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

November 13, 2018: Meeting Agenda and Notes

- Review of other states'/systems' use of financial dashboards/goals Discussion highlighted some of the financial measures/dashboards utilized by other systems/states, as referenced in the following materials or links. Many systems do not use financial measures; of those that do, measures tend to highlight affordability (a student success measure), operating efficiencies and trends, and/or financial ratios. The benefits and challenges of a composite financial index were also discussed.
 - Summary Document (attached, see pdf page 2)
 - <u>SHEEO Report: Monitoring and Assessing the Financial Health and Risk of Colleges</u> and Universities
- 2. Review of risk assessment financial measures Discussion about financial ratios utilized the latter portion of the financial risk assessment for illustrative purposes. The more common ratios were explained to increase understanding of what they measure and how they may be utilized as a management tool.
 - Sample Financial Risk Assessment (attached, see pdf page 14)
- Discussion of optimization of shared services Discussion focused on the efficiencies that can be achieved through shared services, the System's current shared services, and historical successes and challenges of centralized services. It was noted that the System is viewed as a leader in shared services, based on a study by Baker Tilly in 2014 (See Appendix 2 of this <u>online report</u>).
 - 2018-19 Shared Services Budget (attached, see pdf page 42)
- 4. Successful practices of other universities in reinvestment, improved efficiency, and implementing change

Discussion reviewed some high impact practices for maximizing efficiencies both at State System universities and at other universities. In particular, the Oregon system has achieved a level of administrative centralization that may deserve some study.

- Best Practice Examples (attached, see pdf page 126)
- 5. Big picture questions—The following were discussed.
 - a. What is the purpose of the State System?
 - b. How do we justify its existence?
 - c. How do we make sure we are working on the right things, i.e., the things that have the greatest impact toward achieving the System's goals?
 - d. What does success look like?
 - e. What are the indicators that show success is being achieved? Task group should consider a limited group of measures (e.g., 3-5) that may address operational efficiencies, financial ratios, and community engagement.
- 6. New Business—New study was released by Moody's Investor Services
 - New Moody's Issued In-Depth Analysis of the System (attached, see pdf page 128)

Summary of the Use of Financial Indicators by Other States/Systems As of November 9, 2018

Sta	ate/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.	North Dakota	9
9.	Ohio	9
10.	Oregon (Oregon Higher Education Coordinating Commission [HECC))	11
11.	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 <u>undergraduate success</u>, <u>diversity</u>, <u>research</u>, <u>financial aid</u>, and <u>finance</u>.

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_201 7_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 Lessoned 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: <u>https://sites.google.com/maine.edu/umsdashboard/main</u> Measures 19 indicators; 11 are financial.

Finance Core Ratios: four components of CFI <u>https://sites.google.com/maine.edu/umsdashboard/board-of-trustees-data/finance-core-ratios</u>

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: (Operating Income (Loss) + Net Non-Operating Revenues (Expenses)) / (Operating Revenues + 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: (Change in Net Position / 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: (Expendable Net Position / 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.

- 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.
- 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.

Composite Financial Index (CFI) Primary Reserve Ratio Return on Net Assets						
 Viability Ratio Operating Margin Ratio 						
ta:						
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
s another frame in this dashboard	6.45	4.26	1.85	0.99	1.00	1.49
s another marrie in this dashboard	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
	3 10	3.37	1.95	1.14	0.77	1.29

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

<u>https://www.northcarolina.edu/sites/default/files/unc_strategic_plan.pdf</u> 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: <u>https://www.northcarolina.edu/strategic-planning/unc-chapel-hill</u>

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. NORTH DAKOTA

North Dakota University System Financial Review

http://ndus.edu/uploads/resources/8662/campus-financial-review.pdf

Presents an annual financial review to provide an understanding of the financial health of each institution and to identify trends. The financial ratios used include:

- The Composite Financial Index based on four core ratios: primary reserve ratio, net income ratio, viability ratio, and return on net assets ratio. The CFI is calculated both with and without long-term liabilities and component units.
- Current Ratio
- Working Capital Ratio
- Operating Income Ratio
- Net Income Margin
- Net Tuition and Fees per FTE Enrollment
- 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

9. OHIO

Financial Campus Accountability Report

https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/financial/campusaccountability/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 colocated 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.

10. 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.

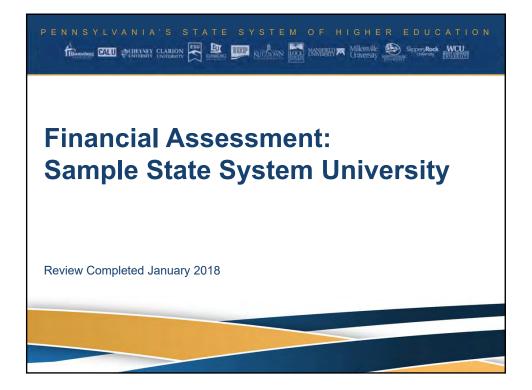
11. TEXAS

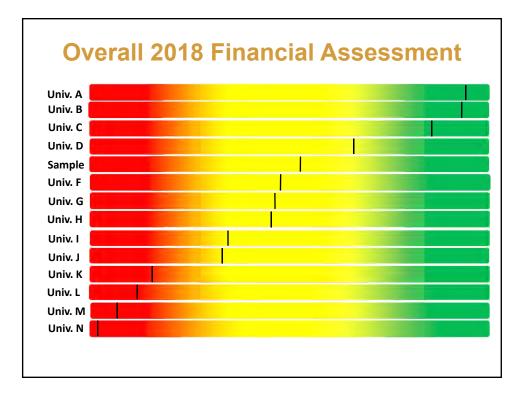
University of Texas System https://data.utsystem.edu/

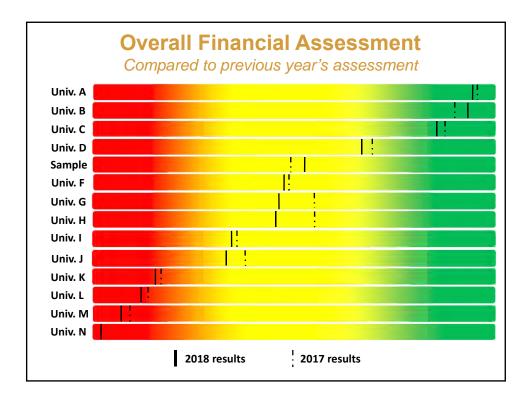
The University of Texas (UT) System is committed to transparency and is driving success by making critical information about its operations readily available to stakeholders through the UT System Dashboard. The *UT System Measures Up* section on the website highlights key metrics in each of the UT System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

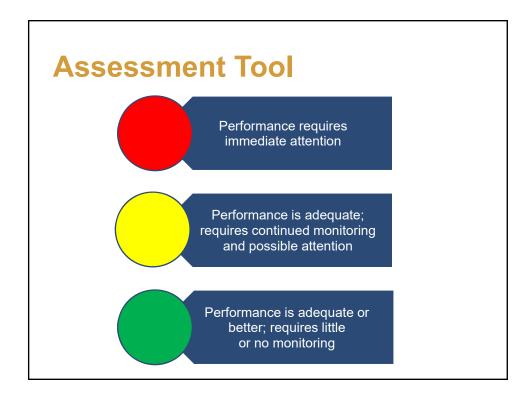
Fast Facts--The University of Texas System Fast Facts provides quick insights and answers to questions pertaining to all 14 UT System institutions. Areas of interest include: students and faculty; research; campus tuition, fees, and financial aid; faculty honors; and the budget, among others.

https://utsystem.edu/sites/default/files/documents/facts%2C-figures-anddata/Fast%20Facts%202016/Fast_Facts_2016_Feb2017_v2Update.pdf (Financial information begins on page 9.)









Components of Financial Assessment

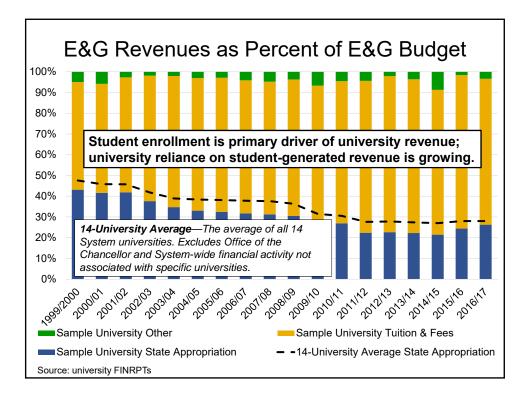
Modeled after a typical analysis used in an external review of the financial strength of higher education institutions.

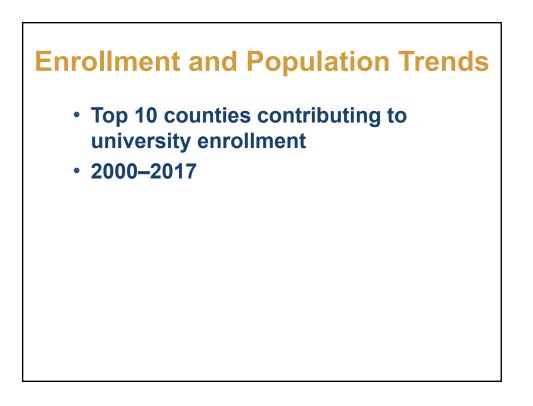
- Market Demand
- Operating Efficiency
- Financial Performance

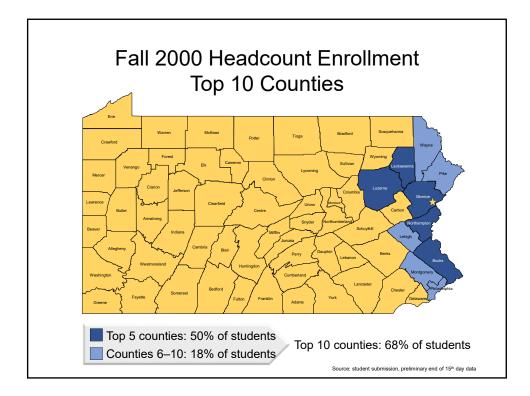


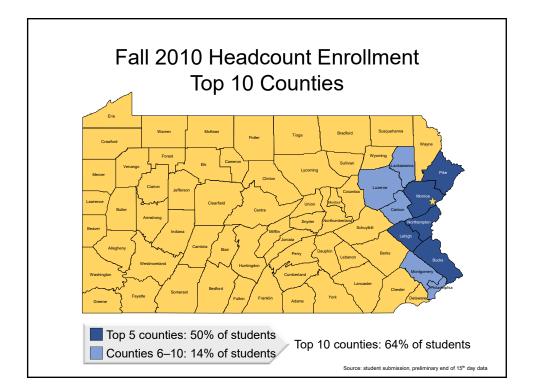
- Enrollment and Population Trends
- Projected Enrollment
- Brand Strength

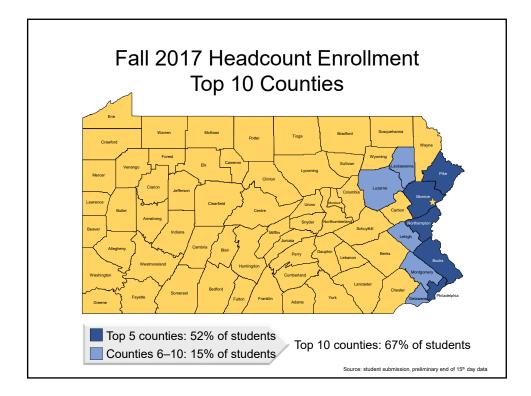
Why is market demand an integral part of a financial assessment?

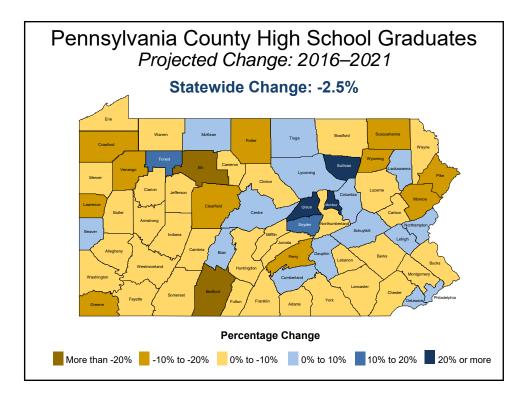


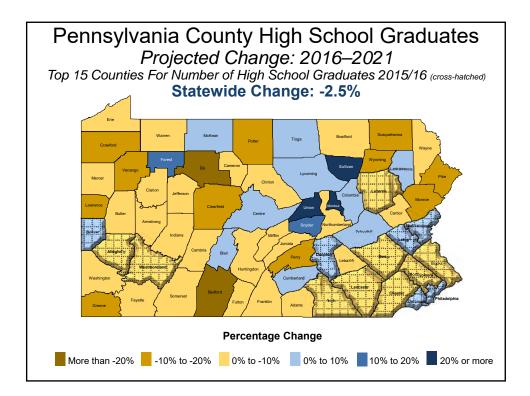


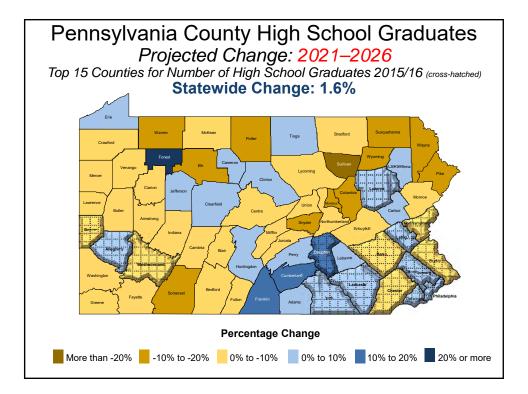




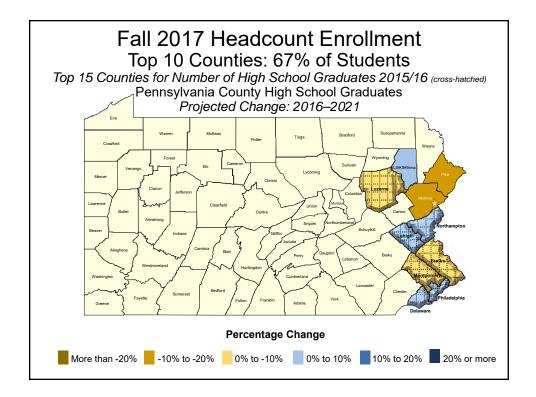




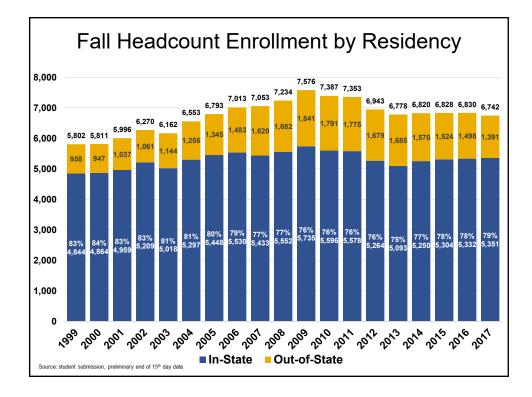


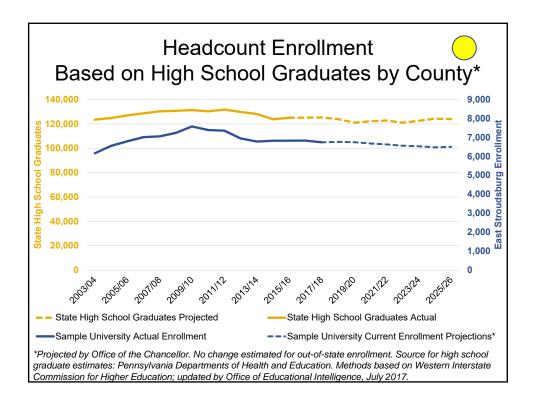


5 Counties for Numbe and Projected Percent			
Philadelphia	11,754	0.4%	
Allegheny	10,893	-7.8%	
Montgomery	8,018	-0.3%	
Bucks	6,927	-2.0%	
Chester	6,798	-5.1%	
Delaware	5,211	0.2%	Top 15
Lancaster	4,985	-0.9%	counties
York	4,905	-2.3%	comprise
Berks	4,736	-3.4%	67.5% of all
Lehigh	3,632	6.9%	high school graduates.
Westmoreland	3,604	-6.9%	gradatoo.
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%	
			Source: PA Department of Education



and 20	16 High	Scho	ol Graduates, b	y Cour	nty
	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	60	<u>33,878</u>
Schuylkill	75	1,307	Total	6.742	125,051

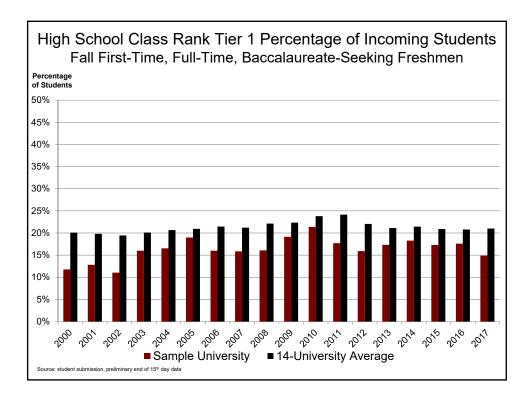


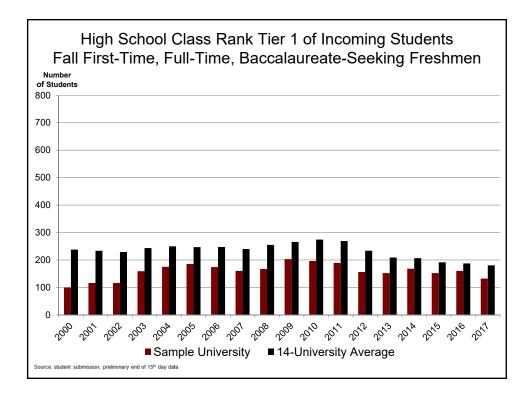


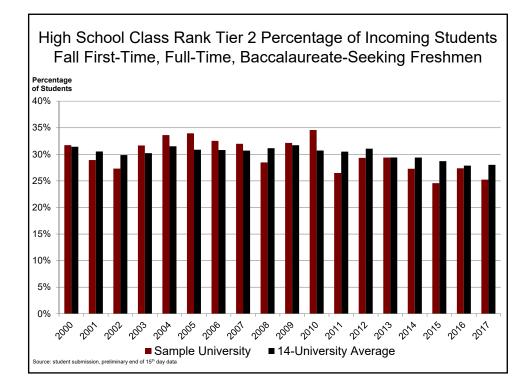
Brand Strength

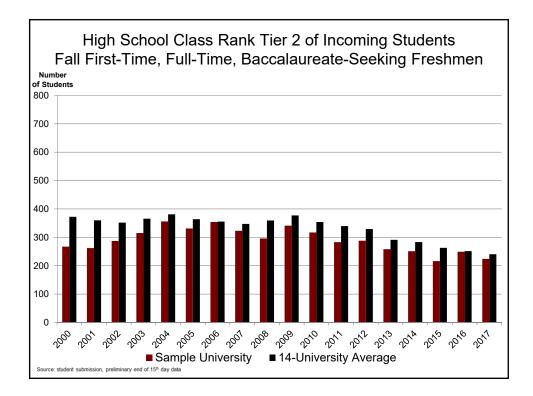
College preparedness of incoming students is an indicator of brand strength.

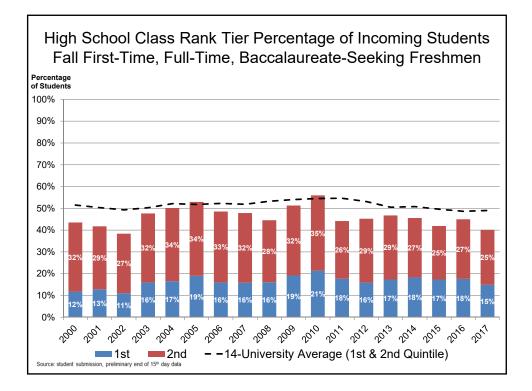
- Incoming freshman enrollment by quintile of high school rank
- Selectivity
- Matriculation
- SAT scores

