-Year Colleges and Universities

A TACKLING TRANSFER REPORT | 2021



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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.

Acknowledgments

The authors of this work would like to offer a special thanks to David Burge of George Mason University and Ben Kennedy of Kennedy & Company for sharing their experience, insights, and materials from the development of the ADVANCE Program at Northern Virginia Community College and George Mason University. Their insights and model served as inspiration and foundation for the Transfer Opportunity Calculator (and this brief). Thank you to Robert Templin of the Aspen Institute for lending his time and thought partnership to the process. Additionally, we would like to thank Taylor Boulware for her editorial expertise and time. And Ben Barrett, Gelsey Mehl, and Heather Adams of the Aspen Institute for their support in advancing the structure, accessibility, design, and publication of this brief. Our work on transfer is made possible by the generous support from Ascendium, ECMC Foundation, Joyce Foundation, and the Kresge Foundation.

We are also grateful for the national, state, and institutional transfer leaders who generously shared their time, insights, and experiences for the development of this report:

David Burge, Vice President for Enrollment Management, George Mason University

John Fink, Senior Research Associate, Community College Research Center

Stephen Handel, Executive Director, College Board

Maria Harper-Marinick, Senior Fellow, Aspen Institute College Excellence Program

Shanna Smith-Jaggars, Assistant Vice Provost of Research and Program Assessment, The Ohio State University

Davis Jenkins, Senior Research Scholar, Community College Research Center

Benjamin Kennedy, Founder and CEO, Kennedy & Company

George Mahaffy, Senior Advisor, Sova

Patricia Parker, Project Director, Transfer Virginia

Ken Redd, Director, National Association of College and University Business Officers

Charles Tate, Director of Transfer Advising, University of Mary Washington

Introduction

Four-year colleges and universities have many reasons to invest in providing more opportunities for community college transfer students and lowering barriers to their success. Motivations to prioritize community college transfer as a student success strategy include:

1. Advancing racial justice and economic mobility: As a sector, community colleges serve more racially and socioeconomically diverse students than four-year institutions.¹ Enrolling more students who started at community college can increase a university's diversity and increase economic and social mobility for students of color and from low-income backgrounds.

2. Enhancing institutional excellence: All students benefit from learning alongside peers who represent a diversity of backgrounds and experiences. In addition to racial, ethnic, and socioeconomic diversity, community college students are more likely to be first-generation college students, veterans, parents, older, and/or returning from the workforce than those who enroll directly in four-year institutions.² Transfer pathways allow greater access to four-year institutions for these students whose diverse experiences enrich the learning environment both in and outside the classroom.

3. Maintaining (and increasing) overall enrollment and revenues to secure institutional sustainability: In recent years, enrollment at many public and private four-year institutions has been flat or declining, a trend that is expected to continue.³ The rise of free community college programs could result in first-year enrollment declines at four-year institutions.⁴ Enrolling more transfer students can help offset declining enrollment of first-time, full-time students and ensure institutions stay financially solvent long-term.

4. Increasing the number of students graduating with bachelor's degrees: Increasing transfer student enrollment and completion can help bolster the local economy by producing more bachelor's-degree-level workers. These efforts also create talent pipelines for businesses and entire sectors, expanding and diversifying fields that have historically not been diverse. In turn, this helps more students from community colleges access good jobs that pay family-sustaining wages. Universities may find that deepening corporate partnerships and community engagement to prioritize transfer student access and success may lead to additional investments and political support.

5. Reducing costs for students (and taxpayers): When transfer works, it provides students with an affordable, efficient pathway to a bachelor's degree. By delivering on that promise, four-year institutions demonstrate that they are good stewards of public resources, gaining support from legislators and growing their reputations with prospective students and their families.

The Transfer Opportunity Calculator can help four-year leaders use data to devise a transfer strategy that addresses the first three imperatives. The tool provides users with data to assess the feasibility and impact of increasing enrollment of transfer students from a selected two-year institution. The effect is projected across measures of diversity and the financial return on investment for increased transfer student enrollment.

Access the **Transfer Opportunity Calculator** at tacklingtransfer.org/research-tools.

This accompanying brief expands on the crucial role that robust examination of data can play in informing and supporting the implementation of a transfer strategy. It also highlights how George Mason University advanced student success through a rigorous analysis of, and commitment to, community college transfer.

The Transfer Opportunity Calculator is designed to help leaders plan their transfer strategy using data. Data is also crucial to evaluate the effectiveness of those strategies. Guidance on quantitative evaluation of more extensive, institutional transfer efforts can be found in *Evaluating Transfer Student Success and Equity: A Primer on Quantitative Data for Two- and Four-Year Institutions*.

