TRENDS IN HIGHER EDUCATION: 2018 OUTLOOK
THE RISING NEED FOR SUSTAINABLE FINANCIAL, OPERATIONAL AND ACADEMIC MODELS
The value of higher education once seemed unquestionable, and the pipeline of resources to support academic programs, research and student financial aid appeared unwavering. That was then. While the higher education sector continued to grow for decades with rising student populations, increasing federal research funds and robust investment markets, recent trends demonstrate the landscape for U.S. colleges and universities is changing. The reality is that costs, alternative revenue streams and student enrollment have shifted – all in the wrong direction – applying significant pressure to academic boards and management teams who now must reevaluate their business models in pursuit of long-term sustainability.

Specifically, state funding for higher education has been declining since the start of the Great Recession, showing no signs of rebounding even as the economy steadily improves. At the same time, the future of federal funding for academic research, grants and loans is, at best, uncertain. Proposed changes to the Higher Education Act and versions of the federal budget include further reductions to federal Pell Grant reserves, changes to loan consolidation and borrowing limits for both students and parents and a potential decrease of more than 13 percent to the Department of Education’s resources.

The decline of state and federal funding has shifted more of the cost burden for higher education to students and their families. In the last 10 years, annual tuition rates increased by 35 percent on average with several U.S. states witnessing rises of 60 percent or more at four-year, public institutions. Real median income growth doesn’t come close to matching those tuition hikes. Consequently, college enrollment has declined as more students and families question the potential return on investment in higher education. Some institutions are finding competition (and others opportunity) in alternative delivery methods like massive open online courses (MOOCs) that offer classes, credentials and a growing number of degree programs at significantly lower costs. International student enrollment – a key source of tuition income for many institutions – is also falling off, driven by uncertainty about future U.S. immigration policies and rising competition from colleges and universities in other countries.

All these factors are placing never-before-seen financial stress on U.S. colleges and universities, and there is a rising call for greater focus on thoughtful fiscal responsibility across the higher education sector. Annual cash operating deficits are common in higher education today, and they are non-sustainable. Credit rating agencies Standard & Poor’s (S&P) and Moody’s have recently expressed renewed skepticism about the fundamental stability of higher education, recognizing that financial statements within the sector have lost strength, are vulnerable and that liquidity is thin at too many institutions of higher learning.

The unmistakable bottom line is that higher education is in a new environment, one that more closely resembles the corporate landscape with steep competition, constant pressure to demonstrate value to all its constituents and an expectation of greater self-support. To remain viable, U.S. colleges and universities must adapt. This report highlights the challenges facing higher education in 2018 and beyond. It also explores solutions for creating sustainable financial, operational and academic models to ensure each institution remains equipped to fulfill its mission.
At a very high level, financial sustainability is the greatest challenge threatening the ability of U.S. colleges and universities to fulfill their individual missions. Nearly all funding sources - government allocations and grants, tuition and debt financing – have been squeezed, and changes in one source can have a domino effect on the others. On the expense side, most schools are simply spending more than they can afford. Importantly, though, the challenges are more than financial. Colleges and universities also require updated operational and academic strategies, coordinated with financial responsibility, to sustain their core mission. Revenue enhancement and cost cutting, in the absence of strategies that are aligned with investment in and resource allocation to the institution's mission, will likely fail to achieve true sustainability.

DECLINING GOVERNMENT FUNDING

State funding of public higher education institutions in the U.S. declined by 16 percent between 2008 and 2017, falling to an average state spend per student of $1,448. In the 2014-15 academic year, the average cost per student for a four-year public college or university – including student services, academic support and instructional support – was $10,221. Of the 44 U.S. states that reduced funding for higher education during that timeframe, more than 40 percent made cuts of 20 percent or greater (Exhibit 2).