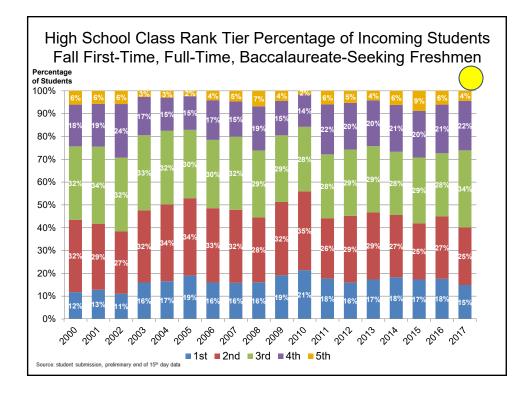


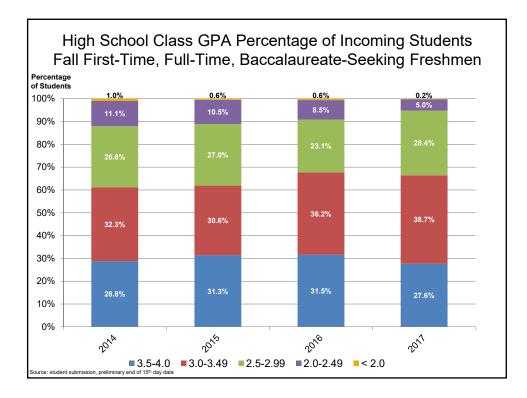


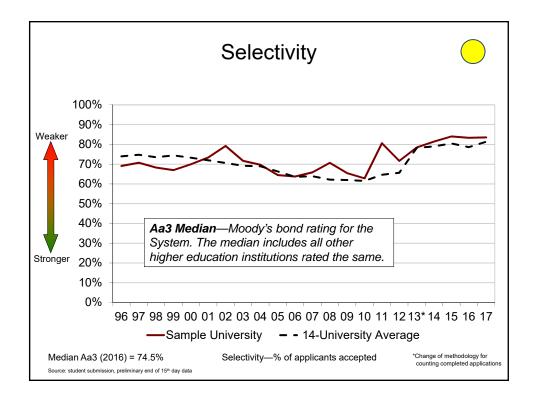


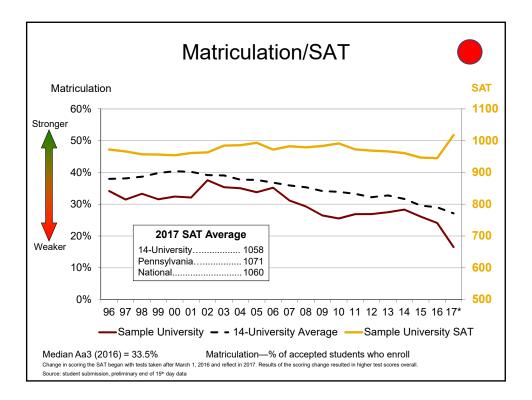


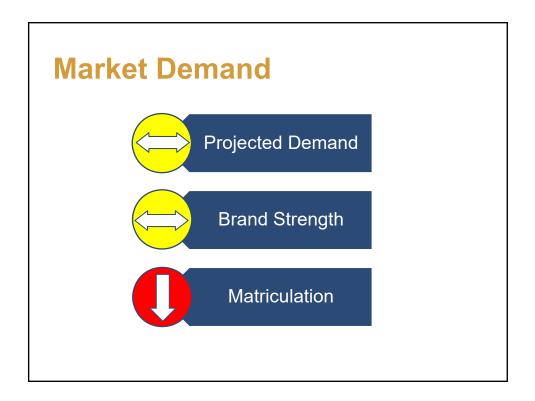




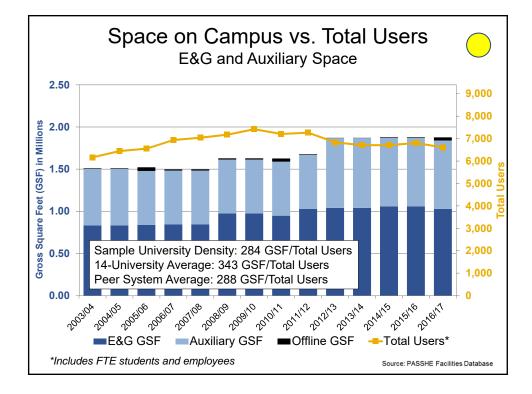


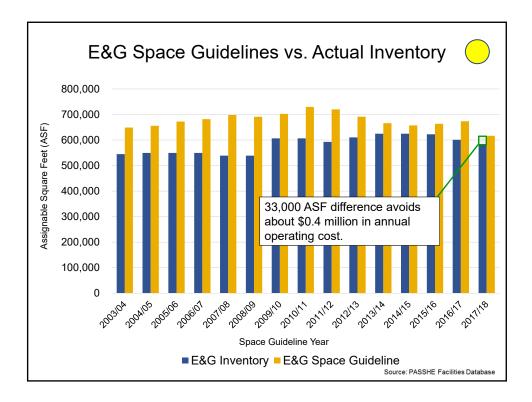


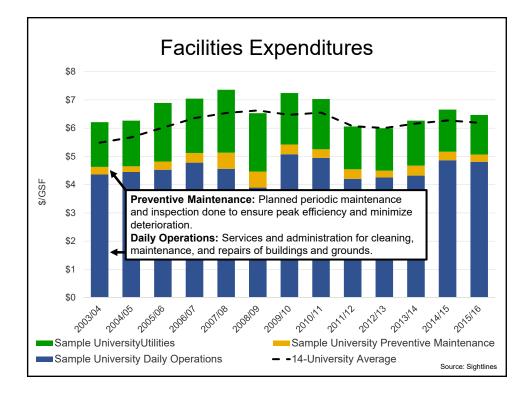


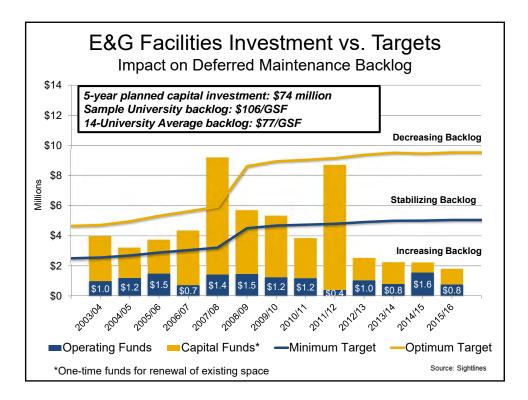


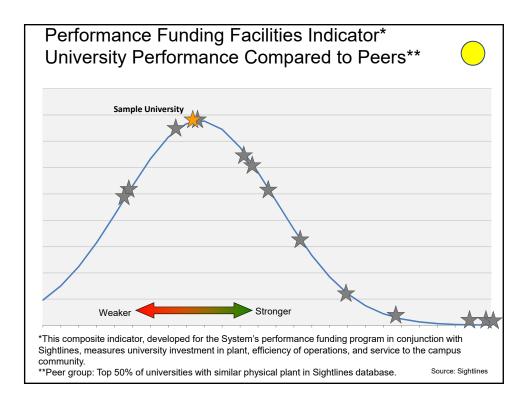


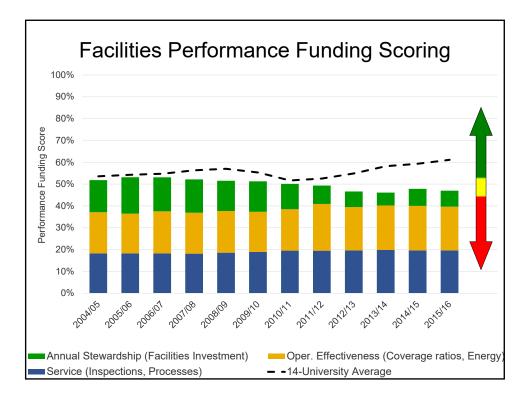


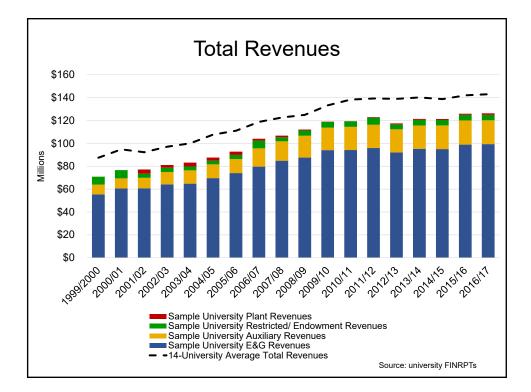


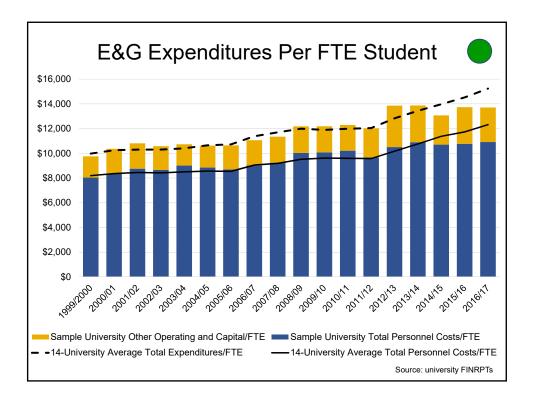


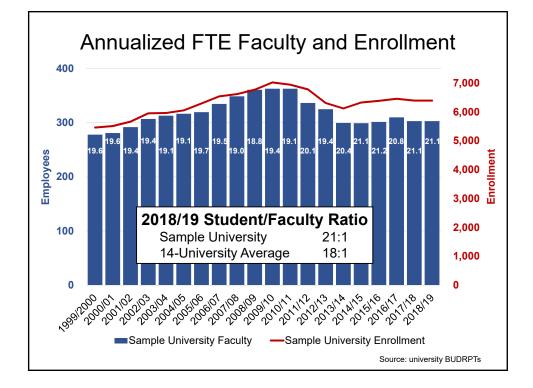


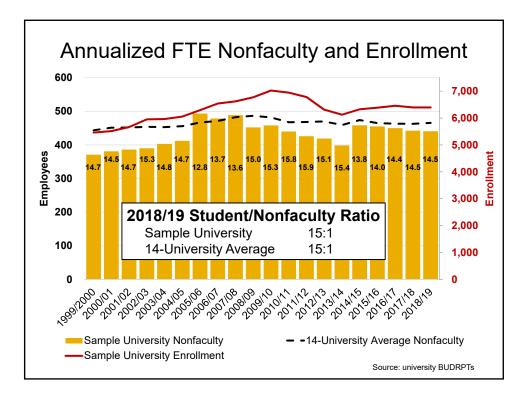


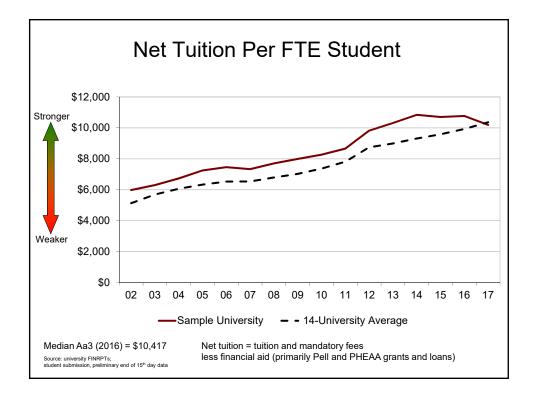


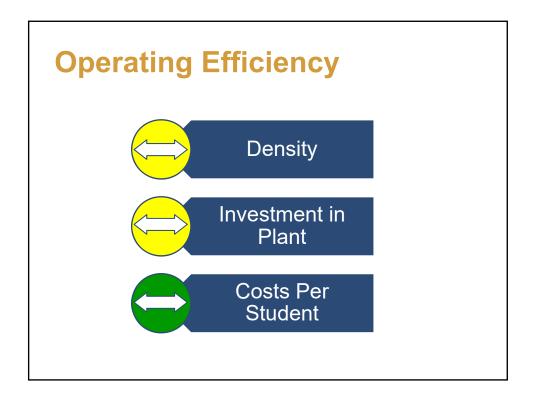


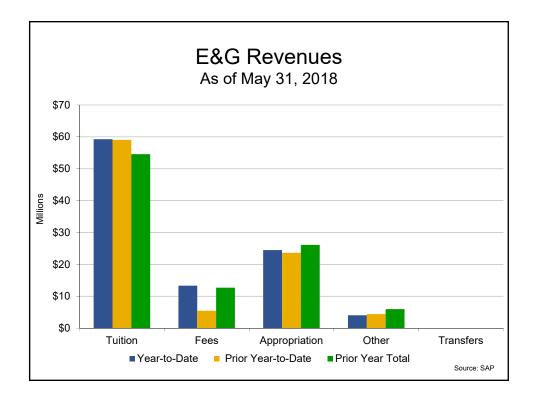


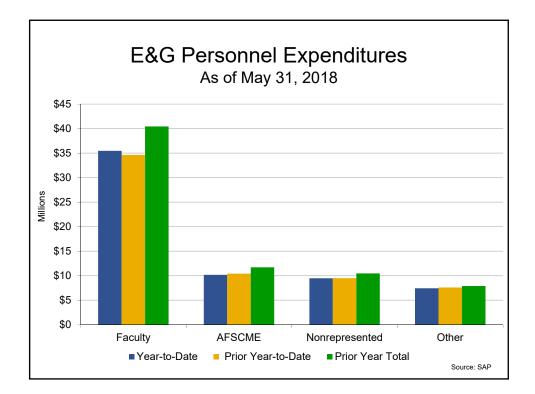




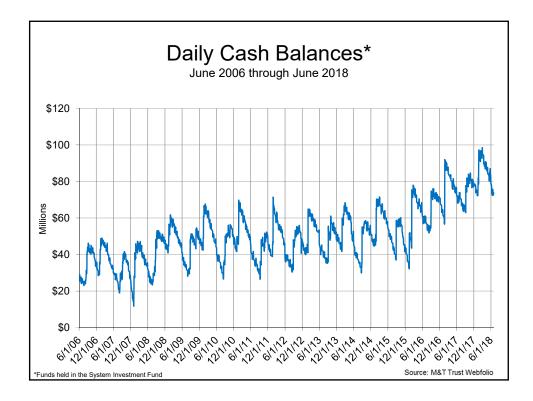


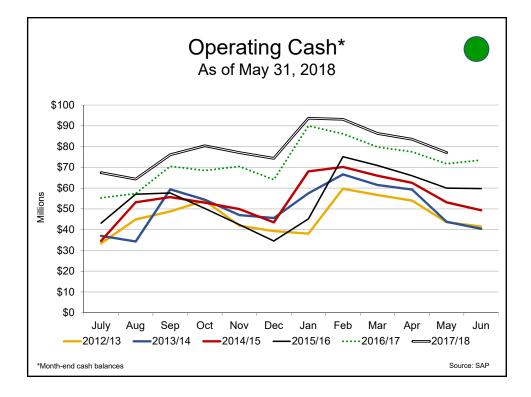


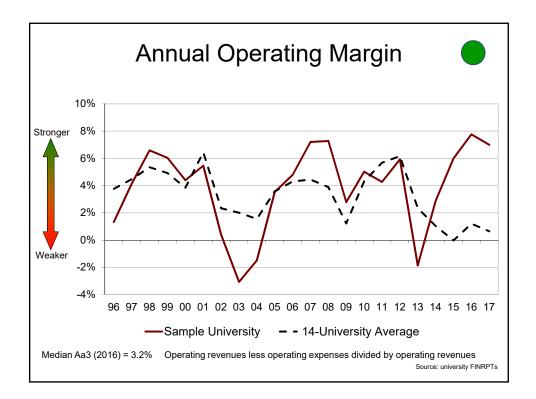


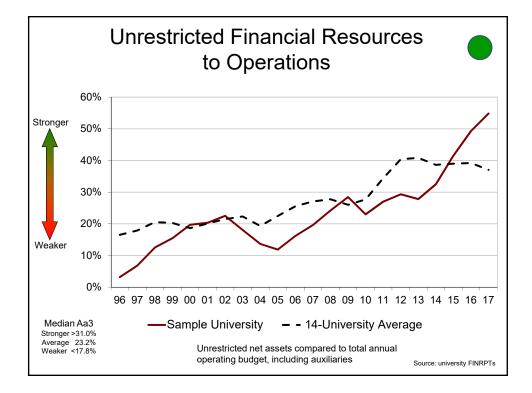


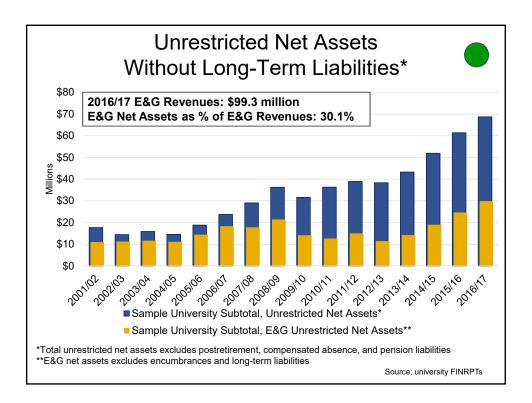


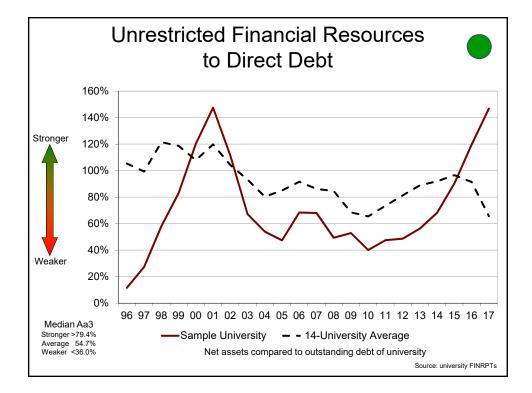


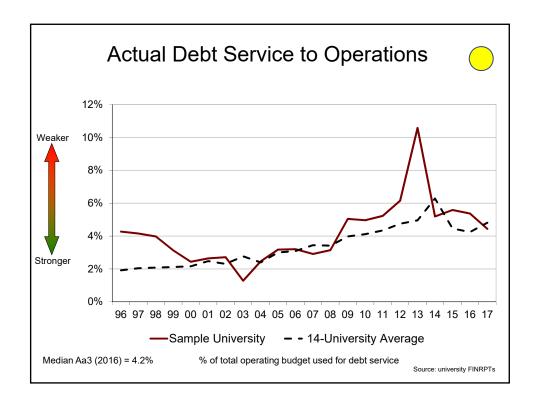


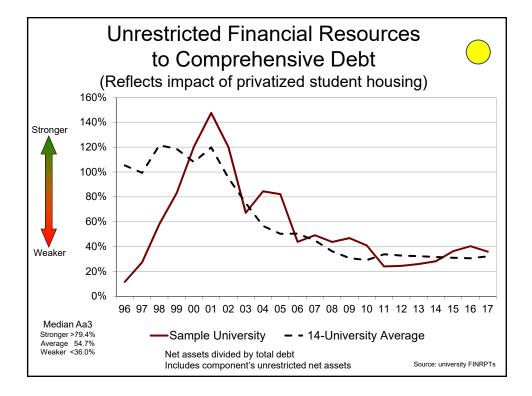


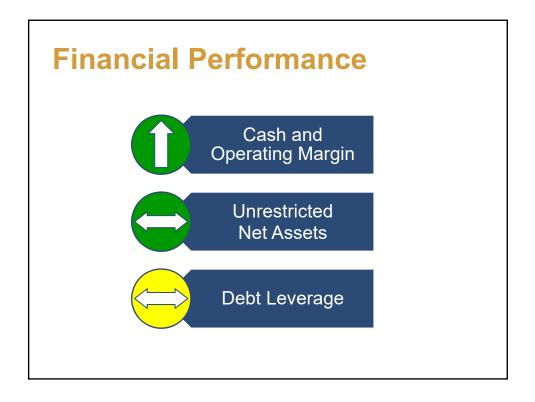


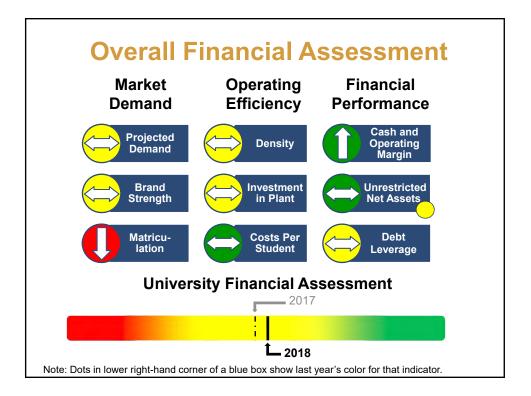
















Shared Services Fiscal Year 2018/19 Budget



NOTE: Due to repagination of document, add 43 to page numbers in this table of contents to find a specific heading withing the Shared Services budget.

Pennsylvania's State System of Higher Education Shared Services Fiscal Year 2018/19 Budget

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Consolidated University

Operations (CUO) Program Offices	CUO Manager	VP Liaison	
Human Capital Management/	. Frank E. Lentz/	. (formerly David A. Topper/)	
Payroll Accounting and Related Contract	. Annette K. Mathes	. (formerly Melinda D. Fawks)	.18
Office of System Human Resources			
and Related Contracts	. Brenda A. Mundell	. (formerly David A. Topper)	.22
Labor Relations	. Lisa A. Sanno	. Gerald L. Silberman	.26
Construction Support Office			
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CISCO Smartnet Maintenance and Support	
VMware Licenses and Annual Support.	

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Executive Information Systems (EIS)	
Strategic Information Management System (SIMS)	
State System @ Center City Philadelphia	
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Office of Internal Audit and Risk Assessment	
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Fiscal Year 2018/19 Budget Summary

(Includes Optional System Contracts, System Contracts Not Included in the Estimated Allocation to Universities Schedules, and Programs Funded Off the Top of the Appropriation)

、				Change-	-FY 2017/18	Change—FV 3	2018/19 Request	Change—FY 2018/19 Request		
	FY 2017/18 Projection	FY 2017/18	FY 2018/19	Projection	n vs. Budget \$	vs. FY 201	7/18 Budget		18 Projection \$	
CUO Program Offices	Projection	Budget	Request	%	\$	%	\$	%	\$	
Human Capital Management/Payroll Accounting	\$795,498	\$812,231	\$810,045	-2.1%	(\$16,733)	-0.3%	(\$2,186)	1.8%	\$14,547	
Office of System Human Resources	684,328	854,516	803,717	-19.9%	(170,188)	-5.9%	(50,799)	17.4%	119,389	
Labor Relations	768,142	793,016	800,031	-3.1%	(24,874)	0.9%	7,015	4.2%	31,889	
Construction Support Office	304,346	308,008	315,127	-1.2%	(3,662)	2.3%	7,119	3.5%	10,781	
University Legal Counsel Office	2,069,634	2,324,381	2,400,302	-11.0%	(254,747)	3.3%	75,921	16.0%	330,668	
Keystone Library Network (KLN)	699,205	766,321	754,260	-8.8%	(67,116)	-1.6%	(12,061)	7.9%	55,055	
Distance Education	67,207	63,688	67,792	5.5%	3,519	6.4%	4,104	0.9%	585	
The Harrisburg Internship Semester (THIS)	156,542	181,070	201,425	-13.5%	(24,528)	11.2%	20,355	28.7%	44,883	
SSHEnet	657,743	671,139	884,125	-2.0%	(13,396)	31.7%	212,986	34.4%	226,382	
Subtotal CUO Program Offices	6,202,645	6,774,370	7,036,824	-8.4%	(571,725)	3.9%	262,454	13.4%	834,179	
Turnover/Savings Target		(99,134)	(99,134)		99,134		0		(99,134)	
Total CUO Program Offices	6,202,645	6,675,236	6,937,690	-7.1%	(472,591)	3.9%	262,454	11.9%	735,045	
System Contracts (Mandatory and Optional)										
Human Resources Training	56,816	28,408	28,408	100.0%	28,408	0.0%	0	-50.0%	(28,408)	
Benefits Contracts	422,327	447,342	459,220	-5.6%	(25,015)	2.7%	11,878	8.7%	36,893	
Penn State Engineering Advisory Services	572,840	572,840	590,025	0.0%	0	3.0%	17,185	3.0%	17,185	
Facilities Benchmarking and Analysis (Sightlines)	375,900	375,900	383,600	0.0%	0	2.0%	7,700	2.0%	7,700	
Legal Counsel Contracts	295,000	300,000	300,000	-1.7%	(5,000)	0.0%	0	1.7%	5,000	
KLN On-Line Databases	3,249,805	3,297,597	3,339,475	-1.4%	(47,792)	1.3%	41,878	2.8%	89,670	
Distance Education Third-Party Software Products	1,103,558	994,220	882,521	11.0%	109,338	-11.2%	(111,699)	-20.0%	(221,037)	
Desire2Learn and Helpdesk	1,613,483	1,526,073	1,526,073	5.7%	87,410	0.0%	0	-5.4%	(87,410)	
SSHEnet Contracts	1,586,389	1,591,122	1,770,166	-0.3%	(4,733)	11.3%	179,044	11.6%	183,777	
Federally Required Annual Single Audit	185,374	203,965	164,304	-9.1%	(18,591)	-19.4%	(39,661)	-11.4%	(21,070)	
Annual Financial Statements Audit	616,220	709,030	628,500	-13.1%	(92,810)	-11.4%	(80,530)	2.0%	12,280	
Central Banking Agreement	456,187	467,691	466,532	-2.5%	(11,504)	-0.2%	(1,159)	2.3%	10,345	
Memberships	64,559	62,974	63,992	2.5%	1,585	1.6%	1,018	-0.9%	(567)	
Career Services	100,080	79,800	67,796	25.4%	20,280	-15.0%	(12,004)	-32.3%	(32,284)	
Analyst Software Licenses for Economic Modeling (EMSI)	93,750	93,750	93,750	0.0%	0	0.0%	0	0.0%	0	
Data Miner Subscription	6,600	6,500	6,800	1.5%	100	4.6%	300	3.0%	200	
Microsoft	1,374,595	1,361,326	1,392,577	1.0%	13,269	2.3%	31,251	1.3%	17,982	
Adobe Enterprise Term License Agreement	801,018	801,018	801,018	0.0%	0	0.0%	0	0.0%	0	
Red Hat Site Licenses	167,951	167,951	172,989	0.0%	0	3.0%	5,038	3.0%	5,038	
Internet Security	103,168	103,168	112,713	0.0%	0	9.3%	9,545	9.3%	9,545	
CISCO	476,243	476,243	490,530	0.0%	0	3.0%	14,287	3.0%	14,287	
VMware	321,785	321,785	321,785	0.0%	0	0.0%	0	0.0%	0	
Total System Contracts	14,043,648	13,988,703	14,062,774	0.4%	54,945	0.5%	74,071	0.1%	19,126	
Other Programs										
Shared Administrative System (SAP)	8,590,380	9,052,435	9,598,068	-5.1%	(462,055)	6.0%	545,633	11.7%	1,007,688	
Executive Information Systems (EIS) ¹	647,669	672,283	720,956	-3.7%	(24,614)	7.2%	48,673	11.3%	73,287	
Strategic Information Management System (SIMS) ^{1,2}	3,578,027	2,880,888	2,880,888	24.2%	697,139	0.0%	0	-19.5%	(697,139)	
State System @ Center City Philadelphia3	1,224,058	1,283,776	1,450,941	-4.7%	(59,718)	13.0%	167,165	18.5%	226,883	
Treasury Accounting	261,326	263,251	277,308	-0.7%	(1,925)	5.3%	14,057	6.1%	15,982	
Subtotal Other Programs	14,301,460	14,152,633	14,928,161	1.1%	148,827	5.5%	775,528	4.4%	626,701	
Turnover/Savings Target		(101,786)	(101,786)		101,786		0		(101,786)	
Total Other Programs	14,301,460	14,050,847	14,826,375	1.8%	250,613	5.5%	775,528	3.7%	524,915	
Other Programs (Funded Off the Top of the Appropriation)										
Office of Internal Audit and Risk Assessment	937,203	1,010,024	1,029,256	-7.2%	(72,821)	1.9%	19,232	9.8%	92,053	
Dixon University Center Academic Consortium ⁴	1,318,123	1,367,909	1,369,285	-3.6%	(49,786)	0.1%	1,376	3.9%	51,162	
Total Other Programs (Funded Off the Top of the Appropriation)	2,255,326	2,377,933	2,398,541	-5.2%	(122,607)	0.9%	20,608	6.4%	143,215	
Total	\$36,803,079	\$37,092,719	\$38,225,380	-0.8%	(\$289,640)	3.1%	\$1,132,661	3.9%	\$1,422,301	
				-		-		-		

¹Amounts do not include \$250,000 transfer from EIS to SIMS in FY 2017/18.

²FY 2018/19 budgeted expenditure requirements are \$3,199,581. However, agreed-upon multi-year budget plan calls for funding requirements of \$2,880,888 per year.

³Tentative budget. Presented for informational purposes only. Final budget will be approved by the Center's participating universities.

⁴Amounts are net of miscellaneous revenue, which is consistent with how other budgets are presented. FY 2017/18 amounts adjusted accordingly.

FY 2017/18 Projection does not include possible restoration of renewal and replacement funds that were cut from the budget.