About the Transfer Opportunity Calculator

Estimating the Impact of Increased Community College Transfer on Equitable Enrollment and Institutional Revenue

By increasing enrollment of community college transfer students, universities can advance critical components of their institutional missions—including providing equitable access for students from low-income backgrounds and students of color—while also increasing revenue.

The Transfer Opportunity Calculator provides data to help college leaders assess the feasibility and impact of increasing transfer student enrollment from specific community college partners. The tool is designed to assist senior leaders at four-year institutions—CFOs, enrollment managers, student success leaders, provosts, and more—in understanding how transfer can be a core strategy for achieving equity and financial objectives.

Many universities have not fully used transfer strategically and could benefit from additional insights into how adding transfer students has implications for enrollment, student success, equity, and institutional finance. Specifically, decision-makers at four-year institutions can benefit from examining four key kinds of data:

- 1. The supply of potential transfer students**
- 2. The likely success of students after transferring to the four-year institution**
- 3. The diversity of the four-year institution, its feeder schools, and its surrounding area**
- 4. The financial implications of adding transfer students**

The Transfer Opportunity Calculator provides tailored information in each area to help institutions understand the potential impact of increased transfer enrollment. The summaries below detail why leaders should evaluate each type of information and how they can use these facts and this tool to prioritize and improve transfer as a success strategy at their institution.

Calculator Use Cases

CALCULATOR USE CASE #1

Understanding the Supply of Transfer Students

Why this matters

Four-year schools may worry that by promoting transfer programs, students who would have enrolled as first-year students will instead enroll in community college first (or forgo the four-year school altogether). Four-year institutions may also wonder if the pool of potential transfer students is large enough to warrant expanding the partnership.

What data to use

Data the Transfer Opportunity Calculator provides	Additional data to consider
Average size of the entering transfer class from community colleges Number of potential transfer students, based on the statewide average transfer-out rate and the national intent-to-transfer rate	Trends in regional high school enrollment Trends in regional high school graduates' postsecondary plans and enrollment patterns Regional postsecondary attainment rate and number of adults with some college but no degree

How to share these data with stakeholders

Work with senior leaders, including presidents and enrollment managers, to understand the institution's enrollment trends and needs. Data on the untapped supply of potential students could prompt institutions to consider how transfer partnerships might increase the number of students transferring, thereby expanding enrollment. If the region's high school students shift toward community colleges, then a more robust transfer pathway may protect future upper-division enrollment at the four-year institution. The regional postsecondary attainment rate can also indicate a potential source of older transfer students returning to higher education after pursuing other life goals.

CALCULATOR USE CASE #2

Recognizing Transfer Student Success & Inclusion

Why this matters

Despite research to the contrary, there is a bias that community college students are ill-prepared to succeed in four-year schools. This mindset may cause resistance to increasing transfer enrollment among critical stakeholders, including faculty, staff, leaders, alumni, and trustees. Additionally, many universities already enroll large populations of transfer students. However, key stakeholders are often unaware of the extent of transfer enrollment, making the development of systems that support their success and inclusion more challenging.⁶

What data to use

Data the Transfer Opportunity Calculator provides	Additional data to consider
Six-year completion rates from the time of community college entry for transfer students	Transfer student persistence rates, grade-point average, time-to-degree, and completion rate
Six-year completion rates for students who start at four-year institutions	Proportion of all students who are transfer students, by department, major, or program
Proportion of the four-year institution's incoming students who are transfers	Proportion of all graduates who are transfer students, by department or program

How to share these data with stakeholders

Transfer and program-specific data ensure that academic and student services leaders, faculty, and staff—who may underestimate how many transfer students are already enrolled at the institution—understand the prevalence of transfer students in their classrooms, departments, and programs. Provide data on how transfer students perform once on campus and use that data to highlight the success of a diverse student population who arrived as transfers.

CALCULATOR USE CASE #3

Understanding the Diversity of the Transfer Student Community

Why this matters

On average, two-year institutions enroll higher proportions of first-generation students, students of color, and students from low-income backgrounds than four-year institutions. Four-year schools committed to diversity and equitable opportunity can look to transfer partnerships as an essential strategy. Many states have also set higher education attainment and equity goals.⁵ Strong transfer pathways can help colleges contribute to those goals.

