



System Redesign Phase 2 University Success Task Group

Meeting Agenda
October 30, 2018, 8:30-10:00 a.m.

1. Task Group Orientation
 - a. Expectations
 - i. Review Charge (see attached presentation)
 - ii. Further guidance from Chancellor
 - b. Common starting point
 - i. System webinars on availability of System data
 - c. Method of Operation
 - i. SharePoint site
 - ii. Future meeting dates
2. Overview to Financial Analysis in Higher Education
 - a. System's current financial risk assessment (attached)
 - b. Analysis performed by external rating agencies (attached)
 - c. Financial analysis and measures used publicly in other systems/states (attached)
3. Next Steps
 - a. Reading materials
 - i. Measurement framework developed by the national [postsecondary data collaborative](#)
 - ii. ["Leading with Data"](#)
 - iii. ["Answering the Call"](#)
 - iv. Goal setting: University of North Carolina, [Setting System Goals for Affordability and Efficiency](#)
 - b. Questions, suggestions
 - c. Next meeting

System Redesign – Phase 2 Overview

Purpose: The next phase of the System Redesign will put in place the tools that we will need as leaders to manage and grow our enterprise including:

- A shared understanding of the role the System plays in supporting student success and university success—one that will consistently guide how we address governance, policy, resource planning, and other System issues.
- System goals, with targets for student success and university success.
- University strategies, with goals and targets aligned with System goals.
- University resource plans that are aligned with and designed to advance university strategies and to assist presidents in leading their universities to achieve those strategies, and that are developed according to a common accountability framework.
- A consistent and integrated approach to tuition setting and the allocation of state funding—an approach that is tied directly to and grows out of the above.
- Transparency and inclusiveness in decision-making, strategic directions, and accountability reporting that encourage a new culture of shared understanding of and support for students, universities, and the System.

Approach: We will continue to use the task group structure that has guided the System Redesign efforts thus far, including the use of the website as a clearinghouse of information and a collection point for feedback from students, faculty, staff, trustees, legislators, and all stakeholders. Task groups will include students, faculty, staff, presidents, trustees, and Board members and will be staffed by OOC staff.

Timeline: January 17, 2019—task group recommendations presented to the Board for affirmation.

University Success Task Group

Purpose: To recommend to the Board for consideration two or more university success measurement frameworks to guide the establishment of System goals, university strategies, and associated resource plans. The adopted measurement framework will also inform development of a methodology for allocating state funding, and the accountability framework will be used to evaluate individual and institutional performance and ensure and support continuous improvement.

For each measurement framework that is proposed, the task group will identify strengths and potential weaknesses, as well as any implications with respect to how we think about the System's role, its governance, strategies, and resource planning approaches, etc.

In developing its recommendations, the task group will:

- Review System data resources and capabilities.
- Review and consider emerging best practices in higher education.
- Recommend measures that enable the System to gather and report on university and System progress in a consistent way, while providing each university the flexibility needed to chart the course that best suits the needs of its students and the community it serves.
- Recommend what measures the System ought to set goals around
- Consider the measures—at both the university and System levels—as an opportunity to guide resource allocation decisions, report on financial health, ensure financial accountability and transparency, and promote financial planning focused on cost and revenue levers as well as financial constraints.

Our Charter

- Dan Greenstein, October 2018 address at LHU (Lock Haven):

“Until we can articulate our vision for our system, until we know what we want to be . . . it is impossible to have success.”

Our Situation

- Adverse market condition: excess supply and shrinking demand for higher education
- Highly competitive market place – price wars to maintain market share
 - Only the strongest will survive
 - We have tough competitors
 - Deep pockets
 - Strong reputations
 - Efficient operations
- Our cost structure is unsustainable, even without tough competition
 - Structural operating deficit
 - Large legacy liabilities + indebtedness
 - High fixed costs
 - Lack levers to increase revenue

Goals - Outcomes

- Raise educational attainment levels – access and success
 - Affordable
 - Preparation for jobs – market demand
- Promote economic mobility
- Contribute to community development
- Schools of choice for target prospective students
 - Affordable
 - High graduation rate in 4 years
 - Job placements that utilize college education

Build strong communities where all
citizens can thrive

What Characteristics Should the System have for Long Term Success?

- Financial stability
- Agility/flexibility
- 21st century culture:
 - Use data and public policy as enablers
 - Innovation
 - Collaboration
 - Inclusion
 - Strong accountability
- Optimal use of instruments of change:
 - Funding
 - Accountability
 - Tone at the top/bully pulpit

Change Dimensions

From	To
<ul style="list-style-type: none"> • Financially unsustainable • One size fits all • Inflexible operating model • Inefficient processes • Weak accountability • Just ok place to study or work 	<ul style="list-style-type: none"> • Financially strong • More autonomy to meet specific needs of community • Agile, resilient operating model • Redesigned, efficient processes • Strong accountability + rewards • Study or work institution of choice

Questions to be Considered

- What do we mean by “the system” – what should the PASSHE structure be?
 - What should be done centrally vs. delegated to individual universities?
- Who are our prospective students?
- What can they afford?
- How should state funding be allocated to get the most bang for the buck?

This is just a start. Please add to the list.

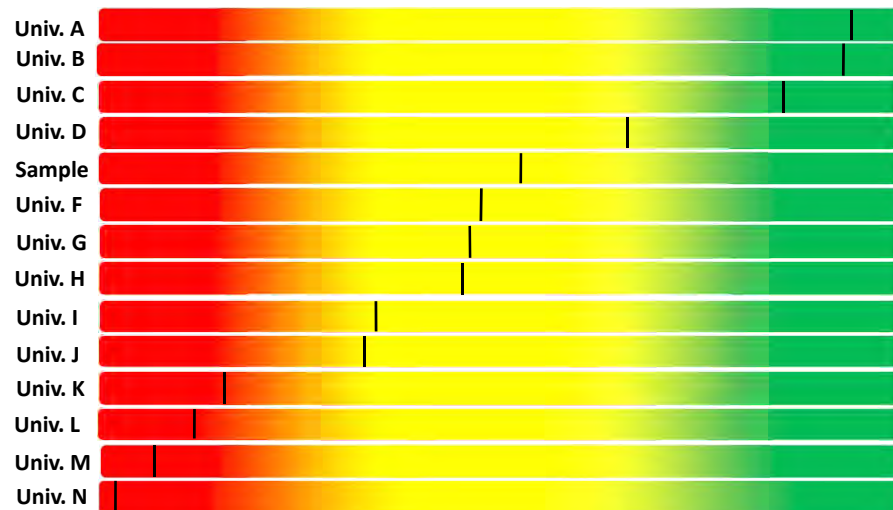
Next Steps

- Read articles and speeches (links sent separately)
- Read rating agency assessment of PASSHE
- Think objectively about how you would design PASSHE for the 21st century if you were to start from scratch

Financial Assessment: Sample State System University

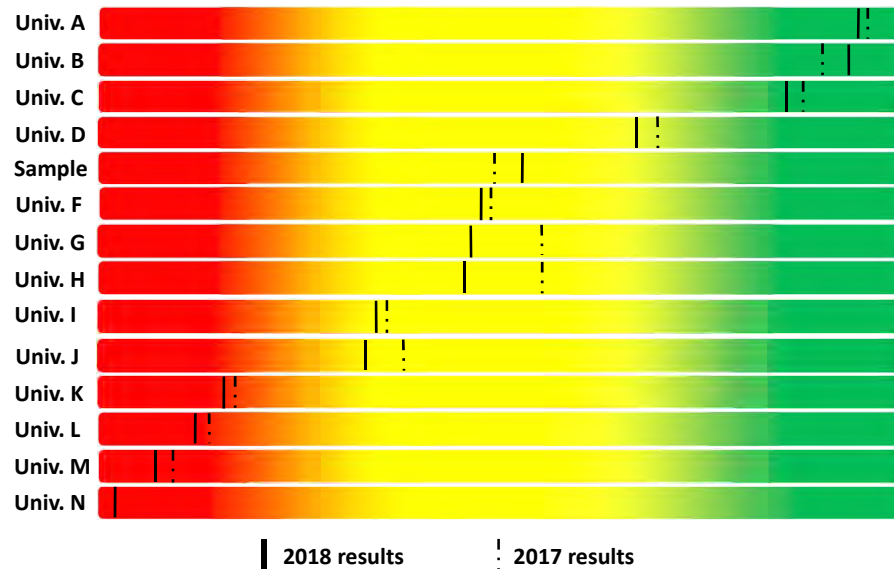
Review Completed January 2018

Overall 2018 Financial Assessment

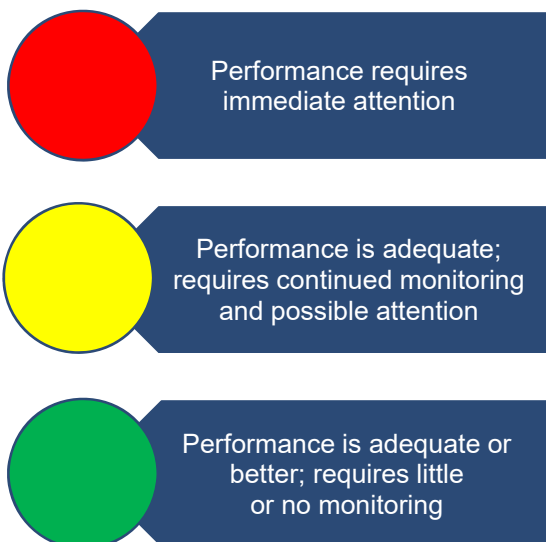


Overall Financial Assessment

Compared to previous year's assessment



Assessment Tool



Components of Financial Assessment

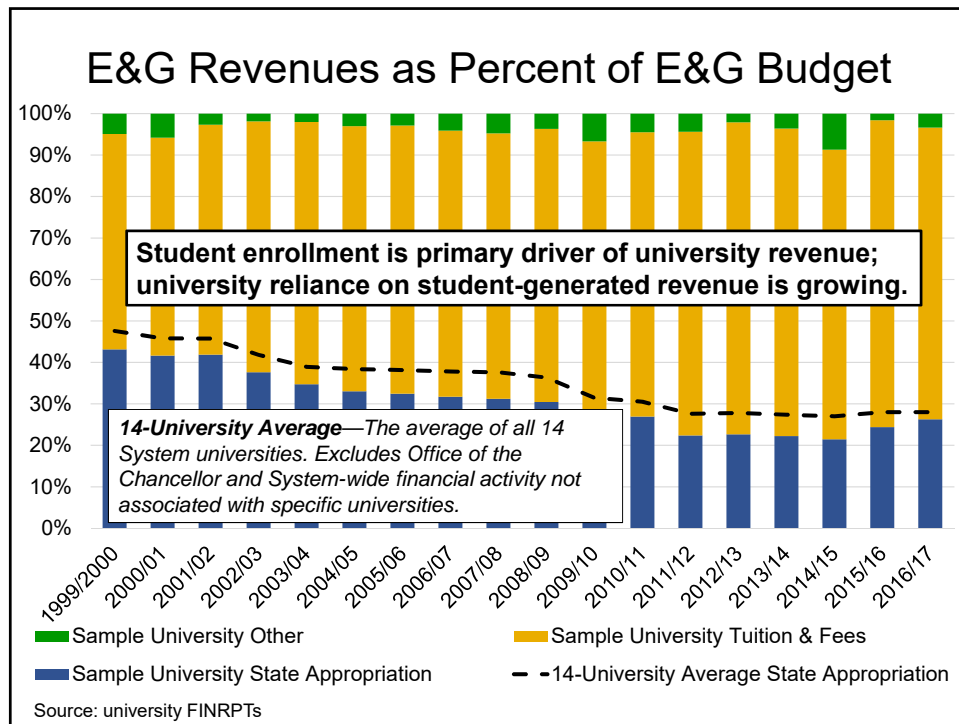
Modeled after a typical analysis used in an external review of the financial strength of higher education institutions.

- **Market Demand**
- **Operating Efficiency**
- **Financial Performance**

Market Demand

- **Enrollment and Population Trends**
- **Projected Enrollment**
- **Brand Strength**

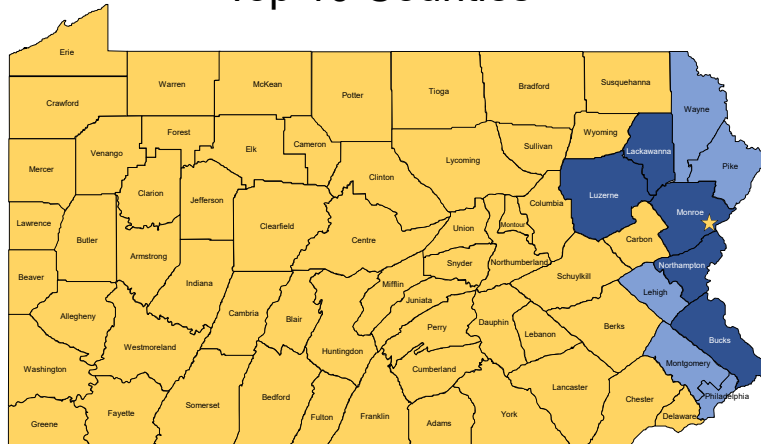
Why is market demand an integral part of a financial assessment?



Enrollment and Population Trends

- Top 10 counties contributing to university enrollment
- 2000–2017

Fall 2000 Headcount Enrollment Top 10 Counties

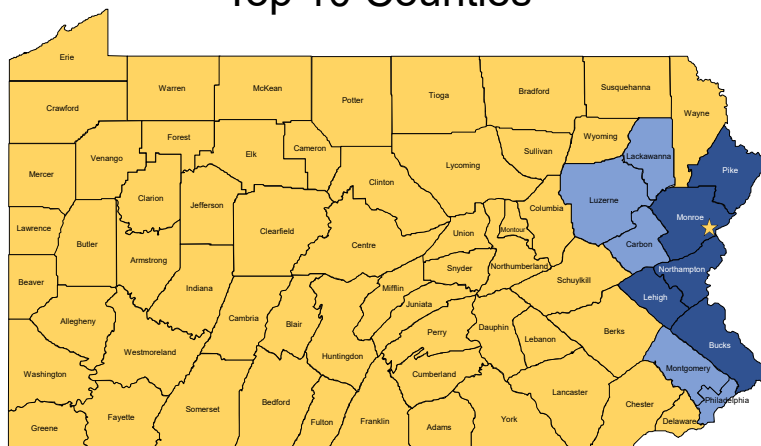


■ Top 5 counties: 50% of students
 ■ Counties 6–10: 18% of students

Top 10 counties: 68% of students

Source: student submission, preliminary end of 15th day data

Fall 2010 Headcount Enrollment Top 10 Counties

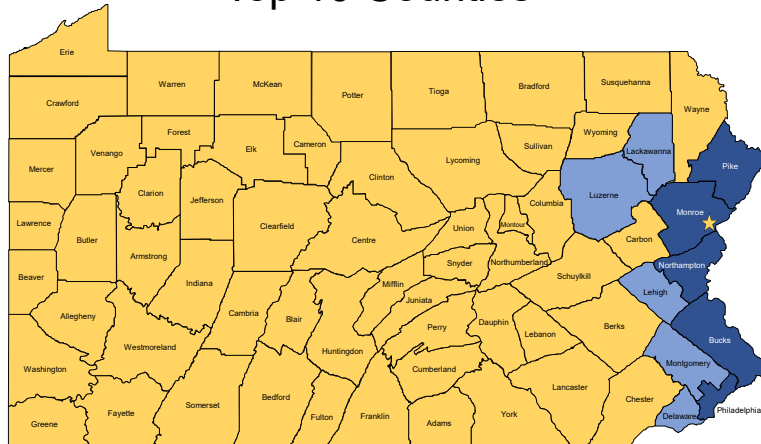


■ Top 5 counties: 50% of students
 ■ Counties 6–10: 14% of students

Top 10 counties: 64% of students

Source: student submission, preliminary end of 15th day data

Fall 2017 Headcount Enrollment Top 10 Counties



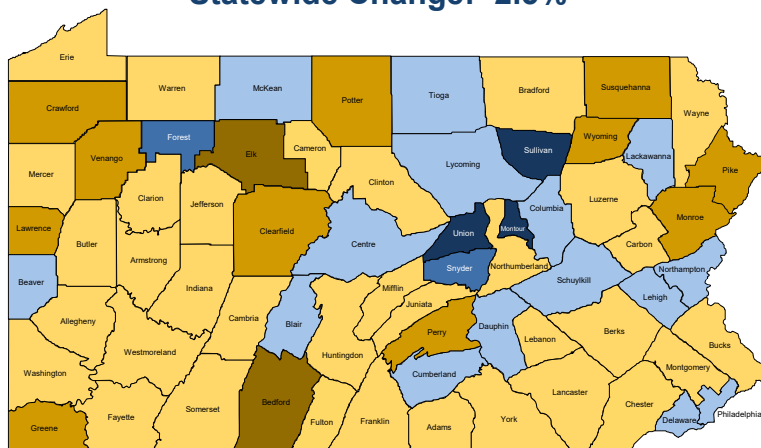
■ Top 5 counties: 52% of students
■ Counties 6–10: 15% of students

Top 10 counties: 67% of students

Source: student submission, preliminary end of 15th day data

Pennsylvania County High School Graduates *Projected Change: 2016–2021*

Statewide Change: -2.5%



Percentage Change

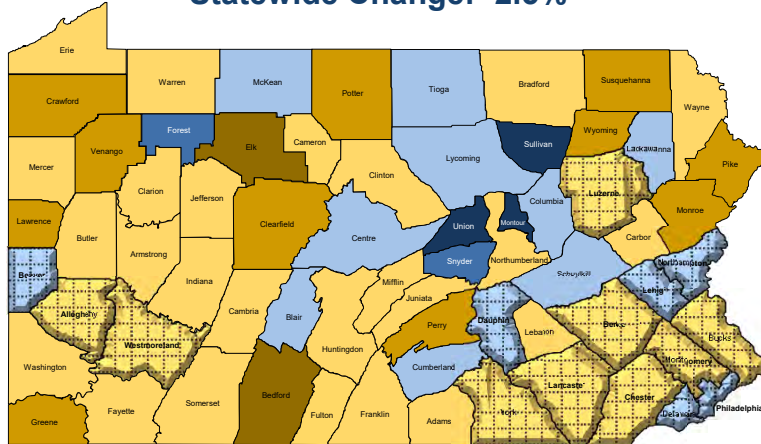
■ More than -20% ■ -10% to -20% ■ 0% to -10% ■ 0% to 10% ■ 10% to 20% ■ 20% or more

Pennsylvania County High School Graduates

Projected Change: 2016–2021

Top 15 Counties For Number of High School Graduates 2015/16 (cross-hatched)

Statewide Change: -2.5%



Percentage Change

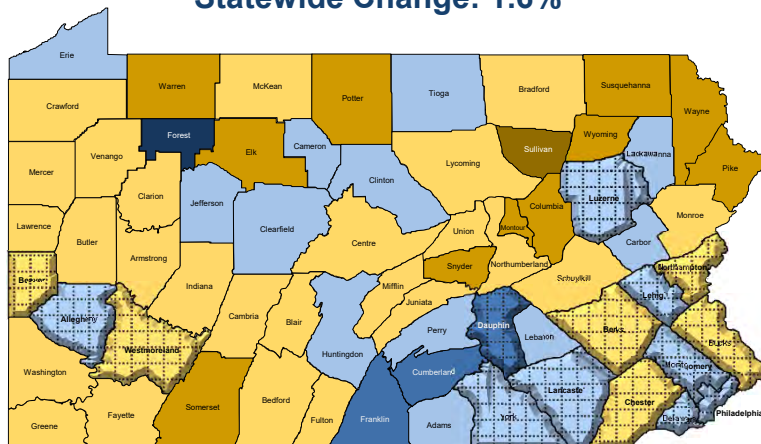
More than -20% -10% to -20% 0% to -10% 0% to 10% 10% to 20% 20% or more

Pennsylvania County High School Graduates

Projected Change: 2021–2026

Top 15 Counties for Number of High School Graduates 2015/16 (cross-hatched)

Statewide Change: 1.6%



Percentage Change

More than -20% -10% to -20% 0% to -10% 0% to 10% 10% to 20% 20% or more

2016 Top 15 Counties for Number of High School Graduates and Projected Percent Change by 2021

Philadelphia	11,754	0.4%
Allegheny	10,893	-7.8%
Montgomery	8,018	-0.3%
Bucks	6,927	-2.0%
Chester	6,798	-5.1%
Delaware	5,211	0.2%
Lancaster	4,985	-0.9%
York	4,905	-2.3%
Berks	4,736	-3.4%
Lehigh	3,632	6.9%
Westmoreland	3,604	-6.9%
Dauphin	3,399	7.7%
Northampton	3,292	4.1%
Beaver	3,130	0.3%
Luzerne	3,063	-2.4%
Total	84,347	-1.5%

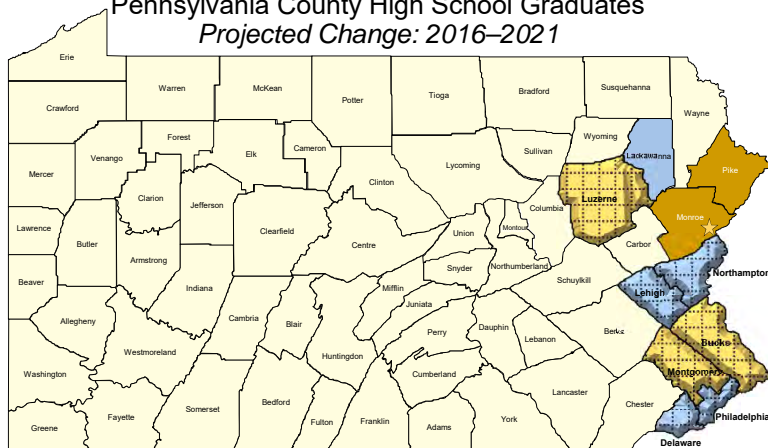
Top 15 counties comprise 67.5% of all high school graduates.