Fiscal Year 2018/19 Budget Summary (Excludes Optional Portion of CUO Program Offices, System Contracts, and Other Programs)

	FY 2017/18	FY 2017/18	FY 2018/19	•	-FY 2017/18 n vs. Budget	•	018/19 Request 7/18 Budget	•	018/19 Request 18 Projection
	Projection	Budget	Request	%	\$	%	\$	%	\$
CUO Program Offices									
Human Capital Management/Payroll Accounting	\$795,498	\$812,231	\$810,045	-2.1%	(\$16,733)	-0.3%	(\$2,186)	1.8%	\$14,547
Office of System Human Resources	684,328	854,516	803,717	-19.9%	(170,188)	-5.9%	(50,799)	17.4%	119,389
Labor Relations	768,142	793,016	800,031	-3.1%	(24,874)	0.9%	7,015	4.2%	31,889
Construction Support Office	304,346	308,008	315,127	-1.2%	(3,662)	2.3%	7,119	3.5%	10,781
University Legal Counsel Office	2,069,634 2,324,381 2,400,302 -11.0% (254,747) 3.3% 75,92'		16.0%	330,668					
Keystone Library Network (KLN) Distance Education	631,215 67,207	699,331 63,688	686,270	-9.7% 5.5%	(68,116)	-1.9% 6.4%	(13,061)	8.7% 0.9%	55,055 585
	,	,	67,792		3,519		4,104		
SSHEnet Subtotal CUO Program Offices	657,743 5,978,113	671,139 6,526,310		-2.0%	(13,396) (548,197)	31.7% 3.7%	212,986 241,099	34.4%	226,382 789,296
Subiolar COO Program Onices	5,976,113	0,520,310	6,767,409	-0.4%	(546,197)	3.1%	241,099	13.2%	769,296
Turnover/Savings Target		(99,134)	(99,134)		99,134		0		(99,134)
Total CUO Program Offices	5,978,113	6,427,176	6,668,275	-7.0%	(449,063)	3.8%	241,099	11.5%	690,162
System Contracts									
Human Resources Training	56,816	28,408	28,408	100.0%	28,408	0.0%	0	-50.0%	(28,408)
Benefits Contracts	422,327	447,342	459,220	-5.6%	(25,015)	2.7%	11,878	8.7%	36,893
Penn State Engineering Advisory Services	572,840	572,840	590,025	0.0%	0	3.0%	17,185	3.0%	17,185
Facilities Benchmarking and Analysis (Sightlines)	350,800	350,800	360,200	0.0%	0	2.7%	9,400	2.7%	9,400
Legal Counsel Contracts	295,000	300,000	300,000	-1.7%	(5,000)	0.0%	0	1.7%	5,000
KLN On-Line Databases	1,872,335	1,903,081	1,926,133	-1.6%	(30,746)	1.2%	23,052	2.9%	53,798
Distance Education Third-Party Software Products	335,835	335,835	187,975	0.0%	0	-44.0%	(147,860)	-44.0%	(147,860)
Desire2Learn and Helpdesk	1,613,483	1,526,073	1,526,073	5.7%	87,410	0.0%	0	-5.4%	(87,410)
SSHEnet Contracts	352,743	352,743	445,867	0.0%	0	26.4%	93,124	26.4%	93,124
Federally Required Annual Single Audit	185,374	203,965	164,304	-9.1%	(18,591)	-19.4%	(39,661)	-11.4%	(21,070)
Annual Financial Statements Audit	616,220	709,030	628,500	-13.1%	(92,810)	-11.4%	(80,530)	2.0%	12,280
Central Banking Agreement	456,187	467,691	466,532	-2.5%	(11,504)	-0.2%	(1,159)	2.3%	10,345
Memberships	6,650	6,500	6,650	2.3%	150	2.3%	150	0.0%	0
Career Services Total System Contracts	100,080	79,800 7,284,108	67,796 7,157,683	25.4%	20,280 (47,418)	-15.0%	(12,004) (126,425)	-32.3%	(32,284) (79,007)
rotal System Contracts	7,230,090	7,204,100	7,137,005	-0.7 /8	(47,410)	-1.776	(120,423)	-1.176	(79,007)
Other Programs	0 500 000	0.050.405	0.500.000	= 404	(400.055)	0.00/	5 45 000	44 70/	4 007 000
Shared Administrative System (SAP)	8,590,380	9,052,435	9,598,068	-5.1%	(462,055)	6.0%	545,633	11.7%	1,007,688
Executive Information Systems (EIS) ¹	647,669	672,283	720,956	-3.7%	(24,614)	7.2%	48,673	11.3%	73,287
Strategic Information Management System (SIMS) ^{1,2}	3,578,027	2,880,888	2,880,888	24.2%	697,139	0.0%	0	-19.5%	(697,139)
Treasury Accounting Subtotal Other Programs	261,326	263,251 12,868,857	277,308	-0.7% 1.6%	(1,925) 208,545	5.3%	14,057 608,363	6.1% 3.1%	15,982 399,818
Ũ	13,077,402			1.078	,	4.770		5.176	
Turnover/Savings Target		(101,786)	(101,786)		101,786		0		(101,786)
Total Other Programs	13,077,402	12,767,071	13,375,434	2.4%	310,331	4.8%	608,363	2.3%	298,032
Other Programs (Funded Off the Top of the Appropriation)	007.000	4 040 05 1	1 000 070	7.00/		4.00/	10.000	0.00/	00.075
Office of Internal Audit and Risk Assessment	937,203	1,010,024	1,029,256	-7.2%	(72,821)	1.9%	19,232	9.8%	92,053
Dixon University Center Academic Consortium ³	1,318,123	1,367,909	1,369,285	-3.6%	(49,786)	0.1%	1,376	3.9%	51,162
Total Other Programs (Funded Off the Top of the Appropriation)	2,255,326	2,377,933	2,398,541	-5.2%	(122,607)	0.9%	20,608	6.4%	143,215
Total	\$28,547,531	\$28,856,288	\$29,599,933	-1.1%	(\$308,757)	2.6%	\$743,645	3.7%	\$1,052,402

¹Amounts do not include \$250,000 transfer from EIS to SIMS in FY 2017/18.

²FY 2018/19 budgeted expenditure requirements are \$3,199,581. However, agreed-upon multi-year budget plan calls for funding requirements of \$2,880,888 per year.

³Amounts are net of miscellaneous revenue, which is consistent with how other budgets are presented. FY 2017/18 amounts adjusted accordingly.

FY 2017/18 Projection does not include possible restoration of renewal and replacement funds that were cut from the budget.

State System @ Center City Philadelphia and THIS reclassified as optional.

Fiscal Year 2018/19 Billed to Universities

(Includes Optional System Contracts, System Contracts Not Included in the Estimated Allocation to Universities Schedules, and Programs Funded Off the Top of the Appropriation)

						-				
				Change—FY 2017/18			2018/19 Request		2018/19 Request	
	FY 2017/18	FY 2017/18	FY 2018/19		n vs. Budget		17/18 Budget		/18 Projection	
CUO Program Offices	Projection	Budget	Request	%	\$	%	\$	%	\$	
Human Capital Management/Payroll Accounting	\$795,498	\$812,231	\$810.045	-2.1%	(\$16,733)	-0.3%	(\$2,186)	1.8%	\$14,547	
Office of System Human Resources	684,328	854,516	803,717	-19.9%	(170,188)	-5.9%	(50,799)	17.4%	119,389	
Labor Relations	768,142	793,016	800,031	-3.1%	(24,874)	0.9%	7,015	4.2%	31,889	
Construction Support Office	304,346	308.008	315.127	-1.2%	(3,662)	2.3%	7,119	3.5%	10,781	
University Legal Counsel Office	2,069,634	2,324,381	2,400,302	-11.0%	(254,747)	3.3%	75,921	16.0%	330,668	
Keystone Library Network (KLN)	699,205	766,321	754,260	-8.8%	(67,116)	-1.6%	(12,061)	7.9%	55,055	
Distance Education	67,207	63,688	67,792	5.5%	3,519	6.4%	4,104	0.9%	585	
The Harrisburg Internship Semester (THIS)	156,542	181,070	201,425	-13.5%	(24,528)	11.2%	20,355	28.7%	44,883	
SSHEnet	657,743	671,139	884,125	-2.0%	(13,396)	31.7%	212,986	34.4%	226,382	
Subtotal CUO Program Offices	6,202,645	6,774,370	7,036,824	-8.4%	(571,725)	3.9%	262,454	13.4%	834,179	
Turnover/Savings Target		(99,134)	(99,134)		99,134		0		(99,134)	
		• • •		-						
Total CUO Program Offices	6,202,645	6,675,236	6,937,690	-7.1%	(472,591)	3.9%	262,454	11.9%	735,045	
System Contracts (Mandatory and Optional)										
Human Resources Training	56,816	28,408	28,408	100.0%	28,408	0.0%	0	-50.0%	(28,408)	
Benefits Contracts	422,327	447,342	459,220	-5.6%	(25,015)	2.7%	11,878	8.7%	36,893	
Penn State Engineering Advisory Services	572,840	572,840	590,025	0.0%	0	3.0%	17,185	3.0%	17,185	
Facilities Benchmarking and Analysis (Sightlines)	375,900	375,900	383,600	0.0%	0	2.0%	7,700	2.0%	7,700	
Legal Counsel Contracts	295,000	300,000	300,000	-1.7%	(5,000)	0.0%	0	1.7%	5,000	
KLN On-Line Databases	3,249,805	3,297,597	3,339,475	-1.4%	(47,792)	1.3%	41,878	2.8%	89,670	
Distance Education Third-Party Software Products	1,103,558	994,220	882,521	11.0%	109,338	-11.2%	(111,699)	-20.0%	(221,037)	
Desire2Learn and Helpdesk	1,613,483	1,526,073	1,526,073	5.7%	87,410	0.0%	0	-5.4%	(87,410)	
SSHEnet Contracts	1,586,389	1,591,122	1,770,166	-0.3%	(4,733)	11.3%	179,044	11.6%	183,777	
Federally Required Annual Single Audit	185,374	203,965	164,304	-9.1%	(18,591)	-19.4%	(39,661)	-11.4%	(21,070)	
Annual Financial Statements Audit	616,220	709,030	628,500	-13.1%	(92,810)	-11.4%	(80,530)	2.0%	12,280	
Central Banking Agreement	456,187	467,691	466,532	-2.5%	(11,504)	-0.2%	(1,159)	2.3%	10,345	
Memberships	64,559	62,974	63,992	2.5%	1,585	1.6%	1,018	-0.9%	(567)	
Career Services	100,080	79,800	67,796	25.4%	20,280	-15.0%	(12,004)	-32.3%	(32,284)	
Analyst Software Licenses for Economic Modeling (EMSI)	93,750	93,750	93,750	0.0%	0	0.0%	0	0.0%	0	
Data Miner Subscription	6,600	6,500	6,800	1.5%	100	4.6%	300	3.0%	200	
Microsoft	1,374,595	1,361,326	1,392,577	1.0%	13,269	2.3%	31,251	1.3%	17,982	
Adobe Enterprise Term License Agreement	801,018	801,018	801,018	0.0%	0	0.0%	0	0.0%	0	
Red Hat Site Licenses	167,951	167,951	172,989	0.0%	0	3.0%	5,038	3.0%	5,038	
Internet Security	103,168	103,168	112,713	0.0%	0	9.3%	9,545	9.3%	9,545	
CISCO	476,243	476,243	490,530	0.0%	0	3.0%	14,287 0	3.0%	14,287	
VMware Total System Contracts	321,785 14,043,648	321,785 13,988,703	321,785 14,062,774	0.0%	54,945	0.0%	74,071	0.0%	0 19,126	
Other Dramman										
Other Programs	8,590,380	9,052,435	9,598,068	-5.1%	(462.055)	6.0%	545,633	11.7%	1 007 600	
Shared Administrative System (SAP) Executive Information Systems (EIS)	8,590,380 600,000	9,052,435 600,000	9,598,068 600,000	-5.1% 0.0%	(462,055) 0	6.0% 0.0%	545,633 0	0.0%	1,007,688 0	
,					0					
Strategic Information Management System (SIMS)	2,527,888	2,527,888	2,880,888	0.0%		14.0%	353,000	14.0%	353,000	
State System @ Center City Philadelphia ¹	1,224,058	1,283,776	1,450,941	-4.7%	(59,718)	13.0%	167,165	18.5%	226,883	
Treasury Accounting Subtotal Other Programs	261,326 13,203,652	263,251 13,727,350	277,308 14,807,205	-0.7% -3.8%	(1,925) (523,698)	5.3%	14,057 1,079,855	6.1%	15,982	
-	10,200,002			0.070				.2,5		
Turnover/Savings Target		(101,786)	(101,786)		101,786		0		(101,786)	
Total Other Programs	13,203,652	13,625,564	14,705,419	-3.1%	(421,912)	7.9%	1,079,855	11.4%	1,501,767	
Other Programs (Estimated Off the Top of the Appropriation)										
Office of Internal Audit and Risk Assessment	919,000	919,000	950,944	0.0%	0	3.5%	31,944	3.5%	31,944	
Dixon University Center Academic Consortium	1,260,000	1,260,000	1,301,580	0.0%	0	3.3%	41,580	3.3%	41,580	
Total Other Programs (Estimated Off the Top of the Appropriation)	2,179,000	2,179,000	2,252,524	0.0%	0	3.4%	73,524	3.4%	73,524	
Total	\$35,628,945	\$36,468,503	\$37,958,407	-2.3%	(\$839,558)	4.1%	\$1,489,904	6.5%	\$2,329,462	

¹Tentative budget. Presented for informational purposes only. Final budget will be approved by the Center's participating universities. FY 2017/18 Projection does not include possible restoration of renewal and replacement funds that were cut from the budget.

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Renewal and Replacement Balances

(FY 2017/18 Renewal and Replacement [R&R] budgets were reduced by \$884,305. If savings targets are exceeded, transfers to R&R may be increased.)

	Actual			Projected			Projected
	Balance at	FY 2017/18	Projection	Balance at	Balance at FY 2018/19 Request		
Program	6/30/17	Add	Release	6/30/18	Add	Release	6/30/19
Human Capital Management/Payroll Accounting	\$21,851	\$3,268	(\$3,268)	\$21,851	\$784	(\$1,800)	\$20,835
Office of System Human Resources	8,973	0	0	8,973	6,429	0	15,402
Labor Relations	13,430	5,205	(5,205)	13,430	1,604	0	15,034
Construction Support Office	374	0	0	374	883	0	1,257
University Legal Counsel	21,836	4,599	(5,403)	21,032	5,006	(3,257)	22,781
Keystone Library Network (KLN)	394,700	26,532	(109,744)	311,488	63,082	0	374,570
Distance Education	1,648	0	(1,648)	0	0	0	0
The Harrisburg Internship Semester (THIS)	375	0	0	375	627	0	1,002
SSHEnet	180,532	0	0	180,532	212,008	0	392,540
Shared Administrative System (SAP)	742,458	191,700	(27,157)	907,001	896,832	(199,500)	1,604,333
State System @ Center City Philadelphia	412,404	0	(340,334)	72,070	90,000	(43,000)	119,070
Dixon University Center Academic Consortium	924,863	113,500	(67,774)	970,589	130,000	(60,000)	1,040,589
Total	\$2,723,444	\$344,804	(\$560,533)	\$2,507,715	\$1,407,255	(\$307,557)	\$3,607,413

Renewal and replacement balances are earmarked for future purchases of equipment such as computers, printers, and copiers. For some programs, such as Keystone Library Network, SSHEnet, Shared Administrative System, State System @ Center City Philadelphia, and Dixon University Center Academic Consortium, balances may also be earmarked for large software purchases, other IT/network equipment, and instructional audio/visual equipment.

General Fund Balances

	Actual	FY 2017/18	Projection	Projected	FY 2018/1	9 Budget	Projected
	Balance at		Expenditures/	Balance at		Expenditures/	Balance at
Program	6/30/17	Revenue	Transfers	6/30/18	Revenue	Transfers	6/30/19
SSHEnet	\$99,840	\$0	\$0	\$99,840	\$0	\$0	\$99,840
Executive Information Systems (EIS)	480,478	600,000	(897,669)	182,809	600,000	(720,956)	61,853
Strategic Information Management System (SIMS)	975,062	2,777,888	(3,578,027)	174,923	2,880,888	(3,199,581)	(143,770)
Dixon University Center Academic Consortium	125,828	1,392,909	(1,451,032)	67,705	1,434,052	(1,501,757)	0
Total	\$1,681,208	\$4,770,797	(\$5,926,728)	\$525,277	\$4,914,940	(\$5,422,294)	\$17,923

FY 2018/19 Summary of Estimated Allocation to Universities (Excludes Optional Portion of CUO Program Offices, System Contracts, and Other Programs)

	FY 2017/18	FY 2018/19	Char	ge	
	Budget	Request	%	\$	
CUO Program Offices					
Human Capital Management/Payroll Accounting	\$812,231	\$810,045	-0.3%	(\$2,186)	
Office of System Human Resources	854,516	803,717	-5.9%	(50,799)	
Labor Relations	793,016	800,031	0.9%	7,015	
Construction Support Office	308,008	315,127	2.3%	7,119	
University Legal Counsel Office	2,324,381	2,400,302	3.3%	75,921	
Keystone Library Network (KLN) ¹	699,331	686,270	-1.9%	(13,061)	
Distance Education	63,688	67,792	6.4%	4,104	
SSHEnet	671,139	884,125	31.7%	212,986	
Subtotal CUO Program Offices	6,526,310	6,767,409	3.7%	241,099	
Turnover/Savings Target	(99,134)	(99,134)	0.0%	0	
Total CUO Program Offices	6,427,176	6,668,275	3.8%	241,099	
System Contracts					
Human Resources Training	28,408	28,408	0.0%	0	
Benefits Contracts	447,342	459,220	2.7%	11,878	
Penn State Engineering Advisory Services	572,840	590,025	3.0%	17,185	
Facilities Benchmarking and Analysis (Sightlines)	350,800	360,200	2.7%	9,400	
KLN On-Line Databases	1,903,081	1,926,133	1.2%	23,052	
Distance Education Third-Party Software Products	335,835	187,975	-44.0%	(147,860)	
Desire2Learn and Helpdesk	1,526,073	1,526,073	0.0%	0	
SSHEnet Contracts	352,743	445,867	26.4%	93,124	
Federally Required Annual Single Audit	203,965	164,304	-19.4%	(39,661)	
Annual Financial Statements Audit	709,030	628,500	-11.4%	(80,530)	
Memberships	6,500	6,650	2.3%	150	
Career Services	79,800	67,796	-15.0%	(12,004)	
Total System Contracts	6,516,417	6,391,151	-1.9%	(125,266)	
Other Programs					
Shared Administrative System (SAP)	9,052,435	9,598,068	6.0%	545,633	
Executive Information Systems (EIS)	600,000	600,000	0.0%	0	
Strategic Information Management System (SIMS)	2,527,888	2,880,888	14.0%	353,000	
Treasury Accounting	263,251	277,308	5.3%	14,057	
Subtotal Other Programs	12,443,574	13,356,264	7.3%	912,690	
Turnover/Savings Target	(101,786)	(101,786)	0.0%	0	
Total Other Programs	12,341,788	13,254,478	7.4%	912,690	
Total	\$25,285,381	\$26,313,904	4.1%	\$1,028,523	

¹FY 2017/18 amount restated to remove optional portion.

State System @ Center City Philadelphia and THIS reclassified as optional.

Pennsylvania's State System of Higher Education Shared Services Breakout of Mandatory vs. Optional System Contracts and Programs Allocated to Universities

		Mandato				Optior	nal		Total			
	Fiscal	Year	Chang	ge	Fisca	l Year	Change	;	Fiscal	Year	Chang	e
	2017/18	2018/19	\$	%	2017/18	2018/19	\$	%	2017/18	2018/19	\$	%
System Contracts												
Human Resources Training	\$28,408	\$28,408	\$0	0.0%	\$0	\$0	\$0	N/A	\$28,408	\$28,408	\$0	0.0%
Benefits Contracts	447,342	459,220	11,878	2.7%	0	0	0	N/A	447,342	459,220	11,878	2.7%
Penn State Engineering Advisory Services	572,840	590,025	17,185	3.0%	0	0	0	N/A	572,840	590,025	17,185	3.0%
Facilities Benchmarking and Analysis (Sightlines)	350,800	360,200	9,400	2.7%	25,100	23,400	(1,700)	-6.8%	375,900	383,600	7,700	2.0%
KLN On-Line Databases	1,903,081	1,926,133	23,052	1.2%	1,394,516	1,413,342	18,826	1.4%	3,297,597	3,339,475	41,878	1.3%
Distance Education Third-Party Software	335,835	187,975	(147,860)	-44.0%	658,385	694,546	36,161	5.5%	994,220	882,521	(111,699)	-11.2%
Desire2Learn and Helpdesk	1,526,073	1,526,073	0	0.0%	0	0	0	N/A	1,526,073	1,526,073	0	0.0%
SSHEnet Contracts	352,743	445,867	93,124	26.4%	1,238,379	1,324,299	85,920	N/A	1,591,122	1,770,166	179,044	11.3%
Federally Required Annual Single Audit	203,965	164,304	(39,661)	-19.4%	0	0	0	N/A	203,965	164,304	(39,661)	-19.4%
Annual Financial Statements Audit	709,030	628,500	(80,530)	-11.4%	0	0	0	N/A	709,030	628,500	(80,530)	-11.4%
Memberships	6,500	6,650	150	2.3%	56,474	57,342	868	1.5%	62,974	63,992	1,018	1.6%
Career Services	79,800	67,796	(12,004)	-15.0%	0	0	0	N/A	79,800	67,796	(12,004)	-15.0%
Analyst Software Licenses for Economic Modeling (EMSI)	0	0	N/A	N/A	93,750	93,750	0	0.0%	93,750	93,750	0	0.0%
Data Miner Subscription	0	0	N/A	N/A	6,500	6,800	300	4.6%	6,500	6,800	300	4.6%
Microsoft	0	0	N/A	N/A	1,361,326	1,392,577	31,251	2.3%	1,361,326	1,392,577	31,251	2.3%
Adobe Enterprise Term License Agreement	0	0	N/A	N/A	801,018	801,018	0	0.0%	801,018	801,018	0	0.0%
Red Hat Site Licenses	0	0	N/A	N/A	167,951	172,989	5,038	3.0%	167,951	172,989	5,038	3.0%
Internet Security	0	0	N/A	N/A	103,168	112,713	9,545	9.3%	103,168	112,713	9,545	9.3%
CISCO	0	0	N/A	N/A	476,243	490,530	14,287	3.0%	476,243	490,530	14,287	3.0%
VMware	0	0	N/A	N/A	321,785	321,785	0	0.0%	321,785	321,785	0	0.0%
Subtotal Contracts	\$6,516,417	\$6,391,151	(\$125,266)	-1.9%	\$6,704,595	\$6,905,091	\$200,496	3.0%	\$13,221,012	\$13,296,242	\$75,230	0.6%
Programs												
State System @ Center City Philadelphia	0	0	0	N/A	1.283.776	1,450,941	167,165	13.0%	1,283,776	1,450,941	167,165	13.0%
	-				, , -	, ,	,		, ,	, ,	,	
Keystone Library Network (KLN) ¹	699,331	688,765	(10,566)	-1.5%	66,990	67,990	1,000	1.5%	766,321	756,755	(9,566)	-1.2%
The Harrisburg Internship Semester (THIS)	0	0	0	N/A	181,070	201,425	20,355	N/A	181,070	201,425	20,355	11.2%
Subtotal Contracts	\$699,331	\$688,765	(\$10,566)	-1.5%	\$1,531,836	\$1,720,356	\$188,520	12.3%	\$2,231,167	\$2,409,121	\$177,954	8.0%
Total	\$7,215,748	\$7,079,916	(\$135,832)	-1.9%	\$8,236,431	\$8,625,447	\$389,016	4.7%	\$15,452,179	\$15,705,363	\$253,184	1.6%

¹FY 2017/18 amounts have been restated to show optional portion.

State System @ Center City Philadelphia and THIS reclassified as optional.

