

Benchmarks for efficiency and sustainability: A research study on the cost of delivery

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Abstract

With changing student demographics and widespread resistance to rising college costs, colleges and universities need research to guide strategic changes that result in financial sustainability. For this reason, the New American Colleges and Universities (NACU), which has a long history of benchmarking among its campuses, conducted a two-phase study in 2020 on the cost of delivery and financial health. In phase one of this study, NACU created multiple benchmarking dashboards using IPEDS data from 2008 to 2018. The return-on-investment (ROI) dashboard identified high-performing campuses with annual ROI ratio values of 2.0 or higher. In phase two, NACU interviewed leaders at these high-performing institutions to understand their strategies for creating financial health. Key findings suggest that leadership at financially solvent institutions maintains a philosophy that originated in the health care sector of “No margin, no mission.” Armed with performance metrics and market research, these campuses are committed to cost containment, data-driven decision making, and calculated program growth for financial sustainability.

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Introduction

This research study comes at a time of great change and uncertainty for colleges and universities, and the lingering and long-term impacts of the global health pandemic are unknown. The affordability of higher education dominates public discourse as rising tuition costs are under scrutiny. Colleges and universities have responded by minimizing annual tuition increases while simultaneously boosting financial aid packages as a strategy to compete for students. For example, this means increasing the amount of aid to students to bring down the tuition cost to students. However, often this increase aid is simply a discounting strategy that is not funded and results in lower net tuition revenues. This combination has strained an already fragile business model, particularly at tuition-dependent institutions with endowments under \$200 million. All of these factors are contributing to the need for a better business model, especially if the trend of increased expenses and lower net tuition continues. Additionally, changes and shifts in the demographics of the traditional college-going student population have compounded challenges, particularly in the Northeast and upper Midwest (Grawe, 2018; NCES, 2018).

In response to these changes, institutions need to make strategic operational changes that result in financial and, therefore, mission sustainability. This is not a time for business-as-usual responses to major challenges, and new academic and business models must be under review and given serious consideration (Marcy, 2020). The COVID-19 pandemic has accelerated the need for systemic change as campuses are less able to generate previous levels of revenue from areas such as student room and board, auxiliary sources (e.g., conferences and summer camps), and athletics (Friga, 2020). Without a doubt, colleges and universities must invest in their strengths and areas of potential growth, thus shifting to an ROI mindset and culture (NACU, 2020) given revenue constraints.

In its 25th year, the New American Colleges and Universities (NACU) has become a center for strategic discussions to improve academic and business performance for our campuses. NACU member

institutions are independent colleges and universities dedicated to the purposeful integration of liberal education, professional studies, and civic engagement. At the time of the study, they represent 22 institutions nationally, including two Historically Black and two Hispanic Serving. Collectively, their 6,000 faculty educate more than 100,000 undergraduate and graduate students. Our member schools are: Belmont University, California Lutheran University, Calvin University, Chatham University, Drury University, Florida Southern College, Hamline University, Hampton University, John Carroll University, Manhattan College, Merrimack College, Moravian College, Nazareth College, North Central College, Ohio Northern University, Queens University of Charlotte, Roger Williams University, Russell Sage College, Tuskegee University, University of La Verne, University of New Haven, and Wagner College.

NACU's mission is *to connect our campuses to collaborate in the delivery of innovative ideas and to champion the belief that an integrated liberal, professional, and civic education is essential to the future of our world.* We execute on our mission by administering a collegiate network of research and learning that transforms academics at NACU campuses. This includes developing and managing a series of professional development programs for faculty and academic leadership, among numerous other research projects and learning activities. These offerings create an exchange of knowledge and practice among colleagues that results in the sharing of curriculum, pedagogy, and research that elevates the learning effectiveness of an integrated NACU education.

Furthermore, NACU has a long history of research and benchmarking. For the last ten years, we have conducted an annual Net Tuition Research Study that indicates our campuses are in line with the national trend of realizing lower net tuition per student, according to the National Association of College and Universities Business Officers (NACUBO) *Tuition Discounting Study* (NACUBO, 2020). After speaking with presidents, provosts, chief financial officers, and vice presidents of enrollment management and student affairs, the need for this study, *Benchmarks for Efficiency and Sustainability*, became clear; that is, a study investigating the ROI of NACU campuses in a

concerted effort to examine trendlines that yield insights and strategies for financial sustainability. The study is broken into two phases. In phase one, we analyzed ten years of annual data in the areas of: a) expenses associated with the cost of instruction; b) total cost of operations; and c) net tuition revenues. In phase two, we interviewed leaders at high-performing campuses to determine the key factors for their year-over-year increasing ROI. The interviews provided insight into their philosophies, strategies, and tactics for creating a campus culture for financial sustainability.

Research process

NACU used an action research method of inquiry for a deeper understanding of the participants in relation to the research questions. Action research engages participants “in a collaborative process of critical inquiry into problems of social practice in a learning context” (Argyris, et. al., 1985, p. 236). It is defined as a “form of self-reflective problem solving, which enables practitioners to better understand and solve pressing problems in social settings” (McKernan, 1988, p. 6). Other scholars have contributed to a definition of action research: McCutcheon and Jung (1990) added the importance of collaboration with participants during the inquiry process. Unlike other methods of inquiry in which research is conducted *on* community, action research permits an inclusive approach in which the inquiry is done *by* or *with* the community (Anderson and Herr, 2005, p. 3). Due to the collaborative nature of the campuses in NACU, the action research approach seemed appropriate.

Seeking to understand the strategies that contribute to financial sustainability, the research design included a set of questions to guide the process:

1. What are the essential metrics needed for creating a valid comparative analysis?
2. What insights can be found by analyzing benchmarks from peer institutions on return-on-investment trendlines to improve financial sustainability?
3. What are effective strategies for improving an institution’s return on investment?

NACU worked with a research team from its campuses to identify different metrics for the benchmark dashboards. The dataset included the standard Integrated Postsecondary Education Data System (IPEDS) metrics on admissions, enrollment, finances, financial aid, and human resources for each year between 2008 and 2018.

Lastly, the research design included in-depth discussions with university presidents from select campuses, identified in the study as a result of their strong year-over-year ROI. These interviews with high-performing campuses enabled the study to capture firsthand a set of key findings from the leadership perspective that contribute to financial sustainability. For each interview, the research team presented the ROI Benchmark dashboard and used a set of standard questions to guide the discussions (see Appendix A).

Finally, the study concluded its data collection by presenting the benchmark tools to chief financial officers from NACU campuses to garner additional reaction and input, as well as suggestions for future benchmarking of key performance indicators. All of the discussions with colleagues throughout the study provided validation of the benchmark dashboards developed in the project. Participants reinforced their value as worthwhile tools for senior leadership.

Benchmark dashboards

The goal of this research project was to equip leadership with the research and counsel to improve decision making that leads to financially sustainable business models. The first phase of the project developed benchmark dashboards to identify trendlines among its campuses that would stimulate discussion with campus leadership. The research team included an expert who helped provide benchmark data support for this project by creating a set of interactive data dashboards using the data visualization tool Tableau. The data source tables for these interactive reports were built using publicly available data downloaded from the federal IPEDS Data Center furnished by the National Center for Educational Statistics.

The dashboards are culled from nearly 90 IPEDS data variables in the following primary categories: a) admissions; b) enrollment; c) finance; d) financial aid; and e) human resources. A full list of the 80+ variables is provided in Appendix B. The initial data download began in 2008 and has continued until now, with the most recent available data for academic year 2018-19. All data are downloaded into comma-separated variable text fields and then uploaded into an SQL data warehouse and integrated with prior years' data. Crosswalk tables have been created to organize each downloaded data field into functional categories for the properties of each higher education institution. Several views have been built in Microsoft SQL Management Studio to summarize the data for each of the NACU institutions, and those views provide the data sources to the interactive data dashboards in Tableau. Dashboards were built using Tableau Desktop (ver. 2020.3) and uploaded to a public Tableau account maintained under the name NACU Dashboards. In total, we created four dashboards. The dashboards developed for the study include the following:

IPEDS Trendlines Benchmark Comparison Report. This descriptive benchmark report provides end users with a list of how all NACU institutions compare along a

single data dimension. Users can select any of the 80+ variables and the years over which they would like to see the data reported to receive a ranked list of every NACU institution along the selected dimension. The yearly value is reported for each institution along with a computed average across all years selected. For financial measures, a toggle button is available to allow the user to calculate a ratio of the selected value by student headcount or student full-time equivalence (FTE) (i.e., endowment per student FTE or instructional expense per student FTE). A second dashboard plots the yearly values on a scatterplot for each institution and then fits regression trendlines to the yearly data points. For both dashboards, a pull-down filter allows users to select specific subsets of NACU institutions along which to compare their home institution.

