

**Office of the Chancellor  
Pennsylvania's State System of Higher Education  
University Operations Procedure/Standard Number 2019-40-A**

**University Financial Sustainability**

Approved by: \_\_\_\_\_



Date: 10-23-2019

History:

Revised: 8/5/2020; 7/20/2023

**Related Policies, Procedures, or Standards:**

**Key words/Categories:**

**I. Introduction**

The Administrative Procedures and Standards serve to interpret and clarify the policy on Financial Sustainability for State System universities.

**II. Definitions**

The definitions listed below include all the indicators identified within the policy as well as additional definitions needed for this procedures document. While all indicators within the policy will be utilized by a university to manage operations, financial risk and to assist with the financial sustainability planning process, only four (4) indicators will be utilized to provide insight into a university's financial health as outlined within these procedures. The four (4) indicators are defined below as procedure indicators; Appendix A provides the methodology by which each financial sustainability indicator each is calculated.

**Procedure Indicators**

- A. **Enrollment Indicator**—Demographic changes have resulted in the increasing role of enrollment as a leading indicator for financial health. Enrollment, for the purposes of this procedure, includes historical data representing the actual prior years' figures and projected data as reported by each university.

**Annualized Student FTE (Fulltime Equivalent):** Measure that combines full- and part-time student credit loads and equates those totals to an annual full-time equivalency. Student FTE is derived from Student Credit Hours, through university course enrollment details for all courses in an academic year (July 1 through June 30, which includes Summer 2, Fall, Winter, Spring, Summer 1).

- An annual Student FTE for Undergraduate Instruction = 30 Credit Hours.
- An annual Student FTE for Graduate Instruction = 24 Credit Hours.

**Projection**—Projection data will be provided by each university through regular planning and reporting processes.

- B. **Operating Margin Indicator**—Operating margin is an indicator of efficiency which shows the impacts of both pricing and operational decisions on financial health. It is recommended by NACUBO (National Association of College and University Business Officers) that the operating margin ratio be within 2-4 percent.

**Operating Margin Ratio:** Annual revenues minus annual expenses divided by the annual revenues.

- C. **Primary Reserve Ratio Indicator**—The primary reserve ratio is an important indicator of financial health showing how long an institution could function using its expendable net assets. It is recommended by NACUBO that the primary reserve ratio be 0.40x or 40 percent or greater.

**Primary Reserve Ratio:** Expendable financial resources (unrestricted plus temporary restricted) divided by annual operating requirements (total expenses).

- D. **University Minimum Reserves Indicator**—The minimum reserve is an indicator of a university's ability to mitigate current and future risk and improve fiscal management.

**University Minimum Reserves:** Cash within all funds, with the exception of restricted and agency, to cover at a minimum 90 days of operating expenses based on prior year financial statement.

## **Additional Definitions**

The following section provides additional definitions for use within the procedures.

- A. **Other Board-Affirmed Metrics**—The following metrics affirmed by the Board of Governors shall be used with other data as part of a University Sustainability Plan.

### **1. Student Support Ratios:**

**Annualized Academic Year FTE Ratio:** A measure of productivity, calculated by dividing student FTE by the total faculty FTE, based on the faculty workload within the fall and spring terms. The total faculty FTE calculation includes the total number of faculty instructional contract hours, including both direct instructional (teaching) and indirect instructional (non-teaching, but instructionally related) contract hours, as well as contract hours associated to noninstructional alternative workload activities. The student FTE is derived from the course credits attempted during fall and spring enrollments.

**Annualized Academic Year Instructional FTE Ratio:** A measure of direct instructional productivity, calculated by dividing Student FTE by the direct instructional faculty FTE, based on fall and spring terms. The faculty FTE calculation is comprised of the total number of faculty associated to direct instruction (teaching) and indirect instructional contract hours. The student FTE is

derived from the course credits attempted during fall and spring enrollments. Note: This calculation could be modified to reflect only Annualized Academic Year Direct Instructional FTE.