To compensate for these losses, many colleges and universities increased tuition substantially, shifting more of the financial burden of higher education to students and their families. The published average annual tuition increased by 35 percent from 2008 to 2017 with eight states seeing hikes of 60 percent or more at four-year, public institutions. Arizona and Louisiana, which had the greatest declines in state funding during that timeframe at 53.8 and 44.9 percent respectively, increased tuition by more than 90 percent (Exhibit 1). Overall, net tuition as a total percentage of educational revenue has increased by 30 percent since before the Great Recession, growing from 36.7 percent in 2006 to 47.8 percent in 2016 (Exhibit 3). Tuition increases over the past decade have far outpaced increases in inflation. Hence, the pressure on affordability and, consequently, accessibility.

Exhibit 1
Percentage Change in Average Tuition at Public, 4-Year Colleges (2008-2017E)

Source: Center on Budget and Public Priorities
Exhibit 2
Percentage Change in State Spending Per Student (2008-2017E)

Source: Center on Budget and Public Priorities

Exhibit 3
Net Tuition as a Total Percentage of Revenue (2006-2016)

Source: State Higher Education Executive Officers
While tuition rates rose sharply, real median income only grew by about two percent. The gap between the rate of increase in college tuition compared to the rate of increase in household income has contributed to a more than nine percent rise in student debt between 2008 (55 percent) and 2016 (60 percent). **In the first quarter of 2017, the total value of student debt at four-year, public institutions was $1.34 trillion – equal to nearly seven percent of the total U.S. federal debt that year.**

Federal loans are the primary source of debt financing for students, and reliance on these has outpaced reliance on private loans over the past decade with compound annual growth rates (CAGR) of 10.9 percent and 2.9 percent respectively (Exhibit 4). Because of this, proposed changes to federal funding for higher education have significant implications not only for institutions, but also for students and families seeking financial aid for higher learning. The current administration is pushing for a greater reliance on private funding for student financial aid. This has the potential to make higher education less accessible to low-income students since private loans typically offer less flexible repayment plans compared to federal loans. As a consequence, an ongoing challenge in higher education today is maintaining both affordability and accessibility to foster a diverse student population.

Other changes being discussed at the federal level that could impact debt financing decisions for students and their families include changes to loan consolidation and borrowing limits, an end to loan forgiveness for public sector workers and an increase in income-based repayment plans from the current 10-percent rate of a students’ post-graduation monthly income to 12.5 percent.

Versions of the 2018 federal budget recommended up to a 13.5 percent year-over-year decrease in the Department of Education’s resources through the elimination of more than 20 programs, most of them focused on assistance for low-income students, and up to a 16 percent decrease in federal Pell Grant reserves ($3.9 billion) while maintaining a maximum award of $5,920 per student.
In response to the rising cost burden of higher education on students and their families, overall U.S. college and university enrollment is declining. Between 2011 and 2016, enrollment in U.S. institutions dropped 7.8 percent from 20.6 million to 19 million. The rate of decline may be escalating. In Spring 2017, post-secondary enrollment fell by more than 272,000, a year-over-year decrease of 1.5 percent. Four-year, for-profit institutions experienced the greatest decline at 10.1 percent compared to 2.5 percent for two-year, public institutions and 0.2 percent for private, non-profits (Exhibit 5). Declining enrollment is expected to continue through at least 2030.

Exhibit 5

Year-Over-Year Enrollment Changes in U.S. Colleges and Universities (Fall 2014 – Spring 2017)

This drop-off, fueled by declining affordability and accessibility, is particularly steep for low-income, high school graduates. Total post-secondary enrollment for this segment fell by nearly 23 percent from 2008 (55.9 percent) to 2013 (45.5 percent). In comparison, enrollment by high-income, high school graduates declined just four percent in that same timeframe (81.9 to 78.5 percent).

Simultaneously, international student enrollment – a significant source of tuition income for many U.S. institutions – has also been declining (Exhibit 6). Between 2016 and 2017, U.S. colleges and universities reported a three percent decrease year over year in international enrollment, and a seven percent decrease is expected for the 2017-18 academic year. This drop-off is due partly to newfound immigration concerns and partly to rising competition from other nations. For example, between 2008 and 2015, international student enrollment in Canada increased by 98 percent and is expected to rise even further because of the nation’s affordable higher education programs and greater political stability compared to other English-speaking countries.