ROI Benchmarking by Institution. The second dashboard that was created was the Return on Investment (ROI) Benchmark Dashboard. For this report, an ROI ratio was calculated and plotted for each academic year for selected institutions. There are many different ways to calculate an ROI ratio, and we decided on a simplified ROI ratio involving a revenue and cost measure using the following formula in Figure 1.

Figure 1. ROI formula

$$\text{ROI} = \frac{\text{Return on Investment}}{\text{Investment Cost}}$$

Return on Investment

Investment Revenue - Investment Cost

For the revenue component of the ratio, we used net price tuition. For the cost component, we used instructional expense per FTE.

The primary reason for using instructional expense per FTE for the cost component was that it was the most directly linked to delivery of instruction and it is the most narrowly defined expense category in the IPEDS Financial Survey. Those who report the data to IPEDS are advised in the following way to include:

...general academic instruction, occupational and vocational instruction, special session instruction, community education, preparatory and adult basic education, and remedial and tutorial instruction conducted by the teaching faculty for the institution's students. Include expenses for both credit and non-credit activities. Exclude expenses for academic administration if the primary function is administration (e.g., academic deans) (IPEDS, 2020).

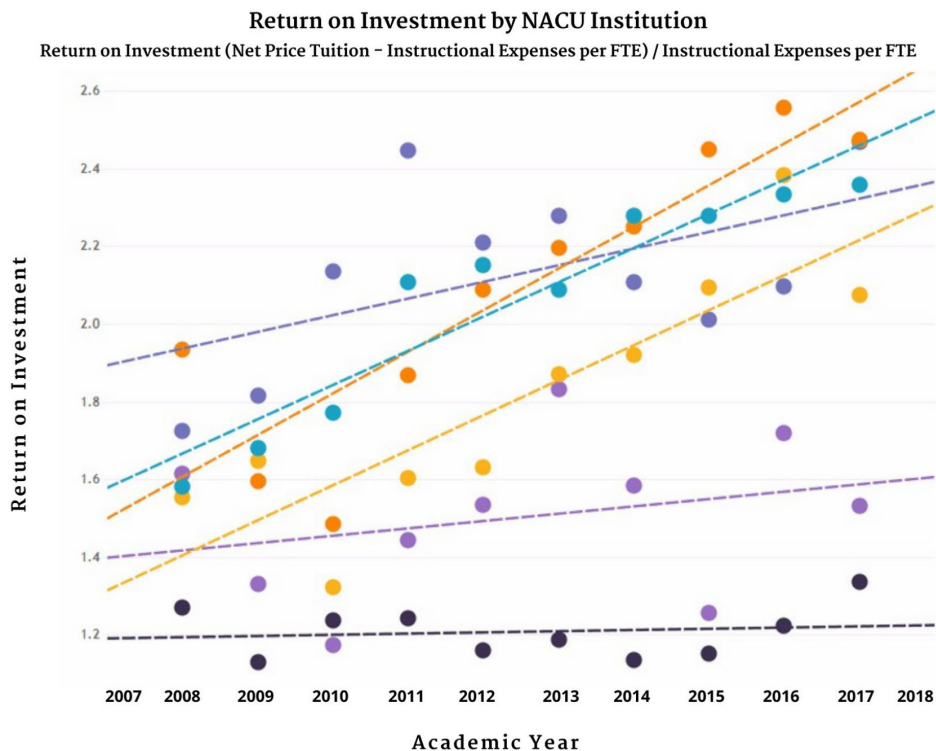
The decision to use net price tuition for the revenue component of the ratio came with the caveat that net price tuition is only reported for incoming full-time, first-year students and does not reflect the total net tuition for all undergraduates (or for graduates). For colleges that have more diversified tuition revenue sources from part time per credit tuition or from graduate tuition, this formula might not be the most accurate measure of revenue. To account for this caveat, we designed an alternate revenue measure that computed a tuition revenue per student FTE using the total discounted

tuition and fee revenue divided by the total student FTE for the institution. A toggle button is available in the dashboard to switch between the two revenue measures.

The computed ratios were plotted along a Y-axis, with the academic year along the X-axis. Regression trendlines were fitted to the plotted points for each of the selected institutions, representing the overall trajectory of their ROI ratios over the selected academic years. End users are able to select the group of institutions plotted in the report, and in addition to plotting the yearly values and trendlines for the ROI ratio, there are toggle buttons that alternatively plot the components of the ratio (instructional cost per student FTE or net tuition price) or other related financial variables (i.e., cost of attendance or endowment). The primary dashboard displays the scatterplots and trendlines, but a second tabbed dashboard also represents the numerical data values in tabular form. Finally, a third dashboard represents the same data in terms of year-over-year percent change in the selected ratio or measure since 2008. This dashboard represents growth or decline of ROI over time as a percentage of the start date.

The colored lines in Figure 2 represent six different institutions and their slopes between 2007-2018 on the X-axis and the ROI ratio on the Y-axis. In the figure, the orange, teal, and yellow trendlines show an increase of over 2.0 in the ratio during the ten-year period of performance for those institutions. Simultaneously, the black and purple institutions' trendlines are relatively flat in growth in comparison.

Figure 2. ROI benchmarking by institution



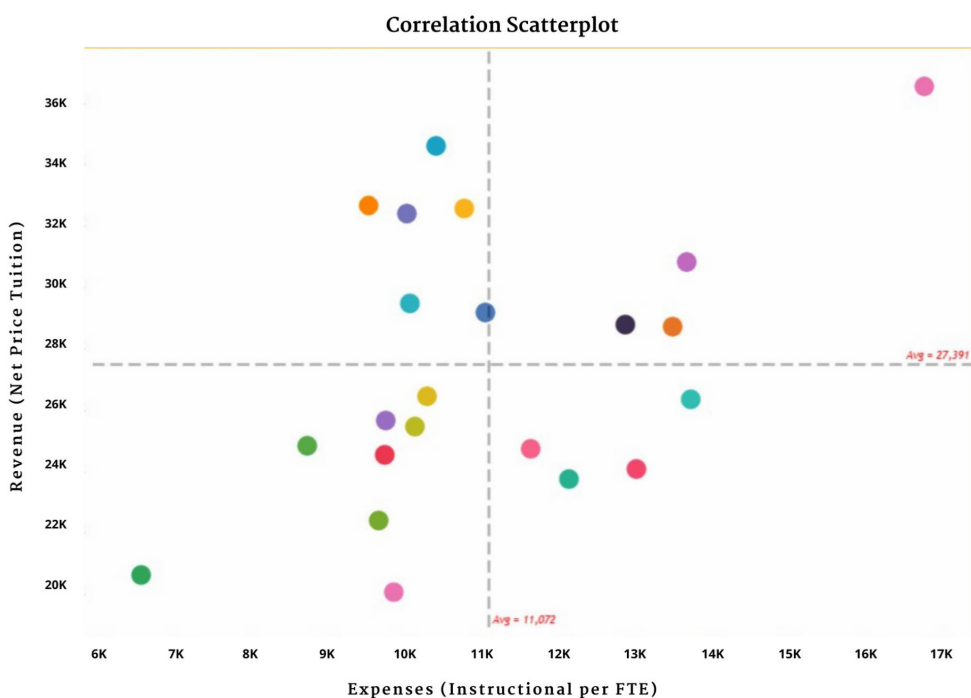
IPEDS Correlation Scatterplot. The IPEDS Benchmark Scatterplot Dashboard in Figure 3, the third dashboard created, was derived from the first two dashboards. As the title implies, this dashboard allows end users to select any two of the available data variables from Appendix B and plot NACU institutions with respect to their values along the two selected variables. The report defaults to representing the average values (across the academic years selected) of the two ROI components of instructional expense per student FTE along the X-axis and net price tuition along the Y-axis. Each color-coded NACU institution's value is plotted along those two dimensions, and dashed lines represent the average value for all selected institutions. The dashed lines represent a proxy set of axes and quadrants to help loosely organize and categorize the plotted institutions. Additionally, the manner in which the individual institutional data points are clustered provides information about the relative direction and strength of correlation between the two data dimensions being plotted in the report.

In looking at the example in Figure 3, the Scatterplot Dashboard creates four artificial quadrants by using the average value among the plotted institutions along each of the axes. In this figure, the horizontal axis represents instructional expenses and vertical represents revenue measures. For the purposes of sustainability and high ratios only, institutions would want to have the highest revenue value and the lowest instructional expense value (since the ratio is [revenue - expense] / expense). In the dashboard, a campus would want to be *above* the horizontal dashed line so that you have above-average net tuition revenue (NTR) compared to other institutions and you would want to be to the *left* of the vertical dashed line indicating you have below average instructional expenses. Having higher instructional expenses is good for other things like a smaller faculty to student ratio and student success measures such as retention and graduation rates. However, considering that most of the institutions have endowments below \$100 million, and thus have limited revenue from the endowment on a yearly basis, lower instructional expenses will help with an increased ROI.