Note: Participation in some of these collaborative contracts, such as Microsoft, Adobe, and Red Hat, is not manadatory, but the universities would need to purchase the services elsewhere if they opted out Participation in EMSI and Data Miner is not mandatory, but is helpful to the universities in meeting certain reporting requirements

FY 2018/19 Estimated Allocation to Universities (Mandatory Only)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	MI	SH	SL	WE	OC	Total
CUO Program Offices																
Human Capital Management/Payroll																
Accounting	\$74,999	\$57,347	\$8,298	\$42,893	\$48,017	\$46,436	\$97,459	\$67,836	\$36,328	\$22,820	\$67,612	\$56,227	\$67,106	\$107,505	\$9,162	\$810,045
Office of System Human Resources	73,359	49,799	9,613	43,968	46,490	46,962	97,076	67,292	38,137	22,378	64,219	57,363	61,776	113,623	11,662	803,717
Labor Relations	76,671	49,979	8,928	44,456	45,837	47,678	96,736	67,191	40,038	23,103	64,706	57,803	63,693	113,212	0	800,031
Construction Support Office	23,611	20,658	13,251	16,635	18,507	22,467	34,844	23,035	17,278	15,884	21,165	23,312	24,348	34,819	5,313	315,127
University Legal Counsel	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,451	171,451	0	2,400,302
Keystone Library Network (KLN)	60,285	53,764	16,494	36,505	53,573	39,606	66,430	57,869	32,961	22,163	54,434	52,287	60,033	79,866	0	686,270
Distance Education	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,843	4,843	4,843	4,843	0	67,792
SSHEnet	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,257	110,514	884,125
Subtotal CUO Program Offices	540,475	463,097	288,134	416,007	443,974	434,699	624,095	514,773	396,292	337,898	503,687	478,543	508,508	680,576	136,651	6,767,409
Turnover/Savings Target*	(7,917)	(6,784)	(4,221)	(6,094)	(6,504)	(6,368)	(9,142)	(7,541)	(5,805)	(4,950)	(7,378)	(7,010)	(7,449)	(9,970)	(2,001)	(99,134)
Total CUO Program Offices	532,558	456,313	283,913	409,913	437,470	428,331	614,953	507,232	390,487	332,948	496,309	471,533	501,059	670,606	134,650	6,668,275
System Contracts (Mandatory Only)					•			•								
Human Resources Training	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,892	28,408
Benefits Contracts	41,915	28,454	5,493	25,122	26,563	26,833	55,467	38,448	21,790	12,786	36,693	32,776	35,297	64,920	6,663	459,220
Penn State Engineering Advisory																
Services	44,208	38,678	24,811	31,147	34,651	42,066	65,240	43,130	32,350	29,741	39,627	43,648	45,587	65,194	9,947	590,025
Facilities Benchmarking and Analysis																
(Sightlines)	26,700	26,700	23,300	23,300	26,700	26,700	26,700	26,700	23,300	23,300	26,700	26,700	26,700	26,700	0	360,200
KLN On-Line Databases	161,064	166,217	38,103	96,919	131,594	154,200	219,148	173,005	86,431	51,986	129,826	141,528	147,558	228,554	0	1,926,133
Distance Education Third-Party Software	16,336	11,701	2,811	9,700	11,321	10,992	23,174	15,855	8,003	5,040	13,727	12,486	13,828	29,734	3,267	187,975
Desire2Learn and Helpdesk	153,892	102,159	9,773	76,451	108,739	96,841	173,657	124,845	75,536	38,125	92,819	93,165	125,326	254,745	0	1,526,073
SSHEnet Contracts	22,709	29,578	27,022	27,022	27,022	27,022	33,285	35,841	27,022	29,578	14,363	32,662	29,578	24,865	58,298	445,867
Federally Required Annual Single Audit	20,971	8,214	18,515	7,172	7,349	7,489	22,505	8,034	6,831	18,876	7,543	7,452	8,131	9,792	5,430	164,304
Annual Financial Statements Audit	52,861	43,535	25,439	33,306	39,695	37,586	55,822	50,912	36,170	30,572	44,209	40,999	45,061	66,672	25,661	628,500
Memberships	475	475	0	475	475	475	475	475	475	475	475	475	475	475	475	6,650
Career Services	9,250	0	6,250	4,750	6,800	4,750	1,733	6,250	2,500	6,250	0	8,163	4,750	6,350	0	67,796
Total System Contracts	552,275	457,605	183,411	337,258	422,803	436,848	679,100	525,389	322,302	248,623	407,876	441,948	484,185	779,895	111,633	6,391,151
Other Programs																
Shared Administrative System (SAP)	897,419	652,669	81,584	457,828	643,071	513,497	1,130,652	810,077	391,601	192,921	692,981	613,317	875,343	1,597,118	47,990	9,598,068
Executive Information Systems (EIS)	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	600,000
SIMS	251,091	211,941	49,284	154,988	188,393	162,597	323,813	227,160	121,753	78,725	215,862	186,950	238,202	437,633	32,496	2,880,888
Treasury Accounting	18,928	22,597	7,231	5,479	23,450	12,411	25,974	20,345	7,108	14,115	15,408	31,866	17,580	34,402	20,414	277,308
Subtotal Other Programs	1,207,438	927,207	178,099	658,295	894,914	728,505	1,520,439	1,097,582	560,462	325,761	964,251	872,133	1,171,125	2,109,153	140,900	13,356,264
Turnover/Savings Target*	(9,203)	(7,079)	(1,345)	(5,022)	(6,816)	(5,552)	(11,603)	(8,362)	(4,261)	(2,473)	(7,358)	(6,645)	(8,920)	(16,096)	(1,051)	(101,786)
Total Other Programs	1,198,235	920,128	176,754	653,273	888,098	722,953	1,508,836	1,089,220	556,201	323,288	956,893	865,488	1,162,205	2,093,057	139,849	13,254,478
Total	\$2,283,068	\$1,834,046	\$644,078	\$1,400,444	\$1,748,371	\$1,588,132	\$2,802,889	\$2,121,841	\$1,268,990	\$904,859	\$1,861,078	\$1,778,969	\$2,147,449	\$3,543,558	\$386,132	\$26,313,904

Note: Amounts above do not include the following:

Legal Contracts-This is charged as individual university or System cases occur.

Central Banking Agreement—Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium-funding is taken off the top of the appropriation.

FY 2017/18 Estimated Allocation to Universities (Mandatory Only)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices																
Human Capital Management/Payroll																
Accounting	\$73,592	\$58,077	\$9,206	\$42,638	\$48,827	\$48,011	\$100,795	\$67,445	\$37,452	\$25,176	\$68,180	\$55,105	\$65,034	\$103,316	\$9,377	\$812,231
Office of System Human Resources	76,091	53,206	10,906	46,927	49,571	51,140	106,660	71,299	40,317	26,438	68,986	59,898	64,194	116,242	12,641	854,516
Labor Relations	74,618	50,255	9,619	43,602	45,490	48,636	99,071	66,617	39,017	24,992	64,189	56,188	62,032	108,690	0	793,016
Construction Support Office	21,852	20,305	13,015	16,345	18,188	22,090	34,269	22,645	16,978	15,590	20,804	22,917	23,565	34,245	5,200	308,008
University Legal Counsel	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,028	166,028	166,028	0	2,324,381
Keystone Library Network (KLN)*	60,598	53,023	16,697	36,717	53,211	50,404	67,282	57,829	35,108	23,954	54,231	52,867	59,222	78,188	0	699,331
Distance Education	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,550	4,550	0	63,688
SSHEnet	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,947	83,894	671,139
Subtotal CUO Program Offices	519,273	447,388	271,965	398,751	427,809	432,803	620,599	498,357	381,394	328,672	488,912	459,498	486,571	653,206	111,112	6,526,310
Turnover/Savings Target**	(7,940)	(6,852)	(4,201)	(5,893)	(6,566)	(6,626)	(9,302)	(7,620)	(5,856)	(4,810)	(7,375)	(7,028)	(7,455)	(9,984)	(1,626)	(99,134)
Total CUO Program Offices	511,333	440,536	267,764	392,858	421,243	426,177	611,297	490,737	375,538	323,862	481,537	452,470	479,116	643,222	109,486	6,427,176
System Contracts (Mandatory Only)		•														
Human Resources Training	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,892	28,408
Benefits Contracts	39,834	27,853	5,709	24,566	25,950	26,772	55,837	37,325	21,106	13,840	36,114	31,357	33,606	60,856	6,617	447,342
Penn State Engineering Advisory																
Services	40,642	37,763	24,205	30,399	33,826	41,084	63,734	42,116	31,576	28,994	38,691	42,622	43,827	63,689	9,672	572,840
Facilities Benchmarking and Analysis																
(Sightlines)	26,000	26,000	22,700	22,700	26,000	26,000	26,000	26,000	22,700	22,700	26,000	26,000	26,000	26,000	0	350,800
KLN On-Line Databases	164,210	156,600	36,648	90,305	135,812	171,927	220,203	167,012	81,598	58,779	124,488	133,696	146,311	215,492	0	1,903,081
Distance Education Third-Party Software	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	22,389	335,835
Desire2Learn and Helpdesk	153,892	102,159	9,773	76,451	108,739	96,841	173,657	124,845	75,536	38,125	92,819	93,165	125,326	254,745	0	1,526,073
SSHEnet Contracts	22,559	22,559	22,559	22,559	22,559	22,559	28,822	28,822	22,559	22,559	9,900	28,198	22,559	22,559	31,411	352,743
Federally Required Annual Single Audit	10,073	10,058	7,426	22,852	23,185	23,284	11,994	9,996	22,643	7,869	9,878	9,196	9,838	25,572	101	203,965
Annual Financial Statements Audit	38,766	45,408	43,781	39,308	39,308	45,408	51,507	38,224	45,408	45,408	44,866	38,766	39,308	49,880	103,684	709,030
Memberships	464	464	0	464	464	464	464	464	464	464	464	465	465	465	465	6,500
Career Services	9,250	6,250	4,750	4,750	6,800	4,750	9,400	6,250	2,500	6,250	0	7,750	4,750	6,350	0	79,800
Total System Contracts	529,973	459,397	201,834	358,637	446,926	483,372	665,901	505,337	350,373	269,271	407,503	435,498	476,273	749,891	176,231	6,516,417
Other Programs																
Shared Administrative System (SAP)	853,645	598,366	76,040	424,559	600,176	516,894	1,089,913	764,026	392,876	205,490	652,681	601,082	799,330	1,432,095	45,262	9,052,435
Executive Information Systems (EIS)	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	600,000
SIMS	221,423	178,167	44,721	133,906	164,323	152,023	287,983	198,457	113,078	75,335	189,281	168,417	203,879	366,485	30,410	2,527,888
Treasury Accounting	19,447	22,832	7,166	6,552	20,509	13,235	39,474	16,466	7,360	14,496	16,954	12,104	35,893	12,291	18,472	263,251
Subtotal Other Programs	1,134,515	839,365	167,927	605,017	825,008	722,152	1,457,370	1,018,949	553,314	335,321	898,916	821,603	1,079,102	1,850,871	134,144	12,443,574
Turnover/Savings Target**	(8,747)	(6,301)	(3,598)	(4,542)	(6,241)	(5,421)	(10,941)	(7,688)	(4,154)	(2,517)	(6,772)	(6,168)	(8,101)	(19,588)	(1,007)	(101,786)
Total Other Programs	1,125,768	833,064	164,329	600,475	818,767	716,731	1,446,429	1,011,261	549,160	332,804	892,144	815,435	1,071,001	1,831,283	133,137	12,341,788
Total	\$2,167,074	\$1,732,997	\$633,927	\$1,351,970	\$1,686,936	\$1,626,280	\$2,723,627	\$2,007,335	\$1,275,071	\$925,937	\$1,781,184	\$1,703,403	\$2,026,390	\$3,224,396	\$418,854	\$25,285,381

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement—Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium-funding is taken off the top of the appropriation.

*Restated to remove optional portion.

**Turnover/Savings Target is prorated across all universities based on their share of the allocation.

THIS and State System @ Center City Philadelphia were removed because they were reclassified as an optional program.

FY 2018/19 vs. FY 2017/18 Estimated Allocation to Universities (Mandatory Only)--Increase/(Decrease) in Dollars (\$)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices	DL	UA	on	0L	LA	LD		No	20	MA	IVII	011	0L	WL.	00	Total
Human Capital Management/Payroll										1						
Accounting	\$1,407	(\$730)	(\$908)	\$255	(\$810)	(\$1,575)	(\$3,336)	\$391	(\$1,124)	(\$2,356)	(\$568)	\$1,122	\$2,072	\$4,189	(\$215)	(\$2,186)
Office of System Human Resources	(2,732)	(3,407)	(1,293)	(2,959)	(3,081)	(4,178)	(9,584)	(4,007)	(2,180)	(4,060)	(4,767)	(2,535)	(2,418)	(2,619)	(979)	(50,799)
Labor Relations	2,053	(276)	(691)	854	347	(958)	(2,335)	574	1,021	(1,889)	517	1,615	1,661	4,522	Ú Ú	7,015
Construction Support Office	1,759	353	236	290	319	377	575	390	300	294	361	395	783	574	113	7,119
University Legal Counsel	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,422	5,423	5,423	0	75,921
Keystone Library Network (KLN)	(313)	741	(203)	(212)	362	(10,798)	(852)	40	(2,147)	(1,791)	203	(580)	811	1,678	0	(13,061)
Distance Education	293	293	293	293	293	293	293	293	293	293	294	294	293	293	0	4,104
SSHEnet	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,310	26,620	212,986
Subtotal CUO Program Offices	21,202	15,709	16,169	17,256	16,165	1,896	3,496	16,416	14,898	9,226	14,775	19,045	21,937	27,370	25,539	241,099
Turnover/Savings Target*	23	68	(20)	(201)	62	258	160	79	51	(140)	(3)	18	6	14	(375)	0
Total CUO Program Offices	21,225	15,777	16,149	17,055	16,227	2,154	3,656	16,495	14,949	9,086	14,772	19,063	21,943	27,384	25,164	241,099
System Contracts (Mandatory Only)																
Human Resources Training	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benefits Contracts	2,081	601	(216)	556	613	61	(370)	1,123	684	(1,054)	579	1,419	1,691	4,064	46	11,878
Penn State Engineering Advisory																
Services	3,566	915	606	748	825	982	1,506	1,014	774	747	936	1,026	1,760	1,505	275	17,185
Facilities Benchmarking and Analysis																
(Sightlines)	700	700	600	600	700	700	700	700	600	600	700	700	700	700	0	9,400
KLN On-Line Databases	(3,146)	9,617	1,455	6,614	(4,218)	(17,727)	(1,055)	5,993	4,833	(6,793)	5,338	7,832	1,247	13,062	0	23,052
Distance Education Third-Party Software	(6,053)	(10,688)	(19,578)	(12,689)	(11,068)	(11,397)	785	(6,534)	(14,386)	(17,349)	(8,662)	(9,903)	(8,561)	7,345	(19,122)	(147,860)
Desire2Learn and Helpdesk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SSHEnet Contracts	150	7,019	4,463	4,463	4,463	4,463	4,463	7,019	4,463	7,019	4,463	4,464	7,019	2,306	26,887	93,124
Federally Required Annual Single Audit	10,898	(1,844)	11,089	(15,680)	(15,836)	(15,795)	10,511	(1,962)	(15,812)	11,007	(2,335)	(1,744)	(1,707)	(15,780)	5,329	(39,661)
Annual Financial Statements Audit	14,095	(1,873)	(18,342)	(6,002)	387	(7,822)	4,315	12,688	(9,238)	(14,836)	(657)	2,233	5,753	16,792	(78,023)	(80,530)
Memberships	11	11	0	11	11	11	11	11	11	11	11	10	10	10	10	150
Career Services	0	(6,250)	1,500	0	0	0	(7,667)	0	0	0	0	413	0	0	0	(12,004)
Total System Contracts	22,302	(1,792)	(18,423)	(21,379)	(24,123)	(46,524)	13,199	20,052	(28,071)	(20,648)	373	6,450	7,912	30,004	(64,598)	(125,266)
Other Programs																
Shared Administrative System (SAP)	43,774	54,303	5,544	33,269	42,895	(3,397)	40,739	46,051	(1,275)	(12,569)	40,300	12,235	76,013	165,023	2,728	545,633
Executive Information Systems (EIS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SIMS	29,668	33,774	4,563	21,082	24,070	10,574	35,830	28,703	8,675	3,390	26,581	18,533	34,323	71,148	2,086	353,000
Treasury Accounting	(519)	(235)	65	(1,073)	2,941	(824)	(13,500)	3,879	(252)	(381)	(1,546)	19,762	(18,313)	22,111	1,942	14,057
Subtotal Other Programs	72,923	87,842	10,172	53,278	69,906	6,353	63,069	78,633	7,148	(9,560)	65,335	50,530	92,023	258,282	6,756	912,690
Turnover/Savings Target*	(456)	(778)	2,253	(480)	(575)	(131)	(662)	(674)	(107)	44	(586)	(477)	(819)	3,492	(44)	0
Total Other Programs	72,467	87,064	12,425	52,798	69,331	6,222	62,407	77,959	7,041	(9,516)	64,749	50,053	91,204	261,774	6,712	912,690
Total	\$115,994	\$101,049	\$10,151	\$48,474	\$61,435	(\$38,148)	\$79,262	\$114,506	(\$6,081)	(\$21,078)	\$79,894	\$75,566	\$121,059	\$319,162	(\$32,722)	\$1,028,523

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement—Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium-funding is taken off the top of the appropriation.

FY 2018/19 vs. FY 2017/18 Estimated Allocation to Universities (Mandatory Only)--Percentage (%) Increase/(Decrease)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices																
Human Capital Management/Payroll																
Accounting	1.91%	-1.26%	-9.86%	0.60%	-1.66%	-3.28%	-3.31%	0.58%	-3.00%	-9.36%	-0.83%	2.04%	3.19%	4.05%	-2.29%	-0.27%
Office of System Human Resources	-3.59%	-6.40%	-11.86%	-6.31%	-6.22%	-8.17%	-8.99%	-5.62%	-5.41%	-15.36%	-6.91%	-4.23%	-3.77%	-2.25%	-7.74%	-5.94%
Labor Relations	2.75%	-0.55%	-7.18%	1.96%	0.76%	-1.97%	-2.36%	0.86%	2.62%	-7.56%	0.81%	2.87%	2.68%	4.16%	0.00%	0.88%
Construction Support Office	8.05%	1.74%	1.81%	1.77%	1.75%	1.71%	1.68%	1.72%	1.77%	1.89%	1.74%	1.72%	3.32%	1.68%	2.17%	2.31%
University Legal Counsel	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	0.00%	3.27%
Keystone Library Network (KLN)	-0.52%	1.40%	-1.22%	-0.58%	0.68%	-21.42%	-1.27%	0.07%	-6.12%	-7.48%	0.37%	-1.10%	1.37%	2.15%	0.00%	-1.87%
Distance Education	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.46%	6.46%	6.44%	6.44%	0.00%	6.44%
SSHEnet	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.73%	31.73%	31.74%
Subtotal CUO Program Offices	4.08%	3.51%	5.95%	4.33%	3.78%	0.44%	0.56%	3.29%	3.91%	2.81%	3.02%	4.14%	4.51%	4.19%	22.98%	3.69%
Turnover/Savings Target*	-0.29%	-0.99%	0.48%	3.41%	-0.94%	-3.89%	-1.72%	-1.04%	-0.87%	2.91%	0.04%	-0.26%	-0.08%	-0.14%	23.06%	0.00%
Total CUO Program Offices	4.15%	3.58%	6.03%	4.34%	3.85%	0.51%	0.60%	3.36%	3.98%	2.81%	3.07%	4.21%	4.58%	4.26%	22.98%	3.75%
System Contracts (Mandatory Only)																
Human Resources Training	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benefits Contracts	5.22%	2.16%	-3.78%	2.26%	2.36%	0.23%	-0.66%	3.01%	3.24%	-7.62%	1.60%	4.53%	5.03%	6.68%	0.70%	2.66%
Penn State Engineering Advisory																
Services	8.77%	2.42%	2.50%	2.46%	2.44%	2.39%	2.36%	2.41%	2.45%	2.58%	2.42%	2.41%	4.02%	2.36%	2.84%	3.00%
Facilities Benchmarking and Analysis																
(Sightlines)	2.69%	2.69%	2.64%	2.64%	2.69%	2.69%	2.69%	2.69%	2.64%	2.64%	2.69%	2.69%	2.69%	2.69%	0.00%	2.68%
KLN On-Line Databases	-1.92%	6.14%	3.97%	7.32%	-3.11%	-10.31%	-0.48%	3.59%	5.92%	-11.56%	4.29%	5.86%	0.85%	6.06%	0.00%	1.21%
Distance Education Third-Party Software	-27.04%	-47.74%	-87.44%	-56.68%	-49.43%	-50.90%	3.51%	-29.18%	-64.25%	-77.49%	-38.69%	-44.23%	-38.24%	32.81%	-85.41%	-44.03%
Desire2Learn and Helpdesk	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SSHEnet Contracts	0.66%	31.11%	19.78%	19.78%	19.78%	19.78%	15.48%	24.35%	19.78%	31.11%	45.08%	15.83%	31.11%	10.22%	85.60%	26.40%
Federally Required Annual Single Audit	108.19%	-18.33%	149.33%	-68.62%	-68.30%	-67.84%	87.64%	-19.63%	-69.83%	139.88%	-23.64%	-18.96%	-17.35%	-61.71%	5276.24%	-19.45%
Annual Financial Statements Audit	36.36%	-4.12%	-41.89%	-15.27%	0.98%	-17.23%	8.38%	33.19%	-20.34%	-32.67%	-1.46%	5.76%	14.64%	33.66%	-75.25%	-11.36%
Memberships	2.37%	2.37%	0.00%	2.37%	2.37%	2.37%	2.37%	2.37%	2.37%	2.37%	2.37%	2.15%	2.15%	2.15%	2.15%	2.31%
Career Services	0.00%	-100.00%	31.58%	0.00%	0.00%	0.00%	-81.56%	0.00%	0.00%	0.00%	0.00%	5.33%	0.00%	0.00%	0.00%	-15.04%
Total System Contracts	4.21%	-0.39%	-9.13%	-5.96%	-5.40%	-9.62%	1.98%	3.97%	-8.01%	-7.67%	0.09%	1.48%	1.66%	4.00%	-36.66%	-1.92%
Other Programs																
Shared Administrative System (SAP)	5.13%	9.08%	7.29%	7.84%	7.15%	-0.66%	3.74%	6.03%	-0.32%	-6.12%	6.17%	2.04%	9.51%	11.52%	6.03%	6.03%
Executive Information Systems (EIS)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SIMS	13.40%	18.96%	10.20%	15.74%	14.65%	6.96%	12.44%	14.46%	7.67%	4.50%	14.04%	11.00%	16.83%	19.41%	6.86%	13.96%
Treasury Accounting	-2.67%	-1.03%	0.91%	-16.38%	14.34%	-6.23%	-34.20%	23.56%	-3.42%	-2.63%	-9.12%	163.27%	-51.02%	179.90%	10.51%	5.34%
Subtotal Other Programs	6.43%	10.47%	6.06%	8.81%	8.47%	0.88%	4.33%	7.72%	1.29%	-2.85%	7.27%	6.15%	8.53%	13.95%	5.04%	7.33%
Turnover/Savings Target*	5.21%	12.35%	-62.62%	10.57%	9.21%	2.42%	6.05%	8.77%	2.58%	-1.75%	8.65%	7.73%	10.11%	-17.83%	4.37%	0.00%
Total Other Programs	6.44%	10.45%	7.56%	8.79%	8.47%	0.87%	4.31%	7.71%	1.28%	-2.86%	7.26%	6.14%	8.52%	14.29%	5.04%	7.40%
Total	5.35%	5.83%	1.60%	3.59%	3.64%	-2.35%	2.91%	5.70%	-0.48%	-2.28%	4.49%	4.44%	5.97%	9.90%	-7.81%	4.07%

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement-Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium-funding is taken off the top of the appropriation.

FY 2018/19 Estimated Allocation to Universities (Optional)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices													•	•		
Keystone Library Network (KLN)	\$9,609	\$7,039	\$0	\$4,807	\$6,964	\$5,422	\$0	\$0	\$858	\$0	\$0	\$6,457	\$9,509	\$17,325	\$0	\$67,990
THIS ¹	14,388	14,388	14,388	14,388	14,388	14,388	14,388	14,387	14,387	14,387	14,387	14,387	14,387	14,387	0	201,425
Total CUO Program Offices	23,997	21,427	14,388	19,195	21,352	19,810	14,388	14,387	15,245	14,387	14,387	20,844	23,896	31,712	0	269,415
System Contracts																
Facilities Benchmarking and Analysis																
(Sightlines)	3,900	0	0	0	3,900	0	3,900	0	0	0	3,900	3,900	3,900	0	0	23,400
KLN On-Line Databases	120,338	107,260	8,867	44,035	69,441	74,199	258,325	100,799	45,322	33,632	74,520	103,363	135,253	237,988	0	1,413,342
Distance Education Third-Party Software	91,721	44,965	6,348	21,737	49,281	38,955	100,753	46,086	22,351	6,251	15,102	37,358	82,303	122,945	8,390	694,546
SSHEnet Contracts	178,559	110,885	26,526	62,526	127,205	80,430	84,900	146,159	80,676	49,386	137,346	72,546	60,630	3,240	103,285	1,324,299
Memberships	5,575	5,150	677	1,102	5,575	5,150	6,892	5,150	677	677	5,150	1,102	5,150	6,892	2,423	57,342
Analyst Software Licenses for Economic																
Modeling (EMSI)	15,000	3,750	3,750	3,750	10,000	3,750	3,750	3,750	3,750	3,750	3,750	12,500	7,500	15,000	0	93,750
Data Miner Subscription	453	453	453	453	453	453	453	453	453	453	454	454	454	454	454	6,800
Microsoft	90,171	83,129	23,988	76,365	65,571	108,859	139,801	106,861	56,669	42,075	105,902	65,142	108,391	162,336	157,317	1,392,577
Adobe Enterprise Term License																
Agreement	165,243	46,599	11,466	38,955	45,987	41,160	93,419	61,005	0	23,226	54,488	48,290	54,464	105,473	11,243	801,018
Red Hat Site Licenses	42,269	30,041	0	8,305	28,908	0	0	0	0	0	0	0	34,197	0	29,269	172,989
Internet Security	4,820	689	8,381	4,445	3,856	2,617	33,580	4,131	0	689	0	0	43,277	5,784	444	112,713
CISCO	250,932	0	36,579	37,316	0	0	0	0	0	0	0	81,366	0	0	84,337	490,530
VMware	32,905	18,329	2,721	12,685	16,767	0	44,667	23,058	12,360	6,778	38,452	18,113	21,659	38,640	34,651	321,785
Total System Contracts	1,001,886	451,250	129,756	311,674	426,944	355,573	770,440	497,452	222,258	166,917	439,064	444,134	557,178	698,752	431,813	6,905,091
Other Programs																
State System @ Center City																
Philadelphia ²	54,868	0	16,492	0	0	0	0	5,287	0	0	0	0	0	1,374,294	0	1,450,941
Total Other Programs	54,868	0	16,492	0	0	0	0	5,287	0	0	0	0	0	1,374,294	0	1,450,941
Total	\$1,080,751	\$472,677	\$160,636	\$330,869	\$448,296	\$375,383	\$784,828	\$517,126	\$237,503	\$181,304	\$453,451	\$464,978	\$581,074	\$2,104,758	\$431,813	\$8,625,447

¹Reclassified as optional.