**Fall FTE Ratio:** A measure of productivity, calculated by dividing fall student FTE by the fall faculty FTE, based on all faculty workload within the fall semester. Faculty are identified as those employees classified within the APSCUF bargaining unit, paid from unrestricted funds; there is no distinction between instructional and noninstructional faculty or the inclusion of personnel from other units who may be performing teaching activities. Faculty FTE is a measure of the employee utilization over time; based on SAP Capacity Utilization for Fall Term (will not exceed 1.0). The student FTE is derived from the course credits attempted during fall as of the fall freeze date.

**Headcount Ratio:** Number of students per one faculty member. Calculation performed: Student Headcount divided by Faculty FTE, performed per fall and spring term.

2. **Student to Nonfaculty Ratio (FTE ratio):**

**Annualized FTE Ratio:** Number of FTE students per one FTE staff member. Calculation performed: Student FTE divided by staff FTE.

**Headcount Ratio:** Number of students per one staff member. Calculation performed: Student Headcount divided by Staff Headcount, performed per fall and spring term.

3. **University Debt Ratio:** The availability of expendable net assets to cover debt, should the institution need to settle its obligations. Calculation performed: Unrestricted and expendable net assets, not including capital projects expendable net assets, divided by total debt. Also known as Viability Ratio.
4. **Education and General (E&G) Expenditures per Student FTE:** The Education and General Fund consists of all unrestricted resources used in support of the primary academic mission of the university, with no restrictions placed on them by outside agencies. Expenditures are inclusive of all personnel compensation and benefits, as well as all operational expenditures consisting of supplies and services and capital expenditures incurred by the university within a given fiscal year from July 1 through June 30. Calculation performed: E&G Expenditures divided by Annualized Student FTE.
5. **Retention Rate (second fall):** The percentage of fall first-time, full-time, baccalaureate degree-seeking students who return for the following fall term.
6. **Graduation Rates (completions):** Percentage of fall first-time, full-time, baccalaureate degree seeking, undergraduate students receiving a bachelor's degree within four and six consecutive years. Student segments are based on status of entering fall term.

- B. **Financial Insolvency**—The university's net position, excluding the unfunded liabilities, is negative, as reported in the audited financial statements.
- C. **Liquidity Loan**—Loans providing temporary cash for operations for universities that have declining cash balances, and are to be repaid according to loan agreements, which include loans from within university accounts (intra-university) and loans from within the System.
- D. **Investment Initiative**—Start-up funding for strategic or innovative investments to enhance a university's success, which must comply with established reinvestment agreements.
- E. **Financial Sustainability Plan**—A plan developed by the university through a process that relies on diverse stakeholders across the university community which addresses the core challenges confronting the university. The plan must be presented utilizing the standard template and process required by the chancellor. Also known as the Comprehensive Planning Process (reference link).
- F. **Peer University Consulting**—A diverse group of subject matter experts identified by the chancellor's office, in coordination with the System's Executive Leadership Group (ELG), and drawn from System universities or external resources to be utilized based on issues specific within the Financial Sustainability Plans.

### III. Procedure/Standard

- A. **Determination of Financial Category**—The four indicators outlined in the above definitions will be analyzed jointly by the Chief Academic Officers (CAOs) and the Chief Financial Officers (CFOs) at least annually to make an initial recommendation of where the university lies across the financial spectrum based on all four indicators. At a minimum, annually the following will occur:
  1. An analysis will be conducted across the indicators with input from the university.
  2. A recommendation will be presented to the university president and the Council of Trustees for review and commentary.
  3. The recommendation, inclusive of all feedback, will be presented by the president to the ELG for appropriate review with final action by the chancellor.
  4. Depending on where a university falls across the spectrum, additional actions may be required as defined below.
- B. **Financial Spectrum Categories**

Based on the determination of a university within a financial spectrum, additional levels of detail in narrative, projections and monitoring will be required.

**1. Overall Stability:**

- a. The following are characteristics across the multiple indicators of universities in this category:
  - i. Enrollments have remained relatively stable (less than a 2 percent decline) or increased in the past two years and projections indicate stability or growth.
  - ii. A university's annual operating margin is 2 percent or higher (3-year moving average).
  - iii. University's Primary Reserve Ratio is 40 percent or higher (3-year moving average).
  - iv. University reserves meet or exceed 180 days cash on hand.
- b. Triggers, actions and monitoring: None.
- c. The university is eligible to apply for assistance from the Investment Fund in order to pursue strategic or innovative initiatives that are intended to strengthen the university's financial stability.