Furthermore, solely from an ROI perspective, being in the upper-left quadrant is ideal because it represents *above-average* NTR and *lower-than-average* instructional expenses. That is the quadrant where we will find schools with the highest ROI ratios. Conversely, campuses in the lower-right quadrant will have the *lowest* ROI ratios since they have *below-average* NTR's and higher-than-average instructional expenses. Campuses in the remaining two quadrants will be those average institutions that should

have ROI ratios near 1. You can imagine a diagonal line that goes from the lower left of the Scatterplot Dashboard to the upper right. Institutions along that imaginary line are probably the ones that have fairly balanced revenues to expenses and ROIs in the 1.0 to 1.5 range. Their revenues are high (or low for schools in the lower-left quadrant), but so are their instructional expenses, so they are somewhat balanced.

Figure 3. IPEDS revenue to expense correlation scatterplot



Financial Health Benchmark Comparison Dashboard. The final dashboard that was created is the IPEDS Financial Health Benchmark Dashboard in Figure 4. The goal of this dashboard is to provide an institution with a quick comparison of their data to that of a selected subset (or all) of NACU institutions relative to 17 pre-selected data fields related to the financial health of institutions. The data fields span enrollment, admissions, finance, financial aid, and human resources, and the average values (averaged across the academic years selected by the end user) of the home institution are compared to the average across all comparison institutions selected

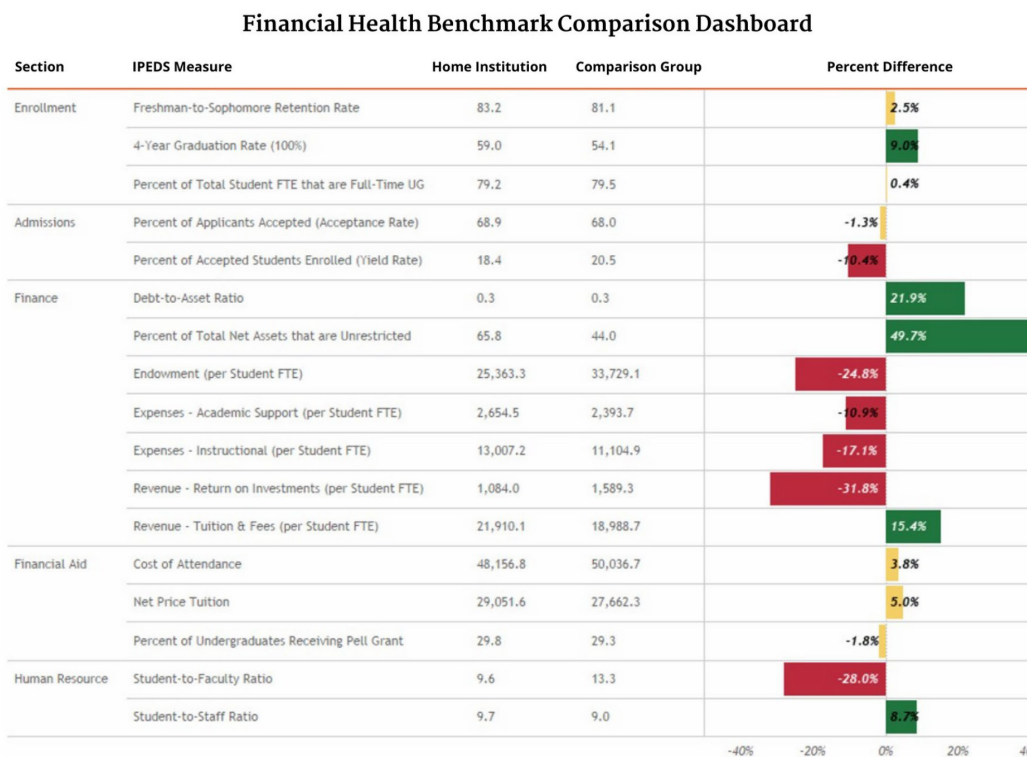
(default is all NACU institutions). The comparisons are represented in terms of percent differences plotted in a horizontal bar graph between -50% and 50%. The bars are color coded as red, yellow, or green, with red representing any “negative” difference larger than 10%, green representing any “positive” difference greater than 10%, and yellow representing any value within +/- 10%.

The enrollment variables selected for this scorecard were freshman-to-sophomore retention rate, four-year graduation rate, and the percentage of total student FTE that are full-time undergraduate (dependence on

traditional full-time UG enrollment). The admissions variables were acceptance rate and yield rate. The finance variables were debt-to-asset ratio; percent of total net assets that were unrestricted; endowment per student FTE; academic support expenses per student FTE; instructional expenses per student FTE; return on investments per student FTE; and tuition and fee revenue

per student FTE. The financial aid variables were cost of attendance, net price tuition, and the percentage of enrolled undergraduates receiving federal Pell grants. Lastly, the human resource variables were student-to-faculty and student-to-staff ratios during the same periods.

Figure 4. Financial health benchmark comparison dashboard



All four dashboards provided the benchmark data for the research team to analyze trends and identify key findings that led to conclusions for financial health strategies. The dashboard analysis and strategies are shared in the next section.

General analysis of the dashboards

Like most private institutions, NACU campuses are tuition dependent and provide a mainly traditional four-year residential undergraduate experience. For most, enrollment has increased over the last ten-year period. This growth has not been reported by all private

institutions across higher education. In fact, many have reported decreased enrollment, and at some, enrollment has significantly dropped (NSC, 2020). In addition to mostly modest enrollment growth over the last ten years as seen in Table 1, most NACU institutions have also increased their ROI year-over-year, or at least kept their ROI stable. The range of ROI ratios remained above 1.0 among institutions and annual growth in ROI ranged from .05 to over 2.0 as seen in the example of the six campuses represented in Figure 3. This acknowledges the strength of institutional leaders and their governing boards to effectively strategically leverage tuition, financial aid, expenses, and endowments.

Table 1. Ten years of enrollment growth, 2009-2018

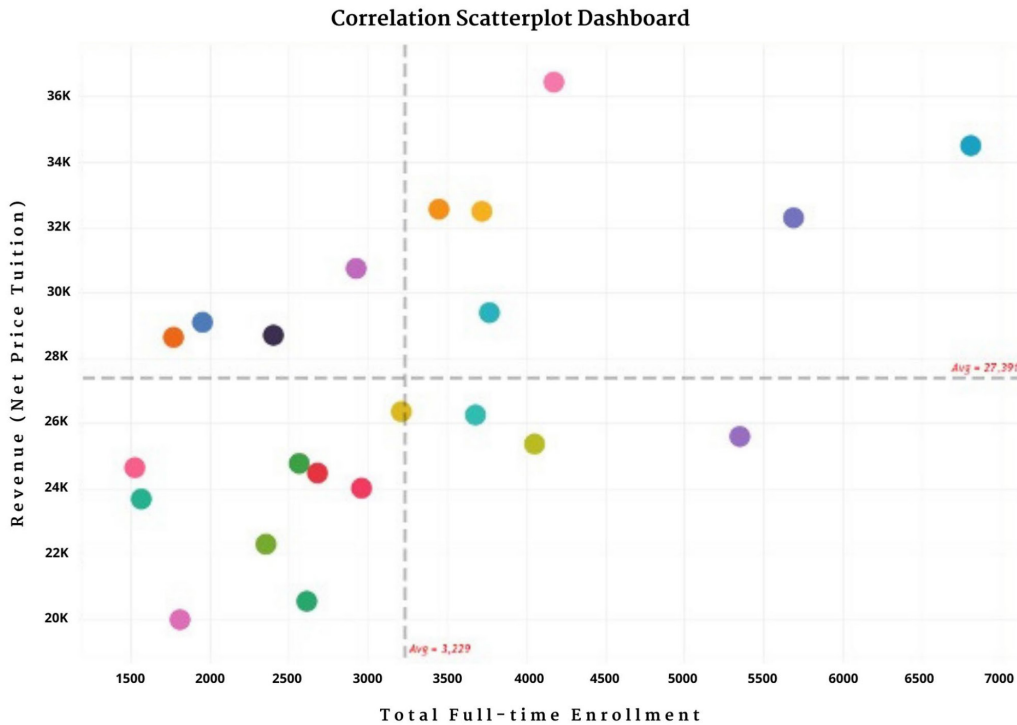
		Enrollment									
		Academic Year									
		2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
Institution A		8,064	8,159	8,369	8,334	8,517	8,796	8,628	8,370	8,032	7,482
Institution B		8,260	8,012	7,723	7,350	7,244	6,915	6,665	6,395	5,888	5,424
Institution C		6,867	6,984	6,835	6,786	6,811	6,555	6,351	6,385	5,949	5,770
Institution D		4,860	5,024	5,193	4,801	4,884	4,732	4,768	4,844	4,680	4,587
Institution E		4,321	4,618	4,646	4,269	4,393	4,622	4,765	5,221	5,254	5,402
Institution F		3,526	3,734	3,852	4,258	4,469	4,581	4,683	4,855	5,008	5,166
Institution G		4,383	4,236	4,174	4,126	4,160	4,282	4,205	4,103	3,931	3,714
Institution H		3,732	3,840	3,918	3,990	3,993	4,034	4,008	3,967	3,991	4,092
Institution I		4,232	4,242	4,214	4,071	3,970	3,883	3,800	3,657	3,412	3,461
Institution J		3,555	3,517	3,523	3,673	3,688	3,711	3,560	3,709	3,692	3,714
Institution K		3,039	3,088	3,108	3,238	3,695	3,619	3,557	3,611	3,570	3,636
Institution L		4,643	4,191	4,014	3,620	3,337	3,067	2,694	2,447	2,168	2,090
Institution M		3,026	3,289	2,851	2,996	3,103	3,118	3,117	3,152	2,946	2,931
Institution N		2,987	2,900	2,883	2,871	2,818	2,823	2,910	3,102	3,257	3,307
Institution O		2,928	2,965	2,949	2,962	3,043	3,048	3,042	2,989	2,902	2,798
Institution P		3,154	3,055	2,977	2,869	2,670	2,619	2,455	2,442	2,434	2,426
Institution Q		2,633	2,525	2,713	2,897	2,878	2,832	2,965	2,939	2,966	749
Institution R		2,536	2,507	2,330	2,286	2,248	2,285	2,386	2,491	2,524	2,568
Institution S		2,218	2,271	2,308	2,213	2,231	2,245	2,221	2,237	2,275	2,265
Institution T		2,336	2,269	2,110	2,224	2,134	2,170	2,178	2,220	2,266	2,219
Institution U		2,514	2,446	2,426	2,261	1,970	1,837	1,910	2,002	2,032	2,057