²Reclassified as optional. Tentative budget.

FY 2017/18 Estimated Allocation to Universities (Optional)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	MI	SH	SL	WE	OC	Total
CUO Program Offices										•				•		
Keystone Library Network (KLN)	\$8,198	\$5,752	\$0	\$3,975	\$5,812	\$4,906	\$0	\$7,303	\$3,712	\$0	\$0	\$5,701	\$7,754	\$13,877	\$0	\$66,990
THIS ¹	15,089	15,089	15,089	0	15,089	15,089	15,089	15,089	15,089	0	15,089	15,089	15,090	15,090	0	181,070
Total CUO Program Offices	23,287	20,841	15,089	3,975	20,901	19,995	15,089	22,392	18,801	0	15,089	20,790	22,844	28,967	0	248,060
System Contracts																
Facilities Benchmarking and Analysis																
(Sightlines)	3,800	0	0	0	3,800	0	3,800	0	0	0	6,100	3,800	3,800	0	0	25,100
KLN On-Line Databases	114,858	97,316	8,319	42,943	64,939	100,515	248,565	98,047	45,313	51,086	71,851	99,240	126,266	225,258	0	1,394,516
Distance Education Third-Party Software	74,878	42,830	6,348	21,737	30,846	38,154	100,754	62,258	21,555	6,252	15,103	35,224	82,303	120,143	0	658,385
SSHEnet Contracts	179,955	91,121	26,545	52,645	127,421	70,627	84,900	147,555	70,495	52,465	104,966	62,366	60,727	3,240	103,351	1,238,379
Memberships	5,513	5,088	615	1,040	5,513	5,088	6,830	5,088	615	615	5,088	1,040	5,088	6,830	2,423	56,474
Analyst Software Licenses for Economic																
Modeling (EMSI)	15,000	3,750	3,750	3,750	10,000	3,750	3,750	3,750	3,750	3,750	3,750	12,500	7,500	15,000	0	93,750
Data Miner Subscription	433	433	433	433	433	433	433	433	433	433	434	434	434	434	434	6,500
Microsoft	90,151	68,727	23,988	87,431	65,571	106,771	138,229	104,346	56,669	42,076	105,922	63,570	108,389	149,300	150,186	1,361,326
Adobe Enterprise Term License																
Agreement	165,243	46,599	11,466	38,955	45,987	41,160	93,419	61,005	0	23,226	54,488	48,290	54,464	105,473	11,243	801,018
Red Hat Site Licenses	41,038	29,166	0	8,063	28,066	0	0	0	0	0	0	0	33,201	0	28,417	167,951
Internet Security	4,820	689	8,047	4,307	3,856	2,617	26,584	4,131	0	689	0	0	41,295	5,784	349	103,168
CISCO	243,624	0	35,513	36,229	0	0	0	0	0	0	0	78,996	0	0	81,881	476,243
VMware	32,905	18,329	2,721	12,685	16,767	0	44,667	23,058	12,360	6,778	38,452	18,113	21,659	38,640	34,651	321,785
Total System Contracts	972,218	404,048	127,745	310,218	403,199	369,115	751,931	509,671	211,190	187,370	406,154	423,573	545,126	670,102	412,935	6,704,595
Other Programs																
State System @ Center City																
Philadelphia ¹	30,875	0	0	0	6,280	0	0	5,026	0	0	3,132	0	0	916,444	322,019	1,283,776
Total Other Programs	30,875	0	0	0	6,280	0	0	5,026	0	0	3,132	0	0	916,444	322,019	1,283,776
Total	\$1,026,380	\$424,889	\$142,834	\$314,193	\$430,380	\$389,110	\$767,020	\$537,089	\$229,991	\$187,370	\$424,375	\$444,363	\$567,970	\$1,615,513	\$734,954	\$8,236,431

¹Reclassified as optional.

FY 2018/19 vs. FY 2017/18 Estimated Allocation to Universities (Optional)--Increase/(Decrease) in Dollars (\$)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	MI	SH	SL	WE	OC	Total
CUO Program Offices																
Keystone Library Network (KLN)	\$1,411	\$1,287	\$0	\$832	\$1,152	\$516	\$0	(\$7,303)	(\$2,854)	\$0	\$0	\$756	\$1,755	\$3,448	\$0	\$1,000
THIS	(701)	(701)	(701)	14,388	(701)	(701)	(701)	(702)	(702)	14,387	(702)	(702)	(703)	(703)	0	20,355
Total CUO Program Offices	710	586	(701)	15,220	451	(185)	(701)	(8,005)	(3,556)	14,387	(702)	54	1,052	2,745	0	21,355
System Contracts		· · · ·	-						·					•	·	
Facilities Benchmarking and Analysis																
(Sightlines)	100	0	0	0	100	0	100	0	0	0	(2,200)	100	100	0	0	(1,700)
KLN On-Line Databases	5,480	9,944	548	1,092	4,502	(26,316)	9,760	2,752	9	(17,454)	2,669	4,123	8,987	12,730	0	18,826
Distance Education Third-Party Software	16,843	2,135	0	0	18,435	801	(1)	(16,172)	796	(1)	(1)	2,134	0	2,802	8,390	36,161
SSHEnet Contracts	(1,396)	19,764	(19)	9,881	(216)	9,803	0	(1,396)	10,181	(3,079)	32,380	10,180	(97)	0	(66)	85,920
Memberships	62	62	62	62	62	62	62	62	62	62	62	62	62	62	0	868
Analyst Software Licenses for Economic																
Modeling (EMSI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data Miner Subscription	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	300
Microsoft	20	14,402	0	(11,066)	0	2,088	1,572	2,515	0	(1)	(20)	1,572	2	13,036	7,131	31,251
Adobe Enterprise Term License																
Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Hat Site Licenses	1,231	875	0	242	842	0	0	0	0	0	0	0	996	0	852	5,038
Internet Security	0	0	334	138	0	0	6,996	0	0	0	0	0	1,982	0	95	9,545
CISCO	7,308	0	1,066	1,087	0	0	0	0	0	0	0	2,370	0	0	2,456	14,287
VMware	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total System Contracts	29,668	47,202	2,011	1,456	23,745	(13,542)	18,509	(12,219)	11,068	(20,453)	32,910	20,561	12,052	28,650	18,878	200,496
Other Programs																
State System @ Center City																
Philadelphia	23,993	0	16,492	0	(6,280)	0	0	261	0	0	(3,132)	0	0	457,850	(322,019)	167,165
Total Other Programs	23,993	0	16,492	0	(6,280)	0	0	261	0	0	(3,132)	0	0	457,850	(322,019)	167,165
Total	\$54,371	\$47,788	\$17,802	\$16,676	\$17,916	(\$13,727)	\$17,808	(\$19,963)	\$7,512	(\$6,066)	\$29,076	\$20,615	\$13,104	\$489,245	(\$303,141)	\$389,016

FY 2018/19 vs. FY 2017/18 Estimated Allocation to Universities (Optional)--Percentage (%) Increase/(Decrease)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	МА	МІ	SH	SL	WE	OC	Total
CUO Program Offices	1		•									0.1	-			
Keystone Library Network (KLN)	17.21%	22.37%	0.00%	20.93%	19.82%	10.52%	0.00%	-100.00%	-76.89%	0.00%	0.00%	13.26%	22.63%	24.85%	0.00%	1.49%
THIS	-4.65%	-4.65%	-4.65%	0.00%	-4.65%	-4.65%	-4.65%	-4.65%	-4.65%	0.00%	-4.65%	-4.65%	-4.66%	-4.66%	0.00%	11.24%
Total CUO Program Offices	3.05%	2.81%	-4.65%	382.89%	2.16%	-0.93%	-4.65%	-35.75%	-18.91%	0.00%	-4.65%	0.26%	4.61%	9.48%	0.00%	8.61%
System Contracts															•	
Facilities Benchmarking and Analysis																
(Sightlines)	2.63%	0.00%	0.00%	0.00%	2.63%	0.00%	2.63%	0.00%	0.00%	0.00%	-36.07%	2.63%	2.63%	0.00%	0.00%	-6.77%
KLN On-Line Databases	4.77%	10.22%	6.59%	2.54%	6.93%	-26.18%	3.93%	2.81%	0.02%	-34.17%	3.71%	4.15%	7.12%	5.65%	0.00%	1.35%
Distance Education Third-Party Software	22.49%	4.98%	0.00%	0.00%	59.76%	2.10%	0.00%	-25.98%	3.69%	-0.02%	-0.01%	6.06%	0.00%	2.33%	0.00%	5.49%
SSHEnet Contracts	-0.78%	21.69%	-0.07%	18.77%	-0.17%	13.88%	0.00%	-0.95%	14.44%	-5.87%	30.85%	16.32%	-0.16%	0.00%	-0.06%	6.94%
Memberships	1.12%	1.22%	10.08%	5.96%	1.12%	1.22%	0.91%	1.22%	10.08%	10.08%	1.22%	5.96%	1.22%	0.91%	0.00%	1.54%
Analyst Software Licenses for Economic																
Modeling (EMSI)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Data Miner Subscription	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.61%	4.61%	4.61%	4.61%	4.61%	4.62%
Microsoft	0.02%	20.96%	0.00%	-12.66%	0.00%	1.96%	1.14%	2.41%	0.00%	0.00%	-0.02%	2.47%	0.00%	8.73%	4.75%	2.30%
Adobe Enterprise Term License																
Agreement	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Red Hat Site Licenses	3.00%	3.00%	0.00%	3.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	3.00%	3.00%
Internet Security	0.00%	0.00%	4.15%	3.20%	0.00%	0.00%	26.32%	0.00%	0.00%	0.00%	0.00%	0.00%	4.80%	0.00%	27.22%	9.25%
CISCO	3.00%	0.00%	3.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	0.00%	3.00%	3.00%
VMware	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total System Contracts	3.05%	11.68%	1.57%	0.47%	5.89%	-3.67%	2.46%	-2.40%	5.24%	-10.92%	8.10%	4.85%	2.21%	4.28%	4.57%	2.99%
Other Programs																
State System @ Center City																
Philadelphia	77.71%	0.00%	0.00%	0.00%	-100.00%	0.00%	0.00%	5.19%	0.00%	0.00%	-100.00%	0.00%	0.00%	49.96%	-100.00%	13.02%
Total Other Programs	77.71%	0.00%	0.00%	0.00%	-100.00%	0.00%	0.00%	5.19%	0.00%	0.00%	-100.00%	0.00%	0.00%	49.96%	-100.00%	13.02%
Total	5.30%	11.25%	12.46%	5.31%	4.16%	-3.53%	2.32%	-3.72%	3.27%	-3.24%	6.85%	4.64%	2.31%	30.28%	-41.25%	4.72%

FY 2018/19 Estimated Allocation to Universities (Total; Mandatory and Optional Combined)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices	BL	CA	СП	0L	LA	ED	IIN	ĸu	10	MA	IALL	30	3L	VVE	00	TOLAI
Human Capital Management/Payroll		1						1		r						
Accounting	\$74,999	\$57,347	\$8,298	\$42,893	\$48,017	\$46,436	\$97,459	\$67,836	\$36,328	\$22,820	\$67,612	\$56,227	\$67,106	\$107,505	\$9,162	\$810,045
Office of System Human Resources	73,359	49,799	9,613	43,968	46,490	46,962	97,076	67,292	38,137	22,378	64,219	57,363	61,776	113,623	11,662	803,717
Labor Relations	76,671	49,979	8,928	44,456	45,837	47,678	96,736	67,191	40,038	23,103	64,706	57,803	63,693	113,212	0	800,031
Construction Support Office	23,611	20,658	13,251	16,635	18,507	22,467	34,844	23,035	17,278	15,884	21,165	23,312	24,348	34,819	5,313	315,127
University Legal Counsel	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,450	171,451	171,451	0	2,400,302
Keystone Library Network (KLN)	69,894	60,803	16,494	41,312	60,537	45,028	66,430	57,869	33,819	22,163	54,434	58,744	69,542	97,191	0	754,260
Distance Education	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,842	4,843	4,843	4,843	4,843	0	67,792
THIS	14,388	14,388	14,388	14,388	14,388	14,388	14,388	14,387	14,387	14,387	14,387	14,387	14,387	14,387	0	201,425
SSHEnet	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,258	55,257	110,514	884,125
Subtotal CUO Program Offices	564,472	484,524	302,522	435,202	465,326	454,509	638,483	529,160	411,537	352,285	518,074	499,387	532,404	712,288	136,651	7,036,824
Turnover/Savings Target*	(7,917)	(6,784)	(4,221)	(6,094)	(6,504)	(6,368)	(9,142)	(7,541)	(5,805)	(4,950)	(7,378)	(7,010)	(7,449)	(9,970)	(2,001)	(99,134)
Total CUO Program Offices	556,555	477,740	298,301	429,108	458,822	448,141	629,341	521,619	405,732	347,335	510,696	492,377	524,955	702,318	134,650	6,937,690
System Contracts	· · · · ·	·	, ,	· · ·		· · ·	,	· · · ·			· · · ·	· · · ·			,	
Human Resources Training	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,892	28,408
Benefits Contracts	41,915	28,454	5,493	25,122	26,563	26,833	55,467	38,448	21,790	12,786	36,693	32,776	35,297	64,920	6,663	459,220
Penn State Engineering Advisory	,	,	,				,	,			,	,	,		,	
Services	44,208	38,678	24,811	31,147	34,651	42,066	65,240	43,130	32,350	29,741	39,627	43,648	45,587	65,194	9,947	590,025
Facilities Benchmarking and Analysis																
(Sightlines)	30,600	26,700	23,300	23,300	30,600	26,700	30,600	26,700	23,300	23,300	30,600	30,600	30,600	26,700	0	383,600
KLN On-Line Databases	281,402	273,477	46,970	140,954	201,035	228,399	477,473	273,804	131,753	85,618	204,346	244,891	282,811	466,542	0	3,339,475
Distance Education Third-Party Software	108,057	56,666	9,159	31,437	60,602	49,947	123,927	61,941	30,354	11,291	28,829	49,844	96,131	152,679	11,657	882,521
Desire2Learn and Helpdesk	153,892	102,159	9,773	76,451	108,739	96,841	173,657	124,845	75,536	38,125	92,819	93,165	125,326	254,745	0	1,526,073
SSHEnet Contracts	201,268	140,463	53,548	89,548	154,227	107,452	118,185	182,000	107,698	78,964	151,709	105,208	90,208	28,105	161,583	1,770,166
Federally Required Annual Single Audit	20,971	8,214	18,515	7,172	7,349	7,489	22,505	8,034	6,831	18,876	7,543	7,452	8,131	9,792	5,430	164,304
Annual Financial Statements Audit	52,861	43,535	25,439	33,306	39,695	37,586	55,822	50,912	36,170	30,572	44,209	40,999	45,061	66,672	25,661	628,500
Memberships	6,050	5,625	677	1,577	6,050	5,625	7,367	5,625	1,152	1,152	5,625	1,577	5,625	7,367	2,898	63,992
Career Services	9,250	0	6,250	4,750	6,800	4,750	1,733	6,250	2,500	6,250	0	8,163	4,750	6,350	0	67,796
Analyst Software Licenses for Economic																
Modeling (EMSI)	15,000	3,750	3,750	3,750	10,000	3,750	3,750	3,750	3,750	3,750	3,750	12,500	7,500	15,000	0	93,750
Data Miner Subscription	453	453	453	453	453	453	453	453	453	453	454	454	454	454	454	6,800
Microsoft	90,171	83,129	23,988	76,365	65,571	108,859	139,801	106,861	56,669	42,075	105,902	65,142	108,391	162,336	157,317	1,392,577
Adobe Enterprise Term License	105.040	10 500			15 005						= / /00	10.000		105 150		
Agreement	165,243	46,599	11,466	38,955	45,987	41,160	93,419	61,005	0	23,226	54,488	48,290	54,464	105,473	11,243	801,018
Red Hat Site Licenses	42,269	30,041	0	8,305	28,908	0	0	0	0		0	0	34,197	0	29,269	172,989
Internet Security	4,820	689	8,381	4,445	3,856	2,617	33,580	4,131	0		0	0	43,277	5,784	444	112,713
CISCO	250,932	0	36,579	37,316	0	0	0	0	0	0	0	81,366	0	0	84,337	490,530
VMware	32,905	18,329	2,721	12,685	16,767	0	44,667	23,058	12,360	6,778	38,452	18,113	21,659	38,640	34,651	321,785
Total System Contracts	1,554,161	908,855	313,167	648,932	849,747	792,421	1,449,540	1,022,841	544,560	415,540	846,940	886,082	1,041,363	1,478,647	543,446	13,296,242
Other Programs	007.440	050.000		157.000		540.407				100.001			075 0 10		17.000	
Shared Administrative System (SAP)	897,419	652,669	81,584	457,828	643,071	513,497	1,130,652	810,077	391,601	192,921	692,981	613,317	875,343	1,597,118	47,990	9,598,068
Executive Information Systems (EIS)	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	600,000
SIMS	251,091	211,941	49,284	154,988	188,393	162,597	323,813	227,160	121,753	78,725	215,862	186,950	238,202	437,633	32,496	2,880,888
State System @ Center City Philadelphia	54.868	0	16.492	0	0	0	0	5.287	0	0	0	0	0	1.374.294	0	1,450,941
Treasury Accounting	18,928	22,597	7,231	5,479	23,450	12,411	25,974	20,345	7,108	14,115	15,408	31,866	17,580	34,402	20,414	277,308
Subtotal Other Programs	1,262,306	927,207	194,591	658,295	894,914	728,505	1,520,439	1,102,869	560,462	325,761	964,251	872,133	1,171,125	3,483,447	140,900	14,807,205
Turnover/Savings Target*	(9,203)	(7.079)	(1.345)	(5,022)	(6.816)	(5,552)	(11.603)	(8,362)	(4.261)	(2,473)	(7,358)	(6.645)	(8.920)	(16,096)	(1,051)	(101.786)
Total Other Programs	(9,203)	920.128	193.246	(5,022)	888.098	(5,552)	1.508.836	(0,302)	556.201	323.288	956.893	865.488	(8,920)	3.467.351	139.849	14,705,419
Total Other Programs	\$3,363,819	920,128 \$2,306,723	\$804,714	, .	\$2,196,667	,	\$3,587,717	,,	\$1,506,493	323,288 \$1,086,163	956,893 \$2,314,529	,	\$2,728,523	\$5,648,316		\$34,939,351
I OTAI	φ3,303,019	φ2,300,723	φου4,/14	φι,/3Ι,3Ι3	φ2,190,007	φ1,903,515	43,307,717	¢∠,030,907	φ1,500,493	φ1,000,103	92,314,529	φ∠,∠43,947	φ2,120,023	φ 0,04 0,316	φ017,945	\$34,939,351

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement—Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium-funding is taken off the top of the appropriation.

FY 2017/18 Estimated Allocation to Universities (Total; Mandatory and Optional Combined)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices	DL	UA	GI	<u>CL</u>	LA	LD	IN	ĸ	20	MA	IVII	511	32	WL.	00	Total
Human Capital Management/Payroll				<u>г</u>												
Accounting	\$73,592	\$58,077	\$9,206	\$42,638	\$48,827	\$48,011	\$100,795	\$67,445	\$37,452	\$25,176	\$68,180	\$55,105	\$65,034	\$103,316	\$9,377	\$812,231
Office of System Human Resources	76,091	53,206	10,906	46,927	49,571	51,140	106,660	71,299	40,317	26,438	68,986	59,898	64,194	116,242	12,641	854,516
Labor Relations	74,618	50,255	9,619	43,602	45,490	48,636	99,071	66,617	39,017	24,992	64,189	56,188	62,032	108,690	0	793,016
Construction Support Office	21,852	20,305	13,015	16,345	18,188	22,090	34,269	22,645	16,978	15,590	20,804	22,917	23,565	34,245	5,200	308,008
University Legal Counsel	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,027	166,028	166,028	166,028	0	2,324,381
Keystone Library Network (KLN)	68,796	58,775	16,697	40,692	59,023	55,310	67,282	65,132	38,820	23,954	54,231	58,568	66,976	92,065	0	766,321
Distance Education	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,549	4,550	4,550	0	63,688
THIS	15.089	15.089	15.089	0	15.089	15.089	15.089	15.089	15.089	0	15.089	15.089	15.090	15.090	0	181.070
SSHEnet	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,946	41,947	83.894	671,139
Subtotal CUO Program Offices	542,560	468,229	287,054	402,726	448,710	452,798	635,688	520,749	400,195	328,672	504,001	480,288	509,415	682,173	111.112	6,774,370
Turnover/Savings Target*	(7,940)	(6,852)	(4,201)	(5,893)	(6,566)	(6,626)	(9,302)	(7,620)	(5,856)	(4,810)	(7,375)	(7,028)	(7,455)	(9,984)	(1,626)	(99,134)
Total CUO Program Offices	534,620	461,377	282,853	396,833	442,144	446,172	626,386	513,129	394,339	323,862	496,626	473,260	501,960	672,189	109,486	6,675,236
System Contracts	001,020	101,011	202,000	000,000			020,000	010,120	00 1,000	020,002	100,020		001,000	0.2,.00	100,100	0,010,200
Human Resources Training	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,894	1,892	28,408
Benefits Contracts	39.834	27.853	5,709	24.566	25,950	26.772	55.837	37.325	21.106	13.840	36.114	31.357	33,606	60.856	6.617	447.342
Penn State Engineering Advisory	00,004	21,000	0,700	24,000	20,000	20,112	00,007	07,020	21,100	10,040	00,114	01,007	00,000	00,000	0,011	
Services	40,642	37,763	24,205	30,399	33,826	41,084	63,734	42,116	31,576	28,994	38,691	42,622	43,827	63,689	9,672	572,840
Facilities Benchmarking and Analysis	- , -		,	,		/		, -		- /	,	1-	- / -		- / -	- ,
(Sightlines)	29,800	26,000	22,700	22,700	29,800	26,000	29,800	26,000	22,700	22,700	32,100	29,800	29,800	26,000	0	375,900
KLN On-Line Databases	279,068	253,916	44,967	133,248	200,751	272,442	468,768	265,059	126,911	109,865	196,339	232,936	272,577	440,750	0	3,297,597
Distance Education Third-Party Software	97,267	65,219	28,737	44,126	53,235	60,543	123,143	84,647	43,944	28,641	37,492	57,613	104,692	142,532	22.389	994.220
Desire2Learn and Helpdesk	153,892	102,159	9,773	76,451	108,739	96.841	173,657	124.845	75,536	38,125	92,819	93,165	125.326	254,745	0	1,526,073
SSHEnet Contracts	202,514	113,680	49,104	75.204	149,980	93,186	113,722	176.377	93,054	75,024	114.866	90,564	83.286	25,799	134,762	1,591,122
Federally Required Annual Single Audit	10,073	10,058	7,426	22,852	23,185	23,284	11,994	9,996	22,643	7,869	9,878	9,196	9,838	25,572	101	203,965
Annual Financial Statements Audit	38,766	45,408	43,781	39,308	39,308	45,408	51,507	38,224	45,408	45,408	44.866	38,766	39,308	49,880	103,684	709,030
Memberships	5,977	5,552	615	1,504	5,977	5,552	7,294	5,552	1,079	1,079	5,552	1,505	5,553	7,295	2,888	62,974
Career Services	9,250	6,250	4.750	4,750	6.800	4.750	9,400	6,250	2.500	6.250	0	7,750	4,750	6,350	0	79.800
Analyst Software Licenses for Economic	-,		,	,	-,	,	.,	-,	,	-,	-	,	,	- ,		- ,
Modeling (EMSI)	15,000	3,750	3,750	3,750	10,000	3,750	3,750	3,750	3,750	3,750	3,750	12,500	7,500	15,000	0	93,750
Data Miner Subscription	433	433	433	433	433	433	433	433	433	433	434	434	434	434	434	6,500
Microsoft	90,151	68,727	23,988	87,431	65,571	106,771	138,229	104,346	56,669	42,076	105,922	63,570	108,389	149,300	150,186	1,361,326
Adobe Enterprise Term License																
Agreement	165,243	46,599	11,466	38,955	45,987	41,160	93,419	61,005	0	23,226	54,488	48,290	54,464	105,473	11,243	801,018
Red Hat Site Licenses	41,038	29,166	0	8,063	28,066	0	0	0	0	0	0	0	33,201	0	28,417	167,951
Internet Security	4,820	689	8,047	4,307	3,856	2,617	26,584	4,131	0	689	0	0	41,295	5,784	349	103,168
CISCO	243,624	0	35,513	36,229	0	0	0	0	0	0	0	78,996	0	0	81,881	476,243
VMware	32,905	18,329	2,721	12,685	16,767	0	44,667	23,058	12,360	6,778	38,452	18,113	21,659	38,640	34,651	321,785
Total System Contracts	1,502,191	863,445	329,579	668,855	850,125	852,487	1,417,832	1,015,008	561,563	456,641	813,657	859,071	1,021,399	1,419,993	589,166	13,221,012
Other Programs																
Shared Administrative System (SAP)	853,645	598,366	76,040	424,559	600,176	516,894	1,089,913	764,026	392,876	205,490	652,681	601,082	799,330	1,432,095	45,262	9,052,435
Executive Information Systems (EIS)	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	600,000
SIMS	221,423	178,167	44,721	133,906	164,323	152,023	287,983	198,457	113,078	75,335	189,281	168,417	203,879	366,485	30,410	2,527,888
State System @ Center City Philadelphia	30,875	0	0	0	6,280	0	0	5,026	0	0	3,132	0	0	916,444	322,019	1,283,776
Treasury Accounting	19,447	22,832	7,166	6,552	20,509	13,235	39,474	16,466	7,360	14,496	16,954	12,104	35,893	12,291	18,472	263,251
Subtotal Other Programs	1,165,390	839,365	167,927	605,017	831,288	722,152	1,457,370	1,023,975	553,314	335,321	902,048	821,603	1,079,102	2,767,315	456,163	13,727,350
Turnover/Savings Target*	(8,747)	(6,301)	(3,598)	(4,542)	(6,241)	(5,421)	(10,941)	(7,688)	(4,154)	(2,517)	(6,772)	(6,168)	(8,101)	(19,588)	(1,007)	(101,786)
Total Other Programs	1,156,643	833,064	164,329	600,475	825,047	716,731	1,446,429	1,016,287	549,160	332,804	895,276	815,435	1,071,001	2,747,727	455,156	13,625,564
Total	\$3,193,454	\$2,157,886	\$776,761	\$1,666,163	\$2,117,316	\$2,015,390	\$3,490,647	\$2,544,424	\$1,505,062	\$1,113,307	\$2,205,559	\$2,147,766	\$2,594,360	\$4,839,909	\$1,153,808	\$33,521,812

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement-Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium—funding is taken off the top of the appropriation.