**2. Financial Sustainability Plan One:**

- a. The following are characteristics across the multiple indicators of universities in this category:
  - i. Enrollments have decreased between 2-5 percent in the past two years and projections indicate continued decline.
  - ii. A university's annual operating margin is between 0-2 percent (3-year moving average).
  - iii. University's Primary Reserve Ratio is between 20 percent and 40 percent (3-year moving average) and trending downward.
  - iv. University reserves are between 90 and 180 days cash on hand.
- b. Triggers, actions and monitoring:
  - i. Based upon the analysis and recommendation outlined in Section III A, if it is determined by the ELG that a university is within this category, a Financial Sustainability Plan will be required to be submitted to the CAOs and CFOs for initial review and feedback. This group's feedback may include recommendations for follow-up monitoring on compliance.
  - ii. The Financial Sustainability Plan and CAO/CFO feedback will be presented to the university president for presentation to the Council of Trustees for review and commentary, with periodic updates as appropriate.
  - iii. The Financial Sustainability Plan and all feedback will be submitted by the university president to the ELG for awareness and additional comment with final approval by the chancellor.
- c. The university is eligible to apply for assistance from the Investment Fund in order to pursue strategic or innovative initiatives that are intended to strengthen the university's financial stability.

### 3. Financial Sustainability Plan Two:

- a. The following are characteristics across the multiple indicators of universities in this category:
  - i. Enrollments have decreased between 5 and 10 percent in the past two years and projections indicate continued decline.
  - ii. A university's annual operating margin is negative (3-year moving average).
  - iii. University's Primary Reserve Ratio is between 0 percent and 20 percent (3-year moving average) and trending significantly downward.
  - iv. University reserves are between 30 and 90 days cash on hand.
- b. Triggers, actions and monitoring:
  - i. Based upon the analysis and recommendation outlined in Section III A, if it is determined by the ELG that a university is within this category, a Financial Sustainability Plan will be required to be submitted to the CAOs and CFOs for initial review. This group will provide feedback for the ELG review.
  - ii. The Financial Sustainability Plan may require any or all of the following components including but not limited to:
    - 1. Identification of new and alternative revenue streams.
    - 2. Review of Board-Affirmed Metrics (defined above) to address prescribing cost-cutting measures such as limitations on discretionary spending, workforce reductions, closure of facilities, program curtailment, realignment of academic program offerings, and elimination of services.
    - 3. Consideration of furlough and retrenchment options in accordance with collective bargaining agreements, as appropriate.
    - 4. Consideration of outsourcing administrative functions to third-party vendors, other System universities (if the receiving System president agrees), the Office of the Chancellor, or System/regional shared services (if participating presidents agree), in accordance with collective bargaining agreements, as appropriate.
    - 5. Consideration of restricting the hiring of new employees or entering into new contracts.
    - 6. Consideration and prioritization of operating capital needs and identifying resources to meet needs.
- c. Leveraging the ability for a loan between auxiliary and E&G funds within the university's funds. All intra-university loans must utilize the loan template (Appendix B).
  - i. The review and feedback will be presented to the university president.
  - ii. The Financial Sustainability Plan and CAO/CFO feedback will be presented by the president to the Council of Trustees for review and commentary.
  - iii. The Financial Sustainability Plan and all feedback will be submitted by the university president to the ELG for awareness and additional comment with final approval by the chancellor.
  - iv. The president shall provide interim reports as required by the chancellor/designee as deemed necessary for the monitoring of progress,

until the university is no longer determined to be in documented stress. These reports shall be presented to the CAO/CFOs for feedback and potential additional monitoring as well as provided to the ELG, the Board of Governors, and respective Council of Trustees.

- d. The university is eligible to apply for assistance from the Investment Fund in order to pursue strategic or innovative initiatives that are intended to strengthen the university's financial stability.