In reviewing financial data linked to enrollment, financial aid, expenses, and available human resources, we found that most NACU institutions raised tuition annually by five to seven percent. For most, enrollment growth has been small. As traditional undergraduate enrollment is predicted to continue declining and consumers are wary of taking on college debt, this study shows for most member institutions that the future will require careful implementation of strategies to increase net tuition revenue, grow a more flexible endowment, and reduce operational expenses in order to invest in new programs or modify program offerings to align with market demand.

Although many institutions find their small size to be an asset, from a financial perspective, we find a

positive relationship between net price tuition and total undergraduate enrollment FTE as measured in Figure 5. Total institutional expenses range from approximately \$40 million for the smallest of institutions to \$166 million for the larger institutions. Net revenues ranged from slightly above \$1 million to almost \$20 million. Most member institutions averaged a net revenue of about \$4 million per year. When looking at overall institutional expense and net revenues, the data collected demonstrates what might be viewed as an obvious finding that more net revenue per student combined with higher enrollment allows for greater financial flexibility and improved economies of scale.

Figure 5. Scatterplot of net price tuition and total enrollment



Further, due to rising competition to enroll undergraduates from a shrinking pool of high school students nationwide, many institutions may not be able to depend on an increase in net tuition revenues during this period of increased competition (Grawe 2018; NACUBO, 2019). A few member institutions may have the ability to increase their net tuition revenue and not experience enrollment declines, but others may struggle to grow enrollment and net revenues. While a few institutions have been able to grow their net tuition revenue as shown in Table 2, most institutions have barely increased net revenues in recent years. This trend, likely to be impacted further by COVID-19, is expected to continue over the next decade as competition for the next cohorts of students increases.

For most institutions, net revenues, which are also displayed in Table 2, have marginally increased. While this is not a surprising finding, the challenge to grow actual net dollars to support increased expenses will continue to challenge institutions. Further, increasing both enrollment and NTR is going to be difficult for most of the institutions. Table 2 shows that only a few select campuses were able to increase NTR and enrollment by more than 20% over the periods between 2011-13 and 2016-18. Only 4 schools increased NTR by more than 10% and enrollment by more than 20%.

Table 2. Enrollment correlated to net tuition revenue

Changes in Full-time Undergraduate Enrollment and Net Tuition Revenue

NACU Institution	% Change FT Undergraduate Enrollment	% Change Net Tuition Revenue
1	43.9%	17.9%
2	43.5%	25.1%
3	27.8%	13.9%
4	26.2%	21.4%
5	17.3%	16.3%
6	11.1%	22.5%
7	11.0%	22.0%
8	10.6%	11.2%
9	9.9%	-1.5%
10	7.5%	14.3%
11	5.6%	6.3%
12	4.7%	3.7%
13	2.2%	16.1%
14	1.4%	10.1%
15	-0.3%	-2.7%
16	-0.8%	9.8%
17	-1.0%	22.7%
18	-2.9%	26.3%
19	-5.7%	-0.2%
20	-6.9%	5.6%
21	-12.2%	25.6%
22	-34.4%	-7.6%

For many member schools, a higher NTR was related to enrolling fewer students. While several institutions boosted NTR by over 20%, they experienced stagnant enrollment growth.

Most students enrolled at NACU institutions rely on federal loans to pay for part of their education as exhibited in Figure 6 (a dotted line is provided at the 50% mark for reference). Each bar represents a different institution in the figure (names have been removed).

This reliance represents an additional risk to member institutions, especially with continued discussion of “free” or red-cost college programs among publicly supported colleges and universities. With approximately 40% of all traditional-aged college students receiving a Pell grant, the percentage of loan amount may become a metric that needs much closer monitoring. Students’ willingness to pay versus ability to pay versus willingness to borrow all needs to be considered as institutions put together financial aid strategies and packages.

Figure 6. Percentage of NACU undergraduate students relying on federal loans in 2018

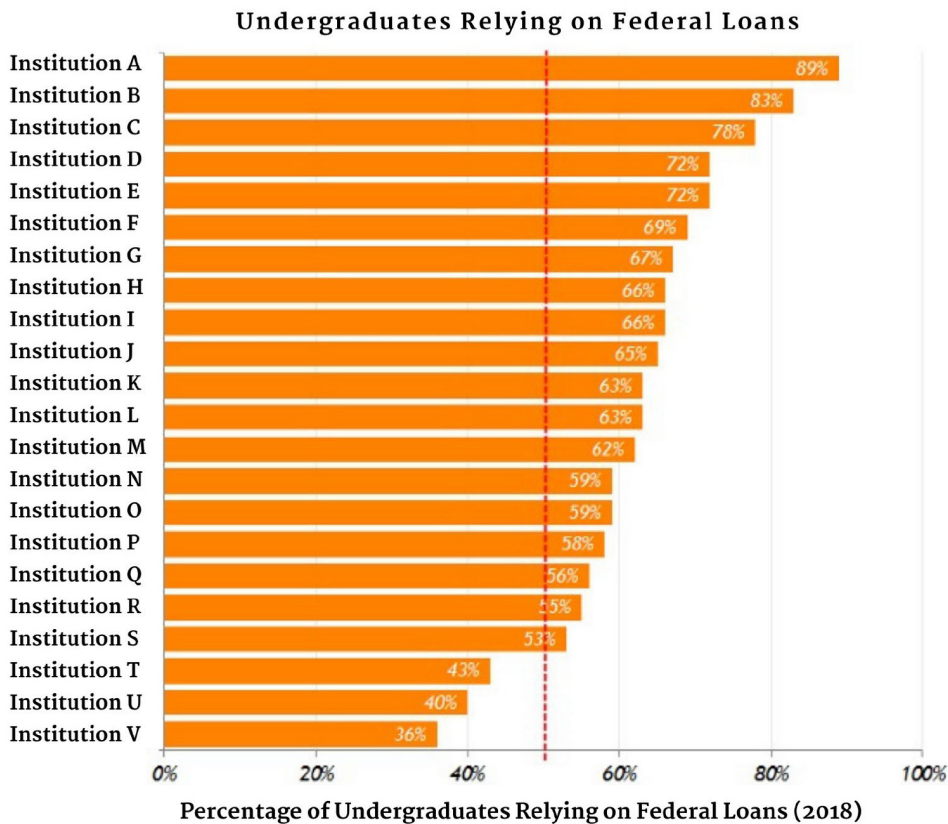
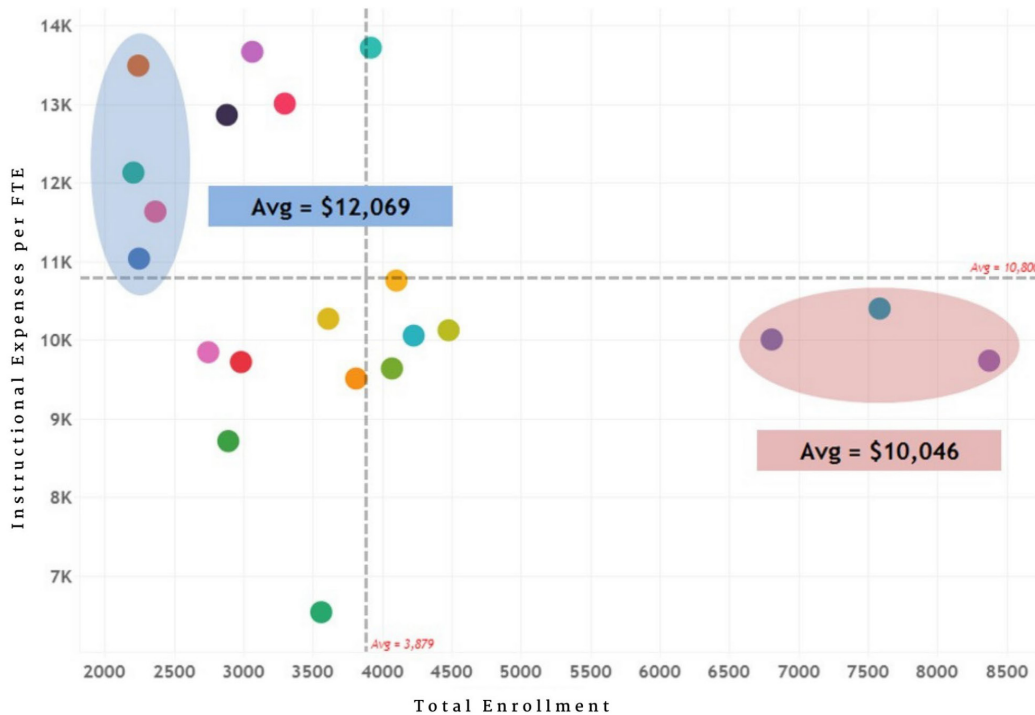