Source: PA Department of Education

Fall 2017 Headcount Enrollment

Top 10 Counties: 67% of Students

Top 15 Counties for Number of High School Graduates 2015/16 (cross-hatched)
 Pennsylvania County High School Graduates
 Projected Change: 2016–2021



Percentage Change

More than -20% -10% to -20% 0% to -10% 0% to 10% 10% to 20% 20% or more

Fall 2017 Enrollment and 2016 High School Graduates, by County

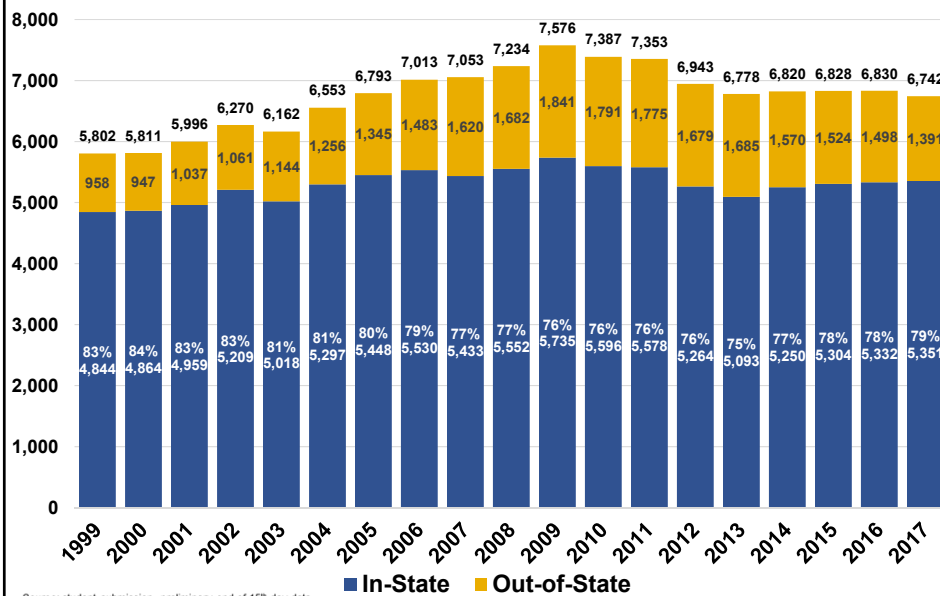
	Fall 2017	2016		Fall 2017	2016
Monroe	1,679	2,292	Chester*	73	6,798
Out-of-State	1,391	N/A	York*	59	4,095
Northampton*	787	3,292	Lancaster*	54	4,985
Philadelphia*	480	11,754	Cumberland	43	2,057
Bucks*	290	6,927	Dauphin*	40	3,399
Pike	270	678	Susquehanna	26	468
Lehigh*	269	3,632	Lebanon	20	1,321
Montgomery*	266	8,018	Wyoming	15	254
Lackawanna	182	1,792	Allegheny*	9	10,893
Luzerne*	155	3,063	Bradford	7	642
Delaware*	147	5,211	Columbia	7	802
Berks*	141	4,736	Lycoming	7	1,007
Carbon	100	643	Northumberland	6	780
Wayne	84	327	All Other PA Counties	<u>60</u>	<u>33,878</u>
Schuylkill	75	1,307	Total	6,742	125,051

Source for fall 2017: student submission, preliminary end of 15th day data

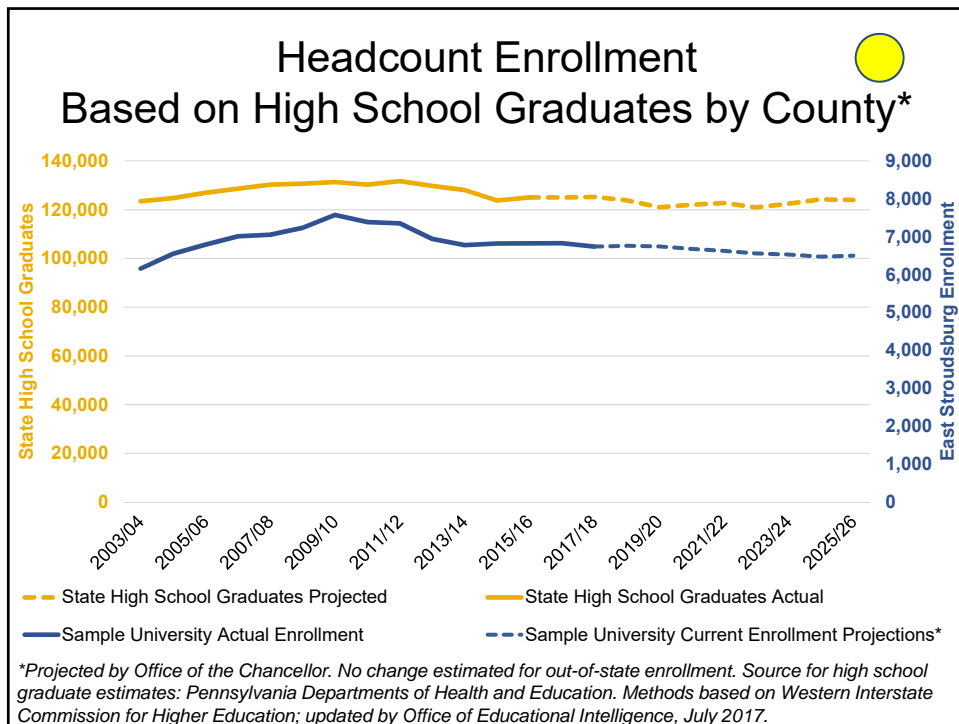
Source for 2016: PA Department of Education

*Top 15 counties for number of high school graduates

Fall Headcount Enrollment by Residency



Source: student submission, preliminary end of 15th day data

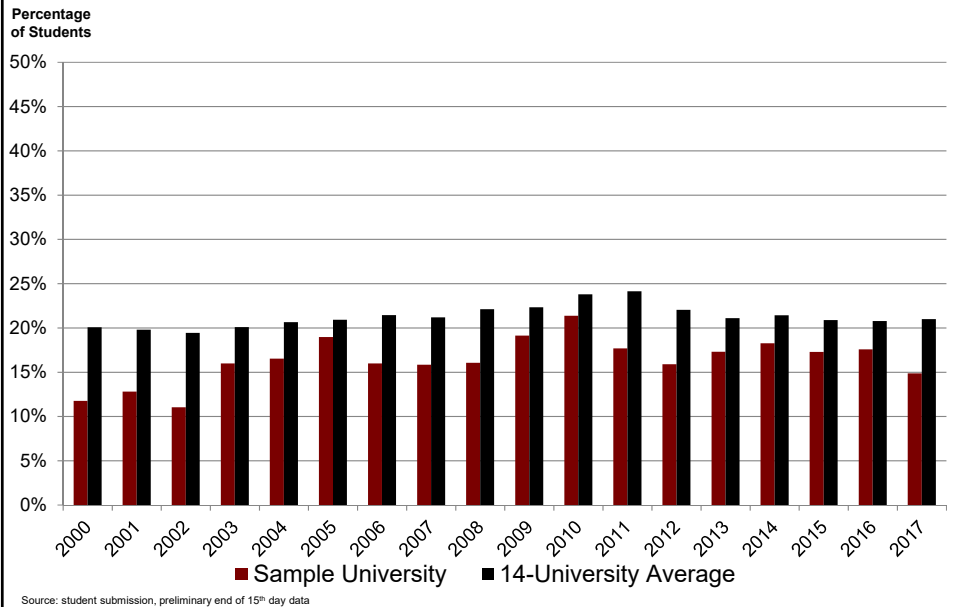


Brand Strength

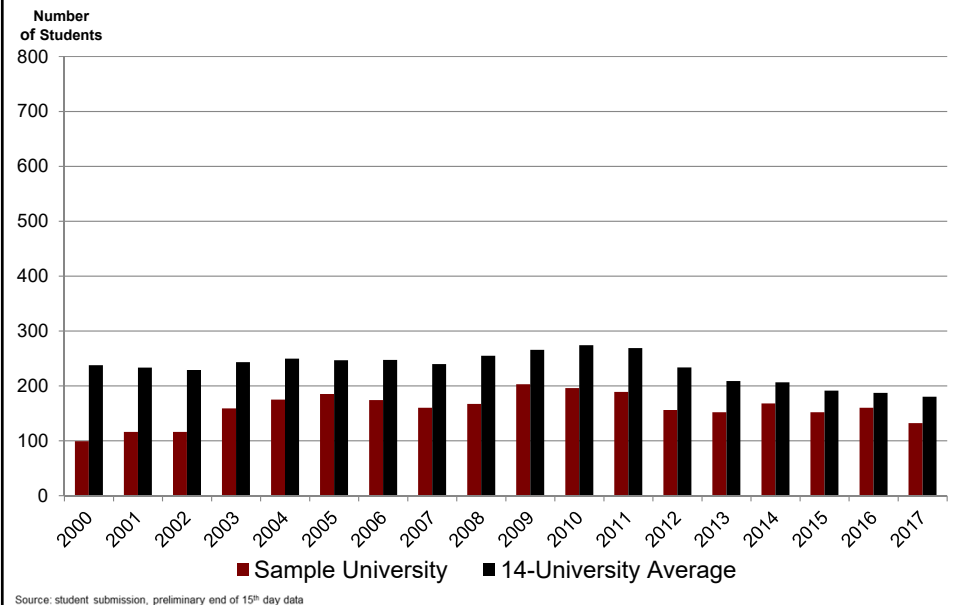
College preparedness of incoming students is an indicator of brand strength.

- **Incoming freshman enrollment by quintile of high school rank**
- **Selectivity**
- **Matriculation**
- **SAT scores**

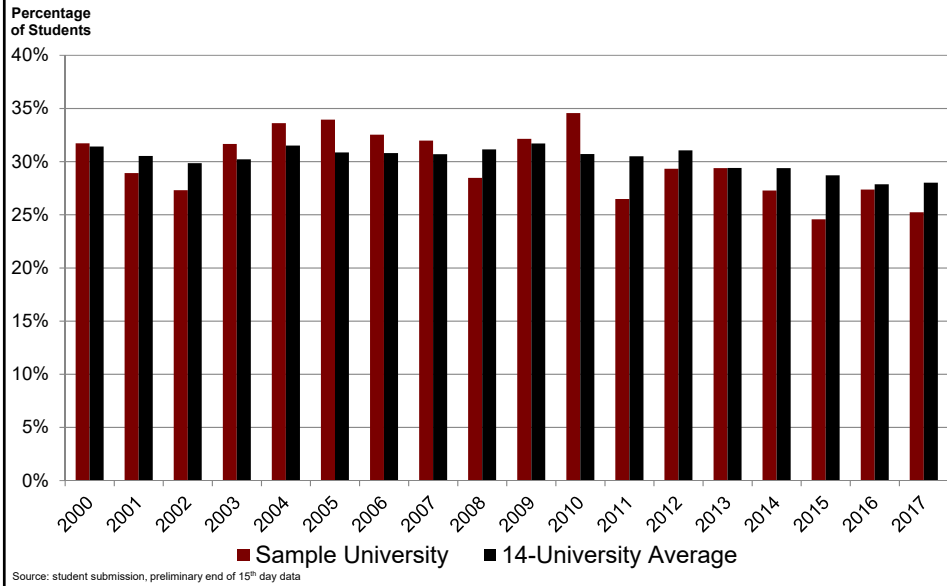
High School Class Rank Tier 1 Percentage of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen



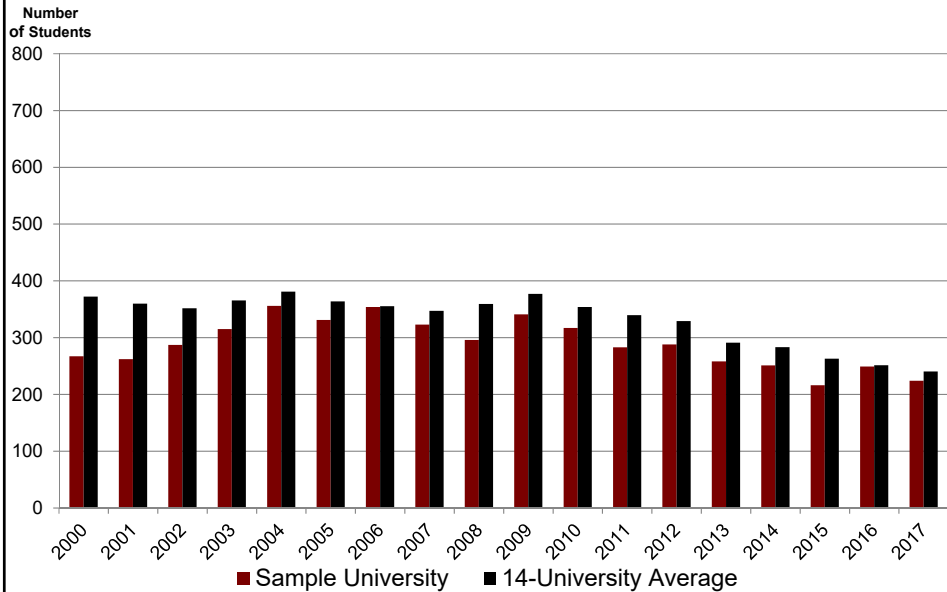
High School Class Rank Tier 1 of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen



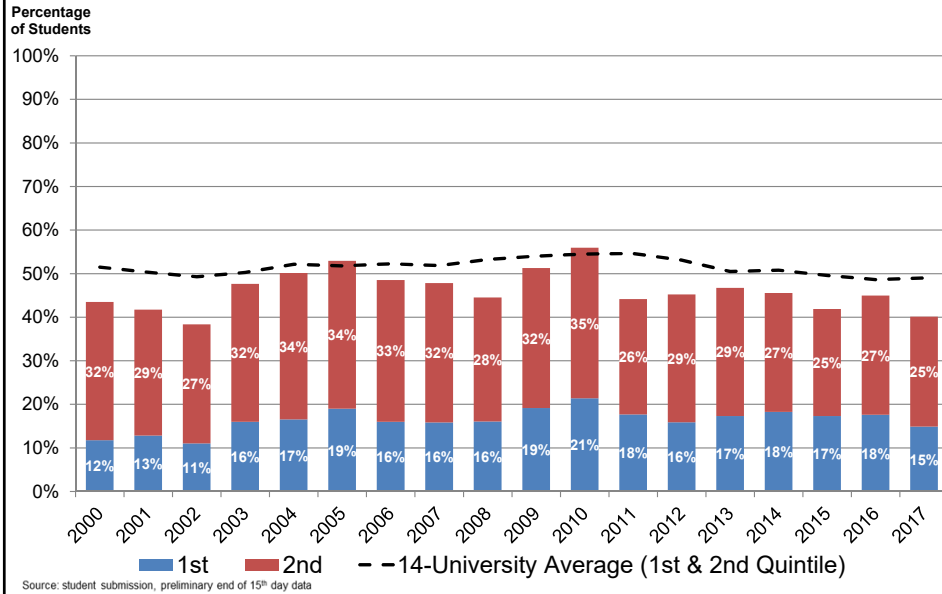
High School Class Rank Tier 2 Percentage of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen



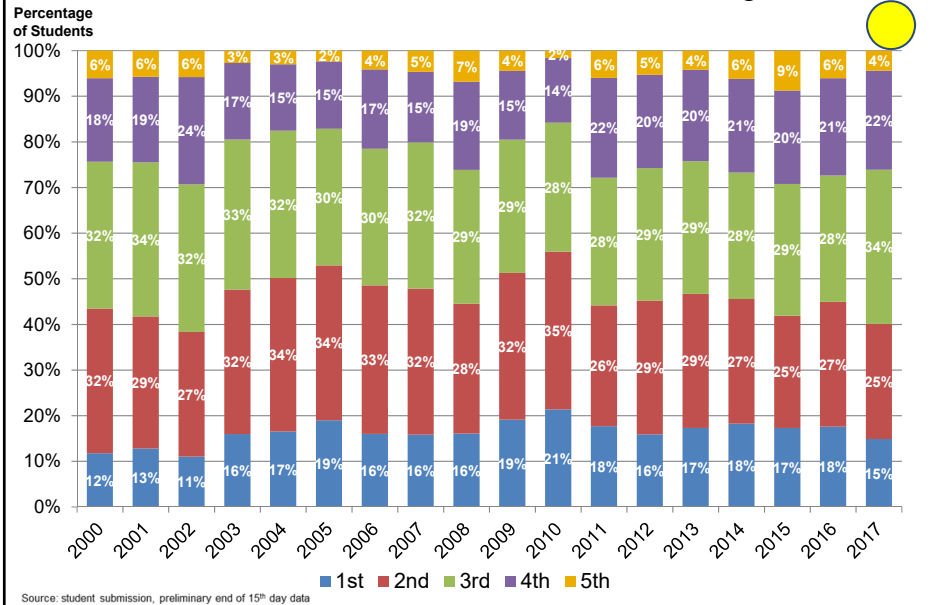
High School Class Rank Tier 2 of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen



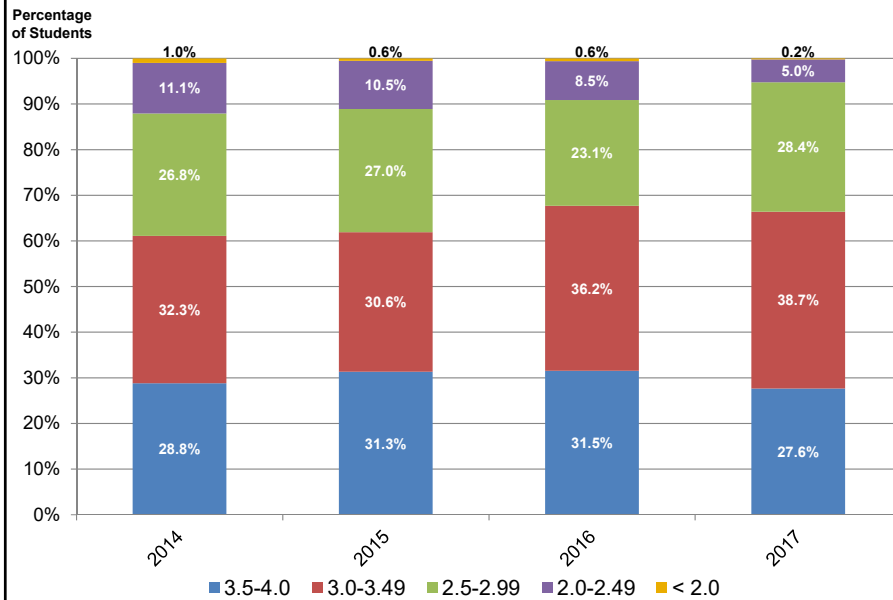
High School Class Rank Tier Percentage of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen



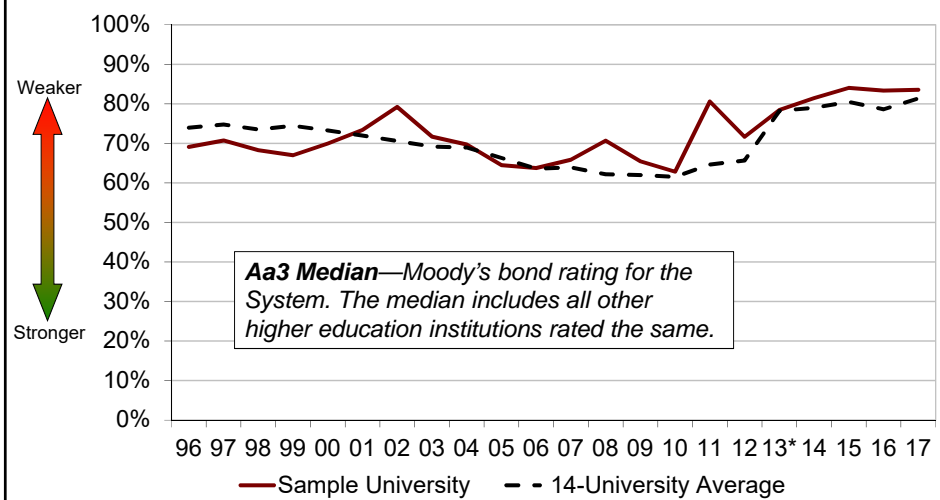
High School Class Rank Tier Percentage of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen



High School Class GPA Percentage of Incoming Students Fall First-Time, Full-Time, Baccalaureate-Seeking Freshmen

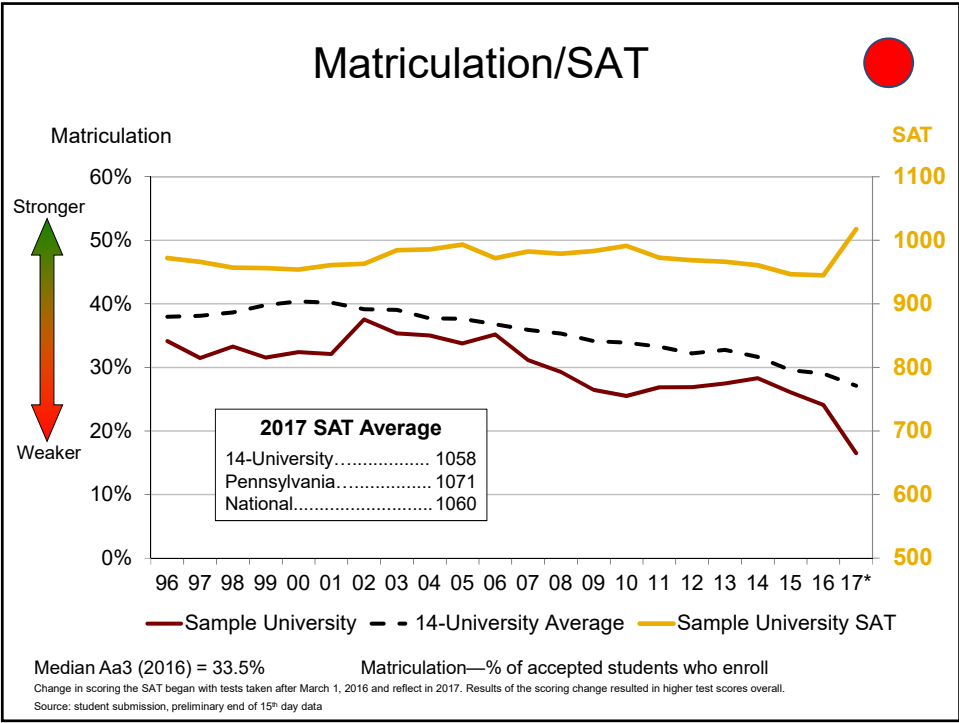


Selectivity

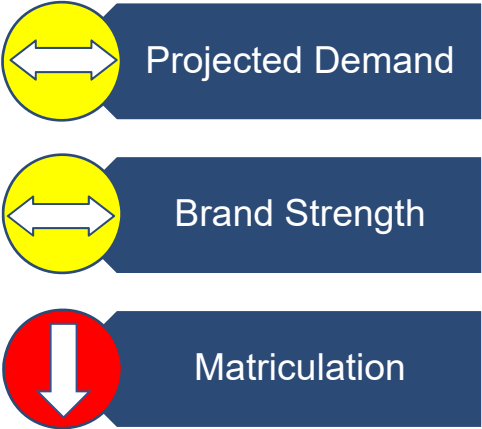


Selectivity—% of applicants accepted

*Change of methodology for counting completed applications



Market Demand



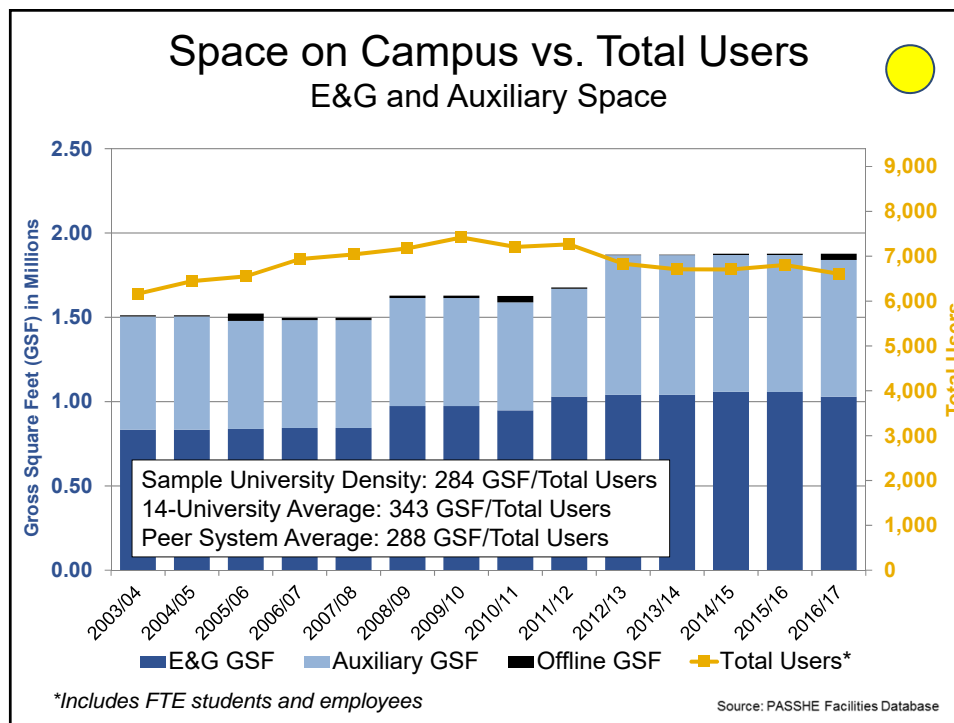
Operating Efficiency

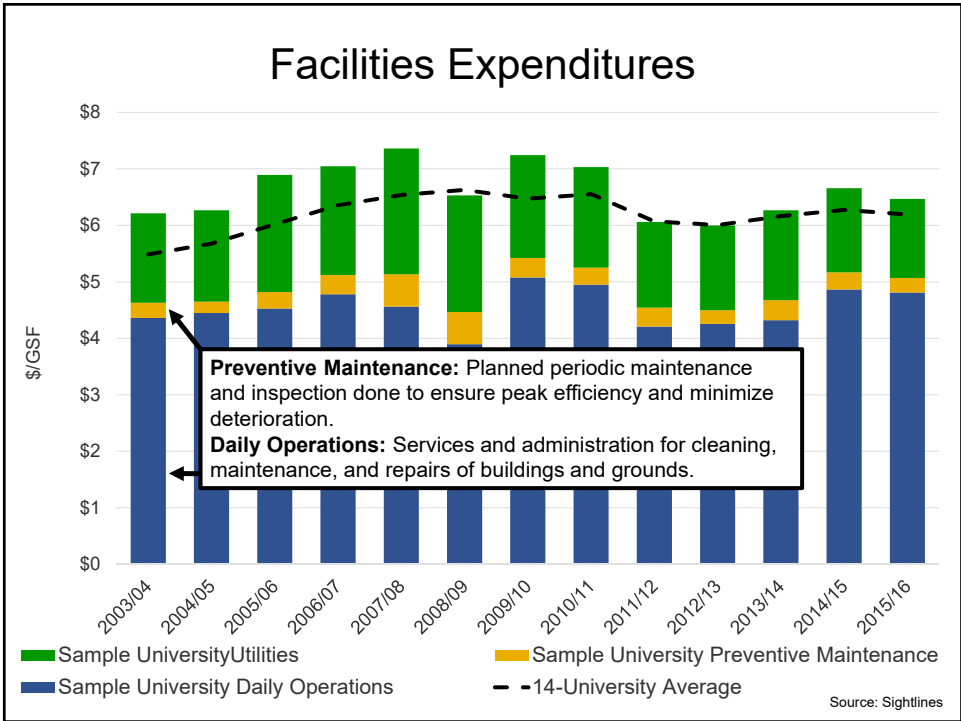
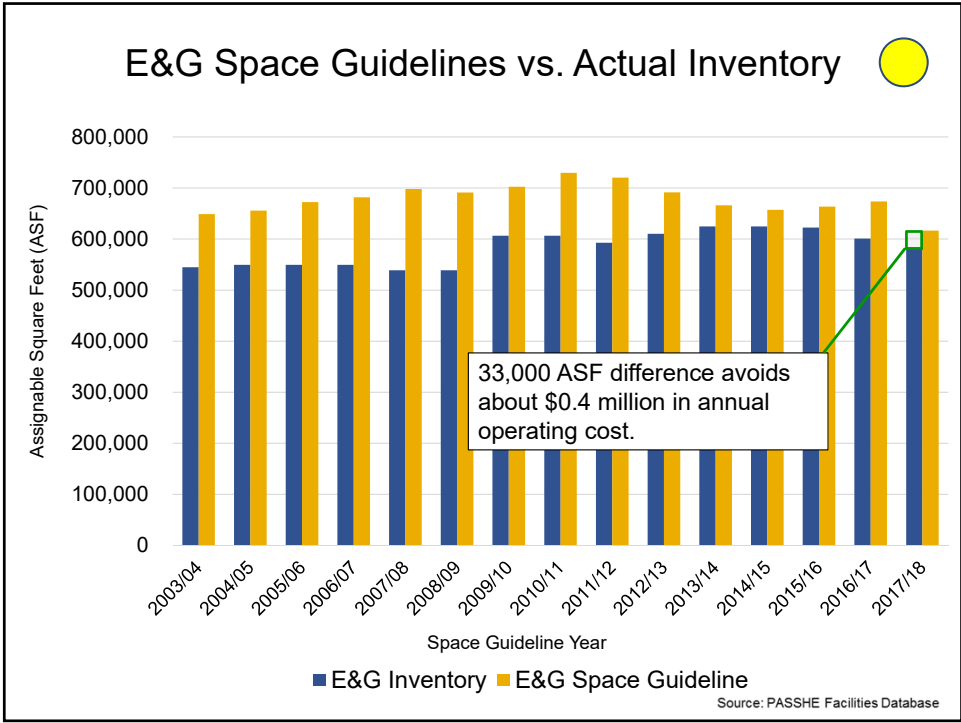
Stewardship of Physical Resources

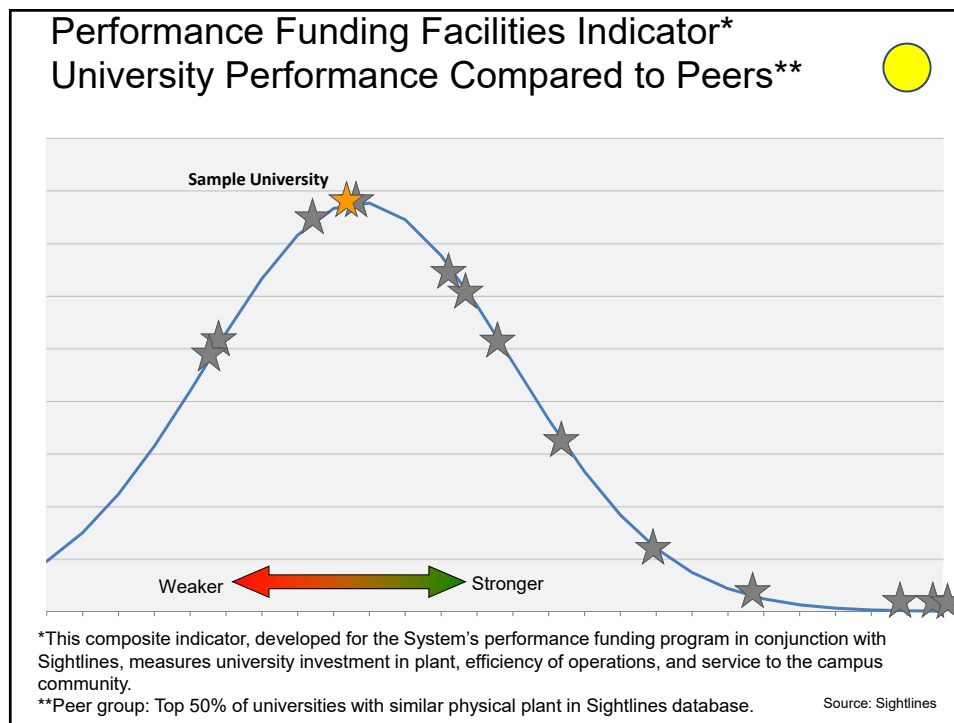
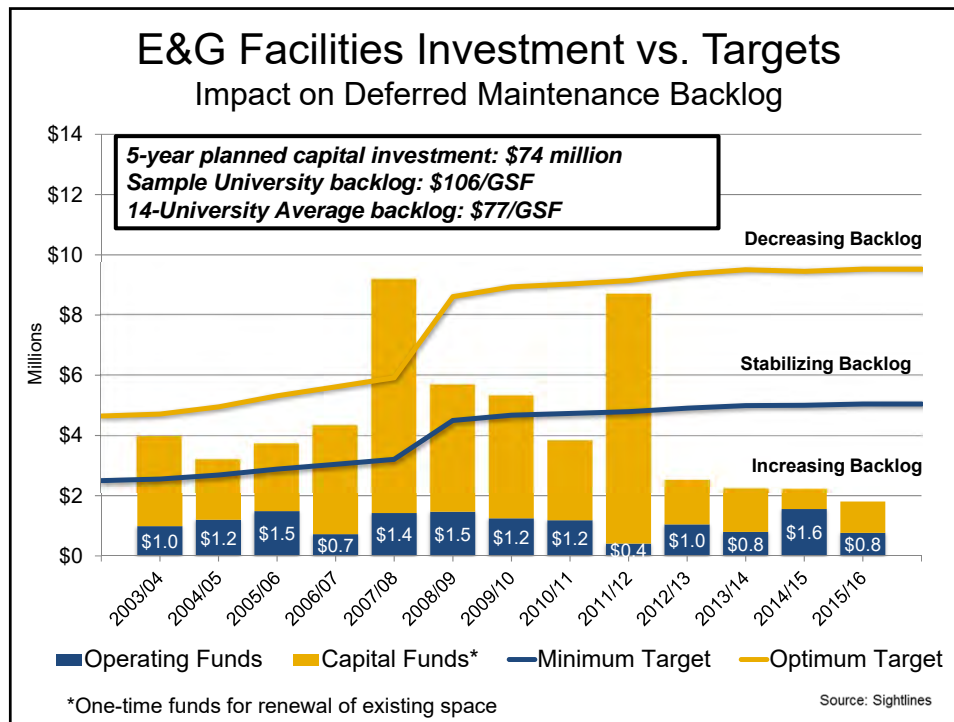
- Density of Space
- Investment in Plant