Declining international enrollment – particularly from China, India and Saudi Arabia – could have a significant impact on the financial models of U.S. colleges and universities, with potential loss of around $250 million in tuition revenue annually.
The combination of rising tuition, deeper debt burdens and an increasingly competitive job market is fueling greater scrutiny by students and their families when it comes to assessing the value of a college degree. This makes the landscape significantly more competitive for U.S. colleges and universities than it has been in the past. To contend, institutions need to not only demonstrate clear value to students, they need to structure their financial, operational and academic models to maximize resources and attract students while attempting to remain viable and sustainable.

Exhibit 6
Reported Changes in International Enrollment in U.S. Colleges and Universities

- **39%** of responding institutions reported a decline in international applications for Fall 2017
- **31%** of responding institutions reported a decline in graduate applications from the Middle East for Fall 2017
- **32%** of responding institutions reported a decline in graduate applications from China for Fall 2017

Source: The American Association of Collegiate Registrars and Admissions Officers’ (AACRAO) survey of 250 U.S. colleges and universities (March 2017)
All schools are affected in some way by the economic, political and financial changes of the last decade, and no institution is immune to failure. At this stage, every college and university should have a firm handle on its realistic revenue streams, a clear understanding of and ability to communicate its unique value proposition and a unified strategy for ensuring maximum efficiency and long-term sustainability to support its core mission. If this is not the case for an individual institution, the time for change is now.

In fact, changing an institution of higher education is significantly more challenging than changing a corporation. Regardless of an individual college or university’s age, the culture of academia is deeply rooted in centuries-old philosophies and practices. The larger an institution is, the more siloed its organizational structure likely is and the harder it will be to uproot outdated models and achieve systemic change. Nonetheless, it must be done if an institution is to remain competitive and continue to fulfill its mission for the long term.

For too many schools, balance sheets and income statements are trending negatively. Maintaining reasonable levels of liquidity, in many instances, is a significant and ongoing challenge. To remain viable, U.S. colleges and universities need to contain tuition, increase affordability and broaden access by:

- Ensuring all constituents (e.g., board, administration, faculty) embrace the need for change and the urgent need for sustainability
- Diversifying funding sources to address revenue shortfalls
- Investing in and applying appropriate resources to the core business
- Creating multi-faceted, cost-efficient financial, operating and academic models that appropriately align costs while preserving the core mission
- Offering a clear value proposition to students and stakeholders

ACHIEVING FINANCIAL, OPERATIONAL AND ACADEMIC EFFICIENCY

U.S. colleges and universities cannot rely as heavily on state and federal funding as they have in the past. Aside from raising tuition – an option which may be maxed out given significant increases to date and the resulting decline in student enrollment – other material funding options include fundraising, asset monetization and taking on additional debt.

Some institutions may be able to realize significant economic benefit through philanthropic contributions. For example, in 2017, eight of the 19 charitable gifts of $100 million or more went to public colleges. However, gifts of that caliber take a strong brand identity, deep alumni network and community of support. At the same time, the recently passed Tax Cuts and Jobs Act of 2017 could have a negative impact on charitable giving from middle-class donors. The act nearly doubles the standard deduction, giving taxpayers less incentive to itemize – and therefore make – charitable contributions. The Tax Policy Center (TPC) projects that 62 percent fewer households with income levels between $75,000 and $200,000 will benefit from charitable deduction under the new law. Institutions should certainly continue building philanthropic support, but they must also diversify funding through other means.
Over the last decade, more colleges and universities have tried raising capital through debt. However, many find that poor ratings from the agencies deter would-be creditors. The number of higher education institutions rated by S&P increased by nearly 50 percent between 2006 and 2016. During that same timeframe, the number of institutions with a BB or B rating – indicating significant speculation, uncertainties or exposure to adverse conditions – increased by more than 600 percent.