Figure 7 displays the cost of instruction per student FTE compared to total enrollment. Among the four lowest-enrolled NACU institutions, the average instructional expense per FTE is \$12,069 (group in blue), where the average instructional cost per FTE of the largest

schools, in red, is \$10,046. Institutions with the largest enrollments are able to maintain lower expenses per student. However, there was wide variability among schools at other enrollment levels.

Figure 7. Cost of instruction per student FTE compared to total enrollment



Again, this finding is not necessarily a surprise, but a finding that most smaller institutions may need to better understand or consider. Some operational costs are needed to serve 2,000 or 7,000 students and only marginally increase based on larger enrollments. For the smaller institutions, this means that efficiencies will have to occur through new staffing models, technology, partnerships, outsourcing, or sharing of services. NACU has discussed shared service concepts, but like most consortia, these ideas have yet to be acted upon in any scalable way that would decrease overall expenses. If most member institutions seek to keep their enrollments at fewer than 3,000 students, these institutions will likely need to partner with other member institutions or with institutions in their regions to create infrastructure that provides similar quality service that is offered at lower costs to keep overall institutional expenses down.

The most striking, but still not surprising, is the increase in unfunded institutional aid given to students shown in Table 3. Unfunded aid or discounting is a strategy by institutions to offer students lower tuition rates that, consequently, results in lower net revenue from students. In other words, the institutions forfeit the revenue from the published tuition price. Each row represents a different institution; identifying information removed. Unfunded aid in 2011 was from as high as \$13,840 per student to as low as \$1,588 per student. In 2019, the aid was as high as \$17,436 per student and as low as \$5,052 per student. Most institutions increased their aid by 40% to 50% per student.

Table 3. Unfunded grant aid per student headcount

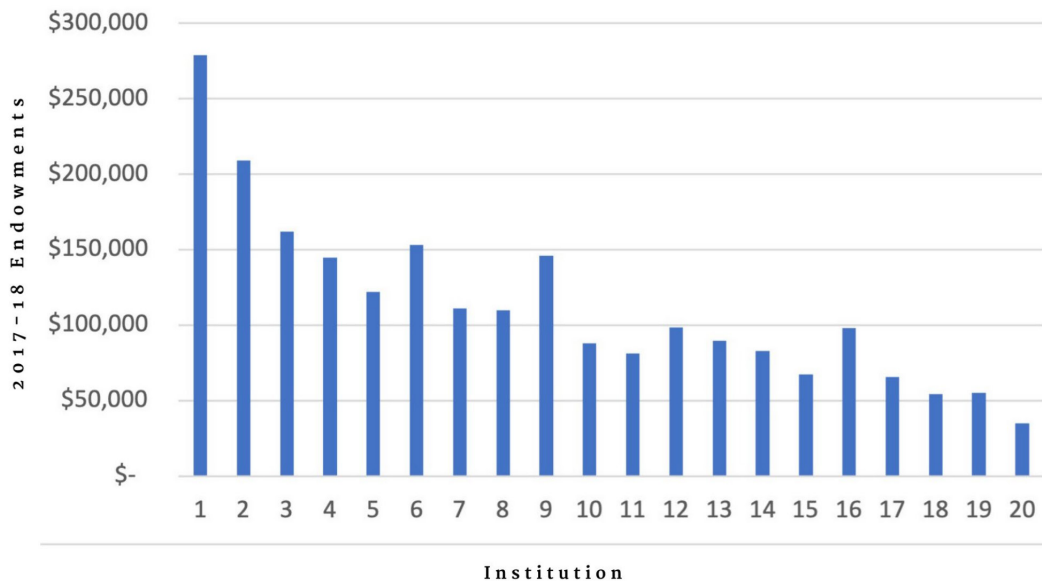
		Institutional Grant Aid (Unfunded) Per Student Headcount									
		Academic Year									
	Average	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11	
Institutions	1	14,760.88		17,436	16,609	16,188	15,325	14,380	13,740	12,732	11,678
	2	14,000.11		17,748	17,068	15,708	14,515	13,645	12,451	11,129	9,736
	3	13,550.35		13,144	12,856	11,032	10,393	16,619	15,905	14,614	13,840
	4	13,209.01		17,201	15,882	14,626	13,348	12,336	11,495	10,828	9,956
	5	12,376.33		14,407	14,140	13,659	12,789	11,986	11,281	10,864	9,885
	6	11,792.24		14,464	13,449	12,889	11,848	11,689	10,697	9,934	9,368
	7	10,909.95		14,751	13,464	12,646	11,342	10,263	9,455	8,157	7,202
	8	10,409.54		12,554	11,526	11,290	10,931	10,305	9,828	8,900	7,943
	9	9,462.78		12,782	11,573	10,617	9,752	8,913	8,070	7,122	6,874
	10	9,447.06		12,582	11,759	10,501	9,523	8,821	7,968	7,376	7,047
	11	9,154.27		12,267	11,135	10,092	9,135	8,550	7,714	6,990	7,349
	12	8,486.33		10,249	9,050	9,462	9,016	8,577	7,865	7,149	6,523
	13	8,112.72		10,198	9,599	8,896	8,932	8,195	7,291	6,424	5,366
	14	7,818.98		10,133	9,278	8,407	7,912	7,360	7,100	6,387	5,974
	15	7,555.48		7,131	7,024	7,380	7,938	8,421	7,936	7,799	6,815
	16	6,245.02		7,888	7,200	7,180	6,708	6,545	5,584	4,874	3,980
	17	5,030.02		6,318	5,810	5,770	4,928	4,787	4,699	4,088	3,841
	18	4,757.58		6,978	6,322	5,498	4,840	4,224	3,299	3,551	3,348
	19	4,462.32		7,091	5,770	4,557	3,498	3,447	3,642	3,758	3,935
	20	3,129.41		5,052	4,532	3,598	3,144	2,869	2,592	1,661	1,588

Like most private institutions in the nation, this data trend is on par with national reported trends (NACUBO, 2020). The implications for institutional sustainability are substantial. Institutions cannot continue to raise prices, expecting increases to their operating costs, only to give this away in institutional aid.

Endowment size is another challenge for many institutions. NACU campuses have smaller endowments, ranging from \$35 million to \$270 million in Figure 8.

The endowments often contain many restrictions, typically for student financial scholarship or endowed faculty positions. The average endowment of member institutions was \$100 million in 2017-18. Given the range in these endowment sizes, the potential revenues received each year from the endowment draw will only cover marginal financial aid or operational expenses.

Figure 8. Endowment data 2017-18



The need to fundraise and build a more flexible endowment is key to the longevity of most member institutions. This will not be an easy task as all of these institutions have infrastructure and physical plant needs that will likely require additional funds. This presents a challenging problem of balancing short-term needs (e.g., modernized facilities, beautiful campus, new technologies, liquidity) with the long-term need for a robust and diversified endowment to allow for a predictable revenue stream to support operational costs. For most member institutions, this will require aggressive strategies that demand additional staffing support but might be challenged by some stakeholders who believe fundraising should support the short-term investments to grow or maintain current enrollments versus saving for long-term fiscal health. Given the increase in institutional grant aid, the conversation among stakeholders about short-term need versus long-term fiscal sustainability will continue to challenge how institutions invest in fundraising activities and where or when those fundraised dollars are used.