#### **4. Financial Sustainability Plan Three:**

- a. The following are characteristics of universities in this category across multiple indicators:
  - i. Enrollments have decreased greater than 10 percent in the past two years and projections indicate continued decline.
  - ii. A university's annual operating margin is consistently negative year over year (3-year moving average).
  - iii. University's Primary Reserve Ratio is negative year over year.
  - iv. University reserves are less than 30 days cash on hand.
- b. Triggers, actions and monitoring:
  - i. Based upon the analysis and recommendation outlined in Section III A, if it is determined by the ELG that a university is within this category, a Financial Sustainability Plan will be required to be submitted to the CAOs and CFOs for initial review. This group will provide feedback for the ELG review.
  - ii. The Financial Sustainability Plan may require any or all of the components for Plan Two including other items as may be required by the chancellor.
  - iii. The review and feedback will be presented to the university president.
  - iv. The Financial Sustainability Plan and CAO/CFO feedback will be presented by the president to the Council of Trustees for review and commentary.
  - v. The Financial Sustainability Plan and all feedback will be submitted by the university president to the ELG for awareness and additional comment with final approval by the chancellor.
  - vi. The president shall provide interim reports as required by the chancellor/designee as deemed necessary for the monitoring of progress, until the university is no longer determined to be in documented stress. These reports shall be presented to the CAO/CFOs for feedback, potential additional monitoring and provided to the ELG, the Board of Governors, and respective Council of Trustees.
- c. Once a university has been determined to be in this category, the Board of Governors shall authorize the appropriate course of action to include the following:
  - i. Authorize a liquidity loan if there is reasonable evidence of potential future financial sustainability. Revenue anticipation, such as anticipated or planned increases in enrollment, tuition, fees, or appropriation shall not be considered to be evidence of future financial sustainability, without sufficient empirical support of the veracity of the increases.

- ii. If a liquidity loan is needed, specific procedures and conditions shall apply, such as must have first considered intra-university loans, expended reserves, and implemented the Financial Sustainability Plan actions.
- iii. The university shall comply with any restrictions or requirements established as a condition of receiving the liquidity loan.
- iv. The loan shall be repaid in full, with interest, based upon the terms of the agreement as outlined in a promissory note.

#### **C. ACTIONS TO ADDRESS FINANCIAL CONCERNS**

Universities, in plan levels two and three listed above, or if determined to be unable to address their financial or operational challenges, the chancellor, after consultation with the ELG, may take a number of actions including but not limited to:

- 1) requiring changes to the plan and/or staffing of selected operational areas, in accordance with collective bargaining agreements, as appropriate.
- 2) providing detailed reports to the Board of Governors
- 3) requiring peer review committees
- 4) utilization of external audits of selected operational areas
- 5) requiring of a loaned executive for oversight in selected operational functions with a dual reporting relationship to the university and the chancellor

Universities, in any plan level, may also request assistance to address their financial or operational challenges.

#### **IV. Implementation**

Any changes to procedures, standards, and guidelines shall be promulgated by the chancellor after consultation with the ELG and Board of Governors.

**Effective Date**—Immediately.

**Appendix A** – Financial Sustainability Indicator Definitions Methodology

**Appendix B** – Sample Loan Agreement





# Appendix A<sup>1</sup>

## Financial Sustainability

### Indicator Definitions Methodology

*November 2019*

*Updated August 2020*

*Updated June 2023*

<sup>1</sup>Appendix to System Procedure/Standard 2019-40: *University Financial Sustainability*

# Enrollment Indicator

Enrollment figures are sourced from the university-submitted student data files, as required and defined by the Annual Data Collection Plan. The data is moved from the submission environment to the SAP Business Warehouse for reporting. Enrollment figures represent annualized FTE for the prior three completed academic years to evaluate change in enrollment over two years.