FY 2018/19 vs. FY 2017/18 Estimated Allocation to Universities (Total; Mandatory and Optional Combined)--Increase/(Decrease) in Dollars (\$)

	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	OC	Total
CUO Program Offices	DL	UA	GI	<u>CL</u>	LA	LD	IN	NO	10		IVII	511	32	VVL	00	Total
Human Capital Management/Payroll	1											1				
Accounting	\$1,407	(\$730)	(\$908)	\$255	(\$810)	(\$1,575)	(\$3,336)	\$391	(\$1,124)	(\$2,356)	(\$568)	\$1,122	\$2,072	\$4,189	(\$215)	(\$2,186)
Office of System Human Resources	(2,732)	(3,407)	(1,293)	(2,959)	(3,081)	(4,178)	(9,584)	(4,007)	(2,180)	(4,060)	(4,767)	(2,535)	(2,418)	(2,619)	(979)	(50,799)
Labor Relations	2,053	(276)	(691)	854	347	(958)	(2,335)	574	1,021	(1,889)	517	1,615	1,661	4,522	0	7,015
Construction Support Office	1,759	353	236	290	319	377	575	390	300	294	361	395	783	574	113	7,119
University Legal Counsel	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,423	5,422	5,423	5,423	0	75,921
Keystone Library Network (KLN)	1,098	2,028	(203)	620	1,514	(10,282)	(852)	(7,263)	(5,001)	(1,791)	203	176	2,566	5,126	0	(12,061)
Distance Education	293	293	293	293	293	293	293	293	293	293	294	294	293	293	0	4,104
THIS	(701)	(701)	(701)	14,388	(701)	(701)	(701)	(702)	(702)	14,387	(702)	(702)	(703)	(703)	0	20,355
SSHEnet	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,312	13,310	26,620	212,986
Subtotal CUO Program Offices	21,912	16,295	15,468	32,476	16,616	1,711	2,795	8,411	11,342	23,613	14,073	19,099	22,989	30,115	25,539	262,454
Turnover/Savings Target*	23	68	(20)	(201)	62	258	160	79	51	(140)	(3)	18	6	14	(375)	0
Total CUO Program Offices	21,935	16,363	15,448	32,275	16,678	1,969	2,955	8,490	11,393	23,473	14,070	19,117	22,995	30,129	25,164	262,454
System Contracts	· .				· .				· · · ·					· · · · · · · · · · · · · · · · · · ·		
Human Resources Training	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benefits Contracts	2,081	601	(216)	556	613	61	(370)	1,123	684	(1,054)	579	1,419	1,691	4,064	46	11,878
Penn State Engineering Advisory	,		× /				(/ /					,				
Services	3,566	915	606	748	825	982	1,506	1,014	774	747	936	1,026	1,760	1,505	275	17,185
Facilities Benchmarking and Analysis																
(Sightlines)	800	700	600	600	800	700	800	700	600	600	(1,500)	800	800	700	0	7,700
KLN On-Line Databases	2,334	19,561	2,003	7,706	284	(44,043)	8,705	8,745	4,842	(24,247)	8,007	11,955	10,234	25,792	0	41,878
Distance Education Third-Party Software	10,790	(8,553)	(19,578)	(12,689)	7,367	(10,596)	784	(22,706)	(13,590)	(17,350)	(8,663)	(7,769)	(8,561)	10,147	(10,732)	(111,699)
Desire2Learn and Helpdesk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SSHEnet Contracts	(1,246)	26,783	4,444	14,344	4,247	14,266	4,463	5,623	14,644	3,940	36,843	14,644	6,922	2,306	26,821	179,044
Federally Required Annual Single Audit	10,898	(1,844)	11,089	(15,680)	(15,836)	(15,795)	10,511	(1,962)	(15,812)	11,007	(2,335)	(1,744)	(1,707)	(15,780)	5,329	(39,661)
Annual Financial Statements Audit	14,095	(1,873)	(18,342)	(6,002)	387	(7,822)	4,315	12,688	(9,238)	(14,836)	(657)	2,233	5,753	16,792	(78,023)	(80,530)
Memberships	73	73	62	73	73	73	73	73	73	73	73	72	72	72	10	1,018
Career Services	0	(6,250)	1,500	0	0	0	(7,667)	0	0	0	0	413	0	0	0	(12,004)
Analyst Software Licenses for Economic Modeling (EMSI)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Data Miner Subscription	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	300
Microsoft	20	14,402	0	(11,066)	0	2,088	1,572	2,515	0	(1)	(20)	1,572	2	13,036	7.131	31,251
Adobe Enterprise Term License	-	, -	-	(,,	-	,	/-	,	-	()	(- /	7-		.,	, -	
Agreement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Hat Site Licenses	1,231	875	0	242	842	0	0	0	0	0	0	0	996	0	852	5,038
Internet Security	0	0	334	138	0	0	6,996	0	0	0	0	0	1,982	0	95	9,545
CISCO	7,308	0	1,066	1,087	0	0	0	0	0	0	0	2,370	0	0	2,456	14,287
VMware	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total System Contracts	51,970	45,410	(16,412)	(19,923)	(378)	(60,066)	31,708	7,833	(17,003)	(41,101)	33,283	27,011	19,964	58,654	(45,720)	75,230
Other Programs																
Shared Administrative System (SAP)	43,774	54,303	5,544	33,269	42,895	(3,397)	40,739	46,051	(1,275)	(12,569)	40,300	12,235	76,013	165,023	2,728	545,633
Executive Information Systems (EIS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SIMS	29,668	33,774	4,563	21,082	24,070	10,574	35,830	28,703	8,675	3,390	26,581	18,533	34,323	71,148	2,086	353,000
State System @ Center City Philadelphia								TBI	2							
Treasury Accounting	(519)	(235)	65	(1,073)	2,941	(824)	(13,500)	3,879	(252)	(381)	(1,546)	19,762	(18,313)	22,111	1,942	14,057
Subtotal Other Programs	72,923	87,842	10,172	53,278	69,906	6,353	63,069	78,633	7,148	(9,560)	65,335	50,530	92,023	258,282	6,756	912,690
Turnover/Savings Target*	(456)	(778)	2,253	(480)	(575)	(131)	(662)	(674)	(107)	44	(586)	(477)	(819)	3,492	(44)	0
Total Other Programs	72,467	87,064	12,425	52,798	69,331	6,222	62,407	77,959	7,041	(9,516)	64,749	50,053	91,204	261,774	6,712	912,690
Total	\$146,372	\$148,837	\$11,461	\$65,150	\$85,631	(\$51,875)	\$97,070	\$94,282	\$1,431	(\$27,144)	\$112,102	\$96,181	\$134,163	,	(\$13,844)	

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement—Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium—funding is taken off the top of the appropriation.

FY 2018/19 vs. FY 2017/18 Estimated Allocation to Universities (Total; Mandatory and Optional Combined)--Percentage (%) Increase/(Decrease)

Г	BL	CA	СН	CL	EA	ED	IN	KU	LO	MA	МІ	SH	SL	WE	00	Total
CUO Program Offices	DL	UA I	CIT	CL I	LA			ĸ	20	IIIA	IVII	311	32	WL.	00	Total
Human Capital Management/Payroll		r								г						
Accounting	1.91%	-1.26%	-9.86%	0.60%	-1.66%	-3.28%	-3.31%	0.58%	-3.00%	-9.36%	-0.83%	2.04%	3.19%	4.05%	-2.29%	-0.27%
Office of System Human Resources	-3.59%	-6.40%	-11.86%	-6.31%	-6.22%	-8.17%	-8.99%	-5.62%	-5.41%	-15.36%	-6.91%	-4.23%	-3.77%	-2.25%	-7.74%	-5.94%
Labor Relations	2.75%	-0.55%	-7.18%	1.96%	0.76%	-1.97%	-2.36%	0.86%	2.62%	-7.56%	0.81%	2.87%	2.68%	4.16%	0.00%	0.88%
Construction Support Office	8.05%	1.74%	1.81%	1.77%	1.75%	1.71%	1.68%	1.72%	1.77%	1.89%	1.74%	1.72%	3.32%	1.68%	2.17%	2.31%
University Legal Counsel	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	3.27%	0.00%	3.27%
Keystone Library Network (KLN)	1.60%	3.45%	-1.22%	1.52%	2.57%	-18.59%	-1.27%	-11.15%	-12.88%	-7.48%	0.37%	0.30%	3.83%	5.57%	0.00%	-1.57%
Distance Education	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.44%	6.46%	6.46%	6.44%	6.44%	0.00%	6.44%
THIS	-4.65%	-4.65%	-4.65%	0.00%	-4.65%	-4.65%	-4.65%	-4.65%	-4.65%	0.00%	-4.65%	-4.65%	-4.66%	-4.66%	0.00%	11.24%
SSHEnet	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.74%	31.73%	31.73%	31.74%
Subtotal CUO Program Offices	4.04%	3.48%	5.39%	8.06%	3.70%	0.38%	0.44%	1.62%	2.83%	7.18%	2.79%	3.98%	4.51%	4.41%	22.98%	3.87%
Turnover/Savings Target*	-0.29%	-0.99%	0.48%	3.41%	-0.94%	-3.89%	-1.72%	-1.04%	-0.87%	2.91%	0.04%	-0.26%	-0.08%	-0.14%	23.06%	0.00%
Total CUO Program Offices	4.10%	3.55%	5.46%	8.13%	3.77%	0.44%	0.47%	1.65%	2.89%	7.25%	2.83%	4.04%	4.58%	4.48%	22.98%	3.93%
System Contracts		•														
Human Resources Training	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benefits Contracts	5.22%	2.16%	-3.78%	2.26%	2.36%	0.23%	-0.66%	3.01%	3.24%	-7.62%	1.60%	4.53%	5.03%	6.68%	0.70%	2.66%
Penn State Engineering Advisory																ĺ
Services	8.77%	2.42%	2.50%	2.46%	2.44%	2.39%	2.36%	2.41%	2.45%	2.58%	2.42%	2.41%	4.02%	2.36%	2.84%	3.00%
Facilities Benchmarking and Analysis																
(Sightlines)	2.68%	2.69%	2.64%	2.64%	2.68%	2.69%	2.68%	2.69%	2.64%	2.64%	-4.67%	2.68%	2.68%	2.69%	0.00%	2.05%
KLN On-Line Databases	0.84%	7.70%	4.45%	5.78%	0.14%	-16.17%	1.86%	3.30%	3.82%	-22.07%	4.08%	5.13%	3.75%	5.85%	0.00%	1.27%
Distance Education Third-Party Software	11.09%	-13.11%	-68.13%	-28.76%	13.84%	-17.50%	0.64%	-26.82%	-30.93%	-60.58%	-23.11%	-13.48%	-8.18%	7.12%	-47.93%	-11.23%
Desire2Learn and Helpdesk	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SSHEnet Contracts	-0.62%	23.56%	9.05%	19.07%	2.83%	15.31%	3.92%	3.19%	15.74%	5.25%	32.07%	16.17%	8.31%	8.94%	19.90%	11.25%
Federally Required Annual Single Audit	108.19%	-18.33%	149.33%	-68.62%	-68.30%	-67.84%	87.64%	-19.63%	-69.83%	139.88%	-23.64%	-18.96%	-17.35%	-61.71%	5276.24%	-19.45%
Annual Financial Statements Audit	36.36%	-4.12%	-41.89%	-15.27%	0.98%	-17.23%	8.38%	33.19%	-20.34%	-32.67%	-1.46%	5.76%	14.64%	33.66%	-75.25%	-11.36%
Memberships	1.22%	1.31%	10.08%	4.85%	1.22%	1.31%	1.00%	1.31%	6.77%	6.77%	1.31%	4.78%	1.30%	0.99%	0.35%	1.62%
Career Services	0.00%	-100.00%	31.58%	0.00%	0.00%	0.00%	-81.56%	0.00%	0.00%	0.00%	0.00%	5.33%	0.00%	0.00%	0.00%	-15.04%
Analyst Software Licenses for Economic Modeling (EMSI)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Data Miner Subscription	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.62%	4.61%	4.61%	4.61%	4.61%	4.61%	4.62%
Microsoft	0.02%	20.96%	0.00%	-12.66%	0.00%	1.96%	1.14%	2.41%	0.00%	0.00%	-0.02%	2.47%	0.00%	8.73%	4.75%	2.30%
Adobe Enterprise Term License	0.0270	20.0070	0.0070	12.0070	0.0070	1.0070	1.1470	2.4170	0.0070	0.0070	0.0270	2.1770	0.0070	0.1070	4.7070	2.0070
Agreement	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Red Hat Site Licenses	3.00%	3.00%	0.00%	3.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	3.00%	3.00%
Internet Security	0.00%	0.00%	4.15%	3.20%	0.00%	0.00%	26.32%	0.00%	0.00%	0.00%	0.00%	0.00%	4.80%	0.00%	27.22%	9.25%
CISCO	3.00%	0.00%	3.00%	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	0.00%	3.00%	3.00%
VMware	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total System Contracts	3.46%	5.26%	-4.98%	-2.98%	-0.04%	-7.05%	2.24%	0.77%	-3.03%	-9.00%	4.09%	3.14%	1.95%	4.13%	-7.76%	0.57%
Other Programs										I						
Shared Administrative System (SAP)	5.13%	9.08%	7.29%	7.84%	7.15%	-0.66%	3.74%	6.03%	-0.32%	-6.12%	6.17%	2.04%	9.51%	11.52%	6.03%	6.03%
Executive Information Systems (EIS)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
SIMS	13.40%	18.96%	10.20%	15.74%	14.65%	6.96%	12.44%	14.46%	7.67%	4.50%	14.04%	11.00%	16.83%	19.41%	6.86%	13.96%
State System @ Center City Philadelphia								TBD								
Treasury Accounting	-2.67%	-1.03%	0.91%	-16.38%	14.34%	-6.23%	-34.20%	23.56%	-3.42%	-2.63%	-9.12%	163.27%	-51.02%	179.90%	10.51%	5.34%
Subtotal Other Programs	6.26%	10.47%	6.06%	8.81%	8.41%	0.23%	4.33%	7.68%	1.29%	-2.85%	7.24%	6.15%	8.53%	9.33%	1.48%	6.65%
Turnover/Savings Target*	5.21%	12.35%	-62.62%	10.57%	9.21%	2.42%	4.33 %	8.77%	2.58%	-2.85%	8.65%	7.73%	10.11%	-17.83%	4.37%	0.00%
	6.27%	12.35%	-62.62%	8.79%	9.21%	0.87%	4.31%	7.67%	2.58%	-1.75%	7.23%	6.14%	8.52%	9.53%	4.37%	6.70%
Total Other Programs										-2.86%						3.73%
Total	4.58%	6.90%	1.48%	3.91%	4.04%	-2.57%	2.78%	3.71%	0.10%	-2.44%	5.08%	4.48%	5.17%	7.24%	-1.20%	3.73%

Note: Amounts above do not include the following:

Legal Contracts—This is charged as individual university or System cases occur.

Central Banking Agreement—Charges are based on bank activity and investment balances.

Office of Internal Audit and Risk Assessment and Dixon University Center Academic Consortium—funding is taken off the top of the appropriation.

BUDGET SUMMARY

Function: Human Capital Management/Payroll Accounting

Cost Proration Basis: For regular employees, based on permanent salaried employees; for student employees, allocated to users based on number of student employees.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	4.90	4.90	0.0%	4.90	4.90	0.0%
Filled	4.90	4.90	0.0%	4.90	4.90	0.0%
Revenue	\$0	\$0	_	\$0	\$0	_
Personnel Expenditures:						
Salary	383,346	397,948	3.8%	396,742	407,402	2.7%
Benefits	224,823	252,593	12.4%	252,143	251,371	-0.3%
Total Personnel Expenditures	608,169	650,541	7.0%	648,885	658,773	1.5%
Operating Expenditures:						
Postage/Freight	26,837	30,025	11.9%	35,525	32,050	-9.8%
Telecommunications Charges	0	0		0	0	—
Advertising	0	0		0	0	_
Subscriptions	40	0		1,500	1,500	0.0%
Memberships	870	2,500	187.4%	1,500	2,500	66.7%
Printing and Duplicating	4,014	7,550	88.1%	15,100	9,100	-39.7%
Travel, Transportation, and Meetings	1,845	2,750	49.1%	4,800	4,350	-9.4%
Computing and Data Processing	0	750		1,000	750	-25.0%
Professional Services	0	0	—	0	0	_
Other Services	2,735	2,700	-1.3%	3,000	3,800	26.7%
Insurance	0	0		0	0	—
Utilities	0	0		0	0	—
Rental and Lease (Excluding Vehicles)	0	0		1,200	0	—
Miscellaneous Services	817	2,000	144.8%	2,000	2,200	10.0%
Supplies	1,125	750	-33.3%	1,525	1,100	-27.9%
Overhead	83,493	92,596	10.9%	92,596	93,138	0.6%
Payments to State System Universities	0	0	—	0	0	—
Expensed Assets	0	3,336	—	3,600	1,800	-50.0%
Renewal and Replacement Transfer	3,143	3,268	4.0%	3,268	784	-76.0%
Total Operating Expenditures	124,919	148,225	18.7%	166,614	153,072	-8.1%
Capital Expenditures	0	0		0	0	
Total Expenditures	733,088	798,766	9.0%	815,499	811,845	-0.4%
Less Renewal and Replacement Released	0	(3,268)		(3,268)	(1,800)	-44.9%
Net Expenditures	\$733,088	\$795,498	8.5%	\$812,231	\$810,045	-0.3%

Function: Human Capital Management/Payroll Accounting

Describe the mission of this operation.

Human Capital Management provides support to the 14 universities and the Office of the Chancellor for a payroll system that processes SAP information and produces payroll documents for more than 13,000 employees and 16,000 students. This office is responsible for processing and distributing pay and time and attendance reports for the universities and provides human resources consulting and SAP services to university staff. It manages compliance with human resources and payroll requirements by analyzing, reviewing, and remaining current with IRS tax regulations and reporting requirements; the Fair Labor Standards Act; federal and state laws; Commonwealth of Pennsylvania Management Directives, Executive Orders, and Administrative Circulars; collective bargaining agreements, side letters, and arbitrations; and System policies, procedures, and standards. Additionally, the office ensures that the Human Capital Management (HCM) system is in compliance with system audits and validation, and that all benefits, deductions, tax and earning rates, and other changes are correct. This office also prints and delivers approximately 30,000 paper Form W-2s, 12,000 ACA forms, and thousands of pay checks and direct deposit statements.

Payroll Accounting processes and pays the State System's payroll taxes and benefits, annually producing nearly 38,000 IRS Form W-2s, as well as 35,000 Pennsylvania W-2s, over 300 New Jersey W-2s, 860 Philadelphia W-2s, and nearly 37,000 local W-2s, for a payroll exceeding \$1.4 billion. It annually processes over 1,800 payments to third parties for taxes, pension, health benefits, garnishments, union dues, SECA contributions, foundation contributions, and other payments. It annually reissues hundreds of paychecks and direct deposits, corrects hundreds of payroll overpayments, and monitors the escheating of nearly 300 paychecks.

Explain the benefits of centralizing this operation.

All 14 universities and the Office of the Chancellor follow the same payroll guidelines and must comply with requirements of multiple collective bargaining agreements, benefits programs, federal, state, and State System guidelines, and federal, state, and local tax regulations. Consolidating this function allows the State System to act as one entity instead of 15 separate entities. All entities benefit from the standardization, as well as the customization, of SAP. Centralized administration eliminates administration costs at the universities and helps to ensure equitable treatment of employees within the same bargaining unit. Administrative efficiencies are gained through centralized eligibility and enrollment files, and use of the same forms, administrative procedures, technology, and professional staff.

Describe any cost savings made to the universities.

This office realizes cost savings primarily through centralization of operations, avoiding duplication of functions at the universities, and ensuring compliance with applicable federal, state, and local laws/regulations.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

- FY 2018/19 will see continued activity and changes necessary under the Affordable Care Act (ACA). New IRS
 forms were provided for 2016 coverage, and the same forms will be provided for 2017 coverage. While we
 expect that there will be additional changes to the law, we are budgeting with the expectation that we will need
 to continue to provide proof of coverage forms for 2018; therefore, the increased printing and postage costs will
 remain in the budget. This office intends to make this process as streamlined and seamless as possible for
 employees. To save money, this office is developing an electronic delivery solution.
- 2. Most System employees are receiving a biweekly "paperless pay" through direct deposit to their financial institution. With rare exception, employees do not have the option to receive a pay statement. Since its inception, nearly all payments to nonstudent employees have become paperless. In a year, this means that more than 700,000 statements do not have to be printed over 26 pay periods. The effort has saved approximately \$125,000 in paper and ink costs. As work continues with campuses to implement technology that will allow paperless payments to student employees, these endeavors will reduce the costs of printed forms and equipment, staff time, and courier costs.
- 3. Electronic timesheet is now available at all campuses and its reach and spread for exception time reporting will continue to grow. Entries to the electronic system are approved by the supervisor, posted directly to the backend SAP system, and paid through payroll. This removes several manual steps from the process, including the

routing of paper sheets through the approval and input process, manual input by department timekeepers, and storage of paper records. The next phase of the project will include hourly employees, which should have a larger impact on cost savings.

- 4. The office continued implementing the electronic leave request program and responded to CUO review changes via the Employee Self Service (ESS) system, which replaced the three-part Request for Leave form. This program continues to grow and has replaced tens of thousands of paper leave requests. Since its implementation, over 1.8 million leave requests have been submitted electronically, saving approximately \$85,000 in paper costs.
- 5. In conjunction with the Business Intelligence team, the use of the position budget management system (PBM) will be expanded, offering significant process and time savings to university users.
- 6. For tax year 2017, the State System continued to offer electronic W-2 forms, providing early and year-round access to employee W-2 forms. Additionally, new functionality was provided to the campuses that allows them to print a re-issued W-2 for any active employee. This process adds efficiency and cost savings as it reduces the number of paper W-2 forms that are created. In 2017, over 7,000 employees chose the electronic option saving paper, printing, and postage costs.
- 7. The System human resources manager position has developed efficiencies in the classification methodology and is working on initiatives to streamline classifications for several human resources functions, with the growing need for collaboration in mind.
- 8. The Payroll Accounting office continued to find ways to streamline processes, automate tasks, and generate better reports, and continues to increase cross-training.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable). N/A

System Contracts/Programs									
Contract/Program:	Human Resources Training								
Mission/Function:	Provide online ostudents.	Provide online equity compliance and campus safety training to employees and students.							
External Contractor Name:	LawRoom/Campus Clarity								
Cost Proration Basis:	Divided equally among the 14 universities and Office of the Chancellor.								
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change			
Total Costs	\$0	\$56,816	_	\$28,408	\$28,408	0.0%			
Explain in detail significant cost changes with justification on the basis of benefits to the universities.									

Services for FY 2016/17 were not billed until FY 2017/18, which is why the FY 2016/17 Actual amount is \$0 and the FY 2017/18 Projection is twice the budgeted amount.