The challenge to balance revenues and provide additional net margin dollars to build up cash reserves and dollars to add new programs or address deferred maintenance

will be a constant struggle based on the data reviewed. Also, the challenge for most institutions will be how to provide high-quality, high-impact learning while remaining competitive with resources, tools, and services that students are seeking or expecting of private higher-priced institutions.

Key findings from leadership interviews

As noted in the research design section of this report, in addition to the creation and analysis of the dashboards, phase two of the project included campus interviews. We identified a select group of four NACU campuses that showed exceptionally strong performance in the ROI benchmark dashboard. These campuses had steep ascending year-over-year trendline slopes over a period of four years (2014-2018) for those ROI values and ratio values of 2.0 or better in the benchmark. The research team interviewed the presidents at each institution to gain insight into how these leaders strategically ensured the financial health and sustainability of their campuses. Then, we discussed the findings with 15 chief financial officers and provosts to inform and corroborate what we learned.

After interviewing presidents from these high-performing campuses, we found they shared a common philosophy. Further, their financial oversight went above and beyond what you would expect from a president at institutions with higher endowments or public universities. The leadership at these NACU institutions employed a relentless command-and-control approach to ensure their institutions do not outspend the bottom line. At the most financially healthy institutions, presidents are involved in every aspect of the campus as it pertains to budget. They had total control of decision making that impacted finances while delegating responsibility on other matters. One leader described his role as that of a benevolent dictator who must establish and maintain a return-on-investment culture for the good of the whole. To borrow from Sister Irene Kraus, Daughters of Charity National Health Care System, these higher education leaders recognize and perpetuate the notion of “No margin, no mission.” While Sister Kraus brought this philosophy to the health care industry, these presidents, similarly, have brought it to higher education.

To capture the level of engagement and different strategies employed at these institutions, a summary of key findings is outlined in this section to serve as guidance for current and future higher education leaders.

Presidents are involved in every aspect of the campus as it pertains to the budget. The biggest cost driver in higher education is labor and benefits. Hence, strict control of these costs determines an institution’s long-term financial health. When it came to labor expenses, these presidents dedicated substantial time to vacancy management and position realignment. They personally assessed every position that came open for hire and required a case be made for why open positions should be filled. This meant a department had to demonstrate a position’s necessity and how it contributes to the margins. Positions opened due to retirement or new positions requested by deans and chairs underwent the same rigorous review.

Leadership often reassigned positions based on student demand for programs. For example, if a faculty member retired from a department with low enrollment, they would not re-hire that position but instead reallocate

the money to a program with higher enrollment. Also, presidents favored repurposing existing salary lines instead of adding new positions to meet demand, reshuffling the deck without added new costs. For example, a sociology department with six faculty scaled back to three faculty as fewer students majored in sociology, while the business school picked up two new positions resulting from program growth. This approach to investing in success created a sliding scale of faculty supply to meet student demand and, consequently, produced increasing return on investment due to a net savings of one faculty position in this case.

Further, we saw examples of presidents going through every single course taught each semester. At one institution, if a course had less than 12 students in the previous semester, the dean was contacted and required to provide a clear explanation for the low registration. Although a low student-to-faculty ratio is a strength at NACU institutions, the goal at this particular campus was to have a maximum of 20-25 students and a minimum of 12 students, unless there was an approved reason for the low enrollment. Institutions that are vigilant about minimum levels of course registration are on the path to achieving better ROI. When courses run with very few students, the result is a higher instructional cost per student FTE. Because labor drives up the cost of instruction, the most effective strategy is to maximize faculty output through controls and measures on class size.

Presidential oversight did not stop at class size. We found that faculty carried a four-four teaching load, which contributed to an increase in human performance and overall lower cost of instruction. While this teaching load is not unique in higher education, stricter parameters for release time reduced inefficiencies in the system and decreased the need for supplemental part-time faculty. Again, while a four-four teaching load may be common, often institutions grant a substantial amount of release time and, as a result, incur new costs due to the hiring of additional part-time faculty to fill in the gaps. At high-performing campuses, release time was much lower and discouraged unless it contributed to a faculty member’s tenure-track research or brought in grants and contracts for research.

In addition to personnel decisions, the presidents also exercise centralized decision-making during campus construction projects. No one outside of the president, neither deans nor faculty, made final decisions related to new buildings on campuses. While committees with diverse representation provided input in the planning phases, the president had final say and worked closely with the project managers to keep construction costs down. As a result, new construction remained on track and came in on or below budget in the cases we examined.

Campuses know which programs are making money and which are losing money. In line with the focus on controlling the cost of instruction, we found these campuses had incredibly detailed performance metrics and dashboards at their fingertips. The presidents examined program productivity and cost right down to a profit and loss statement for individual faculty members. The data permitted them to phase out programs that were not producing and reallocate funds to higher priorities.

In addition to financial metrics, detailed and frequent program reviews took place. In addition to internal reviews, campuses brought in external educational consults as well as colleagues from other institutions to conduct program reviews and serve in the role of a third-party auditor. In some cases, the presidents shared the program reviews with the entire campus for everyone to read. This served as a strategy to direct pressure on departments to improve their annual results. In fact, poor reviews coupled with the threat of elimination of underperforming programs consequently reenergized efforts toward growth and stability in these areas. The presidents looked for ways to use the performance metrics to challenge the campus to update curricula and motivate faculty to improve teaching and learning.

However, ROI alone was not the only measure presidents valued. A program's reputational strength remained a priority along with its alignment with the institution's mission. They looked at student retention rates and number of graduates produced as key metrics. All of these inputs contributed to a performance-based funding

allocation strategy that resulted in ongoing investments in the most successful parts of the academic enterprise.

Campuses valued high performance. These presidents clearly valued performance in their employees and focused on increasing compensation rates based on performance at their campuses, moving from below to above average compared with their peer institutions. They made annual increases a priority and saw pay as a motivator for increasing faculty and staff performance. Evaluative metrics were tied to expenses and revenues in respective areas. For administrative cost centers, this meant rewarding administrators to lower costs through workflow efficiencies and improved technology. In assessing faculty performance, this included, for example, metrics tied to total student enrollment within majors and programs, as well as enrollment of new first-time and new transfer students by major. The strategy to pay more and expect more contributed to an understanding that personnel share in the benefit of success if they help the institution operate more efficiently, grow revenues, and thrive in the marketplace. Further, the consistent annual increases also helped with employee retention, therefore reducing time and expenses connected with conducting searches.

The flipside to valuing performers is that they removed or retired underperformers. Furloughs, buyouts, and early retirement served as strategies for removing underperformers from the payroll. These strategies applied to faculty and staff positions. The COVID-19 pandemic provided additional motivation to address such changes, which resulted in a leaner administration and much lower costs of instruction.

Campuses are actively trying to be entrepreneurial and grow while maintaining quality. We found these financially sound institutions viewed academic growth as a strategy and were committed to growing in smart ways to create margins and drive financial sustainability. Growth created the opportunity to diversify sources of revenues. Further, they believed that the only way out of a crisis was to grow in smart ways that aligned with mission and market demands rather than making reductions to overcome their challenges.

To ensure smart growth, new programs and initiatives need to be calculated risks with a greater chance of success than failure. They thought it was important to take risks but to measure and understand the risks beforehand by running a pro forma, having adequate investment, and having an exit strategy if goals weren't met. In other words, make a plan and stick with it. Since plans can have lofty goals, one president stressed it was necessary to identify not only the steps to achieve those goals, but also a set of alternative steps to fall back on.

These successful campuses are focused on developing programs to meet workforce demands, such as graduate degrees and credentialing/certificate programs. Also, they realize that today's learners require flexibility, and thus are adding more online and hybrid credit and non-credit professional programs to reach a broader audience.

Smart growth also included looking internally for opportunities. They viewed student retention as a growth strategy. Hence, they invested in leadership and services that produced results, including investments in senior strategists, new technologies, peer mentors, and other retention specialists. Also, they expanded offerings for current students, developing 4+1 master's programs from undergraduate programs with robust enrollment, which streamlined graduate enrollment for students and increased total tuition revenue from those students. They also recognized that educational add-ons such as certificates would both increase revenues and student distinction in the marketplace following graduation.