## Annualized Student FTE Enrollment

Source: Student Data Collection Plan Submissions (E-1 Student)

Measure that combines undergraduate and graduate, full- and part-time, student credits and equates those totals to an annual full-time equivalency. Student FTE is the total credits attempted for a term by students enrolled on the fifteenth day of classes for the Fall and Spring terms and the Summer and Winter end of term from the student data submission for all students. Annualized student FTE combines all terms within an academic year, July 1 through June 30, which includes Summer 2, Fall, Winter, Spring, Summer 1.

Calculation performed adds the following results together:

- Undergraduate Annualized Student FTE = Total Attempted Credits\*/30 Credit Hours.
- Graduate Annualized Student FTE = Total Attempted Credits/24 Credit Hours.

\* Clock-hour students are represented in these figures.

## Enrollment Indicator Calculation:

The evaluated dataset includes the prior three academic years, subtracting the oldest year from the most recent year and then dividing by the oldest year.

Calculation Performed: **AY 2018 – 2019** minus **AY 2016 – 2017** divided by **AY 2016 – 2017**

Academic Year	Total Annualized FTE	Undergraduate Annualized FTE	Graduate Annualized FTE
2018 - 2019	6,916.07	6,172.90	743.17
2017 - 2018	6,923.92	6,218.17	705.75
2016 - 2017	7,052.38	6,369.00	683.38
Enrollment Percentage Change	<b>-1.93%</b>		

# Financial Indicators

*All financial measures are sourced from SAP to the Business Warehouse for reporting. Metrics are provided within the sustainability reports as three-year moving averages for the operating margin and the primary reserve ratio, while the university reserves is evaluated based on June 30 of the most recently closed fiscal year. Fiscal year calculations are individually performed for the prior 5 years.*

## **Net Operating Revenues Ratio or Operating Margin**

*Source: SAP Business Warehouse*

Indicates the surplus (or deficit) of the university's results of operation by which annual revenues cover operating expenses. This shows all revenue (tuition, fees, room and board, appropriation, advancement) and how expenses are managed against those revenues. It will vary based on management decisions that impact both revenue and expenses.

*Calculation performed: Net operating revenues (expenses) plus net nonoperating revenues (expenses) divided by operating revenues plus nonoperating revenues.*

## **Primary Reserve Ratio**

*Source: SAP Business Warehouse*

The Primary Reserve Ratio measures the financial strength of the institution by comparing expendable net assets to total expenses.

*Calculation performed: Expendable net assets divided by total expenses.*

## **University Minimum Reserves**

*Source: SAP Business Warehouse*

Shows the short-term number of days a university can operate and cover its unrestricted operating expenses with cash.

*Calculation performed: Unrestricted cash times 365 divided by total unrestricted expenses.*

*\*All ratios are adjusted for noncash expenses in excess of pay-as-you-go for unfunded liabilities of OPEB, pensions, and compensated absences, and for the net liability of each of these three unfunded liabilities.*

## Financial Indicator Definitions via FINRPT

Data for all financial metrics are sourced from SAP and not directly from the university FINRPTs. The selections and examples below are defined in accordance with Prager/KPMG ratios<sup>1</sup> utilizing the State System's FINRPT methodology. If there are discrepancies between SAP and the FINRPT, actions should be taken by the university to reconcile SAP with the FINRPT in any of the prior years.