BUDGET SUMMARY

Function: Office of System Human Resources

Cost Proration Basis: Allocated to the universities and the Office of the Chancellor based on a pro rata share of permanent salaried employees.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	4.65	4.65	0.0%	4.65	4.65	0.0%
Filled	4.42	4.65	5.2%	4.65	4.65	0.0%
Revenue	\$234,532	\$254,538	8.5%	\$85,000	\$85,000	0.0%
Personnel Expenditures:						
Salary	322,483	347,273	7.7%	346,434	355,321	2.6%
Benefits	142,391	198,508	39.4%	198,231	196,197	-1.0%
Total Personnel Expenditures	464,874	545,781	17.4%	544,665	551,518	1.3%
Operating Expenditures:						
Postage/Freight	3,284	3,550	8.1%	1,900	4,050	113.2%
Telecommunications Charges	0	0	_	0	0	_
Advertising	495	0		0	0	
Subscriptions	565	565	0.0%	565	565	0.0%
Memberships	0	395	_	395	395	0.0%
Printing and Duplicating	0	8,000	_	8,000	2,500	-68.8%
Travel, Transportation, and Meetings	304	3,800	1150.0%	5,000	5,800	16.0%
Computing and Data Processing	0	0		0	0	
Professional Services	243,493	298,010	22.4%	299,920	240,265	-19.9%
Other Services	175	150	-14.3%	300	150	-50.0%
Insurance	0	0	_	0	0	_
Utilities	0	0		0	0	_
Rental and Lease (Excluding Vehicles)	0	0		0	0	_
Miscellaneous Services	100	100	0.0%	300	100	-66.7%
Supplies	281	530	88.6%	300	550	83.3%
Overhead	69,323	75,816	9.4%	75,816	74,795	-1.3%
Payments to State System Universities	1,867	750	-59.8%	750	500	-33.3%
Expensed Assets	319	1,419	344.8%	1,605	1,100	-31.5%
Renewal and Replacement Transfer	3,862	0		0	6,429	_
Total Operating Expenditures	324,068	393,085	21.3%	394,851	337,199	-14.6%
Capital Expenditures	0	0		0	0	
Total Expenditures	788,942	938,866	19.0%	939,516	888,717	-5.4%
Less Renewal and Replacement Released	0	0	_	0	0	_
Net Expenditures	\$554,410	\$684,328	23.4%	\$854,516	\$803,717	-5.9%

Function: Office of System Human Resources

Describe the mission of this operation.

The mission of this area is to provide centralized employee benefits plan management/administration for the 14 universities. Programs include the State System Group Health Program, State System Annuitant Health Care Program, Supplemental Benefits Program (vision and dental benefits), Wellness Program, Flexible Spending Accounts (medical reimbursement account and dependent care account), Alternative Retirement Plan, Tax-Sheltered Annuity Program, Voluntary Group Long-Term Disability Program, Voluntary Group Life and Personal Accident Insurance Program, Basic Group Term Life Insurance Program, the self-insured Workers' Compensation Program, and employee leave administration, including FMLA compliance. The centralized office also coordinates as necessary with the Commonwealth, as well as with the established Funds, to provide other benefits, such as the Deferred Compensation Plan, State Employee Assistance Program, State Employee Combined Appeal, SERS and PSERS retirement programs, PEBTF health benefits, and benefits provided by the Faculty Health and Welfare Fund.

Benefits are provided and programs administered through 20 contracts, including health care program vendors, insurance companies, COBRA administrator, alternative retirement program vendors, flexible spending account administrator, human resources consultants, and actuaries. Primary program administration duties include program and policy development and administration, securing competitive bids through the request for proposals process, financial reviews and determination of funding arrangements, technical assistance for systems development, conduct of program audits, development of administrative procedures, training for university benefits coordinators, and development of employee communication materials.

Explain the benefits of centralizing this operation.

Centralized administration eliminates duplication of program development and administration costs at the universities and helps to ensure equitable treatment of employees within the same bargaining units. Administrative efficiencies are gained, and the potential for errors is greatly reduced, through centralized eligibility and enrollment files, centralized audits of data, and the use of the same forms, administrative procedures, technology, and professional staff. Centralized vendor contracting provides fiscal and administrative efficiencies gained through economies of scale in negotiating considerably larger contracts. These include lower administrative fees and lower actual costs of plan administration by vendors, special considerations for large customers, better opportunities for improved customer service, use of more credible individual claims experience, better selection of financing arrangements, and expanded impact on vendor program development. Centralized administration also eliminates the need for universities to conduct individual competitive bids for vendor selection, handle funding arrangements, develop administrative procedures and systems, prepare individual communications, develop training materials, and pay separately for consulting services. Included in the centralized benefits administration is the management and collection of over \$5 million annually in annuitant health plan contributions from retirees and surviving spouses.

In addition to operational efficiencies, centralized administration provides the framework to ensure that regulatory and legal compliance is achieved, helping to protect the organization from unnecessary exposure due to noncompliance. The increasingly complex field of employee benefits necessitates close attention to ever-changing requirements in such areas as: developing plan documents and summary plan descriptions; preparing annual certifications and evaluations; monitoring implementation changes in regulations (e.g., the Affordable Care Act); meeting annual regulatory reporting requirements, such as the Actuarial Workers' Compensation Funding, GASB Postretirement Benefit Valuation, Self-Insured Certification Renewal, Annual Participant Disclosures, and Medicare Secondary Payer requirements; and coordinating recapture of funds from federal programs, including the Medicare Retiree Drug Subsidy and Early Retiree Reinsurance Program (ERRP).

Describe any cost savings made to the universities.

- Savings in premium rates and self-insured costs have been realized due to negotiations of larger contracts and having a single point-of-contact.
- Applications to the Centers for Medicare and Medicaid for the "Retiree Drug Subsidy" are completed annually, and have resulted in receipt of payments totaling \$20.7 million to date.
- Strong System-wide participation in the State System's wellness program (Healthy U) has contributed to cost avoidance of approximately \$15.5 million for the three most recent plan years, as manifested by a claims growth trend that is well below national averages.
- The competitive bid process for vision benefits and administrative services resulted in an award to the current provider, NVA, with a five-year rate guarantee with no increase to the administration fee.

- The competitive bid process for voluntary group life insurance and voluntary long-term disability resulted in an award to the incumbent provider, CIGNA, with lower participant rates, as well as an increased Guaranteed Issue amount for both employees and spouses.
- Existing Section 125 flexible spending accounts (FSA) continue to generate savings. It is estimated that the direct FICA tax savings for funds flowing through the Plan will be approximately \$272,000 in calendar year 2018. Prior adoption of the participant-friendly "carry-over" provision (which allows \$500 in unspent medical FSA funds to be carried over for use during the entire next calendar year), as well as the recent health plan changes that increase member out-of-pocket costs, have contributed positively to a 6% increase in FSA deferrals compared to the prior year.
- The change in health plan funding to a self-funded plan has avoided over \$13 million in Affordable Care Act (ACA) taxes to date.
- Structuring the Annuitant Health Care Program in a manner in which it is exempt from most of the ACA benefits expansions and requirements has saved the System approximately \$700,000 per year in expenses.
- The competitive bid process for COBRA administrative services and FSA administration resulted in an award to a new provider, ADP, with a projected five-year cost savings of \$80,000.

Describe any recent program changes or improvements to the FY 2018/19 budget year.

- As a result of the recently completed health care Request for Proposals (RFP), Highmark was selected as the successful bidder. Compared to the existing contract with Highmark, the new contract, which is effective July 1, 2018, will include:
 - A reduction in medical plan administrative costs of more than \$160,000 for the first three years of the contract.
 - No increase to current prescription drug and wellness plan administrative costs for the entire five-year contract term.
 - Estimated reductions in prescription drug costs of approximately \$6 million over the first three years of the contract resulting from improved discounts.
 - Guaranteed prescription drug rebates that, for the first year of the contract, are over \$4 million greater than the actual rebates received in the most recently completed plan year. These rebate guarantees will be in place for the first three years of the contract, with scheduled guarantee increases each year.
- As a result of the Alternative Retirement Plan (ARP) competitive bid process, Fidelity and TIAA were awarded contracts to continue to provide ARP services. VALIC did not submit a successful bid and, therefore, will be removed effective July 1, 2018. Prospectively, only the two approved ARP vendors will be permitted to provide investments under the voluntary TSA plan. In order to provide greater flexibility and choice to participants, both vendors will offer a brokerage window option within the TSA. The same investment menu for both the ARP and TSA plans, monitored for performance standards, will be offered at the lowest share class available, reducing costs for participants. State System administrative cost savings will also be realized with the streamlining of vendors for both the ARP and TSA plans, with lower consultant monies paid to monitor vendor investments and fees, and decreased administrative time spent by both System-level and university benefits staff.
- Centralized benefits communications are being sent directly to employees on a more frequent basis to allow
 university benefits staff time to focus on other priorities. Additionally, there is a continued effort to reduce paper
 and postage expenses in annuitant communications. Last year, open enrollment communications were sent
 electronically to more than 20% of annuitants. All avenues are being reviewed to determine the best ways to
 communicate benefits information effectively to employees and annuitants, while reducing costs as much as
 possible.
- Enhancements have been made to the annuitant eligibility/tracking process to automate and streamline processes and provide updated information regarding employee retirements to the universities in a more timely manner.
- Continued management of the more restrictive eligibility criteria regarding health plan enrollment of spouses has generated significant cost savings based upon the enrollment patterns of the employees hired on or after the effective date of those provisions (July 1, 2013). Among those employees, there is a spousal enrollment rate of 41%, compared to 67% for employees hired prior to implementation of these rules. Each covered spouse costs the State System an average of approximately \$7,400 annually. During 2017/18, System staff initiated an annual spousal eligibility attestation process to ensure continued adherence to these eligibility rules.
- Through participation with the Commonwealth in the recent competitive bid of the Basic Group Life Insurance program, the new contract with the successful bidder (MetLife) will generate \$500,000 in savings over the five-year contract period.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable).

System Contracts/Programs									
Benefits Contracts									
Provide benefits services									
 State Employee Assistance Program (SEAP) (Commonwealth of Pennsylvania) Workers' Compensation Assessments (Commonwealth of Pennsylvania) 									
Pro rata share of permanent salaried employees.									
FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change				
\$285,906	\$297,327	4.0%	\$297,342	\$309,220	4.0%				
123,414	125,000	1.3%	150,000	150,000	0.0%				
\$409,320	\$422,327	3.2%	\$447,342	\$459,220	2.7%				
	Benefits Contra Provide benefit 1) State Employ 2) Workers' Co Pro rata share of FY 2016/17 Actual \$285,906 123,414 \$409,320	Provide benefits Contracts Provide benefits services 1) State Employee Assistance 2) Workers' Compensation As Pro rata share of permanent s FY 2016/17 Actual FY 2016/17 Actual FY 2017/18 Projection \$285,906 \$297,327 123,414 125,000 \$409,320 \$422,327	Benefits Contracts Provide benefits services 1) State Employee Assistance Program (S 2) Workers' Compensation Assessments (I Pro rata share of permanent salaried employee FY 2016/17 FY 2017/18 Actual Projection \$285,906 \$297,327 4.0% 123,414 125,000 \$409,320 \$422,327	Benefits Contracts Provide benefits services 1) State Employee Assistance Program (SEAP) (Commor 2) Workers' Compensation Assessments (Commonwealth Pro rata share of permanent salaried employees. FY 2016/17 Actual FY 2017/18 Projection FY 2017/18 % Change FY 2017/18 Budget \$285,906 \$297,327 4.0% \$297,342 123,414 125,000 1.3% 150,000 \$409,320 \$422,327 3.2% \$447,342	Benefits Contracts Provide benefits services 1) State Employee Assistance Program (SEAP) (Commonwealth of Penn 2) Workers' Compensation Assessments (Commonwealth of Pennsylvan Pro rata share of permanent salaried employees. FY 2016/17 FY 2017/18 FY 2017/18 FY 2017/18 FY 2017/18 FY 2018/19 Request \$285,906 \$297,327 4.0% \$297,342 \$309,220 123,414 125,000 1.3% 150,000 150,000				

At this time, the Office of Administration (OA) has still not billed the State System for SEAP for FY 2017/18. OA has indicated a projected cost for 2017/18 of \$297,327 and advised the State System to budget for FY 2018/19 at a 4% increase over the projected FY 2017/18 cost.

BUDGET SUMMARY

Function: Labor Relations

Cost Proration Basis: Allocated to the universities based on a pro rata share of permanent salaried employees, excluding

nonrepresented.

FY 2018/19 FY 2016/17 FY 2017/18 FY 2017/18 Actual Projection % Change Budget Request % Change FTE Complement: Authorized 4.40 4.90 11.4% 4.90 4.90 0.0% Filled 4.40 4.90 11.4% 4.90 4.90 0.0% Revenue \$0 \$0 \$0 \$0 ____ ____ Personnel Expenditures: 402,293 Salary 367,245 9.5% 402,213 411,203 2.2% 241,757 26.4% 240,113 Benefits 191,285 241,428 -0.5% **Total Personnel Expenditures** 558,530 644,050 15.3% 651,316 1.2% 643,641 **Operating Expenditures:** 284 300 400 Postage/Freight 5.6% 300 -25.0% **Telecommunications Charges** 0 25 0 25 ____ ____ 0 0 Advertising 0 0 Subscriptions 0 0 _ 0 0 ____ Memberships 290 400 37.9% 400 400 0.0% Printing and Duplicating 12,712 5,000 -60.7% 18,000 8,000 -55.6% Travel, Transportation, and Meetings 14,063 20,100 42.9% 14,600 22,000 50.7% Computing and Data Processing 0 2,500 _ 2,500 0 ____ Professional Services 13,402 15,000 11.9% 25,000 25,000 0.0% Other Services 1,491 1,200 1,848 1,500 -19.5% -18.8% Insurance 0 0 0 — 0 ____ 0 0 Utilities 0 0 Rental and Lease (Excluding Vehicles) 0 0 0 0 **Miscellaneous Services** 3,180 4,000 4,000 25.8% 5,000 25.0% Supplies 951 1,000 5.2% 1,200 1,200 0.0% Overhead 54,146 74,567 74,567 83,686 12.2% 37.7% Payments to State System Universities 601 0 0 0 — ____ **Expensed Assets** 0 0 6,860 0 Renewal and Replacement Transfer 3,960 5,205 31.4% 5,205 1,604 -69.2% **Total Operating Expenditures** 105,080 129,297 23.0% 154,580 148,715 -3.8% Capital Expenditures 0 0 0 _ 0 ____ 663,610 800.031 Total Expenditures 773,347 16.5% 798.221 0.2% 0 Less Renewal and Replacement Released (5,205)____ (5,205)0 ____ **Net Expenditures** \$663.610 \$768.142 15.8% \$793.016 \$800.031 0.9%

Function: Labor Relations

Describe the mission of this operation.

The Labor Relations (LR) office directs all labor relations activities for the Office of the Chancellor and the universities including: negotiations, implementing and interpreting collective bargaining agreements (CBA), administering several grievance and arbitration procedures, representing the State System in meet and discuss at the state level, and assisting the Legal Office with litigation matters. Additionally, LR assists and advises university leaders on personnel actions regarding nonrepresented employees, including the implementation of applicable policies. This office, in collaboration with System Human Resources, maintains the State System's position classification structure for represented employees and supports the System Human Resources office in administering the terms and conditions reached through collective bargaining that affect benefits and payroll operations.

During fiscal year 2018/19, the LR office will:

- Negotiate successor collective bargaining agreements with APSCUF (faculty and coaches), SCUPA (professional employees), and OPEIU (nurses). These agreements expire June 30, 2019. Negotiations will be accomplished consistent with the State System's operational and fiscal objectives. In addition, LR will participate in the Commonwealth of Pennsylvania's negotiations for successor agreements with AFSCME (clerical, administrative, and maintenance employees) and SEIU 668 (occupational therapists and drug/alcohol treatment specialists). This office is primarily responsible for soliciting proposed changes, drafting proposals, negotiating, and/or finalizing contract language. LR staff serve as members of management's bargaining team.
- 2. Administer the various grievance procedures and provide advice and guidance on settlements and precedentsetting arbitration awards, including the impact on operations.
- 3. Through daily interactions with university and Office of the Chancellor staff, provide advice and consultation regarding the application of personnel policies, as well as the interpretation and application of the collective bargaining agreements, memoranda of understanding, and side letter agreements.
- 4. Conduct meet and discuss sessions with various unions.
- 5. Maintain the position classification structure for represented employees.
- 6. Assist in the presentation of the State System's cases before the Pennsylvania Labor Relations Board and the courts.
- 7. Provide advice and guidance to meet changing workforce needs as a result of academic program changes, budget constraints, and enrollments.
- 8. Assist in the State System's redesign efforts. It is anticipated that the LR office will support the various task groups by providing advice and guidance relative to the collective bargaining agreements, as well as meeting with the unions to discuss and/or negotiate changes impacting the bargaining units.

Explain the benefits of centralizing this operation.

As required by Act 188, the collective bargaining agreements are negotiated on a System-wide level by the Office of the Chancellor. Centralized negotiation, communication, training, and administration of these agreements enhance consistent interpretation and application of contractual provisions. Assisting and advising on personnel actions regarding nonrepresented employees provide consistency in the actions taken as related to facts. Both of these initiatives serve to forego or mitigate costly settlements, arbitrations, and litigations or the establishment of unnecessary past practices.

Describe any cost savings made to the universities.

Without a centralized LR staff, universities would need to employ staff or devote additional staff time to developing expertise in collective bargaining practices and techniques, reviewing and resolving grievances, and preparing for arbitration and labor board hearings. Each university would have to spend additional staff time interpreting and coordinating the administration of collective bargaining agreements with other universities to ensure consistent application. Through consultations, briefings, and trainings, the LR office guides the universities in the application of collective bargaining agreements/memoranda of understanding to avoid grievances and other disputes, thereby lowering administrative and processing costs.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

In fiscal year 2018/19, the LR office will again be engaged in collective bargaining for successor agreements with several unions. The current agreements expire June 30, 2019. The LR office will play a key role in achieving

changes to these agreements and will be essential in guiding the implementation of those changes. The LR staff will be assisting the universities in navigating the various CBAs as workforce needs are adjusted as a result of program changes and fiscal constraints.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable). The FY 2018/19 request includes additional costs associated with collective bargaining. Although not significant, the increased costs are to cover meal expenses and off-site meeting room rental fees for APSCUF faculty bargaining. Also included is the cost of professional printing of CBAs for university managers; the amount requested is much less than in previous years. It is this office's intent to limit the number of professionally printed agreements and to encourage use of the electronic versions available on the State System's website.

Function: Construction Support Office

Cost Proration Basis: 20% of costs divided by 15; 80% of costs based on pro rata share of square footage of the 14 universities and the Office of the Chancellor.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	2.00	2.00	0.0%	2.00	2.00	0.0%
Filled	2.00	2.00	0.0%	2.00	2.00	0.0%
Revenue	\$0	\$0	_	\$0	\$0	_
Personnel Expenditures:						
Salary	178,040	185,840	4.4%	184,429	190,070	3.1%
Benefits	80,409	83,000	3.2%	86,582	84,857	-2.0%
Total Personnel Expenditures	258,449	268,840	4.0%	271,011	274,927	1.4%
Operating Expenditures:						
Postage/Freight	7	40	471.4%	150	120	-20.0%
Telecommunications Charges	0	0	—	0	0	—
Advertising	0	0	—	0	500	—
Subscriptions	287	250	-12.9%	460	460	0.0%
Memberships	350	350	0.0%	700	700	0.0%
Printing and Duplicating	0	0	_	0	0	—
Travel, Transportation, and Meetings	5,760	5,413	-6.0%	6,200	6,200	0.0%
Computing and Data Processing	0	0		0	0	
Professional Services	0	0		0	0	
Other Services	0	0		0	0	
Insurance	0	0		0	0	
Utilities	0	0		0	0	
Rental and Lease (Excluding Vehicles)	0	0		0	0	
Miscellaneous Services	0	116		0	150	
Supplies	216	150	-30.6%	300	300	0.0%
Overhead	26,873	29,187	8.6%	29,187	30,887	5.8%
Payments to State System Universities	899	0	_	0	0	—
Expensed Assets	905	0	_	0	0	—
Renewal and Replacement Transfer	650	0		0	883	—
Total Operating Expenditures	35,947	35,506	-1.2%	36,997	40,200	8.7%
Capital Expenditures	0	0		0	0	
Total Expenditures	294,396	304,346	3.4%	308,008	315,127	2.3%
Less Renewal and Replacement Released	(826)	0		0	0	
Net Expenditures	\$293,570	\$304,346	3.7%	\$308,008	\$315,127	2.3%

Function: Construction Support Office (CSO)

Describe the mission of this operation.

- Provides program standardization for procurement and administration of the System's design professional services and construction contracts.
- Establishes and publishes revisions to contracts and procedures required by changes in statutes, executive orders, management directives, policies, and best practices.
- Monitors compliance by the System and universities with the requirements of statutes, policies, and procedures/standards that govern the execution of facilities projects.
- Administers the contract dispute process for protests and claims that arise under design professional services and construction contracts administered by universities.
- Procures and administers centrally held open-ended contracts for various design professional services for use by universities.
- Conducts semiannual training conferences for university construction contract specialists and for university facilities project managers.
- Assists with coordination of Commonwealth capital projects with the Department of General Services (DGS).

Explain the benefits of centralizing this operation.

All 14 universities and the Office of the Chancellor follow the same procedures for procuring and administering design professional services and construction contracts. Centralizing the policy, procedures, and oversight functions ensures a clear and consistent interpretation and application of statutes, policies, and procedures/standards across the System, which in turn reduces contracting, legal, and financial risks to facilities projects. The review of contract claims and bid protests, which CSO administers, is critical in resolving disputes at the university or System level and minimizing legal fees. Lastly, providing centrally held open-ended professional contracts reduces the workload for universities that choose to use these contracts.

Describe any cost savings made to the universities.

The System's construction contract documents and manual were revised in FY 2013/14 and FY 2014/15, respectively. Annual reviews and updates are performed. The System's design professional services contracts and manual were revised in FY 2017/18, but major refinements and additions need to continue throughout FY 2017/18 and FY 2018/19. The revised contracts and manuals provide more effective contract procurement and administration, and will better protect universities' interests.

By having centrally-held open-ended contracts, universities do not have to advertise and award their own contracts. In 2013, 2015, and FY 2016/17, CSO awarded contracts for construction management services, commissioning services, and architectural and engineering services, respectively. The six-year procurement cycle for these contracts will begin again in January 2019 with the procurement of construction management services.

Assistance to universities concerning Guaranteed Energy Savings Act (GESA) projects and other energy-related initiatives, most of which involve savings in energy usage, or the cost of energy, continues periodically.

Central coordination with DGS on capital projects provides a more responsive approach to the universities' needs and concerns. Project delegations, while currently not being done by DGS, may resume in the future, and central coordination of delegation agreements and their requirements saves universities time and effort.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

- As universities begin to use the new design professional services contracts, additional guidance and training may be required.
- The Governor's administration may reach out to and encourage the System to more actively participate in the Commonwealth's small and small diverse business programs, which in turn will require coordination with DGS, and guidance and training for the universities.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable). Discretionary line items continue to be held to a minimum, with minor variations, both up and down, from year to year.

System Contracts/Programs										
Contract/Program:	Penn State Engineering Advisory Services									
Mission/Function: Mission/Function: To provide advisory services to universities for energy planning and procurement; and electrical, mechanical, and water treatment engineering operation, maintenance, and planning. In addition to engineering advisory services, the contract includes assistance with the Energy Strategic Plan and its implementation; Clean Air Act and Clean Water Act permit compliance assistance; ongoing utilities usage data collection and reporting; and development and presentation of electrical, mechanical, and water treatment training sessions to enhance the skills of managers, supervisors, and staff.										
External Contractor Name:	Penn State Fac	cilities Engineer	ing Institute	(PSFEI)						
Cost Proration Basis:	20% of costs d of the 14 unive	•			ta share of squa	are footage				
	FY 2016/17 Actual									
Total Costs	\$556,548	\$572,840	2.9%	\$572,840	\$590,025	3.0%				

PSFEI's assistance with energy procurement alone helped State System universities avoid energy costs of approximately \$4.3 million last year and approximately \$44 million over the last 10 years. There are private-sector firms that claim to be able to provide a similar service; however, state agencies that have pursued other approaches have found the results inferior and costly (at times getting stuck with energy costs exceeding the local distribution company tariff rate). By working with PSFEI and the Commonwealth in energy procurement efforts, the State System has been able to leverage the Commonwealth's purchasing power to drive down commodity prices and make well-informed purchasing decisions.

In addition to energy procurement services, PSFEI provides engineering consulting expertise in various highly technical areas where universities do not have on-staff expertise. Bundling this capability allows for a low-cost on-call resource to help with emergency needs, provide unbiased input on project designs or engineering services, assist with very complex regulatory compliance, and negotiate with municipal and regulatory entities. The alternative would require the State System to hire additional personnel or consulting services at a cost premium.

A complete summary of services provided to the universities by PSFEI is available in the annual Utilities Utilization Report prepared for the System.

A new five-year contract was executed on June 7, 2016. In this agreement, the negotiated contract costs were set for fiscal year 2016/17. Costs for remaining years are submitted for approval annually. Year-to-year cost increases are mostly related to fringe benefits cost increases. As state employees, the impact of fringe benefits cost increases for PSFEI staff is similar to the State System and other state agencies.