What data to use

Data the Transfer Opportunity Calculator provides	Additional data to consider
Demographic data on students at four-year colleges, feeder community colleges, and local high schools, including race and ethnicity, income, age, and first-generation status Projected changes to the composition of the four-year institution’s student body resulting from increased transfer enrollment	Regional postsecondary attainment by race and ethnicity Regional median income by race and ethnicity Success of transfer students by race and ethnicity Parallel data points broken out by demographics of interest to the institution (e.g., age, gender, parenting status, military status, rural vs. urban)

How to share these data with stakeholders

Consider how the demographic makeup of the four-year institution compares to that of feeder community colleges and high schools. Examine how increasing transfer enrollment would affect the four-year enrollment of students from low-income backgrounds and students of color to help the institution achieve its diversity, equity, and inclusion goals.

CALCULATOR USE CASE #4

Clarifying the Financial Impact of Enrolling More Transfer Students

Why this matters

In most cases, a well-executed transfer partnership will pay off financially for the four-year institution over the long run.⁷ That return may require upfront investment and ongoing support for students. Chief financial officers, presidents, trustees, and others will want to know the extent of those costs and whether (and when) they will demonstrate financial returns. Faculty and staff will want to see that capacity increases needed to serve transfer students effectively will be funded. Finally, economic data are critical when planning and implementing transfer partnerships (or any new initiative). They can inform enrollment targets, select services to be provided, and necessary adjustments to other programming.

What data to use

Data the Transfer Opportunity Calculator provides	Additional data to consider
Net tuition revenue per transfer student Annual total revenue from new transfer students Categorized costs of transfer program and supports (as inputted by user) Five- and ten-year projections of costs and revenue, including adjustable scenarios	Adjustments based on more nuanced information about costs and revenues associated with transfers, accounting for institutional context and history Additional data that illustrate the institution's current financial conditions

How to share these data with stakeholders

Use the financial forecasts to gain the support of decision-makers—including the board, president, provost, and CFO—for upfront investment or policy changes that may create short-term losses but long-term returns on investment.

Show faculty and staff concerned about capacity constraints that new transfer students bring additional resources to support staff positions, programming, and upper-division courses. In developing the model, engage internal stakeholders to help estimate the targeted increased transfer enrollment costs. Broad input will result in greater confidence in the model's output.

Make a case to external funders who are looking to support completion, talent development for the regional economy, advance social mobility, and address equity gaps. A program may significantly benefit from short-term funding to help with initial investments before it becomes self-sustaining; longer-term funding often supports student scholarships.

Incorporate the tool's financial forecasts into the college's short- and long-term budgeting process. Consider what adjustments need to be made in the short term to weather any initial shortfall, plus what costs could be delayed until revenue picks back up. To accommodate increased enrollment, identify what investments will be needed in personnel, facilities, specialized programming to address unique transfer student experience, and other areas. Set targets for enrollment and monitor actual costs against projections. Use the tool's scenario planner to help develop backup plans based on not meeting—or exceeding—the projections.

APPLYING THE TRANSFER OPPORTUNITY CALCULATOR

Case Study

A Case Study from George Mason University and Northern Virginia Community College

In 2017, George Mason University (Mason) and Northern Virginia Community College (NOVA) created ADVANCE, a transfer collaboration that simultaneously enrolls students at both institutions. As part of the planning process, the institutions invested significant time and expense to understand the full financial impact of the new program, including an exploration of the data provided by the Transfer Opportunity Calculator. Detailing the implications of a transfer program using this process enabled Mason to move beyond a general perception that increasing transfer students was the right thing to do, to a concrete understanding that it made long-term economic sense for the university. The lessons from Mason and NOVA's investigation of the mission and financial dimensions to transfer can support other colleges and universities in developing more strategic transfer pathways, partnerships, and support services.

Launching the process and engaging the experts

ADVANCE was crafted under the leadership of Scott Ralls, then-president of NOVA, and Ángel Cabrera, then-president of Mason. The initiative responded to several priorities facing the college leaders and the region they served.

NOVA's enrollment had multiplied over ten years, from 41,266 students in 2007 to 51,190 in 2017.⁸ During that time, Mason's total enrollment had grown by 36 percent; by 2017, its transfer population had increased to account for nearly half of all students.⁹

At the same time, the region was rapidly changing, with significant growth among Hispanic residents.¹⁰ When choosing where to start college, these students were more likely to pick NOVA, the lower-cost option between the two schools. Indeed, Hispanic student enrollment nearly tripled during this time.¹¹ Current and former senior administrators understood these students as coming to college because they wanted to access the expanding number of good jobs in the region, many of which were in the technology and health care fields and required at least a bachelor's degree. If Northern Virginia was to meet its talent needs, there had to be a more seamless way for NOVA students to attain a bachelor's degree.