### Net Operating Revenues Ratio or Operating Margin

	Source	FY 2022
<b>OPERATING MARGIN RATIO</b> <i>as revised April 2023</i>		<b>0.72</b>
<b>Numerator: Net Operating Revenues</b>		<b>\$ 15,056,387</b>
Total Revenues	BI FINRPT MO	\$ 2,137,283,157
Total Revenue Adjustments		
State Appropriations, Capital (MO 412)	BI FINRPT MO	\$ (28,480,000)
Capital Gifts and Grants (MO 421-425, 431, All Plant, NIP)	BI FINRPT MO	\$ (6,859,839)
Loan Forgiveness/Transfer (MO 424)	BI FINRPT MO	\$ (21,793,563)
Additions to Permanent Endowments (MO 430)	BI FINRPT MO	\$ 0
Perkins Other Costs & Losses (MO 453 GL 671140)	GL Acct 671140	\$ 2,003,249
Unrealized Increase/(Decrease) in Fair Value (MO 454)	BI FINRPT MO	\$ 16,631,244
(Gain)/Loss on Acquisition/Disposal (MO 455, 458)	BI FINRPT MO	\$ (2,235,987)
Total Expenses	BI FINRPT MO	\$ (1,894,600,541)
Total Expense Adjustments		
Compensation Expenses Related to Unfunded Liabilities	BI FINRPT MO	\$ (186,967,461)
Compensation Expenses paid from Plant (Capitalized)	BI FINRPT MO	\$ 76,128
<b>Denominator: Total Revenues</b>		<b>\$ 2,096,548,261</b>
Total Revenues	BI FINRPT MO	\$ 2,137,283,157
Total Revenue Adjustments		
State Appropriations, Capital (MO 412)	BI FINRPT MO	\$ (28,480,000)
Capital Gifts and Grants (MO 421-425, 431, All Plant, NIP)	BI FINRPT MO	\$ (6,859,839)
Loan Forgiveness/Transfer (MO 424)	BI FINRPT MO	\$ (21,793,563)
Additions to Permanent Endowments (MO 430)	BI FINRPT MO	\$ 0
Perkins Other Costs & Losses (MO 453 GL 671140)	BI FINRPT MO	\$ 2,003,249
Unrealized Increase/(Decrease) in Fair Value (MO 454)	BI FINRPT MO	\$ 16,631,244
(Gain)/Loss on Acquisition/Disposal (MO 455, 458)	BI FINRPT MO	\$ (2,235,987)
<b>Note:</b> in FY21 and FY22, the operating margin was revised to include the unearned revenue associated with the COVID institutional shares in FY21 and exclude it in FY22. This adjusted operating margin ratio was used in the Sustainability Metrics during those years.		

<sup>1</sup>Prager, Sealy & Co., LLC; KPMG LLP; and Attain LLC. *Strategic Financial Analysis for Higher Education: Identifying, Measuring & Reporting Financial Risks, Seventh Edition*. 2010.

## Primary Reserve Ratio

	Source		FY 2022
<b>PRIMARY RESERVE RATIO</b> <i>as revised April 2023</i>			<b>36.52</b>
<b>Numerator: Expendable Net Assets</b>			<b>\$ 760,075,354</b>
Unrestricted Net Assets from Balance Sheet			
*Unrestricted Net Assets	BI FINRPT BS	\$	(2,379,461,105)
*Total Unfunded Liabilities		\$	3,084,952,241
Current Portion of Compensated Absences Liability	BI FINRPT BS	19,863,227	
Current Portion - SSHE Plan OPEB Liability	BI FINRPT BS	27,032,773	
Current Portion - REHP OPEB Liability	BI FINRPT BS	9,062,843	
Current Portion - PSERS OPEB Liability	BI FINRPT BS	0	
Compensated Absences Liability	BI FINRPT BS	143,313,362	
SSHE Plan OPEB Liability	BI FINRPT BS	1,344,777,834	
REHP OPEB Liability	BI FINRPT BS	399,943,782	
PSERS OPEB Liability	BI FINRPT BS	4,178,308	
SERS Net Pension Liability	BI FINRPT BS	592,332,472	
PSERS Net Pension Liability	BI FINRPT BS	72,646,382	
SSHE Plan OPEB Deferred Inflows	BI FINRPT BS	279,468,655	
REHP OPEB Deferred Inflows	BI FINRPT BS	318,275,673	
PSERS OPEB Deferred Inflows	BI FINRPT BS	266,867	
SERS Deferred Inflows	BI FINRPT BS	260,420,385	
PSERS Deferred Inflows	BI FINRPT BS	16,071,062	
SSHE Plan OPEB Contributions After Measurement Date	BI FINRPT BS	(27,032,777)	
SSHE Plan OPEB Other Deferred Outflows	BI FINRPT BS	(172,098,229)	
REHP OPEB Contributions After Measurement Date	BI FINRPT BS	(9,062,844)	
REHP OPEB Other Deferred Outflows	BI FINRPT BS	(62,971,445)	
PSERS OPEB Contributions After Measurement Date	BI FINRPT BS	(210,597)	
PSERS OPEB Other Deferred Outflows	BI FINRPT BS	(574,568)	
SERS Contributions After Measurement Date	BI FINRPT BS	(49,548,172)	
SERS Other Deferred Outflows	BI FINRPT BS	(67,824,515)	
PSERS Contributions After Measurement Date	BI FINRPT BS	(8,848,102)	
PSERS Other Deferred Outflows (Include Act. Less Prop Cont)	BI FINRPT BS	(4,530,135)	
Expendable Restricted Net Assets from Balance Sheet			
*Scholarships and Fellowships	BI FINRPT BS	\$	32,439,783
*Research	BI FINRPT BS	\$	430,653
*Other	BI FINRPT BS	\$	21,713,782
<b>Denominator: Total Expenses</b>			<b>\$ 2,081,491,874</b>
Total Expenses	BI FINRPT MO	\$	1,894,600,541
Total Expense Adjustments			
Compensation Expenses Related to Unfunded Liabilities	BI FINRPT MO	\$	186,967,461
Compensation Expenses paid from Plant (Capitalized)	BI FINRPT MO	\$	(76,128)