In addition to impacting individual institutions, poor ratings can cast a dark cloud over the whole sector. Moody’s reports that aggregate operating revenue at four-year institutions is expected to increase by 3.5 percent in 2018. However, growth in operating expenses is expected to outpace that at approximately four percent. Because of this, Moody’s recently downgraded its rating of the U.S. Higher Education sector from “stable” to “negative” (Exhibit 7).

In its annual sector outlook, published in January 2018, S&P also issued a negative forecast commenting that “students’ continued expectations of increased college affordability and lower tuition and debt at the same time they demand more and better facilities, services and general college experience have left many institutions at a difficult operational crossroads.”

Exhibit 7
Moody’s did note in its overall downgrade that solid reserves add a stabilizing element to the sector. Therefore, if student demand proves steady, if cash and investment levels remain strong and **if institutions can sustain revenue growth of at least three percent while keeping it above expense growth, the outlook could shift back to “stable.”** S&P also implied that if institutions become more flexible and adapt to change, brighter future outlooks are possible. Herein lie the opportunities for U.S. colleges and universities.

To keep revenue growth above expense growth and to ensure prudent financial management to deal with future unknowns, many institutions need to rethink their business models. This involves making internal measurements, benchmarking against industry peers and asking tough questions like those outlined in Exhibit 8. These models must be economically sound, based on financial sustainability and practically effective to advance the school’s mission and meet the changing needs of its students.

By taking a hard look at these areas and ensuring that operational and academic structures are right-sized based on the institution’s volume, revenue and mission, colleges and universities will not only achieve greater efficiency, they will also be able to better demonstrate value to students and stakeholders.

### Exhibit 8
**Illustrative Questions for Assessing an Institution’s Sustainability**

| Academic | | Operational | | Financial |
|----------|----------|-------------|----------|
| ▪ Are enrollment and faculty levels in alignment? | ▪ Have shared services and outsourcing been analyzed to ensure economies of scale and the provision of quality services? | ▪ Does the institution have sufficient liquidity and a substantive financial forecasting capability? |
| ▪ Are classes set up efficiently to ensure maximum enrollment in each course? | ▪ Are the costs of infrastructure and back-office functions in line with the institution’s mission, size and revenue? | ▪ Does the institution have a substantive budgeting approach and are all reporting entities taking responsibility for their budgets? |
| ▪ Are faculty teaching loads optimal? | ▪ Are fixed costs at the appropriate level? | ▪ Have all asset monetization opportunities been analyzed? |
| ▪ Is the faculty appropriately balanced among tenured, contract and adjunct instructors? | ▪ Is course scheduling efficient both from space and academic perspectives? | ▪ Is the institution using its real estate in the most optimal, efficient and cost-effective manner? |
| ▪ Which programs are not sustaining the core? | ▪ Are all issues of consolidation and integration “on the table”? | ▪ Is the endowment at an appropriate level? |
| ▪ Is the faculty and administration “speaking with one voice”? | ▪ Are the faculty and administration “speaking with one voice”? | ▪ Is the school’s community providing necessary and appropriate elements of support? |

### The “Change Readiness” Factor

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Are the institution and its leadership teams realistically positioned to make difficult decisions to create change and embrace economic models that are financially sustainable?</td>
<td>▪ Does the institution have a vision for the future, and is it equipped to effectively communicate its vision with all constituents, both within the institution and throughout its support community?</td>
</tr>
</tbody>
</table>
Prospective college students today all felt the Great Recession’s impact in one way or another. Many first-time freshman – members of Generation Z – remember their parents, friends or neighbors struggling with job loss, home foreclosure or insurmountable debt. Students with workforce experience who are returning to school for an advanced degree or in pursuit of a new career may have experienced those struggles firsthand. The point is that incoming college students are more cost and debt conscious than ever before, and their primary purposes for obtaining a higher degree are to achieve employment and to maximize their income. To compete for these students and their carefully-guarded tuition dollars, institutions must demonstrate clear value and return on investment.