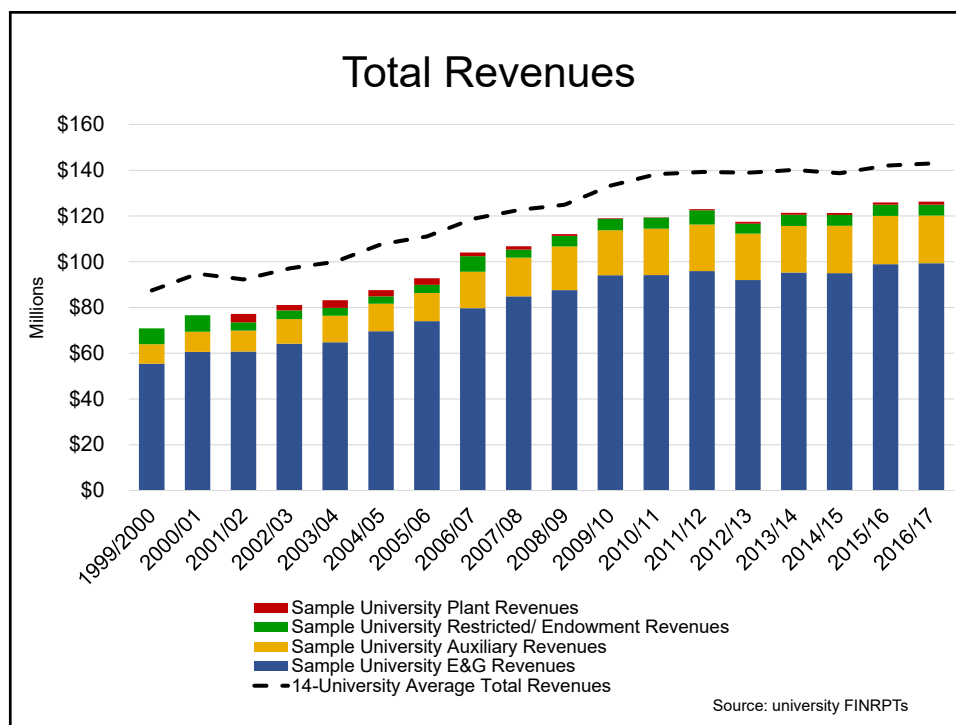
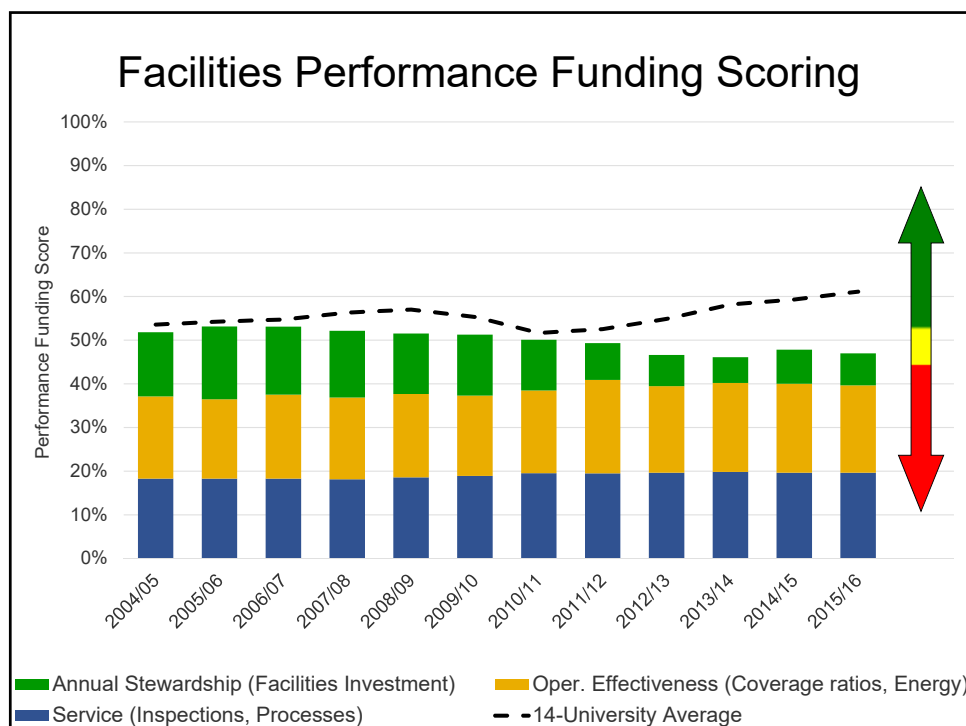
Stewardship of Financial Resources

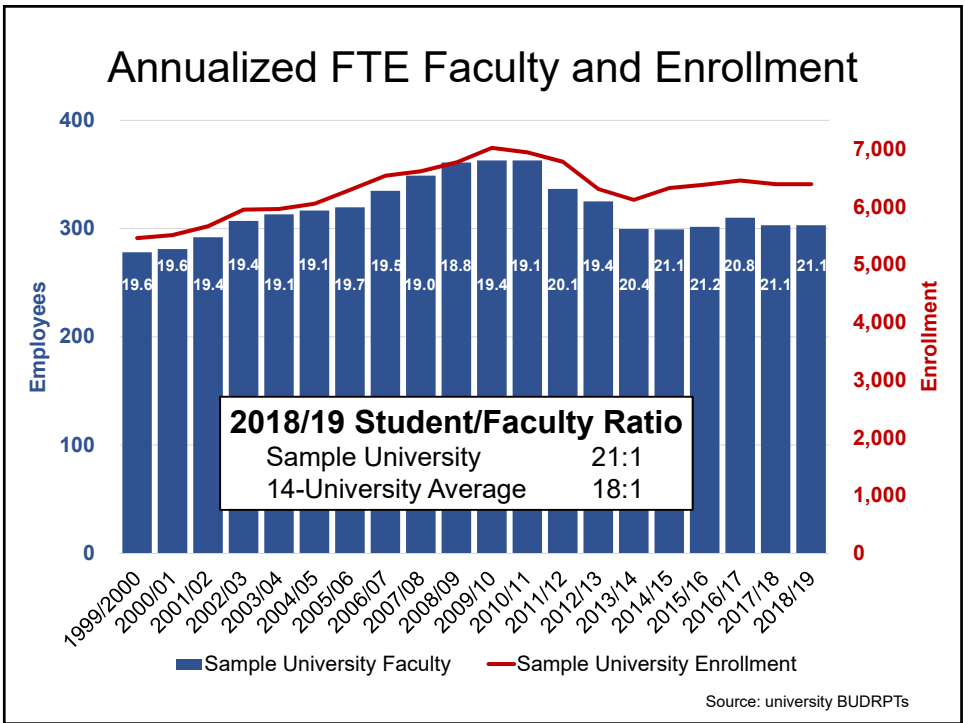
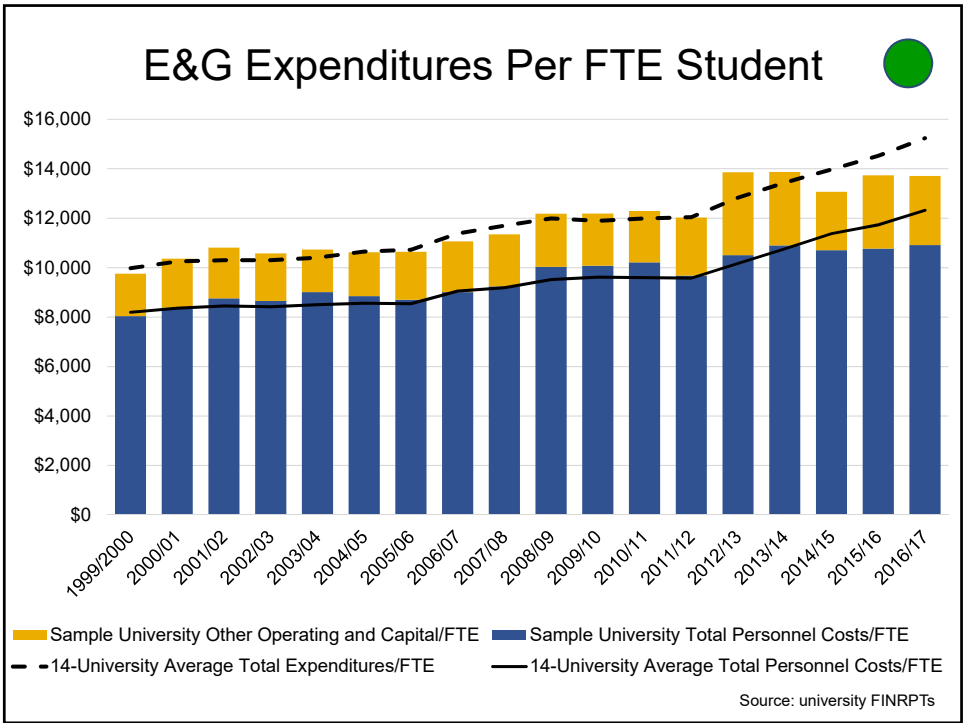
- Revenue Sources
- Expenses Per Student

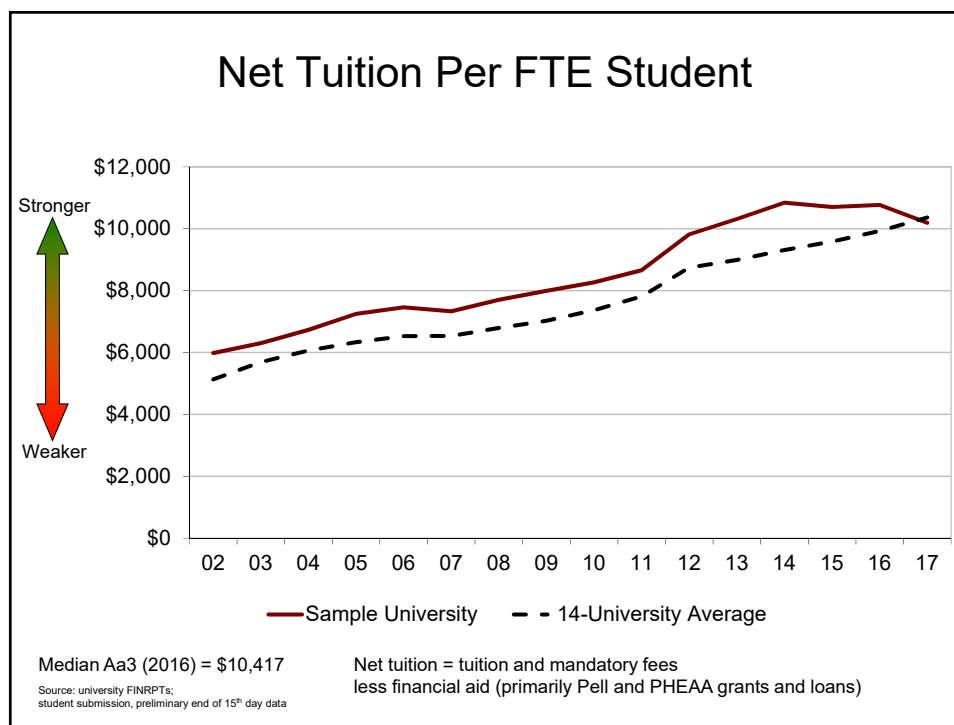
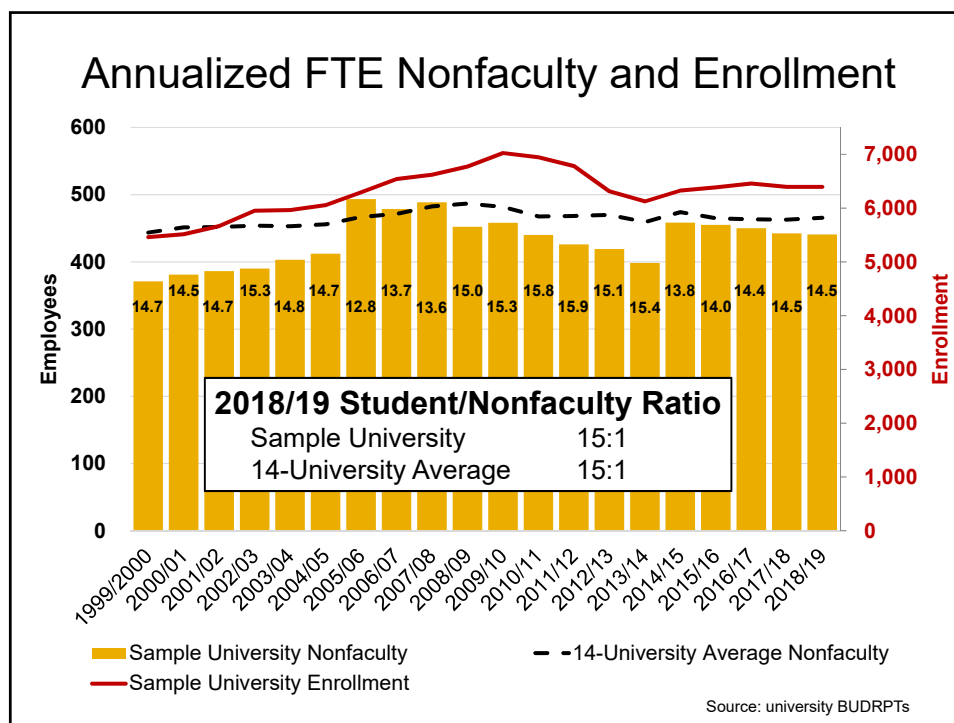




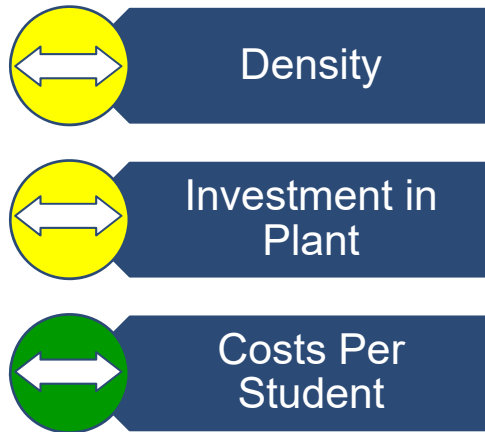




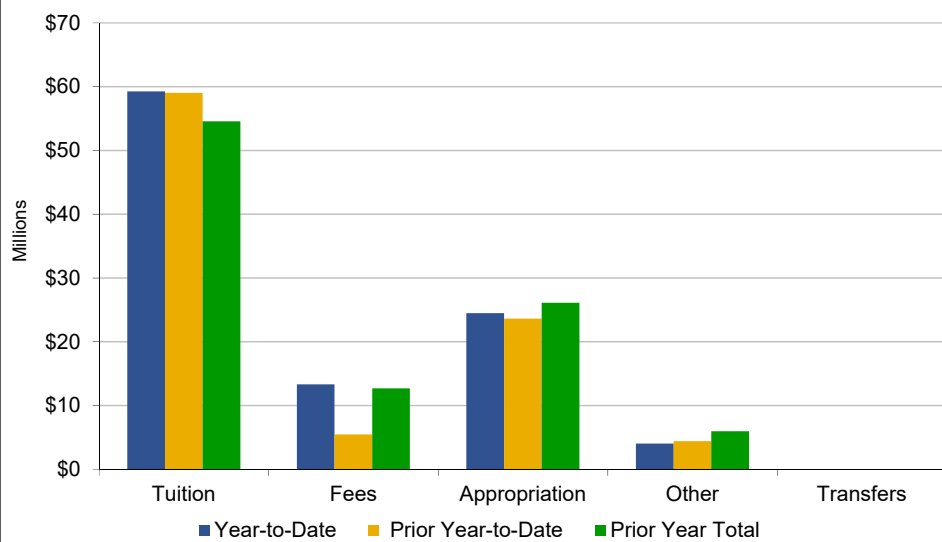




Operating Efficiency



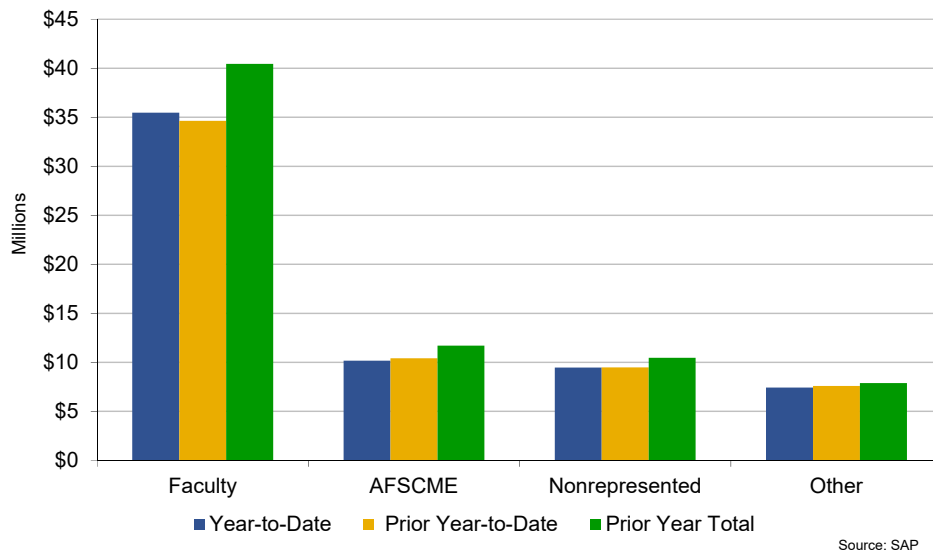
E&G Revenues As of May 31, 2018



Source: SAP

E&G Personnel Expenditures

As of May 31, 2018

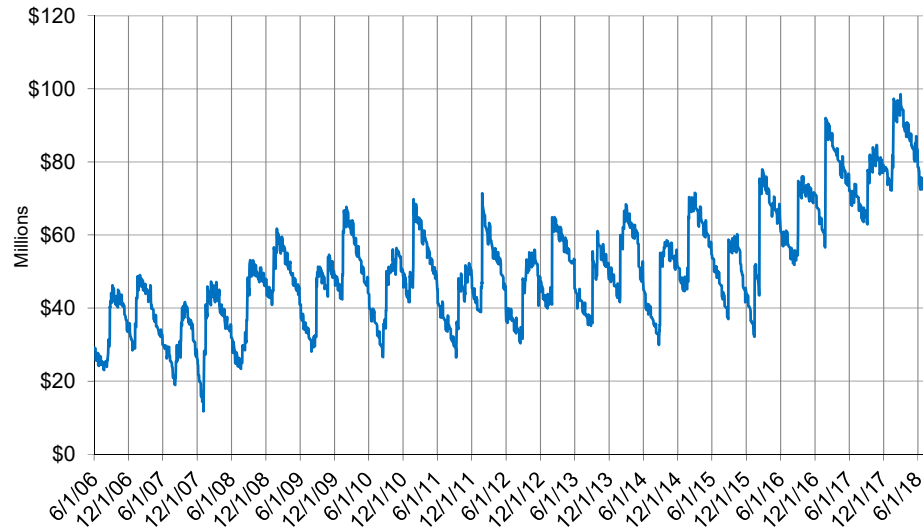


Financial Performance

- Cash
- Operating Margin
- Unrestricted Net Assets
- Debt

Daily Cash Balances*

June 2006 through June 2018

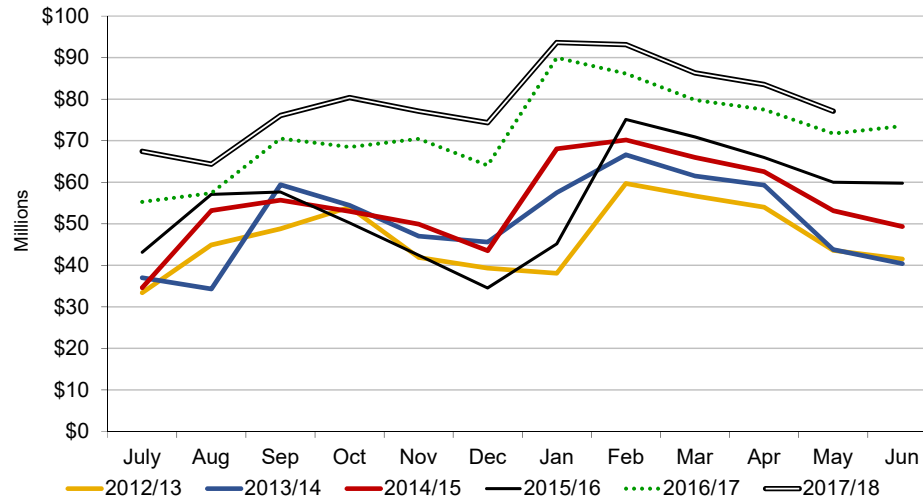


*Funds held in the System Investment Fund

Source: M&T Trust Webfolio

Operating Cash*

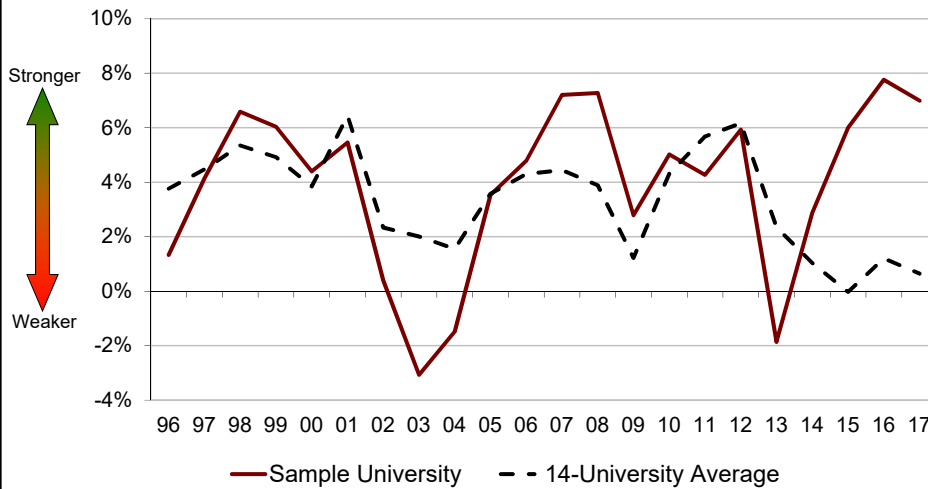
As of May 31, 2018



*Month-end cash balances

Source: SAP

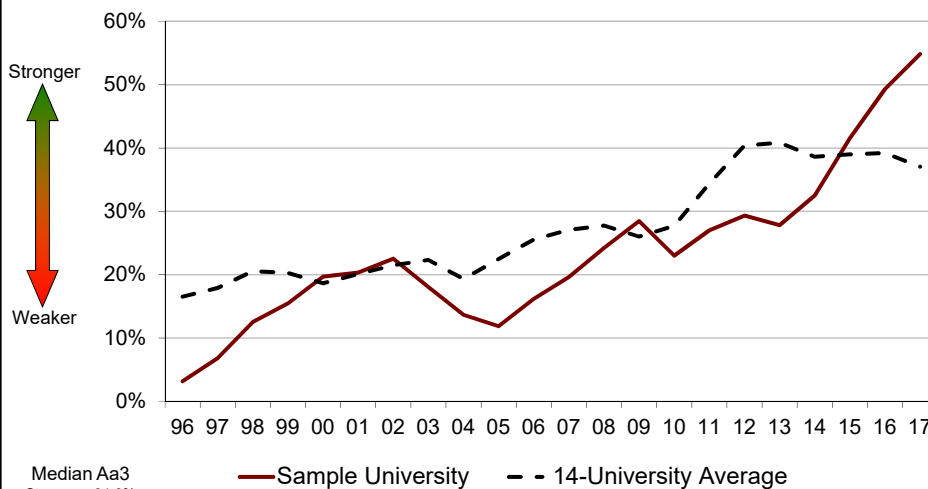
Annual Operating Margin



Median Aa3 (2016) = 3.2% Operating revenues less operating expenses divided by operating revenues

