



Pennsylvania's State System of Higher Education University Success Task Group

**December 11, 2018 Meeting
Agenda and Highlights**

Context

- Operate within context of how other Task Groups define
 - System Success
 - Student Success

Framework for Draft Recommendations

- Guiding principles.
 - *Task group adopted guiding principles as reflected in Attachment 2.*
- Concepts to consider when determining the draft recommendations (Attachment 1).
- Appropriateness of potential measures.
 - Financial measures (Attachment 2, supported by Attachments 3 and 4).
 - *Task Group supported the following three financial measures:*
 - *Primary Reserve Ratio (useable reserves to operations)*
 - *Net Operating Revenues Ratio (operating gain/loss)*
 - *Visibility Ratio (useable resources to debt)*
 - Student success measures (Attachments 5 and 6)
 - *Focus on affordability measures*
 - Community engagement measures based on Carnegie classification categories for community engagement (Attachment 7)
 - *Focus on community support measures*
 - Alignment with System goals; collaboration
 - *How can this be measured?*

Framework for University Success Task Group Report

- What's missing or needs to be changed?
 - *All measures must be named and presented in a way that is informative for nonfinancial audiences.*
 - *Address inter-relationship of measures with work of other task groups*
- Input needed to complete:
 - Proposed Measurement Framework
 - *Finalize proposed measures at next meeting*
 - Other Observations

Other Business

- [Texas A&M](#) University System Phase II – Regional Universities Comprehensive Administrative Review, identifies potential administrative efficiencies and effectiveness to produce cost savings.

Concepts to consider:

Student Success: Achieve personal growth and economic security

- Alignment with System goals/strategy/operating principles
 - No tolerance for 'climate change deniers'; this is not a passing storm
- Degree of collaboration (sharing university)
 - System success is the overriding priority – all wear same big hat
 - Resources are system resources, not university resources
- Use of enablers for Student Success
 - Use such tools as
 - Predictive analytics
 - Personal student advising
- Meet student and community needs with program flexibility, for example:
 - Online classes
 - Evening classes/degree programs
 - Weekend classes/degree programs
 - Programs tailored to provide for community workforce needs

Community engagement

- Build partnerships with private sector to create virtuous cycle of program funding and job placement (private sector provides funds and employment opportunities, university provides human talent (workforce with the right skills))
- Actively raise awareness of university programs/accessibility to optimize student applications
 - Faculty, students and graduates should all be active in outreach

Proposed Financial Dashboard for Pennsylvania's State System of Higher Education

Guiding Principles:

For inclusion in a financial dashboard, indicators must be:

- Impactful**—presenting meaningful information about the financial health of the organization.
- Valid and Reliable**—consistently measuring the same thing over and over.
- Comparable**—among System universities and externally.
- Accessible and Understandable**—informative for nonfinancial audiences.

Assumptions:

- 1) Affordability measures and instructional/student success efficiency measures will be derived via the Student Success Task Group.
- 2) If System goals are established that will generate efficiencies, associated savings will be captured in addition to any other financial measures adopted.
- 3) Targets should not be established for financial measures; standards for performance may be established against which trends of the following measures may be monitored.
- 4) Although not part of the dashboard, the System will continue to monitor trends in funding and expenditures per student and by source/function/object.

	Composite Financial Index*	Other Financial Trends Monitored	Facility Indicators	Community/External Engagement
Option 1	Report a modified CFI with three of its four ratios: Primary Reserve Ratio. Net Operating Revenues Ratio. Viability Ratio. Calculate both with and without long-term liabilities.	Monthly Days Cash on Hand Net Tuition per Student Debt Service to Operations	Density: gross square feet (GSF) per user (students and employees) and/or	Private Support: Annual Funds Raised
Option 2	Report the CFI and its four ratios: Primary Reserve Ratio. Net Operating Revenues Ratio. Return on Net Position Ratio. Viability Ratio. Calculate both with and without long-term liabilities and affiliated entities.		Facilities Composite Score	