Also, all presidents interviewed emphasized that quality academic programs and campus facilities were the key to attracting and retaining students. Thus, academic program quality has the biggest impact on financial sustainability. They noted that building and investing in marquee programs led to continuous growth in enrollment, reputation, and ROI. These quality programs were so strong that the institution could keep discount rates low for students in popular, marquee programs while simultaneously raising tuition steadily each year. The leaders identified that a next step for programs, especially those with low enrollment and/or in the liberal arts, would be to collaborate more purposefully across

disciplines to produce high-quality experiences for students in all programs.

Finally, these institutions prioritized growing their endowments as a strategy for financial health. They used short-term measures such as investing annual net revenues into the endowment when they did not need them for construction projects on campus, as well as growing the endowment through investment gains. Also, we saw increases in planned giving as a long-term strategy for endowment growth in addition to stretch goals such as doubling the size of their endowments in the next five to seven years.

Campuses prioritize financial management and finding efficiencies. It seems obvious that smart financial management leads to sustainability. These institutions exhibited a strict adherence to practices that make financial sustainability possible. We found different examples of surplus budgeting, including models in which the CFO computes revenue and expense slopes as part of the budget with the goal that the area between lines must expand each year. While the institutions acknowledge that costs increase over time, they make sure the cost line consistently falls below the revenue line. Again, this takes discipline and is achieved through the strict oversight and commitment to controlling the costs of instruction through staffing efficiencies we described earlier.

Furthermore, interviewees noted that their campuses found efficiencies in other operational areas. We saw a common focus on process improvement and cost reduction through better use of technology and changes to procurement. A unique example included rebuilding the campus' entire energy infrastructure to eliminate deferred maintenance, resulting in nearly \$2 million in savings. Other areas included developing partnerships with businesses that work with higher education to bring about efficiencies. All of these examples corroborated the mindset of the campus to become leaner in operations while building quality and reputation.

Communicate with people who may not understand the basis for these decisions. The annual budget and financial decisions are not a secretive process at

these campuses. There is a commitment to financial transparency and open communication. Beyond sharing and discussing the budget, these leaders felt compelled to educate faculty and staff on strategic finance, helping them understand the financial realities and rationale for choices and priorities. However, when educating a campus, it is important to remember when presenting ratios and dashboards that context is everything. If not presented in a context, different individuals will come to different conclusions that align with their thinking. These leaders ensured the education process was transparent, open, and contextualized.

Potential strategies for improved financial health

There are many opportunities for growth despite the data points that demonstrate stress or vulnerabilities for the member institutions. While some of these may appear to be outside of the traditional four-year undergraduate education, they illustrate ways institutions could consider growing to serve populations where there is demand for higher education. Areas for potential growth include the following:

Graduate education. While some institutions have graduate enrollment that contributes to the institution's financial health, most do not. In particular, part-time graduate enrollment is small at most institutions. Institutions may find financial improvements by offering targeted graduate degrees or certificates.

Part-time enrollment. Only two institutions enroll more than 500 part-time students, while most enroll less than 200 part-time students. It is likely that none of the NACU member institutions rely on financial gains through part-time students, and it is indeed difficult to build predictable financial models on part-time enrollments. However, many students will be enrolling part time and/or seeking greater flexibility to enroll full time in some terms and part time in other terms. If member institutions seek to enroll more students, this sub-population likely needs to grow strategically, and the infrastructure to support these students will also need to grow, with careful planning and ROI weighted in the equation.

Transfer students. Only four institutions enroll more than 200 transfer students. Given some of the locations and missions, it is surprising that a low number of students are transferring into these institutions. While COVID-19 will alter some projections, the 2017 National Clearinghouse report projected a rise in associate degree students for both males and females, albeit a smaller increase than in the last decade but an increase nonetheless (NCE, 2017). Only 18% of all transfer students enroll at private institutions. The common strategy for increasing transfer is to focus on developing articulation agreements between schools, meaning policies that guarantee classes completed at one school will be accepted when a student transfers to another school. This will provide seamless credit transfer and make it easy for general education requirements to be met. Aggressive marketing campaigns could also boost those numbers. Given current enrollment sizes, this appears to be a strategic and financial opportunity.

Male enrollment. Like most institutions, NACU institutions are enrolling fewer male students. There is almost no data to suggest this will change, particularly for smaller institutions, but a more balanced mix of male/female students is key to attracting and retaining more students. While most institutions acknowledge the shift in enrollment patterns, little effort beyond athletics is being deployed to attract male students. Most NACU institutions have impressive completion rates for male students. This may be a marketing angle to recruit and/or retain more males.

Increasing diversity. Given that the locations of some of these institutions are in populated urban areas, it is surprising to see how few enroll students from diverse or underrepresented backgrounds. If we remove the two HBCUs that focus their efforts on serving Black students, only three member institutions serve more than 30% of students from diverse backgrounds. The same enrollment projection report that predicts more associate degree students also predicts significantly more students who come from non-white households will seek to enroll. Many of the NACU institutions are well suited to serve more of these students and need to become aggressive in recruiting and enrolling these students.

Limiting the number of full-time staff or shifting to outsourced services. Institutions are reporting that students need more support services such as counseling, health services, and academic support services, which often leads to institutions investing in additional staff. At a time when net tuition revenues are barely growing, institutions do not have the operating budgets to add staffing for these services. Therefore, they must reconsider how to meet student needs in a more cost-effective way, such as via outsourcing or online services.

Graduation and retention rates. Higher graduation rates appear to correspond with the more sought-after institutions. While some could argue that longer periods of enrollment lead to more tuition revenue, high graduation rates at the most selective institutions build a culture of success, which leads to greater enrollment gains. Almost all NACU institutions could work—and likely are working—to increase their graduation rates, especially the four-year rate. Many have above-average graduation rates, but efforts need to continue to increase these rates to further enhance a culture of success.

While difficult for some institutions to conceptualize during a demographic downturn, the largest takeaway from the data is the need for most institutions to grow their enrollment and their net revenue. To do this, likely it requires elimination of programs that are costly and in low demand. They need to concurrently build awareness of their distinctive qualities, which will lead to increased market demand and, thus, increased net revenues. This is not an easy task, nor does this study imply institutions are not working to build upon their distinctive traits or characteristics. Yet, the data suggest that those with more than 3,000 students appear to be less tuition dependent and operate more efficiently, thus realizing a greater ROI and more stability compared with their peers.


Based on the data and the current critical issues facing the higher education sector, these strategies can contribute to the financial health of institutions. The greatest significance will be achieving success in most of them in combination. This will require considerable planning and effective execution on the part of academic

and administrative leadership in tandem with an investment of adequate resources to produce the desired ROI.

Conclusion

In conclusion, the two parts of this research study—phase one: benchmark dashboards development and analysis; and phase two: interviews with campus leaders with higher ROI yields—produced valuable benchmarking tools, general analysis, and key findings for financial sustainability. In addition to a set of potential strategies for improved financial health based on the dashboards, we found in the interviews, as trite as it sounds, that leadership always matters, particularly when it comes to leaders at residential independent colleges and universities strained by current and changing demographics and pressures in the marketplace (Mitchell and King, 2018).

Financial health is about the choices and priorities on a campus. Adherence to a philosophy of “No margin, no mission” is the best practice for an institution’s financial sustainability, even if resulting in decisions that are unpopular at times. The presidents we interviewed exhibited a willingness to be censured or even receive a vote of no confidence to employ the measures that have led to their success. They had confidence in their vision and did not worry about whether that vision would be positively embraced or even resisted by their constituents. We found that this philosophy manifests itself in certain strategies when operationalized, including: 1) centralized data-driven decision making in the president’s office on all financial matters; 2) readily accessible and current performance-based metrics to inform staff realignment; 3) publicly available and detailed academic and administrative program reviews; 4) transparent communication on budgetary matters; 5) relentless process improvement and efficiencies in cost of instruction, administrative staffing, and general operations; and 6) academic growth orientation aligned with mission and quality in current and new programs. These practices likely contributed to a healthier balance sheet. They are the blueprint for reducing expenses, primarily in the largest areas of cost of instruction and



financial aid. They also position a campus for investing revenues in new program development driven by student demand. Ultimately, when followed, these strategies and practices can perpetuate the sustainability of small to mid-sized independent colleges and universities, a vital part of the American education system.

Acknowledgments

This research was supported by the TIAA Institute. The content, findings, and conclusions represent the views of the authors and do not necessarily represent the views of TIAA or the TIAA Institute. The authors are thankful for the TIAA Institute's support of this important

research. We would also like to acknowledge additional members of the team that were instrumental to the project, including Michelle Apuzzio, Director of Programs and Communication at the New American Colleges and Universities, and Jim Hundrieser, Vice President for Consulting and Business Development at the National Association of College and University Business Officers. Finally, we are grateful to the institutions that belong to the New American Colleges and Universities and thank them, wholeheartedly, for being exemplary in their pursuits to develop extraordinary graduates for a global workforce and society.

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Appendix A

Below are the guiding questions used for the interviews with campus leaders.