Source: university FINRPTs

Unrestricted Financial Resources to Operations

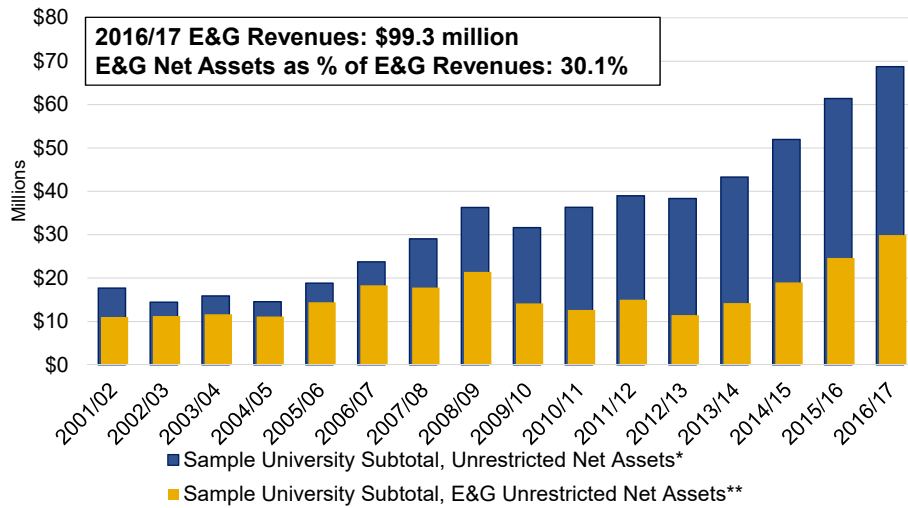


Median Aa3
Stronger >31.0%
Average 23.2%
Weaker <17.8%

Unrestricted net assets compared to total annual operating budget, including auxiliaries

Source: university FINRPTs

Unrestricted Net Assets Without Long-Term Liabilities*

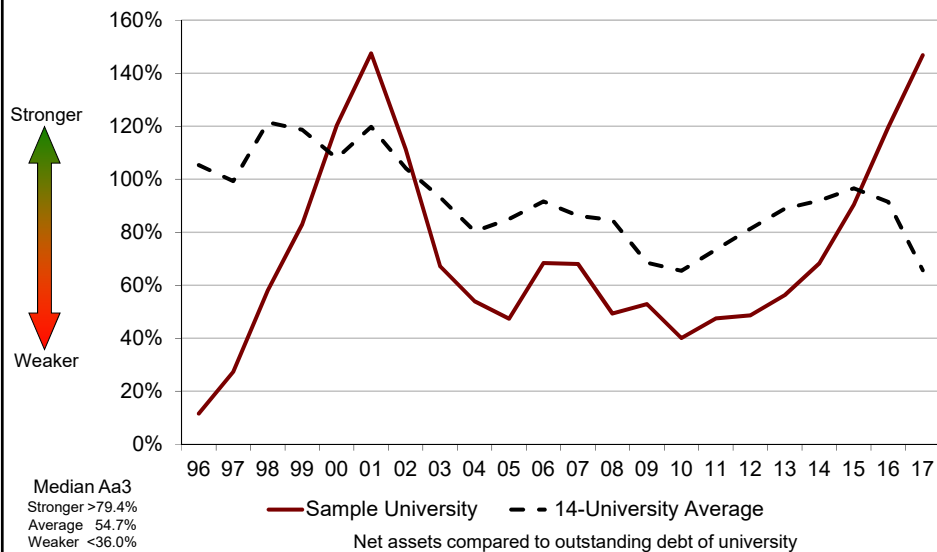


*Total unrestricted net assets excludes postretirement, compensated absence, and pension liabilities

**E&G net assets excludes encumbrances and long-term liabilities

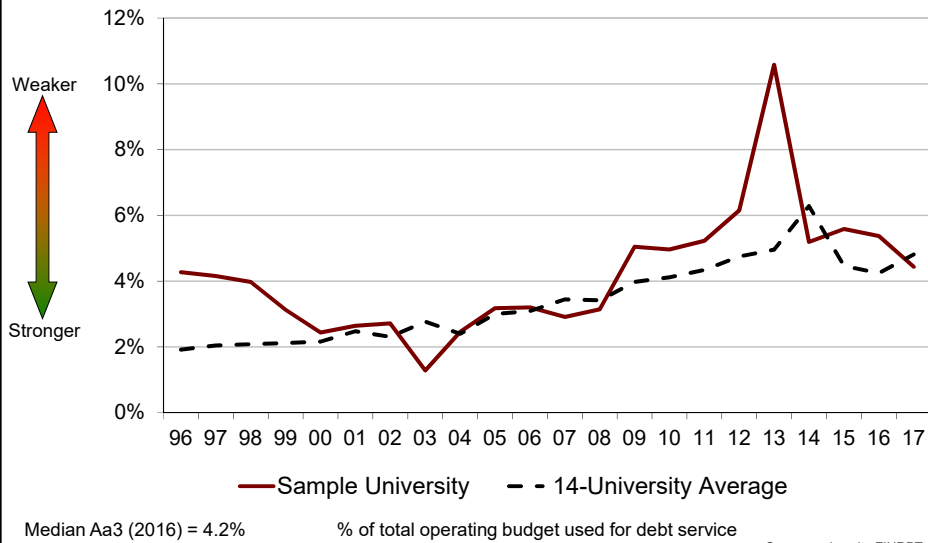
Source: university FINRPTs

Unrestricted Financial Resources to Direct Debt



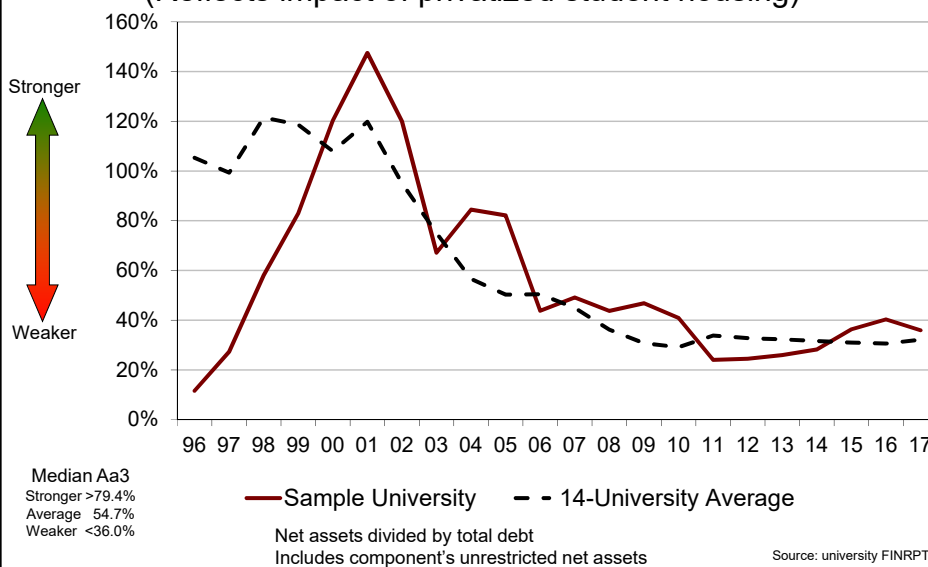
Source: university FINRPTs

Actual Debt Service to Operations

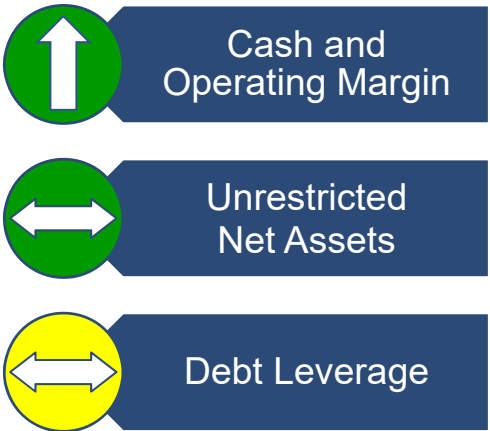


Unrestricted Financial Resources to Comprehensive Debt

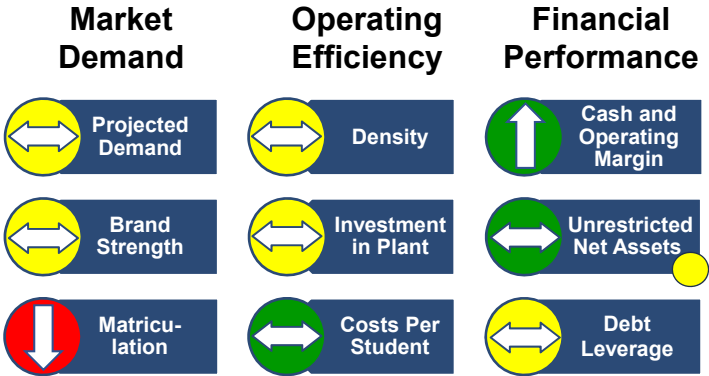
(Reflects impact of privatized student housing)



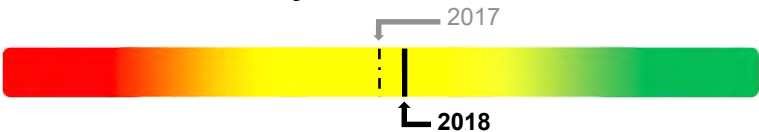
Financial Performance



Overall Financial Assessment



University Financial Assessment



Note: Dots in lower right-hand corner of a blue box show last year's color for that indicator.

CREDIT OPINION

13 August 2018



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Japan 81-3-5408-4100

EMEA 44-20-7772-5454

State System of Higher Education, PA

Update following revision of outlook to stable

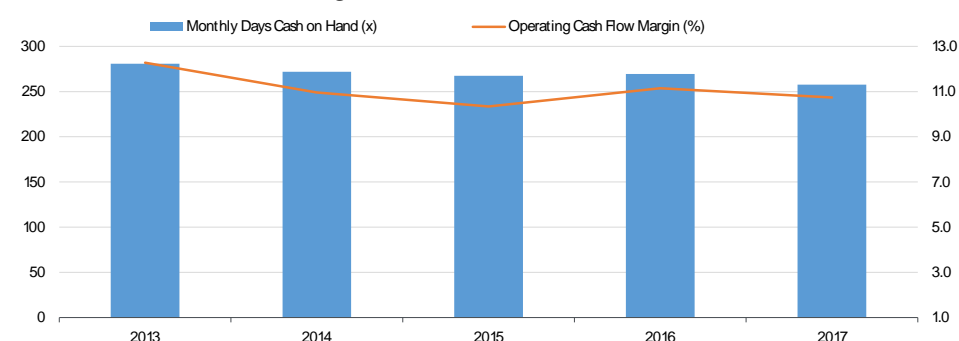
Summary

[State System of Higher Education](#)'s (PASSHE, Aa3 stable) strong credit profile reflects its scale as one of the nation's largest public university systems and the largest provider of higher education in the [Commonwealth of Pennsylvania](#) (Aa3 stable) through its 14 campuses. The system has regularly demonstrated an ability to adjust operations to align with continued enrollment declines. PASSHE has strong unrestricted liquidity and good reserves providing operating flexibility as it works to adjust its expense base. A significant expense constraint is that nearly all of its faculty and staff are subject to collective bargaining agreements that are regularly renegotiated. This exposes the system to both rising compensation costs and potential work stoppages. Although it has high leverage, PASSHE has manageable debt plans coupled with a fairly rapid debt amortization that should at least maintain debt levels.

Moody's revised PASSHE's outlook to stable from negative on August 13, 2018.

Exhibit 1

Continued strong liquidity and good operating cash flow despite year-over-year enrollment declines and constrained tuition growth



Source: Moody's Investors Service

Credit strengths

- » Substantial balance sheet reserves, with unrestricted liquidity of \$1.3 billion or 260 monthly days for fiscal 2017, with fiscal 2018 expected to be similar
- » Significant scale as one of the nation's largest higher education systems
- » Effective system governance and management, including strong fiscal oversight and debt management, with System Redesign underway
- » Good, although thinning, cash flow, with an 11% operating cash flow margin for fiscal 2017
- » Modest near-term debt plans with significant principal repayment expected

Credit challenges

- » Continued cost containment efforts critical to sustaining credit quality in face of declining enrollment
- » Financial flexibility constrained by collective bargaining agreements and required pension and OPEB contributions
- » Potential challenges in executing recommendations from system strategic review
- » High leverage, with \$2.3 billion of total debt, including universities' foundation student housing debt

Rating outlook

PASSHE's stable outlook incorporates our expectations that the system will continue to implement actions related to its System Redesign that will enable it to adapt to demographic shifts in its core market while maintaining generally stable, strong unrestricted liquidity of more than 250 days cash and operating cash flow margins around 10%.

Factors that could lead to an upgrade

- » Sustained increase in operating performance and cash flow generation
- » Significantly strengthened enrollment and sustained strong net tuition revenue growth across the system
- » Greater expense flexibility providing enhanced ability to adjust to business conditions

Factors that could lead to a downgrade

- » Decline in unrestricted liquidity
- » Consistently weaker operating cash flow from failure to match expense growth with revenues
- » Organizational or political resistance to system redesign
- » Weakening of Commonwealth of Pennsylvania's credit profile or sustained decline in commonwealth support

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Key indicators

Exhibit 2

STATE SYSTEM OF HIGHER EDUCATION, PA

	2013	2014	2015	2016	2017	2017 Sensitivity w/ Series AV	Median: Aa Rated Public Universities
Total FTE Enrollment	100,258	97,394	94,829	92,216	89,613	89,613	30,085
Operating Revenue (\$000)	1,892,879	1,916,860	1,912,427	1,960,319	2,001,532	2,001,532	1,136,474
Annual Change in Operating Revenue (%)	-0.2	1.3	-0.2	2.5	2.1	2.1	3.3
Total Cash & Investments (\$000)	1,992,872	2,054,515	2,023,479	1,979,785	2,005,325	2,005,325	1,296,900
Total Debt (\$000)	2,262,550	2,296,995	2,283,052	2,358,720	2,258,981	2,272,791	663,840
Spendable Cash & Investments to Total Debt (x)	0.8	0.8	0.8	0.7	0.7	0.7	1.4
Spendable Cash & Investments to Operating Expenses (x)	0.9	0.9	0.9	0.8	0.8	0.8	0.7
Monthly Days Cash on Hand (x)	281	272	267	270	258	258	168
Operating Cash Flow Margin (%)	12.3	11.0	10.3	11.1	10.7	10.7	11.4
Total Debt to Cash Flow (x)	9.7	10.9	11.5	10.8	10.5	10.6	4.7
Annual Debt Service Coverage (x)	2.6	2.1	1.5	2.4	2.1	2.1	2.9

2017 Sensitivity includes debt issuance and repayment since June 30, 2017

Total FTE Enrollment is fall enrollment of indicated year

Source: Moody's Investors Service

Profile

PASSHE, composed of 14 state-owned universities, was created by the State System of Higher Education Act of November 12, 1982. However, all of the universities have longer histories as teaching colleges, with the latest founded in 1893. The Act also established a Board of Governors and the Office of the Chancellor. With over 102,000 headcount students, PASSHE is Pennsylvania's largest provider of higher education and one of the nation's largest public universities.

Detailed credit considerations

Market profile: established state-wide public university system with declining enrollment tied to state demographics; growing net tuition revenues despite enrollment decreases

PASSHE's credit quality is supported by its role as a critical provider Pennsylvania's public higher education, as well as an educational and economic anchor in the campuses' local regions. However, largely serving an in-state undergraduate student population, system-wide enrollment has fallen in recent years largely due to the declining number of state high school graduates. Although Pennsylvania Department of Education has projected generally stable high school graduates for the next four years, PASSHE continues to see enrollment declines, projecting another 2% decrease for fall 2018. This is lower than budgeted and the system has adjusted its budgeted tuition revenues to reflect the enrollment shortfall.

PASSHE's member universities are challenged by demographics coupled with fierce competition, particularly those located in western Pennsylvania. Campuses have employed differing recruiting and tuition strategies to try to stabilize enrollment, some more successful than others. As a system, PASSHE looks to address staffing and expense structure. Certain campuses, notably Cheyney, Mansfield, Clarion and Edinboro are confronting more material enrollment and financial pressures. The system is reviewing through the board's System Redesign ways to grow tuition revenues while maintaining affordability, including allowing different tuition charges for each campus and program. PASSHE's ability to continue to address these issues across its multi-campus system will be critical to its long-term credit profile.

Despite the enrollment declines, PASSHE has successfully grown overall net tuition revenue through consistent tuition revenue increases. Net tuition revenue per student has increased about 20% to nearly \$11,000 over the past five years. This pattern will hold in fiscal 2018, with 3.5% tuition increases and expected for fiscal 2019 with a 2.9% increase. Occupancy of university housing, particularly the newer facilities financed by related foundations, remains very good across the system.

Operating performance: good cash flow despite expense pressures

Through strong budgetary oversight and adjustments, PASSHE has demonstrated operating resilience to maintain good, albeit declining operating cash flow. Fiscal 2017 operations produced an 11% cash flow margin, better than budgeted due to strong expense management actions to offset the lower revenues. PASSHE is expected to continue good operations and cash flow as it adjusts to pressure revenues, including the current fiscal 2019, from tuition increases, higher appropriations and expense savings measures. For fiscal 2017, 2018 and the current 2019 the commonwealth provided annual increases in operating funding, as well as annual capital funding.