**If a Composite Financial Index (CFI) is used, the Prager/KPMG CFI is the most common, but it is usually modified for use in public systems. Modifications typically include: the elimination of postretirement healthcare and pension liabilities, the exclusion of the financial performance of affiliated entities (a.k.a., component units), and/or presenting the four separate components exclusive of the weighted composite result.*

Use of Financial Indicators by Other States/Systems

State	Composite Financial Index*	Other Financial Trends Monitored	Facility Indicators	Community/External Engagement	Comments
University of California		Revenue by source Gifts by restricted use Costs by function Costs by object of expenditure Source of funds for instructional expenditures	Capital funding Assignable square feet by use Energy Efficiency		Reports financial trends since 2000 in inflation-adjusted dollars.
Georgia	<i>It does not appear that Georgia reports on any financial measures/goals.</i>				
Maine	Reports the CFI and its four ratios: Primary Reserve Ratio, Net Operating Revenues Ratio, Return on Net Position Ratio, Viability Ratio.	Total Expenditures per Fall FTE Student Net Revenue from tuition and fees Revenue from net student fees, other auxiliaries, and noncapital state appropriations Debt ratings (Standard and Poor's)	Density factor: number of users per 100,000 gross square foot (GSF) Net Asset Values (as a percent)		Of its 19 indicators, 11 are financial.
Maryland		System goals include an "Effectiveness and Efficiency initiative to enhance student success, continue innovation in teaching and learning, reengineer administrative processes, and reduce costs. Annual savings achieved are measured.	Number of buildings constructed or designed to be LEED-certified "Silver" or higher Reduce carbon emissions--in metric tons or percent reduction per GSF	Private funds raised per year	
Minnesota	Same as Maine		Reports the Facilities Condition Index (FCI)**: total value of deferred maintenance as a percent of the facility replacement value.		
New York (SUNY)				Total Sponsored Activity Alumni/philanthropic support Civic engagement Economic impact	It does not appear that SUNY has goals, targets, or reports on financial indicators.
North Carolina	<i>Although North Carolina has an Efficiency Goal to "pursue and utilize increased operational and financial flexibility...", the university/system performance agreements and institution-specific dashboards exclude financial, efficiency and affordability measures/targets.</i>				

Use of Financial Indicators by Other States/Systems

State	Composite Financial Index*	Other Financial Trends Monitored	Facility Indicators	Community/External Engagement	Comments
North Dakota	Reports the CFI and its four ratios; calculates both with and without long-term liabilities and affiliated entities.	Current Ratio Working Capital Ratio Operating Income Ratio Net Income Margin Net Tuition and Fees per FTE Student Net Tuition and Fees Dependency Net Liquid Assets Less Current Liabilities Long-term Liabilities, Excluding Pension Liability and Compensated Absences; State Funding per FTE Student for Public Institutions (national comparison) Educational Revenues per FTE Student Educational Appropriations per FTE Student			
Ohio	Reports the CFI with modified weighting and three of its four ratios (excludes Return on Net Assets Ratio); calculates both with and without long-term liabilities.				
Oregon	<i>It does not appear that Oregon reports on any financial measures/goals.</i>				
Tennessee		Revenue per FTE Student by Source			
Texas		Budget Expenditures Budget Revenue Trends per FTE by Source Average Net Tuition and Fees		Research Expenditures Research Fund Sources	
Middle States Commission on Higher Education	CFI and its four ratios: Primary Reserve Ratio, Viability Ratio (with and without Pension liability), Return on Net Assets Ratio, Operating Revenues Ratio. Calculated with and without pensions; since uses IPEDS definitions, excludes affiliates.	Net Income Ratio (operating surplus/operating income) Debt Burden Ratio (debt service to operations) Tuition Discount Ratio (institutional aid/tuition and fees) Tuition Dependency Ratio (net tuition and fees/revenue)			

*If a Composite Financial Index (CFI) is used, the Prager/KPMG CFI is the most common, but it is usually modified for use in public systems. Modifications typically include: the elimination of postretirement healthcare and pension liabilities, the exclusion of the financial performance of affiliated entities (a.k.a., component units), and/or presenting the four separate components exclusive of the weighted composite result.