1. Your institution has continued to see a positive ROI in relation to your instruction expense. What strategies are you employing to keep costs down?
2. ROI is a function of expenses compared to the revenue you are generating. What are the two to three major cost drivers of your institution?
3. Institutions have been able to reduce academic costs by adding more part-time faculty. What effort is your institution making to reduce reliance on full-time staff? How has technology helped streamline processes, and are you moving to a self-service online infrastructure?
4. Has the pandemic allowed you to make staff reductions that you would have liked to have made before the pandemic occurred?
5. Does your institution perform regular program reviews? If so, are the ROI of those programs reviewed in financial terms only, or do you consider the quality of the program, student outcomes, alignment to mission, number of students in the program, the market appeal, graduation rates, retention rates, average class size, etc.?
6. Interestingly, the data indicates the more net revenue, the higher the completion rates. We see your institution is investing more in student support. How are you investing in student success and completion activities?
7. When you think about your financial sustainability for the next decade, what are the top three strategies you are employing to remain financially strong?
8. Given your current fiscal health, are you planning to maintain enrollments or grow enrollments?
9. What strategies have you employed to grow your endowment at such an impressive rate?

Appendix B

Below is a list of the data fields downloaded from the IPEDS Data Center server complete with their category and sub-category headings and the long descriptive names of each data field. Data are downloaded every year for the most recent data made available for participating institutions.

Admissions and Test Scores	Admissions and test scores	Number of applications, admissions, and enrollees	Enrolled total	
			Applicants total	
			Admissions total	
		SAT and ACT test scores	SAT and ACT test scores	Percent of first-time degree/certificate-seeking students submitting SAT scores
				SAT Critical Reading 25th percentile score
				SAT Critical Reading 75th percentile score
				SAT Math 25th percentile score
				SAT Math 75th percentile score
				ACT Composite 25th percentile score
ACT Composite 75th percentile score				
Frequently used/ Derived variables	Total cost of attendance	By residency and housing status	Total price for in-state students living on campus	
			Total price for out-of-state students living on campus	
Student Charges	Price of attendance for full-time, first-time undergraduate students (academic year programs)	Tuition and fees: 2006-07 to current year	Published in-state tuition (Current year)	
			Published in-state fees (Current year)	
			Published in-state tuition and fees (Current year)	
			Published out-of-state tuition (Current year)	
			Published out-of-state fees (Current year)	
			Published out-of-state tuition and fees (Current year)	



Frequently used/ Derived variables	Fall enrollment/retention rates	Total, full- and part-time enrollment and fall FTE	Total enrollment	
			Full-time enrollment	
			Part-time enrollment	
		Undergraduate and graduate enrollment by full- and part-time status	Undergraduate enrollment	
			Graduate enrollment	
			Full-time undergraduate enrollment	
			Full-time first-time degree/certificate-seeking undergraduate enrollment	
			Full-time transfer-in degree/certificate-seeking undergraduate enrollment	
			Full-time graduate enrollment	
			Part-time undergraduate enrollment	
			Part-time graduate enrollment	
		Percent of undergraduate and graduate enrollment by race/ethnicity	Percent of undergraduate enrollment that are American Indian or Alaska Native	
			Percent of undergraduate enrollment that are Asian (beginning in 2010)	
			Percent of undergraduate enrollment that are Native Hawaiian or Other Pacific Islander (beginning in 2010)	
			Percent of undergraduate enrollment that are Black or African American	
			Percent of undergraduate enrollment that are Hispanic/Latino	
			Percent of undergraduate enrollment that are White	
			Percent of undergraduate enrollment that are Race/ethnicity unknown	
			Percent of undergraduate enrollment that are Nonresident Alien	
			Percent of undergraduate enrollment that are two or more races	
			Percent of undergraduate enrollment that are women	
		Adult age (25-64) enrollment and percent of undergraduates by age	Adult age (25-64) enrollment, all students	
			Adult age (25-64) enrollment, undergraduate	
			Adult age (25-64) enrollment, graduate	
		Retention Rates	Full-time retention rate	
		Percent of students enrolled in distance education	Percent of students not enrolled in any distance education courses	
			Percent of undergraduate students not enrolled in any distance education courses	
			Percent of graduate students not enrolled in any distance education courses	
		Graduation Rates	Graduation Rates	Graduation rate - bachelor's degree within 4 years, total
				Graduation rate - bachelor's degree within 6 years, total

Student Financial Aid and Net Price	Student financial aid	Financial aid to all undergraduate students	Percent of undergraduate students receiving Pell grants
			Average amount of Pell grant aid received by undergraduate students
			Percent of undergraduate students receiving Federal student loans
			Average amount of Federal student loan aid received by undergraduate students
	Average net price for full-time, first-time degree/certificate-seeking undergraduate students, 2006-07 to current year	All students (private not-for-profit and for-profit institutions and institutions reporting cost of attendance by program)	Average net price for students receiving grant or scholarship aid (current year)
Full-time first-time degree/certificate-seeking undergraduate students by living arrangement in private not-for-profit and for-profit institutions and institutions reporting cost of attendance by program, 2006-07 to current year	Students who were awarded grant or scholarship aid from federal, state or local government or the institution	Average amount of grant and scholarship aid awarded (current year)	
Frequently used/ Derived variables	Student financial aid of full-time first-time degree or certificate-seeking undergraduate students	Percent of full-time first-time undergraduates receiving institutional grant aid	Percent of full-time first-time undergraduates receiving Pell grants
			Average amount of Pell grant aid received by full-time first-time undergraduates
			Percent of full-time first-time undergraduates receiving institutional grant aid
			Average amount of institutional grant aid received by full-time first-time undergraduates
			Percent of full-time first-time undergraduates receiving federal student loans
			Average amount of Federal student loan aid received by full-time first-time undergraduates
			Percent of full-time first-time undergraduates receiving other student loans
			Average amount of other student loan aid received by full-time first-time undergraduates



Finance	Private not-for-profit institutions or Public institutions using FASB (Public institutions - GASB 34/35)	Assets and liabilities	Total assets
			Total liabilities
			Total unrestricted net assets
			Total restricted net assets
			Total net assets
			Total expenses
		Student grants	Institutional grants (funded)
			Institutional grants (unfunded)
		Revenues and investment return	Tuition and fees
			Private gifts - Total
			Private gifts - Unrestricted
			Investment return
			Total revenues and investment return
		Expenses by functional and natural classification	Instruction-Total amount
			Academic support-Total amount
			Student service-Total amount
			Institutional support-Total amount
			Net grant aid to students-Total amount
		Total expenses-Total amount	
		Endowment assets	Value of endowment assets at the beginning of the fiscal year
Human Resources	Full- and part-time staff by occupational category and race/ethnicity and gender	New HR occupational categories based on SOC 2010	Check box labeled "Grand Total"
		Click on link "Occupation and full- and part-time status"	Check box labeled "Full-time Total"
			Check box labeled "Part-Time Total"
		Click on link "Instructional, research and public service" under "Grand Total"	Click on box labeled "Instructional staff"
		Click on link "Instructional, research and public service" under "Full-time Total"	Click on box labeled "Instructional staff"
Click on link "Instructional, research and public service" under "Part-time Total"	Click on box labeled "Instructional staff"		

About the authors

Sean Creighton is the president of the New American Colleges and Universities, a select national consortium of independent campuses collaborating in the delivery of innovative ideas and championing the belief that an integrated liberal, professional, and civic education is essential to the future of our world. A dedicated public servant, Creighton currently serves on boards for the Dayton Literary Peace Prize, International Leadership Association, ThinkTV (the Dayton-Cincinnati PBS affiliate) and the Washington Internship Institute. He earned his B.A. in English at Marist College, M.A. in English and American Literature at New York University, and Ph.D. in Leadership and Change from Antioch University.

Avo Kechichian is Vice President, Finance and Facilities, and Chief Financial Officer at the University of La Verne. Kechichian oversees all strategic financial planning and analysis for the University of La Verne and provides leadership to La Verne's budgeting, financial strategic planning, resource allocation, business solutions, and development of operating strategies. He joined the university's payroll office in 1985, has served in several positions within the Division of Financial and Business Services. Kechichian holds a MBA from La Verne.

Nicholas LaMendola is Director of Institutional Research at Nazareth College. As a research analyst, LaMendola has been instrumental in creating a data-informed environment for strategic decision making, planning, and assessment, on campus. LaMendola has leveraged his background in analytic statistics and predictive modeling to participate with leadership, across divisions, in a number of strategic projects that currently range from student success, retention/graduation, co-curricular and experiential learning, overhaul of the faculty workload model, and administrative assessment, and diversity and inclusion. LaMendola earned his B.A. in Psychology from the University of Michigan, his M.A. in Brain & Cognitive Science from the University of Rochester, and his Ph.D. in Psychology from the University of Arizona.