PASSHE is acting on various efficiency actions to sustain fiscal balance. However the system has limited ability to take certain expense actions due to its heavily unionized faculty and staff. The negotiated compensation increases, rising pension and OPEB contributions are an additional budgetary strain that will continue without a major revision of retirement benefits. Such adjustments are not likely in the near-term as benefits are determined by the commonwealth or through union contracts.

Wealth and liquidity: good balance sheet reserves and strong liquidity providing operational flexibility

PASSHE will maintain very good working capital reserves and strong liquidity, currently supporting the Aa3 rating and providing flexibility to adjust operations over a multi-year period. PASSHE reported \$2 billion total cash and investments as of June 30, 2017 and projects generally stable reserves for fiscal 2018. Spendable cash and investments including foundation reserves, were \$1.7 billion or 85% of the total, providing excellent operating flexibility.

Liquidity

PASSHE's fiscal 2017 unrestricted monthly liquidity is very strong at \$1.29 billion or 260 days cash, modestly lower than the \$1.31 billion or 270 days the prior year and within our expectations. PASSHE projects generally comparable liquidity for fiscal 2018. A material decline reflecting an inability to sustain fiscal balance would pressure the rating.

Leverage: high leverage with substantial defined benefit obligations

PASSHE is highly leveraged, with \$2.3 billion of total pro forma debt, including about \$1.1 billion of member universities' student housing financed through affiliated foundations. Although legally non-recourse to PASSHE, the financed housing is largely replacement beds for most member universities' housing stock. Total adjusted pro forma debt, including Moody's adjusted net pension liability for the state defined benefit pension plans, is a high \$4.1 billion.

Spendable cash and investments provide a cushion to total pro forma debt of 0.7x, materially below the Aa3-median of 1.2x. Debt-to-revenues and debt-to-cash flow are elevated at 1.1x and 10.6 times, respectively. However, operating leverage would be slightly lower if related student housing revenues of over \$200 million reported by the member universities' foundations were included in the calculation.

Overall debt issuance has slowed as most of the system's housing needs were addressed and PASSHE evaluates proposed projects in light of enrollment projections. It projects generally annual issuance of about \$75 million that is comparable or less than annual principal repayment.

Debt structure

PASSHE's debt is all fixed rate, amortizing debt. The system's debt repays more quickly than many other higher education institutions, generally within 20 years.

Related foundation debt includes about \$163 million of directly placed, demand bank loans. The direct bank placements have financial covenants related to individual bond issues including a debt service coverage covenant of 1.2x for the specific financed residence facilities. PASSHE reports fiscal 2017 debt service coverage for all projects exceeded the covenant and projects similar coverage for fiscal 2018.

Legal Security

PASSHE's revenue bonds are a general obligation of the system backed by its full faith and credit. There is no debt service reserve fund for any debt series.

The Series 2012A Student Housing bonds are obligations of [Kutztown University Foundation](#), intended to be repaid by revenue derived from the housing project. There is a general obligation lease agreement between the university as lessee and both PASSHE and the foundation as lessor, with the lease payments sized to fully make debt service payments. The lease may be terminated under certain conditions, including destruction of the facilities. There is no debt service reserve fund.

Debt-related derivatives

PASSHE has no swaps but is indirectly exposed through some university foundations used to hedge variable rate student housing debt. The total value of the agreements was a liability of \$59 million at June 30, 2017. Beyond limited termination and default events, there are no collateral posting requirements for either PASSHE or for affiliated entities.

Pensions and OPEB

PASSHE has substantial debt-like liabilities through its unfunded share of the commonwealth's multi-employer defined benefit plans and its recognized OPEB liability. PASSHE participates in three different retirement systems - SERS and Public School Employees Retirement System (PSERS), both defined benefit plans, and a defined contribution plan. These obligations will pressure future operations to meet longer-term funding needs. PASSHE's pension liability reported in the audit under GASB 68 was \$1.0 billion, with a \$1.8 billion Moody's Adjusted Net Pension Liability using a market discount rate. Total adjusted debt to operating revenue is a very high 2.0x, twice the 1.0x Aa3-median. Similarly, spendable cash and investments to total adjusted debt of 0.4x is weaker than the 0.6x median.

The increase in PASSHE's pension contributions, determined by state legislation, has slowed. The SERS contribution for fiscal 2018 is currently capped at 32.57% of payroll with annual increases not to exceed 4.5%, up from 29.20% for fiscal 2017. The fiscal 2017 pension expense was nearly 10% of total operating expenses.

PASSHE reported a \$1.1 billion OPEB liability in fiscal 2017, generally comparable with the prior year. For fiscal 2017, the system contributed \$39 million compared to the \$78 million annual cost.

Governance and management: very good centralized financial and budget oversight; system redesign underway with ultimate actions to be determined

PASSHE demonstrates very good centralized financial oversight of its member universities that helps address operating challenges. The system has an enterprise resource management system that consolidates member universities' financial results. It also has integrated short-term and long-term planning and budgeting that it reviews on a regular basis. PASSHE requires the universities to submit regular fiscal year-to-date results to determine if adjustments in operations are required. It also conducts a regular assessment of each university's financial metrics to determine any operational or balance sheet weakening.

In March 2017 PASSHE's chancellor and Board of Governors commissioned National Center for Higher Education Management Systems (NCHEMS) to lead a Strategic System Review of the system and the member universities. NCHEMS presented its findings and recommendations in July 2017. The review examined the system's long-term sustainability of the system, a review of Act 188 that created and empowered PASSHE, and a review of the Office of the Chancellor and the individual universities.

The findings noted challenges to PASSHE's options to growing revenues, including "hyper competition" for a limited pool of traditional age college students. Options for reducing costs are also difficult given down-side risks and effects from options such as including shared services, closures and mergers of individual universities. Recommendations focused on a number of governance changes, including creating a more streamlined management and oversight levels, change in the board's structure, and reconfiguring the universities facing the most severe sustainability challenges.

The system has moved from System Review to System Redesign mode. The Board of Governors affirmed its commitment to the long-term stability of all 14 member universities. It established three priorities - ensuring student success, leveraging university strengths, and transforming the governance/leadership structure. Task groups were launched in December 2017 and are working under the three priorities to propose recommendations, including pricing strategies. Currently the nature of and the timing to implement the

recommendations is not known. Changes in pricing strategies can be effective in permitting PASSHE to show net tuition revenue growth. However it is uncertain how open all constituencies will be to recommendations. It is also not clear at this time if the recommendations can minimize or mitigate some of PASSHE's operating challenges, including its faculty union relationship and its regular contract renewal negotiations and terms.

PASSHE is governed by a 20 member Board of Governors, including the governor and secretary of education, with strong links to the state that, combined with its statewide mission, contributes to generally positive political support. The board approves PASSHE's annual operating and capital budgets and determines tuition fees across the system.

The system announced a new chancellor will assume office on September 4, 2018. The chancellor has extensive higher education experience, both as an administrator at University of California's Office of the President and as a leader of the Postsecondary Success strategy at Bill and Melinda Gates Foundation for six years.

Cheyney University, the smallest of PASSHE's member universities, remains under a "show cause" order from Middle States Commission on Higher Education. In November 2017 the commission accepted the show cause report, approved the teach out plan and extended for one year the period for demonstrating compliance while remaining accredited. Cheyney must submit a report by September 1, 2018 to show cause as to why its accreditation should not be withdrawn. Cheyney remains under heightened cash monitoring by the US Department of Education (USDE). This is resulting in limited distribution of federal financial aid to Cheyney, which is bridged by borrowing from PASSHE through an internal line of credit. This follows USDE's determination Cheyney improperly administered and delivered federal financial aid funds. Cheyney will likely need to pay a monetary settlement of charges, with a potential liability of nearly \$30 million cited in Middle States' November 2017 accreditation statement. The amount is not material given the breadth of PASSHE's credit profile, including strong unrestricted liquidity.

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FITCH RATES PA'S STATE SYSTEM OF HIGHER ED SERIES AV REVS 'A+'; DOWNGRADES OUTSTANDING TO 'A+'

Fitch Ratings-New York-15 August 2018: Fitch Ratings has assigned an 'A+' rating to the following Pennsylvania Higher Educational Facilities Authority's bonds issued on behalf of Pennsylvania's State System of Higher Education (PASSHE, or the System):

--\$105,265,000 million Series AV-1 Revenue and Refunding Bonds;
--\$137,870,000 Series AV-2 Federally Taxable Revenue Bonds.

The series AV-1 bonds will be used to fund capital projects at West Chester University and to refund certain outstanding bonds (series AG and AI); the series AV-2 bonds will be used to finance the acquisition of a student housing facility at Shippensburg University; together the bonds will be used to pay costs of issuance. The bonds are expected to price the week of August 20th.

In addition, Fitch has downgraded the rating on PASSHE's approximately \$1.1 billion in outstanding revenue and refunding revenue bonds to 'A+' from 'AA-':

The Rating Outlook has been revised to Stable from Negative.

SECURITY

The bonds are an unsecured general obligation of the Pennsylvania State System of Higher Education.

KEY RATING DRIVERS

WEAKENING SYSTEM ENROLLMENT: The primary rating driver for the downgrade to 'A+' is continued erosion in enrollment, which is expected to persist as demographic and economic challenges across PASSHE's broad reach continue. Total FTE enrollment declined again in fall 2017 by 2.8%, and is on track to drop again in fall 2018 by similar levels. With continued reductions in high school graduates and uneven economic trends in the state, further declines will be difficult to offset and will limit PASSHE's student-driven financial flexibility going forward.

OPERATIONS REMAIN NEGATIVE: The rating also reflects continually weakened GAAP-based margins for the past five fiscal years, which are expected to persist in fiscal 2018 and 2019. However, steadier rather than worsening results are expected, with approved state support and tuition increases narrowing the System's deficit materially in fiscal 2019 from prior years.

FINANCIAL FLEXIBILITY REMAINS: At the 'A+' rating level, PASSHE will maintain solid available funds levels, which have remained healthy for some time. Approximately \$1.3 billion in available funds (AF) covered 60% of system expenses and over 100% of system total debt in fiscal 2017.

MANAGEABLE DEBT LEVEL: PASSHE's debt burden remains manageable, with sufficient maximum annual debt service (MADS) coverage of 1.2x in fiscal 2017 and a 6.2% MADS burden. At the 'A+' rating level, PASSHE does have some debt capacity and its capital needs continue to be supported in part by state capital appropriations.

RATING SENSITIVITIES

STABLE OPERATIONS: The 'A+' rating will be sensitive to significant erosion in operating performance, which pressures debt service coverage going forward. Unexpected reductions in state support or dramatic enrollment declines could prompt rating pressure.

CREDIT PROFILE

The Pennsylvania State System of Higher Education (PASSHE) is the Commonwealth of Pennsylvania's largest higher education provider, and includes 14 state-owned universities across the Commonwealth that date back as far as 1837. PASSHE is a state agency, established as a university system in 1983. Today it includes the 14 universities, four branch campuses, and several regional centers.

STEADY STATE SUPPORT

PASSHE continues to receive consistent state support for both operations and capital needs. Pennsylvania's (GO bonds rated AA-/Negative) fiscal 2019 budget passed ahead of its fiscal year end, with solid revenue growth easing the path to budget enactment. PASSHE is receiving a 3.3% increase in appropriation as well as a 2.99% increase in tuition, though this falls short of full funding, leaving a \$19 million gap the System will address internally. In addition, the long-standing \$65 million in state support of capital projects is expected to increase by an additional \$5 million for demolition costs.

Actions to preserve student fee revenues and state support have helped maintain PASSHE's available fund (AF) levels, which equaled \$1.3 billion in fiscal 2017. Total AF was equal to 60% of expenses and over 100% of current debt in fiscal 2017, both very solid for the 'A+' rating level.

ENROLLMENT PRESSURES CONTINUE

PASSHE continues to face enrollment declines, with a 2.8% decline in fall 2017 with further erosion expected in fall 2018. Since 2013, headcount enrollment has declined 10.6% and FTE enrollment has declined 12.5%. Enrollment pressures are expected to persist, with growth constrained by economic and demographic factors. Applications and deposits are down year-over-year through July 2018, which will likely result in another year of reduced enrollment in the fall 2018 class.

PASSHE's acceptance rates have increased materially from 66% in fall 2012 to 81% in fall 2017, while matriculation has slipped to 27% from 33% in the same time frame. The accreditation review currently underway at two universities may have further impact on an already challenging environment, though management is expecting a satisfactory resolution to both. Flat to declining high school graduate growth rates are expected through 2026, putting additional pressure on the System.

PERSISTENT NEGATIVE MARGINS

GAAP margins were negative (-4.2%) in fiscal 2017 for the fifth year, and will remain so for fiscal 2018 before narrowing in fiscal 2019. Pension expense of \$150 million is a contributing factor; however, PASSHE did make a \$91 million cash contribution to the pension plan in fiscal 2017. PASSHE participates in two state employer cost-sharing plans, which are now being funded at the full actuarial level in fiscal 2017 per state statutory targets. This should serve to improve the overall funding trajectory and result in a more manageable obligation going forward.

Fitch adjusts operating margin for non-cash items (depreciation and non-cash pension) and interest to arrive at net income available for debt service, which remained just sufficient for 1.2x coverage in fiscal 2017. Ongoing strategic efforts outlined under the System's review (with consultant help from the National Center for Higher Education Management Systems, NCHEMS) in July 2017 are expected to address system inefficiencies and enhance collaboration across universities going forward; efforts which will be undertaken by a new Chancellor starting in September 2018.

Successful outcomes will be necessary to address a challenging demographic environment and alleviate PASSHE's operating pressures.

MANAGEABLE DEBT BURDEN

The series AV bonds will add a marginal amount of net new debt to the System (approximately \$121 million in new money, including the Shippensburg affiliate housing debt), bringing pro forma debt to approximately \$1.3 billion. Pro forma debt levels remain manageable, with MADS equal to 6.2% of fiscal 2017 revenues and AF/pro forma debt just under 98%. Debt service is front loaded through 2024, diminishing markedly through maturity in 2055.

The series AV bonds will be used to refinance all of the series AG and a majority of the outstanding series AI bonds (\$215,000 will remain outstanding), partially fund a student commons project at West Chester University, and to purchase affiliate housing at Shippensburg University. Future disclosed debt-financing between \$75 million - \$100 million was also contemplated with this rating action.

Of note is an additional \$1.1 billion in off-balance sheet student housing debt, not included in total debt. Fitch notes that PASSHE may opt to purchase additional affiliate housing in the future, and AF/debt would decline to 52% if this debt were fully incorporated in the calculation.

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Applicable Criteria

Rating Criteria for Public-Sector, Revenue-Supported Debt (pub. 26 Feb 2018)
<https://www.fitchratings.com/site/re/10020113>
U.S. Public Finance College and University Rating Criteria (pub. 26 Apr 2017)
<https://www.fitchratings.com/site/re/897285>

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Pennsylvania State System of Higher Education

Revenue Bonds New Issue Report

Ratings

New Issues

\$38,050,000 Pennsylvania Higher Educational Facilities Authority (Commonwealth of Pennsylvania) Revenue Bonds, State System of Higher Education, Series AU-1 AA-

\$93,860,000 Pennsylvania Higher Educational Facilities Authority (Commonwealth of Pennsylvania) Refunding Revenue Bonds, State System of Higher Education, Series AU-2 AA-

Outstanding Debt

\$1,072,915,000 Pennsylvania Higher Educational Facilities Authority (Commonwealth of Pennsylvania) Revenue and Revenue Refunding Bonds, State System of Higher Education AA-

Rating Outlook

Negative^a

^aRevised from Stable on Aug. 4, 2017.

New Issue Details

Sale Information: \$38,050,000 Pennsylvania Higher Educational Facilities Authority (Commonwealth of Pennsylvania) Revenue Bonds, State System of Higher Education, Series AU-1, and \$93,860,000 Pennsylvania Higher Educational Facilities Authority (Commonwealth of Pennsylvania) Refunding Revenue Bonds, State System of Higher Education, Series AU-2, via competition the week of Aug. 21.

Security: Payment obligations pursuant to a loan agreement with the Pennsylvania Higher Educational Facilities Authority are an unsecured GO of Pennsylvania State System of Higher Education (PASSHE, or the system) and on parity with prior bonds and additional bonds.

Purpose: To finance a variety of new capital projects (\$38.1 million), advance refund series AH (\$93.9 million), and pay associated issuance costs.

Final Maturity: Series AU-1, June 15, 2042; series AU-2, June 15, 2038.

Key Rating Drivers

Weak Operations Drive Negative Outlook: The 'AA-' rating reflects the system's broad statewide reach and relatively solid financial cushion. However, PASSHE's continually weakened GAAP-based operating margins over the past four fiscal years, including fiscal 2016 and projected for fiscal 2017, drive the Outlook revision from Stable to Negative.

Weakened Systemwide Enrollment: PASSHE's broad reach in Pennsylvania is a credit strength and is consistent with the rating category. Nevertheless, systemwide full-time equivalent (FTE) enrollment continues to decline, in part due to fewer high school graduates in the state, and was down 2.8% in fall 2016 over fall 2015. Management projects steady-to-slightly declining FTE enrollment for fall 2017.

Strong Available Funds: Solid balance sheet resources support the rating. Fitch Ratings-calculated ratios of available funds to fiscal 2016 operating expenses (62.7%) and pro forma debt (98.7%) compare favorably to rating category medians. Including off-balance-sheet student housing debt, the latter ratio is a weaker but still adequate 52.9%.

Pressured Debt Service Coverage: Compressed operating margins pressured annual debt service coverage to a lower 0.8x in fiscal 2015 and 2016, requiring the system to use some capital reserves. The front-loaded debt structure in conjunction with the system's MADS burden (6.3%) somewhat mitigates this concern.

Rating Sensitivities

Weakened Margins and Coverage: Should Pennsylvania State System of Higher Education see further pressure on enrollment levels which lead to weaker operations and weaker debt service coverage, Fitch could lower the rating over the Outlook period. A return to a Stable Outlook at the current rating would be predicated on PASSHE shoring up operating income levels and improving debt service levels.

Additional Debt: Any issuance of additional debt without a commensurate increase in resources, growth in net tuition revenue, and stronger institutional debt service coverage, would put additional negative pressure on the rating.

Related Research

Fitch Rates Penn. State System of Higher Ed Series AU Revs and Rfdg Revs 'AA-'; Outlook to Negative (August 2017)

Fitch Rates Commonwealth of Pennsylvania's \$987MM GOs 'AA-'; Outlook Stable (November 2016)

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Rating History

Rating	Action	Outlook/ Watch	Date
AA-	Affirmed	Negative	8/4/17
AA-	Affirmed	Stable	8/10/16
AA-	Affirmed	Stable	5/5/16
AA-	Affirmed	Stable	8/14/15
AA-	Downgraded	Stable	4/16/15
AA	Affirmed	Negative	4/8/14
AA	Affirmed	Stable	6/13/13
AA	Affirmed	Stable	2/17/12
AA	Affirmed	Stable	6/15/11
AA	Affirmed	Stable	6/15/10
AA	Revised	Stable	4/30/10
AA-	Assigned	Stable	6/15/04

Credit Profile

PASSHE is the Commonwealth of Pennsylvania's (GOs rated 'AA-/Stable') largest higher education provider and its universities offer the lowest cost four-year baccalaureate degree programs in the commonwealth. The system includes 14 universities, four branch campuses, several regional centers, and the McKeever Environmental Learning Center.