**The use of a Facilities Condition Index (FCI) is not uncommon, although its methodology may vary significantly. It relies on an estimate of deferred maintenance backlog.

Financial Ratios Currently Monitored by Pennsylvania's State System of Higher Education

Ratio Name	Definition	What it measures
Selectivity ⁽¹⁾	Number of acceptances divided by applications	Measures the depth of a university's applicant pool
Matriculation ⁽¹⁾	Number of students enrolling divided by number of applications accepted	Measures the preference of a student to attend a particular university
Net Tuition per Student ⁽¹⁾	The sum of gross tuition and fees revenue less scholarship discount and allowances less scholarship expense divided by Total FTE Enrollment from the prior year	Measures tuition and fees actually received per student, after scholarships
Annual Operating Margin ⁽¹⁾ <i>(similar to CFI Net Operating Revenues Ratio, excluding affiliates)</i>	Operating Revenue, less Operating Expenses, divided by Operating Revenue	Indicates the excess margin (or deficit) by which annual revenues cover operating expenses
Unrestricted Financial Resources to Operations ⁽¹⁾ <i>(similar to CFI Primary Reserve Ratio)</i> ⁽²⁾	Unrestricted financial resources divided by total operating expenses	Measures coverage of annual operations by the most liquid financial resources
Monthly Days Cash on Hand	Monthly Liquidity times 365 divided by Operating Expenses less depreciation and additional, unusually large non-cash expenses	Measures the number of days a university is able to operate (cover its cash operating expenses) from unrestricted cash and investments that can be liquidated within one month
Debt Service to Operations ⁽¹⁾	Annual debt service divided by Operating Expenses	Measures burden of actual debt service payments relative to overall operating budget
Debt Service Coverage	Annual operating surplus (deficit) plus interest and depreciation expenses plus additional, unusually large non-cash expenses, divided by actual principal and interest payments	Measures actual margin of protection for annual debt service payments from annual operations
Total Debt to Cash Flow	Total Debt divided by Operating Cash Flow	Measures the ability of a university to repay its debt from the profitability of its operations
Total Financial Resources to Comprehensive Debt	Total financial resources divided by debt outstanding	Measures coverage of all debt by total financial resources including permanent endowments
Unrestricted Financial Resources to Comprehensive Debt ⁽¹⁾ <i>(similar to CFI Viability Ratio)</i> ⁽²⁾	Unrestricted financial resources divided by debt outstanding including privatized student housing by affiliates	Measures coverage of comprehensive debt by the most liquid financial resources
Unrestricted Financial Resources to Direct Debt ⁽¹⁾ <i>(similar to CFI Viability Ratio but without affiliates)</i> ⁽²⁾	Unrestricted financial resources divided by debt outstanding	Measures coverage of direct debt by the most liquid financial resources

Notes:

(1) Ratios currently used in the System's annual financial risk assessment.

(2) The Composite Financial Index (CFI), as created by Prager, Sealy, & Co., KPMG, and Attain, includes four ratios. The System does not monitor the Return on Net Assets (used both in the CFI and by Moody's) as it is most applicable to private entities.

Yellow highlighted measures are considered leading indicators of financial distress.

Financial Ratios Currently Monitored by Pennsylvania's State System of Higher Education

Other Financial Trends Monitored

Operating Efficiencies (financial and human resources)

Daily Cash Balance

Monthly Operating Cash Balance by Year

Unrestricted Net Assets without Long-Term Liabilities

Revenues by Fund (E&G, Auxiliary, Restricted, Plant)

E&G Revenues by Source

E&G Expenditures per FTE Student, Personnel and Nonpersonnel

Expenditures by Function

E&G Revenues per FTE Student by Source (appropriation, student, other)

FTE Faculty compared to FTE Enrollment; Student/Faculty Ratio

FTE Staff compared to FTE Enrollment; Student/Staff Ratio

Facility Indicators

Density: Gross Square Feet per User (students and employees); E&G and Auxiliary space