One obvious requirement is to align academic programs to current job market demand. Students in the U.S. are increasingly choosing degree programs that yield greater post-graduation job prospects. Between 2010 and 2014, enrollment in science and technology programs increased by 49 percent. In math and statistics, they increased by 35 percent; in information technology by 32 percent and in engineering by 26 percent as demand for STEM (science, technology, engineering and mathematics) professionals has risen dramatically across industries. During that same period, enrollment declined in humanities programs like history, philosophy, religious studies and literature (Exhibit 9). In fact, the percentage of all bachelor’s degrees awarded in humanities dipped below 12 percent in 2015.

Exhibit 9
Changes in U.S. College Program Enrollment (2010-2014)

Sources: “Bachelor’s Degrees in the Humanities”, American Academy of Arts & Sciences (May 2017) and “Too Many MBAs?”, Business.com (February 2017)
In addition to carefully considering employment and income prospects associated with their chosen degree, today’s students are also especially mindful of the supplemental costs of higher education – housing, meals, travel and supplies. Many students are looking for alternative learning methods that offer greater accessibility at a lower cost. In 2017, there were more than 9,400 MOOCs available composing over 500 credentialing programs and a growing number of degree programs. While MOOCs can’t match the interactive or hands-on learning potential of a traditional classroom or laboratory, alternative or blended teaching models that combine the accessibility of online instruction with experiential learning (e.g., online instruction, flipped classrooms1, blended MOOCs2, etc.) may make higher learning more time- and cost-efficient, thereby demonstrating even greater value to students and their families.

OWNING THE CORE MISSION

In this new landscape, even the strongest colleges and universities must acknowledge the need for change, plan for a less favorable revenue environment and implement necessary financial strategies. Failure to do so, or postponing until tomorrow what must be done today, will ultimately prevent survival.

To maintain an institution’s viability, it is the responsibility of an institution’s board, management team and faculty to:

- Ensure reliable levels of cash and liquidity based on sound budgeting and financial forecasting with clear strategies that are in alignment with the core mission
- Strengthen the institution’s financial statements from both balance sheet and income statement perspectives with the overall objective of long-term sustainability, again in concert with the core
- Focus on and strengthen the core characteristics of the institution to differentiate the school from its competition
- Demonstrate detailed academic programming to fulfill the school’s mission with enhanced scrutiny on academic quality and integrity buttressed by cost-effective faculties, class programming and academic support centers; remain open to divesting from activities and programs that are non-core
- Right-size operational support and shared services teams with a focus on quality and efficiency
- Optimize the use of all fixed assets and explore appropriate opportunities for asset monetization
- Align academia with the business of running a sustainable institution
- Find common ground among the administration and faculty to make the necessary transformation while protecting the mission and core business

Each institution’s board of trustees must hold management, executives and faculty accountable for maintaining efficient operating models to provide true academic value to students.

1 In a flipped classroom model, students typically receive the lecture component of a course through a recorded video they watch independently in their own time, and they attend class in person to participate in coursework, group work or discussions.

2 Blended MOOCs are a variation of flipped classrooms in which students supplement their online learning through less frequent in-person meetings with a small group, instructor or teaching assistant.
Between 1980 and 2012, the total number of higher education institutions in the U.S. increased by more than 46 percent from 3,231 to 4,726. By 2014, that number dropped to 4,627. The emerging landscape, carved by declining government support, diminishing enrollment and longstanding inefficiencies, is more competitive than ever before. Even before they downgraded their rating of the higher education sector to “negative,” Moody’s predicted that mergers and closures – particularly of smaller institutions – could double or triple in the coming years. The sector understands there are too many higher education institutions in the U.S. The economic reality is that many schools will not survive given the numerous challenges facing higher education.