Specifically, bond proceeds from series AU-1 will be used to: construct and renovate academic and athletic renovations at Indiana University; renovate academic facilities at Slippery Rock University; construct a guaranteed energy savings act project at Slippery Rock University; and, construct a parking structure at West Chester University.

Demand Summary

(Fall Semester of Fiscal Years Ended June 30)

	2012	2013	2014	2015	2016	2017
Headcount						
Total Undergraduate Enrollment	102,900	100,350	98,396	95,804	92,818	89,802
Total Graduate	15,324	14,121	13,632	13,802	14,308	14,977
Total Headcount Enrollment	118,224	114,471	112,028	109,606	107,126	104,779
Total Undergraduate / Total Headcount Enrollment (%)	87.0	87.7	87.8	87.4	86.6	85.7
Full-Time Equivalent (FTE)						
Total FTE Undergraduate Enrollment	96,512	94,213	92,457	89,478	86,622	83,611
Total FTE Graduate Enrollment	8,754	8,210	7,801	7,916	8,207	8,606
Total FTE Enrollment	105,266	102,423	100,258	97,394	94,829	92,217
Admissions						
Freshman Applications	101,443	93,084	77,826	78,878	79,468	79,426
Freshman Admissions	65,587	61,247	60,862	62,312	63,965	63,606
Acceptance Rate (%)	64.7	65.8	78.2	79.0	80.5	80.1
Freshman Matriculants	21,812	20,084	19,941	19,719	18,913	18,137
Matriculation Rate (%)	33.3	32.8	32.8	31.6	29.6	28.5
Average SAT						
Freshmen	1,002	992	987	986	984	977
Annual Undergraduate Cost of Attendance						
Total	8,484	8,733	9,004	9,418	9,766	10,436

Source: Pennsylvania State System of Higher Education (PA) and Fitch.

To help address budget shortfalls stemming from a six-year decline (since fall 2011) in systemwide enrollment, the board of governors and the chancellor commissioned a System review with a consultant (National Center for Higher Education Management Systems, or NCHEMS). Recommendations, released in July 2017, included actions regarding PASSHE's governance structure as well as methods to enhance collaboration among member institutions. Mergers or closures of universities were not recommended; however, a method for reconfiguring institutions facing the most severe challenges (to include sharing of administrative and programmatic resources with member universities) was outlined. Fitch will monitor PASSHE's progress with any actions taken as a result of the NCHEMS report.

Chancellor Frank Brogan announced, prior to the report's release, of his intention to retire effective Sept. 1, 2017. On Aug. 4, the Board named President Karen Whitney of Clarion University as interim Chancellor, effective September 2017 while a national search for a replacement takes place.

Related Criteria

[Rating Criteria for Public Sector Revenue-Supported Debt \(June 2017\)](#)

[U.S. Public Finance College and University Rating Criteria \(April 2017\)](#)

Financial Ratios

(\$000, Audited Years Ended June 30)

	2012	2013	2014	2015	2016
Revenue Diversity (% Adjusted Total Unrestricted Operating Revenues)					
Tuition	40.5	41.7	41.4	41.9	42.2
Student Fees (Tuition and Auxiliary Revenues)	57.3	59.0	58.3	58.5	58.5
Federal Grants and Contracts	9.9	9.5	9.3	9.2	8.9
State/Local Grants and Contracts	6.3	5.6	5.8	5.6	5.5
Other Grants and Contracts	0.4	0.4	0.5	0.4	0.4
Total Grants and Contracts	16.5	15.5	15.6	15.2	14.8
State Appropriations	21.2	21.4	21.1	21.2	21.8
Gifts and Contributions	0.8	0.8	0.9	0.8	1.4
Total Investment Return	1.3	1.1	1.3	1.6	1.2
Expense Ratios (% Total Unrestricted Operating Expenses)					
Instruction	35.9	35.9	35.8	36.4	36.2
Research	0.3	0.3	0.3	0.3	0.3
Operation and Maintenance of Plant	7.2	7.3	7.6	7.6	7.7
Depreciation	5.9	6.1	6.0	5.9	5.9
Interest	2.2	1.9	1.8	1.8	1.6
Financial Aid Ratios					
Tuition Discounting (%)	22.2	20.8	21.4	22.2	21.2
Net Tuition and Fees	786,417	804,199	809,310	816,573	839,035
Change in Net Tuition and Fees (%)	8.7	2.3	0.6	0.9	2.8
Operating Performance Ratios (%)					
Operating Margin	2.0	(1.7)	(3.0)	(3.8)	(4.1)
Balance Sheet Ratios					
Available Funds/Total Operating Expense	65.1	66.0	63.9	62.3	62.7
Available Funds/Total Long-Term Debt	117.7	126.8	129.6	135.1	133.5
Available Funds/Total Pro Forma Long-Term Debt					98.7
Available Funds/MADS (x)	9.9	10.3	10.3	10.1	10.4
Leverage Ratios					
Adjusted Total Unrestricted Operating Revenues Basis					
Current Debt Service Coverage (x)	2.2	1.3	1.0	0.8	0.8
Current Debt Burden (%)	4.4	5.0	4.8	5.4	4.7
Pro Forma MADS Coverage (x)	1.5	1.0	0.8	0.7	0.6
Pro Forma MADS Burden (%)	6.5	6.5	6.4	6.4	6.3
Variable-Rate Bonds as % of Total Bonds	0.0	0.0	0.0	0.0	0.0
Hedged Variable-Rate Bonds as % of Total Bonds	0.0	0.0	0.0	0.0	0.0

Notes: Fitch may have reclassified certain financial statement items for analytical purposes.

Negative Margins for Fourth Year

Operations were negative (4.1%) for a fourth consecutive fiscal year in 2016. Similar margins are expected for fiscal 2017. However, on the positive side, PASSHE benefits from its multi-institution higher education system, sufficient financial reserves, and has demonstrated its willingness to make budgetary cuts to adjust for enrollment and appropriation fluctuations.

The system's focus on student affordability has historically limited tuition increases, although the PASSHE board of governors increased tuition by 3.5% for fall 2017 (fiscal 2018). Management indicates that the tuition increase — in conjunction with an increase in state appropriations and ongoing expense containment — should support improved margins in fiscal 2018. For fall 2016 (reflected in fiscal 2017), the board approved a 2.5% tuition increase. Fitch will monitor the system's operating results for the effect of these changes.

Enrollment Pressures Continue

Enrollment declines reflect state demographics and the declining number of high school graduates. This has contributed to recent operating pressures. FTE enrollment declined 2.8% to 92,217 in fall 2016 from one year prior and is down from 105,266 in fall 2011. Preliminary fall 2017 application and admissions data through July 14, 2017 again suggest modestly declining fall 2017 enrollment. Management notes that enrollment trends vary by member institution, with some showing increases, but not enough to reflect systemwide growth. Final enrollment numbers are not yet available.

Commonwealth Funding Improvement Continues

Pennsylvania's fiscal 2016 budget passed with a 5% (\$20.6 million) appropriation increase (to \$433.4 million total appropriation) for the system, following three years of level funding and a six-month budget impasse. PASSHE successfully managed through the appropriation delays and reported no cash flow issue with operations in fiscal 2016. After January 2016, PASSHE received monthly payments that also incorporated payments owed since July 2015.

Pennsylvania's fiscal 2017 budget, passed in July 2016, resulted in a 2.5% (\$10.8 million) appropriation increase for the system (to \$444.2 million total appropriation). The legislature has approved another 2% (additional \$8.9 million to \$453.1 million) appropriation increase for the system in fiscal 2018, but the commonwealth has yet to enact a revenue package to provide full funding.

Solid Balance Sheet Resources

The system's available funds (AF), defined by Fitch as cash and investments less nonexpendable restricted net assets, support the current rating. Addressing imbalances over the past several years with budgetary adjustments, including workforce reductions, has helped maintain available funds at an average of \$1.28 billion annually since fiscal year-end 2012.

Fiscal 2016 AF (\$1.3 billion) covered unrestricted operating expenses (\$2.1 billion) and pro forma debt (\$1.3 billion, which includes series AU-1 and AU-2 as well as board-approved projects beyond this issuance) by 62.7% and 98.7%, respectively. Both ratios compare favorably to Fitch's 'AA' rating category medians. Including additional \$1.14 billion of off-balance sheet student housing debt, AF relative to debt remains adequate for the rating category, but weakens to 52.9%.

Manageable Debt Burden

Annual debt service coverage weakened due to operating pressures in fiscal 2016 and was 0.8x for the second consecutive year. This compares to at least 1.0x in fiscal years 2012–2014. Management reports that debt service payments were supported in part by reserves.

PASSHE's debt structure is conservative with front-loaded debt service that is all fixed-rate. Additionally, the pro forma MADS occurring in 2020 (\$125.4 million) is manageable, albeit moderately high, at 6.3% of fiscal 2016 operating revenues. Post series AU, PASSHE expects to issue \$61 million for additional spending on the West Chester University combined use facility (which is partially being funded with series AU-1). The latter has been included within pro forma debt.

Primary Security

Security provisions provide limited bondholder protections as is typical of similar entities. PASSHE's obligation pursuant to a loan agreement with the Pennsylvania Higher Educational Facilities Authority is an unsecured general obligation. The system pledges its full faith and credit for the payment of related obligations.

The system may pledge up to 20% of its tuition revenues and commonwealth appropriations to secure debt obligations separate from the outstanding parity bonds. However, the system has not exercised such pledge to date.

Financial Summary

(\$000, Audited Fiscal Years Ended June 30)

	2012	2013	2014	2015	2016
Unrestricted Operating Revenues					
Gross Tuition and Fees	1,010,294	1,015,386	1,029,150	1,050,135	1,065,416
Less: Student Aid	223,877	211,187	219,840	233,562	226,381
Net Tuition and Fees	786,417	804,199	809,310	816,573	839,035
Sales and Services of Auxiliary Enterprises	327,139	332,890	331,431	324,007	323,358
Federal Grants and Contracts	192,150	182,746	181,840	180,051	176,094
State/Local Grants and Contracts	121,577	107,967	113,713	109,061	109,245
Other Grants and Contracts	6,966	7,790	8,849	7,208	8,758
State Appropriations	412,751	412,751	412,751	412,751	433,389
Gifts and Contributions	15,362	15,124	17,791	16,557	28,544
Dividend & Interest Income	24,465	20,409	26,226	31,010	23,979
All Other Operating Revenues	23,205	9,777	14,089	10,736	46,106
Other Material (10%) Operating Revenue	33,535	34,749	39,003	41,885	0
Total Operating Revenue	1,943,567	1,928,402	1,955,003	1,949,839	1,988,508
Unrestricted Operating Expenses					
Instruction	683,429	704,473	720,970	735,576	749,290
Academic Support	158,935	170,773	171,911	178,481	184,037
Institutional Support	251,352	258,068	263,981	247,942	257,261
Student Services	166,300	170,270	176,618	180,271	184,675
Public Service	33,844	34,233	37,457	37,413	39,381
Research	6,591	5,419	5,115	5,742	6,304
Auxiliary Enterprises	235,488	243,320	251,781	255,512	253,786
Student Aid	76,592	74,488	75,592	72,948	79,136
Operation and Maintenance of Plant	137,128	143,214	152,304	153,136	159,904
Depreciation	113,154	119,536	120,193	119,652	121,683
Interest Expense	41,617	37,936	36,862	36,577	33,920
Total Operating Expense	1,904,430	1,961,730	2,012,784	2,023,250	2,069,377
Change in Net Assets from Operations	39,137	(33,328)	(57,781)	(73,411)	(80,869)

Notes: Fitch may have reclassified certain financial statement items for analytical purposes.

Financial Summary (continued)

(\$000, Audited Fiscal Years Ended June 30)

	2012	2013	2014	2015	2016
Unrestricted Non-Operating Revenues/(Expenses)					
Realized and Unrealized Gain/(Loss) on Investments	11,687	(5,131)	(3,179)	(13,055)	2,551
Additions to Permanent Endowment	0	0	0	105	25
Capital Appropriations	9,748	14,835	14,385	13,610	15,714
Capital Grants and Gifts	12,046	14,708	4,375	4,145	7,620
Other Non-Operating Expenses	(2,312)	(6,347)	(12,055)	(9,622)	(12,538)
Other Non-Operating Revenues	1,308	1,334	1,504	1,555	4,018
Total Non-Operating Revenue/(Expense)	32,477	19,399	5,030	(3,262)	17,390
Change in Net Assets	71,614	(13,929)	(52,751)	(76,673)	(63,479)
Adjusted Change in Net Assets from Operations	39,137	(33,328)	(57,781)	(73,411)	(80,869)
Add Back: Depreciation, Amortization, and Other Non-Cash Items	113,154	119,536	120,193	119,652	121,683
Add Back: Interest Expense	41,617	38,786	36,862	36,577	33,920
Adjusted Net Income Available for Debt Service	193,908	124,994	99,274	82,818	74,734
Current Debt Service	86,318	95,962	94,702	104,683	94,298
Pro Forma MADS	125,379	125,379	125,379	125,379	125,379
MADS Fiscal Year	2020	2020	2020	2020	2020
Pro Forma Average Annual Debt Service (AADS)	41,011	41,011	41,011	41,011	41,011
Balance Sheet					
Assets					
Cash and Cash Equivalents	23,738	35,912	48,553	20,445	20,544
Investments	1,316,514	1,326,904	1,314,575	1,313,487	1,355,643
Total Cash and Investments	1,340,252	1,362,816	1,363,128	1,333,932	1,376,187
Property, Plant, and Equipment, Net	1,623,387	1,629,575	1,616,808	1,589,184	1,653,289
Liabilities					
Bonds Payable					
Fixed Rate Bonds Payable	941,715	899,805	859,890	800,455	842,590
Total Bonds Payable	941,715	899,805	859,890	800,455	842,590
Other Obligations					
Capitalized Leases	55,520	56,882	53,791	51,592	48,646
Non-Cancellable Operating Leases	56,389	64,372	78,405	81,328	80,832
Total Long Term Debt	1,053,624	1,021,059	992,086	933,375	972,068
Total Other Obligations	111,909	121,254	132,196	132,920	129,478
Total Pro Forma Debt					1,314,471
Off Balance Sheet Student Housing Debt	1,092,369	1,305,864	1,264,584	1,383,630	1,364,736
Net Assets					
Unrestricted Net Assets	68,583	34,545	(68,480)	(861,425)	(945,708)
Invested In Capital	621,400	647,700	684,396	700,280	709,271
Restricted Net Assets - Non-Expendable (Fitch-Adjusted)	100,111	67,863	77,123	73,109	78,410
Restricted Net Assets - Expendable (Fitch-Adjusted)	22,633	41,691	46,009	29,533	36,045
Total Net Assets	812,727	791,799	739,048	(58,503)	(121,982)
Balance Sheet Resources and Liquidity					
Available Funds (AF)	1,240,141	1,294,953	1,286,005	1,260,823	1,297,777

Notes: Fitch may have reclassified certain financial statement items for analytical purposes.

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Summary of the Use of Financial Indicators by Other States/Systems As of October 29, 2018

State/System:	Page
1. California (University of California)	1
2. Georgia (University System of Georgia and Technical College System of Georgia)	2
3. Maine (University of Maine System)	3
4. Maryland (University System of Maryland)	5
5. Minnesota (Minnesota State Colleges and Universities)	6
6. New York (State University of NY).....	7
7. North Carolina (University of North Carolina)	7
8. Ohio	9
9. Oregon (Oregon Higher Education Coordinating Commission [HECC])	11
10. Texas (University of Texas System)	12

1. CALIFORNIA

University of California

The 2018 UC Accountability Report provides the eleventh annual comprehensive assessment of the University's progress in meeting key teaching, research and public service goals across its 10 campuses. The data will inform the University's strategic planning, budgeting and performance management, as well as help the governing Board of Regents identify the most important policy issues facing UC. This version includes over 100 individual indicators across 13 chapters, assessing progress in areas like [undergraduate success](#), [diversity](#), [research](#), [financial aid](#), and [finance](#).

This reports financial trends since 2000 in inflation-adjusted dollars. Data includes revenue by source, gifts by restricted use, costs by function, costs by object of expenditure, source of funding for instructional expenditures, capital funding, assignable square footage by use, and energy efficiency. This report does not provide goals, targets, or specific indicators.

2. GEORGIA

Georgia: “Complete College Georgia” <http://www.completegeorgia.org/>

In August 2011, Governor Nathan Deal announced the launch of Complete College Georgia, a statewide effort to increase attainment of a high quality certificate or degree. Since that announcement, the University System of Georgia and the Technical College System of Georgia have partnered and collaborated on the strategizing, planning, and implementing of efforts that drive the primary goal of Complete College Georgia to improve student access to and graduation from institutions of higher education. CCG has five major work areas:

- **College Readiness:** Mending the P-12 pipeline to increase the number of high school students graduating and ready to begin higher education work.
- **Improving Access & Completion for Underserved Students:** Identifying and removing common barriers for minority, part-time, adult, military, disabled, low-income, and first generation students.
- **Shortening the Time to Degree:** Improving current and developing new paths for students to earn a high quality degree in a timely manner.
- **Restructuring Instructional Delivery:** Improving the quality of student learning through effective teaching, facilitation and innovative modes of learning.
- **Transforming Remediation:** Improving remedial education practices to remove barriers and increase success.

Aligned to the state plan, campuses developed institution-specific plans to improve access and graduation focused on the following areas:

- Collaborative engagement between campus and community stakeholders
- Data collection to identify strengths, areas for improvement, and the needs of regions and populations served
- Alignment and institutional partnerships with K-12 school districts
- Improved access and graduation for all students and for specific populations
- Shortened time to degree by awarding credit for prior learning and improving transfer and articulation agreements
- Restructured instruction and learning through effective teaching and learning practices in traditional and online courses

Universities have campus plans with specific goals with annual targets, on which they report annually.

For example, at Augusta University (2017 report)

http://www.completegeorgia.org/sites/default/files/Campus_Plans/2017/Augusta_University_2017_Update.pdf

On each goal, they report:

- High impact strategy employed to attain the target
- Demonstration of priority or impact
- Summary of activities
- Measures of progress and success
- Baseline measures
- Interim measures
- Final measures
- Lessons learned

It does not appear that Georgia uses any financial measures/goals.

3. MAINE

University of Maine System (UMS)

Board of Trustees Primary Outcomes

- Increase Enrollment
- Improve Student Success and Completion
- Enhance Fiscal Positioning of the University of Maine System
- Support Maine through Research and Economic Development

In addition, the Board identified two Secondary Outcomes to supplement this work:

- Academic Transformation
- University Workforce Engagement

Key Performance Indicators related to investments in these priority outcomes are reflected in the [UMS Board of Trustees Accountability Data Dashboard](#) currently under development.

UMS Dashboard:

<https://sites.google.com/maine.edu/umsdashboard/main>

Measures 19 indicators; 11 are financial.

Finance Core Ratios: four components of CFI

<https://sites.google.com/maine.edu/umsdashboard/board-of-trustees-data/finance-core-ratios>

The Primary Reserve Ratio provides a snapshot of financial strength and flexibility by indicating how long the institution could function using its expendable net position (both unrestricted and restricted, excluding net position restricted for capital investments) without relying on additional net position generated by operations. This ratio is calculated as follows: (expendable net position/total expenses).