**Note:** in FY21 and FY22, the primary reserve ratio was revised to include the unearned revenue associated with the COVID institutional shares in FY21 and exclude it in FY22. This adjusted primary reserve ratio was used in the Sustainability Metrics during those years.

## University Minimum Reserves

	Source		FY 2022
<b>UNIVERSITY MINIMUM RESERVES <sup>1</sup> as revised April 2023</b>			<b>185</b>
Numerator: Unrestricted Cash and Investments * 365		\$	314,499,150,829
Unrestricted Cash and Investments	BI FINRPT BS	\$	861,641,509
Denominator: Total Unrestricted Expenses		\$	1,704,304,552
Unrestricted Operating Expenses	BI FINRPT MO	\$	1,512,862,167
Unrestricted Compensation Exp Related to Unfunded Liabilities	BI FINRPT MO	\$	191,442,385

<sup>1</sup> Figures above are only from the following fund categories:

- Education & General
- Plant Unrestricted
- Auxiliary Enterprises
- Auxiliary Plant Unrestricted

## Financial Indicator Calculation: Three-Year Moving Averages

Indicator results for the Operating Margin and the Primary Reserve Ratio are based on the five prior fiscal years. These are each calculated and tracked as 3-year averages. The final indicator result is based on the sum of each 3-year average across the numerator, divided by the sum of each 3-year average across the denominator.

### Operating Margin Example:

	2018	2019	2020	2021	2022	3 Year Averages			3 Year Moving Average
						FY 2018-2020	FY 2019-2021	FY 2020-2022	Indicator Result
<b>OPERATING MARGIN RATIO</b>	6.92	5.88	3.38	1.85	7.51	5.4	3.8	4.4	4.53
Numerator: Net Operating Revenues	8,703,287	7,456,338	4,164,018	2,138,966	10,269,024	6,774,548	4,586,441	5,524,003	16,884,992
Denominator: Total Revenues	125,739,988	126,724,133	123,250,321	115,862,479	136,704,123	125,238,147	121,945,644	125,272,308	372,456,099

### Primary Reserve Ratio Example:

	2018	2019	2020	2021	2022	3 Year Averages			3 Year Moving Average
						FY 2018-2020	FY 2019-2021	FY 2020-2022	Indicator Result
<b>PRIMARY RESERVE RATIO</b>	58.42	55.41	57.71	67.59	68.53	57.17	60.12	64.65	60.66
Numerator: Expendable Net Assets	68,367,698	66,087,772	68,726,858	76,861,652	86,645,829	67,727,443	70,558,761	77,411,446	215,697,650
Denominator: Total Expenses	117,036,701	119,267,795	119,086,302	113,723,513	126,435,099	118,463,599	117,359,203	119,748,305	355,571,107

## Financial Indicator Calculation: Minimum Reserve

The evaluated dataset for the University Minimum Reserve calculation is strictly based on the ending balances of the most recently closed fiscal year. All other prior years are included to offer insight into trending of cash balances.