Alvarez & Marsal (A&M), a global professional services firm with unmatched experience in restructuring and performance improvement, is uniquely positioned to work with institutions toward greater efficiency and sustainability. Recognizing that every college and university is unique with its own facts and circumstances, A&M takes a well-informed, data-driven approach when shaping strategies and recommendations for each partner, and the firm’s support doesn’t end there. From analysis to implementation, A&M leaders remain objective and hands-on, serving as active team members throughout the process.

The colleges and universities that rise above the bleak forecasts for the U.S. higher education sector will be those that are willing to adapt and embrace sustainable financial, operational and academic models. To accomplish this, each school at risk must have administrative and academic leadership on the same page, developing well-defined, thoughtful strategies across the entire institution and working cohesively to implement a revitalized vision and path for long-term sustainability.

Create a Sustainable Future for Higher Education.
2018 Outlook Changed to Negative as Revenue Growth Moderates. Moody’s Investors Service, 5 December 2017.


Alvarez & Marsal is helping to develop sustainable higher education institutions by identifying financial and operational solutions, stabilizing distressed institutions, implementing fact-based performance improvement opportunities, using technology to drive innovation and more.

Public and private colleges and universities are in competition to sustain growth despite declining enrollment and limited funding. Campuses must evolve to operate more efficiently while meeting the needs of current and prospective students, faculty, staff and donors. Colleges and universities must optimize the use of their limited debt ceiling and funding capacity.

Augmented Rewards Program Helps Improve Retention at a Non-profit, Accredited Educational Institution (July 2016)
An educational institution realized that its compensation and benefits programs were in need of an overhaul. A&M was engaged to recommend changes that would better reward senior performance and make the programs cost effective.
ABOUT THE AUTHORS

ROBERT HERSHAN
MANAGING DIRECTOR, TURNAROUND AND RESTRUCTURING
rhershan@alvarezandmarsal.com

Mr. Hershan brings more than 30 years of commercial and legal experience and deep expertise in managing complex transactions, with emphasis on problem-solving, structuring and negotiation. Since joining A&M in 2007, Mr. Hershan has facilitated bottom-line and organizational improvement for clients in manufacturing, transportation, language services and technology solutions, financial services and higher education. In the higher education sector, Mr. Hershan has led the development and implementation of financial, operational and academic restructuring strategies at both the undergraduate and graduate levels. Mr. Hershan earned a bachelor’s degree from the Wharton School at the University of Pennsylvania and a juris doctor from Fordham University School of Law.

CRYSTAL L. LAUDERDALE
DIRECTOR, INSIGHT CENTER
clauderdale@alvarezandmarsal.com

Ms. Lauderdale has more than 14 years of experience in digital media and communications with a proven track record of building teams, strategies and processes that achieve measurable business results. Prior to joining A&M, Ms. Lauderdale was Director of Marketing & Communications at Florida Polytechnic University, a brand-new state institution focused on science, technology, engineering and mathematics (STEM). At Florida Poly, she built a full-service marketing and communications department from the ground up, strategically managing resources to support student and faculty recruitment, fundraising, community relations and government affairs while extending brand reach nationally and internationally in the university’s first years of operation. Ms. Lauderdale has also held leadership and management positions in media and tech environments, including Aol and the New York Times’ Regional Media Group.

This article was produced with research and support from the A&M Insight Center, which serves to provide A&M professionals and clients with relevant, industry-specific, actionable insights derived through proprietary studies and research.
Companies, investors and government entities around the world turn to Alvarez & Marsal (A&M) when conventional approaches are not enough to make change and achieve results. Privately held since its founding in 1983, A&M is a leading global professional services firm that provides advisory, business performance improvement and turnaround management services.

With over 3000 people across four continents, we deliver tangible results for corporates, boards, private equity firms, law firms and government agencies facing complex challenges. Our senior leaders, and their teams, help organizations transform operations, catapult growth and accelerate results through decisive action. Comprised of experienced operators, world-class consultants, former regulators and industry authorities, A&M leverages its restructuring heritage to turn change into a strategic business asset, manage risk and unlock value at every stage of growth.

When action matters, find us at: www.alvarezandmarsal.com