Actual E&G Plant Inventory compared to Space Guidelines Estimated Required Assignable Square Feet

Facilities Operating Costs (utilities, daily operations, preventive maintenance)

E&G Capital Investment vs. Funding Target

Facilities Composite Score, Compared to External Peers (reinvestment in plant, preventative maintenance investment, energy efficiency, plant operations and service)

Performance Funding Financial Indicators (Used Prior to 2017/18)

Private Support: annual funds raised

Facilities Investment: annual facilities investment score (a composite score in comparison with national peers)

Yellow highlighted measures are considered leading indicators of financial distress. In addition, enrollment trends and academic preparedness of entering class are leading indicators; both of which will be addressed in the Student Success Task Group recommendations.

Figure 4. Availability of Key Metrics in Major Data Sets

	Metric	Federal Sources (IPEDS and NSLDS)	National Source (NSC)	State Source (CCA)
PERFORMANCE	Enrollment	Available with minor modifications needed	Available with major modifications needed	Available with major modifications needed
	Credit Accumulation	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Credit Completion	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Gateway Course Completion	Available with moderate modifications needed	Available with moderate modifications needed	Available with minor modifications needed
	Program of Study Selection	Available with moderate modifications needed	Available with minor modifications needed	Available with moderate modifications needed
	Retention Rate	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Persistence Rate	Available with moderate modifications needed	Available with minor modifications needed	Available with moderate modifications needed
	Transfer Rate	Available with moderate modifications needed	Available with minor modifications needed	Available with moderate modifications needed
	Graduation Rate	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Success Rate	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Completers	Available with minor modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Net Price	Available with minor modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Unmet Need	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Cumulative Debt	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Employment Rate	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Median Earnings and Earnings Threshold	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Loan Repayment Rate	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Cohort Default Rate	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Graduate Education Rate	Available with moderate modifications needed	Available with minor modifications needed	Available with moderate modifications needed
Learning Outcomes	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed	
EFFICIENCY	Cost for Credits not Completed	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Cost for Completing Gateway Courses	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Time to Credential	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Credits to Credential	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Cost of Excess Credits to Credential	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Expenditures per Student	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Change in Revenue from Change in Retention	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Completions per Student	Available with moderate modifications needed	Available with minor modifications needed	Available with moderate modifications needed
	Student Share of Cost	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
Expenditures per Completion	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed	
EQUITY	Enrollment Status (first-time, transfer)	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Attendance Intensity (full-time, part-time)	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Degree-seeking Status	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Program of Study	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Academic Preparation	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Economic Status	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
	Race/Ethnicity	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Age	Available with moderate modifications needed	Available with minor modifications needed	Available with minor modifications needed
	Gender	Available with minor modifications needed	Available with minor modifications needed	Available with minor modifications needed
	First-generation Status	Available with moderate modifications needed	Available with moderate modifications needed	Available with moderate modifications needed
Available with minor modifications needed		Available with moderate modifications needed	Available with major modifications needed	Not available

University Success – Meeting Student Needs

In-Program Success

<ul style="list-style-type: none"> ▪ <i>Do our students achieve what they set out to achieve?</i> 	
Retention (persistence) rate	% of students in a cohort enrolled at their initial (or subsequent) institution, or earning credential, up to 200% of program length
Graduation (success) rate	% of students completing credential sought from initial (or subsequent) institution, up to 200% of program length
<ul style="list-style-type: none"> ▪ <i>How efficiently do our students achieve what they set out to achieve?</i> 	
Time to credential	Average time accumulated from first date of entry to date of completion
Completions per student	Number of completions divided by number of FTE students
<ul style="list-style-type: none"> ▪ <i>Can our students demonstrate achievement?</i> 	
Learning outcomes	Transparent display of learning goals, assessments and outcomes

- IHEP framework distinguishes cohorts by the type of credential sought (non-credential, certificate, associate or bachelor).
- Unintended consequences may include increasing selectivity of admissions criteria, which limits access, or reducing academic quality and expectations (Li 2018)