With so much at stake, a committee of six senior executives from the two institutions was assigned to oversee the new project called ADVANCE. NOVA and Mason also committed significant staff time to develop all aspects of the program: Four working groups, each staffed with 10 to 12 people, were charged with planning and executing changes in student coaching, admissions, data analysis, and finances.

One of the first steps was to project the financial impact of increased transfer. There was a general understanding that Mason would take a financial loss, as ADVANCE would require NOVA students to complete 60 credits before transferring to

Mason. (Previously, many students had transferred after completing only one semester or one year.) The finance team had to figure out how many lower-division credits would be lost if significantly more students completed their associate degrees before transferring. Additionally, they had to estimate the program's cost, which included more intensive services (for example, coaching) than the traditional transfer student pathway.



The program would not gain full support among key decision-makers unless the president, CFO, and finance working group could explain the financial implications.

The finance working group was comprised of high-level finance staff from both schools, including Mason's chief financial officer. CFOs are not typically so involved in the development of transfer partnerships; in this case, it was necessary given that the program would not gain full support among key decision-makers unless the president, CFO, and finance working group could explain the financial implications and how a robust analytic methodology supported starting the program.

The financial team hired a consulting firm to conduct an in-depth analysis of the cost and revenue projections for the program. This outside engagement had two benefits. It ensured that the timing of the analysis would not slow down progress, as internal finance leaders and staff were already stretched to capacity. It also built confidence that leaders were driven by independent, objective analysis and not just a passion for increasing transfer student success.

Projecting long-term financial impact to put upfront investments into context

The model projected that both schools would eventually see an increase in the financial return. NOVA would see a financial return starting in the third year. While NOVA was not expected to experience significant enrollment loss in the first two years, it did incur upfront costs to help run ADVANCE, including salaries for student success coaches and program leaders and funds for technology, marketing, and events. Additional revenue was predicted for NOVA because students were expected to stay enrolled longer to complete the new 60-credit requirement before transferring.

Mason would see a positive return starting in year four. The university had the exact line-item costs as NOVA but was projected to lose revenue immediately as students delayed their transfer to secure the necessary credits. According to estimates, Mason would have to increase its NOVA transfer class by 5 percent, or 150 students, to recoup these costs.

The financial modeling extended for ten years. The analysis showed NOVA and Mason gaining significant and growing revenue streams after their respective break-even points. Typically, colleges focus on the current-year budget and projections over a limited number of subsequent years. Without the longer-term forecast offered by the NOVA-Mason analysis, financial projections showing multi-year losses may have created an insurmountable hurdle to launching ADVANCE.

The financial analysis rested on the key assumption that ADVANCE would increase the total number of students transferring to Mason. To test this assumption, the schools identified how many NOVA students had expressed interest in transferring to Mason but never did. This analysis revealed a large pool of potential transfer students. Information about which specific populations of students failed to transfer helped the institutions design program elements and incentives to support students in their transition.

Although ADVANCE is a transfer pathway specifically between two schools, the model offers important lessons for all institutions considering increased transfer enrollment. In most cases, a transfer partnership can be designed to improve overall enrollment at the four-year institution. The cost of educating each additional transfer student is typically low. Mason determined that each ADVANCE student would increase teaching costs by less than \$3,000, while many other services could accommodate the increased enrollment at a minimal cost.

Financial and Non-Financial Considerations for Launching ADVANCE

Key financial factors in the ADVANCE Model	Non-financial factors Mason considered while developing ADVANCE
<p>The model was highly sophisticated and relied on extensive research on many factors. At its core were the following key parameters:</p> <p>Credit hours taken: The credit hour is the basis for each institution’s revenue. The model estimated how many credit hours transfer students take at each institution and how that would change for ADVANCE students.</p> <p>Student progression: The model considered how ADVANCE could impact retention, successful transfer, and degree completion. These all factor into the final credit-hour projections.</p> <p>Instructional costs: Faculty salary and course loads produced a cost-per-credit hour for each department, weighted according to the distribution of majors of current transfer students.</p> <p>Marginal costs: Mason determined that the average cost imposed by each additional transfer student would be minimal. Absent a more in-depth capacity and space study, Mason decided that facilities and student services like dining, housing, library, and the health center would have the ability to absorb the growth in transfer students, which would represent less than two percent of the total student population.</p> <p>Programmatic costs: Mason identified the following expense categories to staff ADVANCE: recruiting, marketing, orientation, advising, career services, student life, affinity building, program coordination, and training.</p>	<p>In assessing the need for and the feasibility of a new transfer program, Mason also looked at some non-financial data, including:</p> <p>Supply of students: What are high school students’ educational plans? How many are choosing to go to community college instead of four-year colleges?</p> <p>Workforce demand: What sectors are growing? How many jobs are projected? What new and expanded programs are needed through this partnership?</p> <p>Students served: Does the makeup of the current student body fulfill a college’s mission to serve its region and provide social mobility?</p>