	2020	2021	2022	Indicator Result
<b>UNIVERSITY MINIMUM RESERVES</b>	189	222	224	224
Numerator: Unrestricted Cash and Investments * 365	27,170,858,657	31,059,152,802	31,789,234,518	
Denominator: Total Unrestricted Expenses	144,073,530	139,814,402	141,752,038	

# Sustainability Indicator Key

Metric	Stable	Financial Sustainability Plan 1	Financial Sustainability Plan 2	Financial Sustainability Plan 3
Enrollment	Increasing or relatively stable (Less than 2% Decrease in past two years)	Decreased by 2-5% in past two years	Decreased by 5-10% in past two years	Decreased by more than 10% in past two years
Operating Margin	2% or higher or trending upward (3-year moving average)	Between 0 - 2% (3 year moving average)	Negative (3 year moving average)	Consistently negative year over year
Primary Reserve Ratio	40% or higher (3 year moving average)	Between 20% and 40% (3 year moving average) and trending downward	Between 0% and 20% (3 year moving average) and trending significantly downward	Negative year over year
University Reserves	>= 180 days cash on hand	>= 90 and < 180 days cash on hand	>= 30 and < 90 days cash on hand	< 30 days cash on hand

## Footnotes:

- The Primary Reserve and Operating Margin are KPMG ratios, not Moody's.
- University Minimum Reserve uses KPMG's methodologies for the unrestricted expenses.
- *Primary Reserve* and *Operating Margin* include all funds, i.e., unrestricted and restricted funds.
- *Minimum Reserves* only include unrestricted cash and cash equivalents, including short-term and long-term investments, and unrestricted expenses; restricted cash and expenses are excluded.



## Appendix B

Funds may be transferred to Educational & General funds on a temporary basis to support those operations when needed. Terms for the temporary loan, including interest charged and other provisions are specified in the Auxiliary/E&G Fund University Loan Promissory Note attached to this procedure. A copy of the executed note shall be sent to the Vice Chancellor of Administration and Finance in the Office of the Chancellor. (Highlighted text in the form below are to be updated when used.)

### Promissory Note

**X University of Pennsylvania**

### Auxiliary/E&G Fund University Loan

THIS Promissory Note, made and entered into this **xth** day of **xx**, 201**x**, **b**etween the **X** University of Pennsylvania's auxiliary/educational and general Fund (E&G) Fund as lender, hereinafter referred to as the Lender, and **X** University of Pennsylvania's auxiliary/E&G Fund as borrower, hereinafter referred to as the Borrower.

WHEREAS, the Borrower desires to borrow up to \$**x,x**00,000 from the Lender's Cash Balances as a line of credit, to be drawn upon in any or all amount, as needed by the Borrower, for a term not to exceed **three years** for each draw. The draw(s) shall be repaid in accordance with an amortization schedule determined at the time of the draw, at an initial interest rate of **x.xx**% per annum, set annually in accordance with the System's overall interest rate **[Note: Treasury can provide the current rate]**. In consultation with the Borrower, payment may be requested by the Lender at an earlier date, with interest calculated as described above, and

WHEREAS, the Borrower's request has been duly approved by the President and the Council of Trustees has been notified of this internal loan,

NOW, THEREFORE, for and in consideration of the foregoing, the Borrower makes the following covenants:

- 1) The Borrower agrees that the principal and any and all accrued interest will be paid by a transfer out of its operating account in accordance with schedule described above, or as requested by Lender. The interest rate will be adjusted annually, as provided by the Treasury Office, Office of the Chancellor, Pennsylvania's State System of Higher Education.
- 2) The Borrower agrees to record a "mandatory transfer from auxiliary/E&G" on the effective date of each draw and a "mandatory transfer to auxiliary/E&G" for each payment (principle and interest) to the Lender.
- 3) The Borrower agrees to reflect all anticipated draws and payments in its annual budget projections.

IN WITNESS WHEREOF, the signatories hereto have caused this Promissory Note to be executed the date first above-written.

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President  
☒ University of Pennsylvania

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Vice President for Finance and Administration  
☒ University of Pennsylvania