The Net Operating Revenues Ratio is a measure of operating results and answers the question, “Do operating results indicate that the University is living within available resources?” Operating results either increase or decrease net position and, thereby, impact the other three core ratios: Primary Reserve, Return on Net Position, and Viability. This ratio is calculated as follows:
$$\frac{\text{Operating Income (Loss)} + \text{Net Non-Operating Revenues (Expenses)}}{\text{Operating Revenues} + \text{Non-Operating Revenues}}$$

The Return on Net Position Ratio measures asset performance and management. It determines whether an institution is financially better off than in the previous year by measuring total economic return. It is based on the level and change in total net position. An improving trend in this ratio indicates that the institution is increasing its net position and is likely to be able to set aside financial resources to strengthen its future financial flexibility. This ratio is calculated as follows:
$$\frac{\text{Change in Net Position}}{\text{Total Beginning of the Year Net Position}}$$

The Viability Ratio measures expendable resources that are available to cover debt obligations (e.g., capital leases, notes payable, and bonds payable) and generally is regarded as governing an institution’s ability to assume new debt. This ratio is calculated as follows:
$$\frac{\text{Expendable Net Position}}{\text{Long-Term Debt}}$$

The Composite Financial Index (CFI) creates one overall financial measurement of the institution’s health based on the four core ratios: primary reserve ratio, net operating revenues ratio, return on net position ratio, and viability ratio. By blending these four key measures of

financial health into a single number, a more balanced view of the state of the institution's finances is possible because a weakness in one measure may be offset by the strength of another measure.

The CFI is calculated by completing the following steps:

1. Compute the values of the four core ratios;
2. Convert the ratio values to strength factors along a common scale;
3. Multiply the strength factors by specific weighting factors; and
4. Total the resulting four numbers (ratio scores) to reach the single CFI score.

Finance KPIs

<https://sites.google.com/maine.edu/umsdashboard/board-of-trustees-data/finance-kpis>

Total Expenditures per FTE Student (Fall FTE)

Net Revenue from Tuition and Fees

Revenue from Net Student Fees, Other Auxiliaries and Noncapital State Appropriations

Debt Ratings—Standard and Poors

Facilities KPIs

<https://sites.google.com/maine.edu/umsdashboard/board-of-trustees-data/facilities-kpis>

Density Factor: Number of users per 100,000 GSF

Current: 297; Interim goal: 332; Peer/Industry standard: 460; Long-term goal: 415

Net Asset Value, as a percent (no definition of calculation)

Current: 59%; Interim goal: 63.5%; Peer/Industry standard: 75%; Long-term goal: 70%

4. MARYLAND

University System of Maryland (USM)

Approved by the Board of Regents in December 2010, the plan focuses on five key priorities to strengthen USM's leadership in academic, research, and economic innovation, as well as faculty entrepreneurship. Those priorities are:

- helping the state of Maryland achieve its goal of having 55 percent of its residents holding associate's and/or bachelor's degrees;
- ensuring Maryland's competitiveness in the innovation economy;
- transforming the academic model to meet the higher education and leadership needs of Maryland's 21st century students, citizens, and businesses;
- identifying more effective ways to build and leverage available resources; and
- sustaining national eminence through the quality of USM's people, programs, and facilities.

Identifying More Effective Ways to Build and Leverage Available Resources--

USM is in its second phase of Effectiveness and Efficiency (E&E) initiatives to increase savings, enhance quality, and promote more effective stewardship of system resources, with the following three goals.

1. 2020 Goal: Identify and implement "the next generation" of initiatives under the system's Effectiveness and Efficiency (E&E) Initiative. USM launched E&E 2.0 in February 2015 to enhance student success, continue innovation in teaching and learning, reengineer administrative processes, and reduce costs. E&E 2.0 initiatives include inter-institutional collaboration, optimal use of technology, new academic programs at USM's historically black universities, expanding the use of cloud computing and IT outsourcing, leveraging University of Maryland University College's expertise in online education delivery, and other efforts. Such efforts yielded approximately \$50.9 million in savings in FY 2017.
2. 2020 Goal: Ensure the system's commitment to environmental sustainability. USM leads the state in sustainability efforts with more than 60 facilities constructed and/or planned as LEED-certified "Silver" or higher. All USM institutions have signed the College and University Presidents' Climate Leadership Commitment, making carbon neutrality a part of their academic programs and other educational experiences. Since 2007, USM institutions have reduced overall carbon emissions by 16 percent (139,000 metric tons), which represents a 25 percent reduction per gross square foot.
3. 2020 Goal: Build a vibrant culture of philanthropy across USM institutions and in partnership with its affiliated foundations. Baseline (FY 2010): \$222 million private funds raised. FY 2017: \$291 million.

5. MINNESOTA

Minnesota State Colleges and Universities Board of Trustees Accountability Dashboard

<http://www.minnstate.edu/board/accountability/index.html>

Dashboard includes sections on Composite Financial Index, Enrollment, Facilities Condition Index, Licensure Exams Pass Rates, and Student Persistence and Completion.

The Composite Financial Index section includes its four components: operating margin, primary reserve ratio, return on net assets and viability ratio.

Select Measure:

- ☒ Composite Financial Index (CFI)
- ☐ Primary Reserve Ratio
- ☐ Return on Net Assets
- ☐ Viability Ratio
- ☐ Operating Margin Ratio

Data:

Institution	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Alexandria Technical and Community College	1.15	1.60	1.46	1.94	2.07	3.37
Anoka Colleges	3.52	2.10	3.96	3.77	3.39	3.56
Anoka-Ramsey Community College	3.29	2.45	4.36	3.86	3.75	3.40
Anoka Technical College	4.01	1.53	3.18	3.95	2.67	4.58
Central Lakes College	1.17	1.97	0.86	1.89	4.15	3.98
Century College	3.94	1.78	1.53	1.52	1.26	1.50
Dakota County Technical College	5.56	5.50	4.62	3.19	3.78	3.23
Fond du Lac Tribal and Community College	1.04	2.82	2.76	2.59	2.25	3.68
Minnesota State Community College	6.45	4.26	1.85	0.99	1.00	1.49
Minnesota State University	4.33	3.77	3.07	3.08	3.01	3.19
Lake Superior College	1.99	3.60	2.67	2.50	2.16	1.51
Minneapolis Community and Technical College	2.31	2.43	1.14	1.14	1.39	2.29
Minnesota State College Southeast	2.37	2.61	3.27	0.39	-0.35	0.31
Minnesota State Community and Technical College	3.10	3.37	1.95	1.14	0.77	1.29

Export:

PDF  HTML and/or XLS

Facilities Condition Index (FCI)

Term	Definition
Facilities Condition Index (FCI)	The facilities condition index (FCI) reports the dollar amount of deferred maintenance as a proportion of facility replacement value at each college and university. As a measure of effective stewardship of facilities, it is reported under strategic direction IV, innovate to meet educational needs efficiently.
Current Replacement Value (CRV)	This represents the amount (in current dollars relative to the Fiscal Year) that would be required to replace the facilities.
Deferred Maintenance	Represents the dollar value (current dollars related to Fiscal Year of reporting) of backlogged (deferred) maintenance on the facility.

6. NEW YORK

State University of New York (SUNY)

In January 2015, SUNY identified five priority areas that can be improved upon by channeling our collective power: Access, Completion, Success, Inquiry, and Engagement. The list of system-level metrics (recognizing that these will evolve over time) includes the following:

- Access – NYS Citizens Served by SUNY; Full Student Enrollment Picture; Diversity; Capacity
- Completion – Completions; Student Achievement/Success; Graduation Rates; Time to Degree
- Success – SUNY Advantage (student access to and satisfaction with opportunities that promote post-completion success, such as applied learning and hands-on research, multicultural experiences, academic advisement, and career counseling); Financial Literacy
- Inquiry – Total Sponsored Activity; Faculty and Student Scholarship, Discovery and Innovation; Inquiry embedded curricula/courses
- Engagement – START-UP New York and beyond jobs and businesses; Alumni/Philanthropic Support; Civic Engagement; Economic Impact

It does not appear that SUNY has goals, targets, or reports on financial indicators, or has developed a financial dashboard.

7. NORTH CAROLINA

University of North Carolina

https://www.northcarolina.edu/sites/default/files/unc_strategic_plan.pdf

Limited Indicators in 5 areas: Access; Student Success; Affordability and Efficiency; Economic Impact and Community Engagement; and Excellent and Diverse Institutions.

Affordability and Efficiency Measures:

GOALS AND METRICS

Goal 5: Affordability

Goal: Offer education of equal or higher quality than currently provided at a cost that is both consistent with the State constitution and attainable to students and families in North Carolina.

Metric: Commit to affordable tuition by limiting annual percent increases in undergraduate resident tuition rates to no more than the increase in the median income, while providing autonomy and incentives for UNC institutions that can demonstrate that the financial investment made by students, families, and taxpayers is of excellent value.

Goal 6: Efficiency

Goal: Pursue and utilize increased operational and financial flexibility for the benefit of the educational, research, and public service missions of the University.

Metric: Increase operational and financial flexibility for the University and demonstrate its financial impact. This includes reductions in regulatory burdens and increases in financial reporting and transparency.

Discussion: There is no standard definition of college affordability, which leaves policymakers without a strong benchmark to guide decision-making. Linking tuition and fees to North Carolinians' economic fortunes will add much-needed context to tuition and fee discussions. While we recognize that economic circumstances can change, this standard will help anchor future decisions. During our listening sessions, we consistently heard about regulatory burdens, reporting requirements, and growth in compliance and bureaucracy as key issues undermining

affordability and efficiency. Campus leaders described rules that govern everything from resurfacing a road to adjusting a salary, hurdles that lengthen projects and cost time and money. The University will work to reduce compliance costs while retaining appropriate oversight.

SYSTEM-LEVEL STRATEGIES

State policymakers have shown a clear commitment to affordability. Beginning in fall 2016, UNC students can lock in a fixed tuition rate for four years of continuous enrollment. This guaranteed tuition policy offers predictability for students and families, and it provides a real incentive for on-time graduation. Lawmakers also created NC Promise, which lowers in-state tuition to \$500 per semester at Western Carolina, Elizabeth City State, and UNC Pembroke (out-of-state tuition is set at \$2,500 per year). For \$4,000 in tuition, North Carolina residents will be able to earn a four-year degree in each region of the state. The General Assembly has set aside state funds to offset lost tuition revenue at these institutions, ensuring they remain a great value for students and families.

Across the UNC system, strong financial aid is critical to making our institutions affordable for any student who earns admission. We need to simplify existing state aid programs and work to ensure that they promote both access and success. Supporting Chancellors and campus leaders as they develop effective strategies for need-based aid will go a long way in promoting affordability and strengthening the quality and diversity of our institutions. The University is also building new models of education that can save time and lower costs for students. Aligning online courses across the system will give students more options for finding the classes they need to graduate. And pilot programs in competency based education will give students credit for what they've learned rather than how long they've been in class. Offering students more control over the pace of learning will help focus resources where they are most needed.

Granting University leaders more flexibility in deploying those resources will also help with cost and efficiency. Expanding carry-forward authority—which allows our institutions to put existing funds toward targeted investments—remains a core priority. Loosening state regulations around capital projects, human resources, and routine accounting will make the University more competitive, allowing us to attract talent and focus on high-impact work.

Performance Agreements between each university and the System are supported by annual reports on progress toward meeting the performance targets—

Reporting Example: <https://www.northcarolina.edu/strategic-planning/unc-chapel-hill>

Recognizing that the UNC System's greatest strength lies in the distinct missions of its universities, the performance framework provides leaders with an opportunity to identify System-level commitments that align with institution-level priorities. Appalachian State, in consultation with the UNC System office, has categorized the nine System-level metrics into three tiers:

1. The **Prioritize** category identifies the five metrics that are top priorities for Appalachian State over the next five years; these metrics are central to institutional success and existing improvement efforts.
2. The **Improve** category contains three metrics that are secondary priorities that an institution will work to enhance.
3. The **Sustain** category contains one metric on which an institution will work to maintain its level of performance.

Note: *The performance agreements and the institution-specific dashboards exclude affordability and efficiency measures.*

8. OHIO

Financial Campus Accountability Report

https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/financial/campus-accountability/FY2017_Excluding-Associated-Impacts-of-GASB68.pdf

Presents the following institutional ratios and scores, both including and excluding associated impacts of GASB 68: viability (expendable net assets/plant debt), net income (change in total net assets/revenues), primary reserve (expendable net assets/operating expenses), and composite score.

Task Force on Affordability and Efficiency

https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/affordability-efficiency/Action-Steps-to-Reduce-College-Costs_100115.pdf

Summary recommendations for affordability and efficiency

Master recommendations

1 | Students must benefit: Savings and/or new dollars generated from these recommendations must be employed to reduce the cost of college for students. Any other uses must have tangible benefits for the quality of students' education.

2 | Five-year goals: Each institution must set a goal for efficiency savings and new resources to be generated through fiscal 2021, along with a framework for investing those dollars in student affordability while maintaining or improving academic quality.

STRATEGIC PROCUREMENT

3A | Campus contracts: Each institution must require that its employees use existing contracts for purchasing goods and services.

3B | Collaborative contracts: Ohio's colleges and universities must pursue new and/or strengthened joint purchasing agreements in copiers and printers, computers, travel services, outbound shipping, scientific lab equipment and office supplies.

ASSETS AND OPERATIONS

4A | Asset review: Each institution must conduct an assessment of its noncore assets to determine their market value if sold, leased or otherwise repurposed.

4B | Operations review: Each institution must conduct an assessment of non-academic operations that might be run more efficiently by a regional cooperative, private operator or other entity. This review should include dining, housing, student health insurance, child care, IT help desk, janitorial, landscaping, facility maintenance, real-estate management and parking.

4C | Affinity partnerships and sponsorships: Institutions must, on determining assets and operations that are to be retained, evaluate opportunities for affinity relationships and sponsorships that can support students, faculty and staff.

ADMINISTRATIVE COST REFORMS

5A | Cost diagnostic: Each institution must produce a diagnostic to identify its cost drivers, along with priority areas that offer the best opportunities for efficiencies.

5B | Productivity measure: The Department of Higher Education should develop a common measurement of administrative productivity that can be adopted across Ohio's public colleges and universities.

5C | Organizational structure: Each institution should review its organizational structure to identify opportunities to streamline and reduce costs.

5D | Health-care costs: To drive down costs and take advantage of economies of scale, a statewide working group should identify opportunities to collaborate on health-care costs.

5E | Data centers: Institutions must develop a plan to move their primary or disaster recovery data centers to the State of Ohio Computer Center.

5F | Space utilization: Each Ohio institution must study the utilization of its campus and employ a system that encourages optimization of physical spaces.

TEXTBOOK AFFORDABILITY

6A | Negotiate cost: Professional negotiators must be assigned to help faculty obtain the best deals for textbooks and instructional materials, starting with high-volume, high-cost courses. Faculty must consider both cost and quality in selecting course materials.

6B | Standardize materials for gateway courses: Institutions must encourage departments to choose common materials, including digital elements, for gateway courses that serve large volumes of students.

6C | Develop digital capabilities: Institutions must be part of a consortium to develop digital tools and materials, including open educational resources, that provide students with high-quality, low-cost materials.

TIME TO DEGREE

7A | Education campaign: Each institution must develop a campaign to educate its full-time undergraduates about the course loads needed to graduate on time.

7B | Graduation incentive: Institutions should consider establishing financial incentives that encourage full-time students to take at least 15 credit hours per semester.

7C | Standardize credits for degree: Institutions should streamline graduation requirements so that most bachelor's degree programs can be completed within four years or less and most associate degree programs can be completed in two years or less. Exceptions should be allowed because of accreditation or quality requirements.

7D | Data-driven advising: Institutions should enhance academic advising services so that students benefit from both high-impact, personalized consultations and data systems that proactively identify risk factors that hinder student success.

7E | Summer programs: Each campus must develop plans to evaluate utilization rates for summer session and consider opportunities to increase productive activity.

7F | Pathway agreements: Ohio institutions should continue to develop agreements that create seamless pathways for students who begin their educations at community or technical colleges and complete them at universities.

7G | Competency-based education: Institutions should consider developing or expanding programs that measure student success based on demonstrated competencies instead of through the amount of time students spend studying a subject.

DUPLICATIVE PROGRAMS

8 | Program review: Institutions should consider consolidating programs that are duplicated at other colleges and universities in their geographic area.

CO-LOCATED CAMPUSES

9 | Joint oversight boards: The state should establish joint oversight boards between co-located community colleges and regional campuses of universities with a mandate to improve efficiencies and coordination while maintaining the differentiated mission of each.

POLICY REFORMS

10A | Financial advising: Ohio's colleges and universities should make financial literacy a standard part of students' education.

10B | Obstacles: The Department of Higher Education and/or state legislature should seek to remove any roadblocks in policy, rule or statute that inhibit the efficiencies envisioned in these recommendations.

10C | Real estate sales: State law should be updated to streamline the process for how public institutions sell, convey, lease or enter into easements of real estate.

10D | Insurance pools: State law should be clarified related to the IUC Insurance Consortium, which buys property and casualty insurance on a group basis for most institutions.

9. OREGON

Oregon Higher Education Coordinating Commission (HECC)

https://www.oregon.gov/HigherEd/Documents/HECC/Reports-and-Presentations/HECC-StrategicPlan_2016.pdf

Strategy 2: Public College and University Funding as the sole entity responsible for proposing a comprehensive higher education budget to the Governor and Legislature, the HECC will develop a budgeting model linking state funding inputs to student achievement, and the HECC will work with partners to advocate for funding levels required to meet state goals.

- Develop a comprehensive model of the costs that will be required to meet state goals and advocate to fund it.

Strategy 4: Student Support

The HECC will work to strengthen the ability of campuses and communities to support student safety, success, and completion by:

- Using funding models to incentivize institutions to invest in student safety and success;
- Considering the creation of a strategic fund that can be used to support statewide, collaborative, university-led initiatives focused on improving student success;
- Working with the Legislature and partners to ensure that funding proposals focused on access and affordability are complemented by funding dedicated to student success;
- In partnership with institutions, supporting the development of center(s) to research, develop, and disseminate best practices for student safety and success;

Strategy 5: Affordability

The HECC seeks to limit student and family cost for all, with a particular focus on ensuring that students rising through Oregon's pre-K-12 school system may be reasonably certain they will have access to affordable options for higher education. Key elements of this strategy include:

- Developing a set of affordability measures that can be used to guide policy and to measure progress and reporting annually on progress/status;
 - Such as average net price, average debt at graduation
 - Affordability cannot be meaningfully understood independent of factors that impact students' expectation of their future economic well-being, such as completion rates, time-to-degree, field and level of degree. No matter how low the price a student may have paid, if he or she drops out before completing, or completes with a low-quality credential that doesn't confer economic value, it was probably too expensive.
- Supporting innovations that lower student/family cost while maintaining or increasing quality;
- Increasing state financial aid to the national average per student;
- Continuing to promote Oregonians' access to the state and federal financial aid system, including through FAFSA and ORSAA completion efforts; and
- Connecting young Oregonians to the promise of affordable higher education.

10. TEXAS

University of Texas System

<https://data.utsystem.edu/>

The University of Texas (UT) System is committed to transparency and is driving success by making critical information about its operations readily available to stakeholders through the UT System Dashboard. The *UT System Measures Up* section on the website highlights key metrics in each of the UT System mission areas. The dashboard includes information on affordability, student success, post-graduation earnings, research, healthcare, and state economic impact.

Fast Facts--The University of Texas System Fast Facts provides quick insights and answers to questions pertaining to all 14 UT System institutions. Areas of interest include: students and faculty; research; campus tuition, fees, and financial aid; faculty honors; and the budget, among others.

https://utsystem.edu/sites/default/files/documents/facts%2C-figures-and-data/Fast%20Facts%202016/Fast_Facts_2016_Feb2017_v2Update.pdf

(Financial information begins on page 9.)