Employing the financial model to engage stakeholders

ADVANCE was likely to move forward regardless of the results of the financial analysis, given the presidents' public commitments to the goals of the program and a high-profile public announcement that included the governor of Virginia. But implementing a program as extensive as a scaled dual admissions partnership requires understanding and collaboration across many parts of a university: advisors, faculty, admissions officers, financial aid officers, and others. The financial analysis helped the Mason president and others build support for the program by providing data that preempted concerns raised by various stakeholders and ensured that senior administrators, the board, and others understood the projected costs and how the financial impact would be managed. The chart below provides specific examples of how the economic model provided understanding and helped support the case for transfer with stakeholders.

George Mason University Stakeholder	Concern	How the model made the case
Institutional leaders (president & trustees)	While committed to ADVANCE, they knew that such a significant initiative required a comprehensive fiscal analysis to answer questions about fiscal implications from multiple campus stakeholders.	Mason was able to identify a significant, diverse pool of NOVA students who intended to transfer but never did. The data showed that if those students successfully transferred, enrollment and revenue would increase. At the same time, the university could also fulfill its mission of advancing individual social mobility and regional talent development.
Chief financial officer	The CFO did not have enough detail about the costs of ADVANCE's programmatic elements, the scale, and the duration of the loss associated with more NOVA students transferring with an associate degree. The CFO and financial staff also did not know the implications of adding more students in upper-division courses (which typically cost more per student than lower-division courses).	The model provided a clear projection of the size of the shortfall in the first few years and was supported by thoughtfully considered assumptions. It provided a specific date by which the program would produce positive returns, allowing the CFO to plan accordingly. The model also accounted for variation in department and course level costs, which facilitated detailed budget allocation decisions by year.
Faculty	Some faculty members were concerned about whether their departments would have the capacity to serve more transfer students.	The model showed that each additional student would generate net revenue allocated to increase capacity over the long run. Forecasts about which programs students would likely enroll in helped assure faculty that plans were in place to add instructional capacity in specific disciplines.

Utilizing the financial model to inform planning and implementation of the program

With core stakeholders on board, the financial model also helped to inform planning and implementation of the program by specifying the economic impact of different variables in its design.

Program Design. The model helped the institutions calculate what kind of program they could afford. Initial projections based on an extensive wish list of programmatic elements showed unfeasible costs, so the schools scaled back some elements.

Implementation. The model showed the institutions' leaders how much revenue various numbers of additional transfer students would generate, which helped to set enrollment targets that were realistic and financially sound.

Enrollment projections showed Mason which programs would need additional staff hired before students were accepted. And knowing the scale of the initial revenue loss helped Mason plan to make up for projected costs (for example, increasing enrollment of out-of-state first-year students).

Monitoring. With targets in place, Mason and NOVA can now monitor program enrollment against projections and adjust as needed if actual enrollment varies from targets. So far, the program has significantly exceeded enrollment targets.

Conclusion

The financial analysis conducted during the planning of ADVANCE created value for Mason and NOVA that extended beyond the initiative. Leaders at Mason report that the model also contributed to a culture change by generating greater interest in data analytics over operational reporting. Consumers of the model were impressed by how actionable the information was and were eager for more.

The analysis also benefited transfer students beyond those enrolled in ADVANCE. The effort brought more discipline to conversations about transfer students and programs—a level of inquiry and investigation critical to an institution where over 40 percent of the 27,000 undergraduate students are transfers. Understanding the fiscal implications of a transfer program, both short- and long-term, provided stakeholders concrete data on the impact of a transfer program and how this program at scale made economic sense for the university. Additionally, the model provided the evidence needed to build transfer student services that would support more substantial student outcomes and remain financially sustainable over the long run.

Across the nation, many college and university leaders and practitioners are committed to advancing transfer student success. But commonly held and often ill-informed concerns about short-term financial implications and long-term financial sustainability can slow transfer reform efforts. Using the ADVANCE financial analysis as a model, the Transfer Opportunity Calculator brings together both the analytical rigor and equity dimensions of transfer to support institutional leaders and practitioners in designing, planning, and implementing large-scale transfer partnerships. Overall, the data demonstrate that institutions can maintain—if not strengthen—fiscal health over the long term by serving transfer students well. With the support of this tool, our hope is that more institutions will translate this understanding into success and opportunity for thousands of more transfer students across the country.

Endnotes

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