Post-Program Success

<ul style="list-style-type: none"> ▪ <i>How much economic value do our universities provide for our students?</i> 	
Employment rate (earnings threshold)	% of former students with any earnings (earnings more than median high school graduate) at one, five and ten years after exit
Median earnings	Median annual earnings of former students at one, five and ten years after exit
Graduate education rate	% of bachelor's recipients enrolling in post-baccalaureate or graduate programs within one, five and ten years after exit
<ul style="list-style-type: none"> ▪ <i>How do students perceive the value added from our universities?</i> 	
Student survey	% favorable response to survey (not currently in IHEP framework)

- Our current ability to measure these, especially over long time horizons, is seriously limited by data availability. The committee may consider a recommendation that our universities invest in improving long-term data collection from alumni.

Access / Affordability

▪ <i>What does it cost students to attend our universities?</i>	
Net price	Average cost of attendance less all grant aid
▪ <i>How much debt do students incur to attend our universities?</i>	
Unmet need	Average net price minus average expected family contribution
Cumulative debt	Median debt incurred
▪ <i>How well do our students manage their debt after graduation?</i>	
Loan repayment rate	% of borrowers who make at least \$1 of progress on loan principal at one, three, five and ten years into repayment
Cohort default rate	% of cohort who enter repayment and default within three fiscal years

- IHEP framework recommends disaggregating: (1) all undergrads from full-time cohort, (2) in-state and out-of-state students, and (3) by family income quintiles

Efficiency

▪ <i>How much does it cost to serve our students?</i>	
Expenditures per student	Expenditures per FTE, based on 12-month enrollment
Expenditures per completion	Expenditures divided by number of completions in a given year
▪ <i>How efficiently are student dollars allocated?</i>	
Cost for credits not completed	Per-student expenditures for credits attempted, but not completed, for first-year students
Cost of excess credits to credential	Per-student expenditures for excess credits to credential (all completers in a given year)
▪ <i>How is retention affecting our revenues?</i>	
Change in revenue from change in retention	The impact on tuition revenue of changes in first-year retention rates from one cohort to another

- Should be disaggregated by credential type

Equity

▪ <i>Are our universities accessible to a broad range of students?</i>	
Economic status	% Pell Grant recipients
Race / ethnicity	Use current IPEDS categories
Age	By date of birth or in categories (<20, 20-24, 25+)
Gender	Male, female or other
First-generation	% whose parents' highest education is some college but no degree or below

The University as an Integral Community Partner Zimmerman & Pehrsson

Framework for Measuring Community Engagement

Economic Engagement: The University as a partner in developing work related opportunities

Measure #1 Student enrollment in for credit community-based learning courses such as internships, field placements, student teaching, clinical placements, service-learning courses, etc.

Measure #2 Employment Measure – Number of graduates employed or placed in a graduate or professional program at the regional, state, and national levels. This measure could include employment in target areas such as STEM, medical professions, etc.

Measure #3 Degree application measure - Number of students who acquire gainful employment in the area of their degree or a closely related area.

Community Engagement: The University as a partner that promotes, fosters and invests in community service

Measure #3 Student/Faculty/Administration/Staff participation in local and regional government, non-profit boards, industry consultants, etc. Ideally should be related to individual's area of professional expertise. Can be paid or unpaid.

Measure #4 Student/Faculty/Administration/Staff volunteerism in community service projects, alternative break service or other co-curricular service activity. Limited to volunteerism associated with registered student or official university organization, student club, sorority, fraternity, etc.

Outreach and Partnerships: The University as a Regional Cultural and Economic Resource

Measure #5 Participation (attendance) in public lectures (including panel discussions, planetarium shows, etc.), continuing education courses, business Incubators, cultural events, athletic events, hosted k-12 academic events (science fairs, model UN, etc.).

Community Support for the University

Measure #6 Fundraising Measure – amount raised per student FTE

Measure #7 Foundation and Grant Support –amount raised per student FTE

Measure #8 Collaborative Business and Community Fundraising Projects – amount of partnerships and the amount raised per partnership