System Contracts/Programs									
Contract/Program:	Contract/Program: Facilities Benchmarking and Analysis								
Mission/Function: Mission/Function: To provide data collection, validation, analysis, modeling, and benchmarking related to all aspects of facilities utilization, operations, maintenance, and investment. Advisory services include backlog analysis and modeling of life-cycle investment needs; analysis of E&G and auxiliary facility profiles; and staffing, budget, and work order analyses. Data is also used as the basis for the facilities stewardship performance funding indicator and university financial assessment.									
External Contractor Name:	Sightlines, LLC	;							
Cost Proration Basis:				campus gross s /ersity. Please s	•				
	FY 2016/17FY 2017/18FY 2017/18FY 2018/19ActualProjection% ChangeBudgetRequest% Change								
Total Costs	\$351,331	\$375,900	7.0%	\$375,900	\$383,600	2.0%			

There is a five-year contract with Sightlines through FY 2019/20. The contract was last bid in 2015 with fixed prices for FY 2015/16 and FY 2016/17. Subsequent pricing is negotiated with rate changes comparable to inflation. The apparently higher-than-inflation price increase between FY 2016/17 and FY 2017/18 is largely related to two universities moving up a size category in the Sightlines pricing schedule. The FY 2018/19 base cost for each university is \$23,300 for campuses less than 1.8 million gross square feet and \$26,700 for those greater than 1.8 million gross square feet. The cost difference between the two university sizes is approximately 15%. Six universities have also elected to purchase additional services.

This System contract/program began as a pilot effort by Kutztown, Shippensburg, and West Chester Universities. They identified the effort as a valuable tool for System-wide participation. Nearly 10 years of accurate, benchmarkable, System-wide facilities investment, operations, and maintenance data and analysis are now available.

The data and analysis services provided have been instrumental in helping to justify funding or increases in funding, including a \$145 million increase in capital funding from FY 2008/09 through FY 2010/11, restoration of Key '93 funding following FY 2010/11, and the State System's annual operating appropriation submission request and defense. The information from this program is also valuable in university decision-making and planning, including, but not limited to, identification and sharing of best practices; analysis and decision-making related to staffing levels, supervisory ratios, and organizational structure; facilities budgeting and investments; process improvement efforts; and facilities utilization and master plan efforts. The data is also being used in the State System's performance funding and university financial assessments.

In FY 2013/14, services were added to improve the reliability of estimates of deferred maintenance and capital renewal backlog, as well as a prioritized life-cycle investment projection for at least the next 10 years. Some universities have elected to purchase a more detailed analysis, and the individual university costs are allocated accordingly. This information is extremely helpful in identifying and prioritizing facilities investment needs, assisting with justification in funding increases, and assisting in university decision-making and master plan efforts.

Function: University Legal Counsel Office

Cost Proration Basis: Split equally among the 14 universities.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	14.00	14.00	0.0%	14.00	14.00	0.0%
Filled	12.70	12.65	-0.4%	14.00	14.00	0.0%
Revenue	\$0	\$0	_	\$0	\$0	_
Personnel Expenditures:						
Salary	1,176,802	1,122,996	-4.6%	1,273,276	1,330,986	4.5%
Benefits	543,652	605,083	11.3%	707,891	729,437	3.0%
Total Personnel Expenditures	1,720,454	1,728,079	0.4%	1,981,167	2,060,423	4.0%
Operating Expenditures:						
Postage/Freight	5,571	5,650	1.4%	5,800	5,800	0.0%
Telecommunications Charges	1,727	3,025	75.2%	2,052	2,775	35.2%
Advertising	334	400	19.8%	400	400	0.0%
Subscriptions	39,421	48,300	22.5%	48,300	48,300	0.0%
Memberships	7,034	7,500	6.6%	6,500	8,500	30.8%
Printing and Duplicating	0	1,500	_	3,500	3,000	-14.3%
Travel, Transportation, and Meetings	38,709	52,000	34.3%	55,000	55,150	0.3%
Computing and Data Processing	0	12,500		12,500	12,500	0.0%
Professional Services	1,584	4,300	171.5%	4,300	4,400	2.3%
Other Services	12,938	3,625	-72.0%	5,150	4,700	-8.7%
Insurance	0	0		0	0	
Utilities	0	0	_	0	0	—
Rental and Lease (Excluding Vehicles)	0	0		0	0	
Miscellaneous Services	409	6,700	1538.1%	3,000	6,000	100.0%
Supplies	1,327	1,625	22.5%	2,650	2,125	-19.8%
Overhead	200,934	188,962	-6.0%	188,962	180,880	-4.3%
Payments to State System Universities	172	0	_	0	0	_
Expensed Assets	5,941	6,272	5.6%	5,100	3,600	-29.4%
Renewal and Replacement Transfer	5,534	4,599	-16.9%	4,599	5,006	8.8%
Total Operating Expenditures	321,635	346,958	7.9%	347,813	343,136	-1.3%
Capital Expenditures	0	0		0	0	
Total Expenditures	2,042,089	2,075,037	1.6%	2,328,980	2,403,559	3.2%
Less Renewal and Replacement Released	(5,692)	(5,403)	-5.1%	(4,599)	(3,257)	-29.2%
Net Expenditures	\$2,036,397	\$2,069,634	1.6%	\$2,324,381	\$2,400,302	3.3%

Function: University Legal Counsel Office (ULC)

Describe the mission of this operation.

The University Legal Counsel Office's mission is to provide legal advice and representation to the State System's 14 universities.

Explain the benefits of centralizing this operation.

Centralizing this operation increases efficiency; improves communications; avoids duplication of services; and promotes teamwork, problem solving, and collaborative efforts.

Describe any cost savings made to the universities.

The employment of staff attorneys reduces costs, as the cost of contracting with outside law firms is high (i.e., \$300 an hour and higher, plus costs). More court litigation and trainings are being handled in-house. This provides better representation of clients as counsel is part of the State System and familiar with the universities and the System's operations.

Additionally, the decision was made to leave one support staff FTE position vacant beginning in July 2016, which has resulted in approximately \$60,000 in annual salary and benefits savings.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year. University Legal Counsel continues to cut costs in the area of required legal education credits for the attorneys by making use of the lower cost in-house offerings at the Governor's Office of General Counsel and local Bar Associations.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable).

A need is anticipated for temporary/part-time legal services associated with privatized student housing matters. Funds for this purpose have been included in personnel compensation in the FY 2017/18 projection and FY 2018/19 request. The use of outside counsel will be avoided if possible, which will keep costs to a minimum.

This office is looking into a document management system that will assist in managing documents, specifically electronic documents, more efficiently (including better storage and retrieval of information). Included in this budget is \$7,500 for the annual software license and \$2,800 for consulting services for implementation. The office continues to explore Optical Character Recognition (OCR) software/equipment for the current multifunction machine and/or for the attorneys' desktops at a cost not to exceed \$5,000. This will aid in litigation client management because documents can be immediately scanned into an electronic format that will be easily searchable and indexed.

As ULC moves toward a paperless office, approximately 150 boxes of archived files will be reviewed to remove any unnecessary documentation. After completing that process, the remaining files will be scanned and stored electronically, making them accessible at any time to all legal staff. ULC plans to use an outside company for this work, as the office no longer has the support staff to handle such a project. The estimated cost for this is \$3,000.

	Sy	/stem Contrac	ts/Program	S							
Contract/Program:	Legal Counsel	Contracts									
Mission/Function:	arbitrations and	Outside counsel to represent the State System in labor relations (including arbitrations and labor board matters), labor negotiations, construction, bond matters investigations, and litigation.									
External Contractor	1) Fox Rothso	hild LLP									
Name:	 Campbell E Houston Ha Dickie, McC Buchanan I Florio Perru Schnader H Stradley Ro Ballard Spa Stevens & E 	 2) Saul Ewing LLP 3) Campbell Durrant Beatty Palombo & Miller, P.C. 4) Houston Harbaugh, P.C. 5) Dickie, McCamey & Chilcote, P.C. 6) Buchanan Ingersoll & Rooney, P.C. 7) Florio Perrucci Steinhardt & Fader, LLC 8) Schnader Harrison Segal & Lewis LLP 9) Stradley Ronon 10) Ballard Spahr LLP 11) Stevens & Lee 									
Cost Proration Basis:	Actual, as billed	d by vendor.									
	FY 2016/17 Actual										
Employee Benefits (1)	\$408	\$0	—	\$0	\$0	—					
Labor Relations (2)	0	0	—	0	0						
Labor Relations and Negotiations (3, 6, 10, 11)	297,356	295,000	-0.8%	300,000	300,000	0.0%					
Presidential Contract Review (4)	0	0	_	0	0	—					
Student Housing and Clery Act (8)	0	0		0	0	—					
Civil Rights (Title IX) (7)	0	0		0	0						
Affordable Care Act/Employee Benefits (8)	0	0	—	0	0	_					
Construction Litigation (5)	0	0	—	0	0	—					
Intellectual Property (9)	0	0	_	0	0	—					
Total Costs	\$297,764	\$295,000	-0.9%	\$300,000	\$300,000	0.0%					

Function: Keystone Library Network (KLN)

Cost Proration Basis: Shippensburg hub services charges for Islandora and Archive Space allocated to participating universities

based on student FTE. All other costs allocated according to the following formulas: for Cheyney, Clarion, Mansfield, and Lock Haven Universities, 75% of the costs allocated based on total student FTE and 25% allocated equally. For the remaining 10 universities, 40% of the costs allocated based on total student FTE and 60% allocated equally.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	1.90	1.90	0.0%	1.90	1.90	0.0%
Filled	1.44	1.90	31.9%	1.90	1.90	0.0%
Revenue	\$215,062	\$222,431	3.4%	\$195,152	\$225,969	15.8%
Personnel Expenditures:						
Salary	115,614	134,645	16.5%	135,323	137,446	1.6%
Benefits	70,344	92,206	31.1%	95,816	94,168	-1.7%
Total Personnel Expenditures	185,958	226,851	22.0%	231,139	231,614	0.2%
Operating Expenditures:						
Postage/Freight	2	35	1650.0%	50	35	-30.0%
Telecommunications Charges	655	659	0.6%	750	659	-12.1%
Advertising	0	0	_	0	0	_
Subscriptions	0	0		0	0	_
Memberships	715	740	3.5%	740	900	21.6%
Printing and Duplicating	0	0	_	0	0	_
Travel, Transportation, and Meetings	3,859	5,200	34.7%	5,200	8,336	60.3%
Computing and Data Processing	833,710	302,781	-63.7%	288,525	304,577	5.6%
Professional Services	0	10,669	_	5,000	4,051	-19.0%
Other Services	6,655	115	-98.3%	250	0	—
Insurance	0	0	—	0	0	
Utilities	0	0	—	0	0	
Rental and Lease (Excluding Vehicles)	256	256	0.0%	256	0	
Miscellaneous Services	0	0	—	0	0	—
Supplies	11	0	—	0	250	—
Overhead	24,884	26,562	6.7%	26,563	24,725	-6.9%
Payments to State System Universities	424,781	385,000	-9.4%	385,000	342,000	-11.2%
Expensed Assets	769	0	—	0	0	—
Renewal and Replacement Transfer	52,205	26,532	-49.2%	29,869	63,082	111.2%
Total Operating Expenditures	1,348,502	758,549	-43.7%	742,203	748,615	0.9%
Capital Expenditures	0	45,980		18,000	0	_
Total Expenditures	1,534,460	1,031,380	-32.8%	991,342	980,229	-1.1%
Less Renewal and Replacement Released	(515,702)	(109,744)	-78.7%	(29,869)	0	—
Net Expenditures	\$803,696	\$699,205	-13.0%	\$766,321	\$754,260	-1.6%

Function: Keystone Library Network (KLN)

Describe the mission of this operation.

The mission of the Keystone Library Network (KLN) is to provide a coordinated framework for cost-effective collaboration in the sharing, procurement, and effective provision of information resources and services to students, faculty, and staff at State System universities. This mission is accomplished through the consortia purchase and coordinated delivery of information resources and the provision of an integrated, shared library automation system for the benefit of all System students and faculty. The budget covers the cost of the library system (Alma/Primo); the operation of this system, ArchivesSpace, and Islandora by Shippensburg University of Pennsylvania; and Office of the Chancellor staff. A second budget, the KLN On-Line Databases and Related Services System Contracts/Programs, includes the costs of library content in the form of databases, e-books, and library services hosted by vendors. The KLN On-Line Databases budget includes core databases purchased by all State System universities, as well as optional databases and library services that now include ArchivesSpace membership and CONTENTdm, which are purchased centrally to obtain better pricing.

This budget also includes revenue (\$225,969) from five partner institutions: Geneva College, Harrisburg University of Science and Technology, Lincoln University, State Library of Pennsylvania, and the Pennsylvania State Archives.

Following are outcomes of this shared service:

- Provides assurance of a stable, reliable, and available library automation system that searches digital and
 physical resources to benefit the students and faculty.
- Reduces back-office library processes.
- Ensures the effective and efficient communication processes with libraries.
- Allows for coordinated and efficient professional development for existing product and service enhancements, as well as sharing of best practices in the use of library software.

Explain the benefits of centralizing this operation.

Overhead and administrative costs are reduced by writing 8 contracts rather than 112. Concentrated critical decision-making through a competitive RFP process brings campus representatives together to choose the best product for the group. Cohesiveness and consistency of library service across the System are additional benefits.

Describe any cost savings made to the universities.

In an initial study performed by the Office of Internal Audit and Risk Assessment, it was determined that the cost savings to the universities in the 2003/04 fiscal year was \$1.2 million. In a more recent study, it was determined that the cost avoidance for FY 2016/17 was \$2.7 million.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

There are no new initiatives for FY 2018/19. The staff at Shippensburg University was reduced by 0.5 FTE (a similar reduction occurred in FY 2017/18), totaling an overall reduction of 1.0 FTE as a result of the upgrade to the Alma/Primo software. Additionally, vendor hosting will reduce local server space, which will decrease the cost of renewal and replacement for servers.

Explain in detail cost increases with justification on the basis of benefits to the universities.

There are one-time costs associated with Alma/Primo SaaS training hosted at the Dixon University Center (\$6,467).

System Contracts/Programs										
Contract/Program: KLN On-Line Databases and Related Services										
Mission/Function:	Provide annual	licenses to data	abases inclu	ding full-text arti	cles.					
External Contractor Name:	EBSCO YBP, C	American Library Association, The Chronicle of Higher Education, EBSCO Publishing, EBSCO YBP, Gale Cengage, Infobase Learning, JSTOR, Lyrasis, Morningstar, PALCI, OCLC, ProQuest, Shippensburg University of Pennsylvania, SpringShare, WALDO								
Cost Proration Basis:	services will be university librar Universities, 75 allocated equal based on total s software) will be	Core databases, optional databases (except WALDO and PALCI), and library services will be allocated based on the following formulas agreed upon by the university library directors. For Cheyney, Clarion, Mansfield, and Lock Haven Universities, 75% of the costs will be allocated based on total student FTE and 25% allocated equally. For the remaining 10 universities, 40% of the costs will be allocated based on total student FTE and 60% allocated equally. Library services (optional software) will be allocated based on student FTE. WALDO and PALCI database costs are allocated to each university as billed by each vendor.								
	FY 2016/17 Actual									
Total Costs	\$3,234,854	\$3,249,805	0.5%	\$3,297,597	\$3,339,475	1.3%				
Explain in detail signific Services that comprise the Core Databases Optional Databases Library Services Library Services (Optiona Total	e budget:	\$1,585,377 1,373,353 340,756 39,989 \$3,339,475	ation on the	basis of benef	its to the univ	ersities.				

Function: Distance Education

Cost Proration Basis: Split evenly among the 14 universities.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	0.50	0.11	-78.0%	0.50	0.00	
Filled	0.50	0.11	-78.0%	0.50	0.00	_
Revenue	\$6,785	\$0	_	\$6,000	\$0	_
Personnel Expenditures:		· · · · · ·				
Salary	37,901	18,731	-50.6%	39,210	0	_
Benefits	15,176	4,427	-70.8%	16,088	0	_
Total Personnel Expenditures	53,077	23,158	-56.4%	55,298	0	_
Operating Expenditures:		·				
Postage/Freight	0	0		0	0	_
Telecommunications Charges	0	0		0	0	
Advertising	0	0		0	0	
Subscriptions	0	0		0	0	_
Memberships	0	0		150	0	
Printing and Duplicating	0	0		0	0	_
Travel, Transportation, and Meetings	1,157	0	_	0	0	_
Computing and Data Processing	0	0	_	0	0	_
Professional Services	6,100	0	_	6,300	0	_
Other Services	105	30	-71.4%	100	0	_
Insurance	0	0	_	0	0	_
Utilities	0	0		0	0	—
Rental and Lease (Excluding Vehicles)	256	256	0.0%	256	0	—
Miscellaneous Services	0	0	—	0	0	—
Supplies	87	0		0	0	—
Overhead	6,858	471	-93.1%	7,084	0	_
Payments to State System Universities	0	44,939	—	0	67,792	—
Expensed Assets	0	0		500	0	_
Renewal and Replacement Transfer	0	0	—	815	0	_
Total Operating Expenditures	14,563	45,696	213.8%	15,205	67,792	345.9%
Capital Expenditures	0	0		0	0	
Total Expenditures	67,640	68,854	1.8%	70,503	67,792	-3.8%
Less Renewal and Replacement Released	0	(1,647)		(815)	0	_
Net Expenditures	\$60,855	\$67,207	10.4%	\$63,688	\$67,792	6.4%

Questionnaire

Function: Desire2Learn (D2L) Shared Service (support for D2L/Brightspace Learning Management System [LMS] and related services) (Distance Education)

Describe the purpose and expected outcomes of this shared service.

The Distance Learning Coordinator retired in fall 2017; as such, major components related to the support of the Teaching/Learning Environment Learning Management System (LMS) and related services have been transitioned to West Chester University. This CUO includes an agreement with West Chester University to support the D2L's Brightspace LMS, D2L Helpdesk, and related products and services administratively procured and contracted by the State System.

Following are outcomes of this shared service:

- Provides the assurance of a stable, reliable, and available D2L/Brightspace environment.
- Ensures the effective and efficient communications process with all constituent groups impacted.
- Provides professional development for existing and extended product and service enhancements, service issue escalation, and training.

Time Period for Shared Service

This shared service will run parallel with the D2L/Brightspace contract, which runs through June 30, 2022 (with three two-year optional renewals). This shared service will take effect on or before July 1, 2018, and by mutual agreement (which also includes support of the university presidents) will be renewed annually each fiscal year throughout D2L's Brightspace contract period.

West Chester University Responsibilities

The primary responsibility includes the continuous oversight of D2L, the associated procured Helpdesk, and a specific list of associated LMS software and services (shown in Attachment A). Any changes requested by the universities or the Office of the Chancellor to the list of software and services or to the responsibility will be addressed in subsequent amendments.

The State System and West Chester will review the effectiveness and financial accuracy and details associated with this LOU with the universities twice each year, on or near January 1 and July 1. West Chester's liaison for this LOU will serve as the central point of contact with D2L, integrated third-party product vendors, individual universities, and the Office of the Chancellor. Communications from the vendors to the individual universities, and vice versa, are to be handled by the liaison, including escalation of any major issues with vendors, officials at the Office of the Chancellor, and administrators of the LOU.

West Chester will conduct regular communications with various constituent groups via regular virtual meetings/conference calls between the liaison and the individual university LMS administrators across the State System and will prepare an agenda for each virtual meeting/conference call including agenda items solicited from each of the universities. These virtual meetings/conference calls will address any current or upcoming operational issues and provide an opportunity to explore how to expand and enhance LMS-related services. These calls will include representation from the LMS vendor and/or integrated third-party product vendors on an as-needed basis.

Ongoing communications, including any performance or accessibility issues specific to D2L LMS or integrated products, are to be distributed promptly and thoroughly by the liaison to the individual university LMS administrators via the established communications protocol. This communication begins at the identification of the issue, includes updates during the resolution process, and concludes with a summary of the issue's resolution. This contracted service provides for the LMS support and daily operations to reside and be performed at the university level.

This LOU provides 0.5 FTE. It is anticipated that this LOU will be staffed with a team comprised of a liaison, a backup liaison, and support personnel totaling the 0.5 FTE. It is not expected, or desired, for one individual to be responsible for the entire LOU.

This team will support, facilitate, and enhance the universities' education offerings by:

- Being the liaison that serves as the central point of contact for D2L's Brightspace and Helpdesk, integrated third-party product vendors, individual universities, and the Office of the Chancellor.
- Overseeing the daily operations of the System-wide D2L LMS and Helpdesk licenses/contracts, and related third-party integrated products and services. The procurements, chargeback, legal, and contracting related activities continue as a responsibility of the Office of the Chancellor.
- Opening support tickets with the vendor on behalf of all universities in the case of an issue that impacts the entire State System.
- Coordinating resolution of any issues related to Helpdesk and related third-party integrated products and services.
- Working with vendors to escalate the resolution of issues not being addressed in a timely fashion.
- Working with vendors to communicate technical support documents and training materials for the LMS and related third-party integrated products and services.
- Coordinating product and tool demonstrations with LMS and third-party integrated products and services to the LMS administrators group and others, as appropriate.
- Identifying and facilitating licensing of software and training opportunities for universities through collaborative purchases of hardware and software.
- Working strategically with university LMS administrators across the State System to ensure stable environments, maintaining each university's currently designated LMS contact.
- Working with university LMS administrators for the export, backup, continuity, and periodic purging of course content.
- Representing the LMS administrators group at meetings and/or in discussions concerning online education/learning management systems.
- Working with third-party integrated product vendors on product deployments, upgrades, and patches. This includes communications with universities concerning these activities.
- Monitoring and reporting on the service levels of the D2L LMS, including documenting the details related to any performance or availability issues to support the securing of credit for service-level failures.
- Keeping abreast of policies, laws, and regulations and advising the universities and the Office of the Chancellor, as needed.
- Monitoring and communicating the trends in the development of the LMS's continuous delivery upgrades and patches, which includes sending detailed reminders of any upcoming activity by a vendor that may interrupt/change service availability.
- Monitoring and communicating trends in the development of new educational technologies and related academic applications.
- Providing an annual report highlighting how D2L and contracted vendors have provided a stable, reliable, and available LMS environment, and how the liaison represented all affected constituent groups, including providing professional development for existing and extended product and service enhancements, service issue escalation, and training.

Office of the Chancellor Responsibilities

The Office of the Chancellor will continue to handle the procurement, chargeback, legal, and contracting related activities for these products and services.

Joint Responsibilities

The liaison will work with the Office of the Chancellor to prepare the annual budget and vendor billing related to the set of products and services supporting this LOU. The recovery of funds based upon service-level failures is a shared responsibility between the LOU and the Office of the Chancellor. The liaison will provide the necessary information to the Office of the Chancellor so that the Office of the Chancellor can secure credit for service-level failures.

Describe the budget model.

The budget model includes funding for 0.5 FTE plus an operational budget. The LOU is staffed at 0.5 FTE. Total funding to West Chester includes the actual salary and cost of benefits for their staff members (totaling 0.5 FTE across two or more staff members) plus operational budget.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

The new LMS contract for D2L's Brightspace began on July 1, 2017. This contract represents a significant cost reduction over previous years. For the first five years of the contract, there will be no cost increase in the yearly cost per FTE of the D2L and D2L products to the universities. There are no longer individual fees added for the various additional support services related to authentication, etc. The new contract also provides aggressively discounted pricing on optional products such as Insights, the advanced analytics, ePortfolio, and other products. The daily operations and support for this shared service have been transitioned to the university level.

Attachment A

List of LMS Software and Services

Software in scope:

- Brightspace Learning Environment [State System]
- Blackboard Collaborate [State System]
- Examity [Local]
- ePortfolio [State System]
- Helpdesk services awarded through LMS contract [State System]
- Insights Analytics [State System]
- Kaltura [State System]
- Learning Objects Campus Pack [State System]
- Publisher Integrations [Local]
- ReadSpeaker [Local]
- Respondus (includes LockDown Browser and StudyMate) [State System]
- Turnitin [State System]
- VoiceThread [Local]
- YouSeeU [Local]
- Zoom [State System]

	System Contracts/Programs										
Contract/Program:	Distance Educa	ation Third-Party	y Software Pr	oducts							
Mission/Function:	To provide the universities with tools for faculty and staff to use in their courses.										
External Contractor Name:	Various (listed below)										
Cost Proration Basis:	Items 1 through 5 are based on student FTE. Items 6, 7, and 9 through 11 are divided equally among participating universities. Item 8 is based on employee FTE. Items 12 and 13 are based on level of service and tiered FTE pricing.										
	FY 2016/17 Actual	Actual Projection % Change Budget Request % Change									
1. Wolfram Site License	\$77,599	\$77,599	0.0%	\$77,599	\$77,599	0.0%					
2. ESRI Site License	91,000	91,000	0.0%	91,000	91,000	0.0%					
 Edmentum Teach Prep Library 	1,000	594	-40.6%	594	594	0.0%					
 Learning Objects Campus Pack Software 	95,710	74,750	-21.9%	74,750	74,750	0.0%					
5. Turnitin	124,456	130,023	4.5%	130,023	130,023	0.0%					
6. Respondus Software	60,270	58,690	-2.6%	60,130	60,130	0.0%					
7. Blackboard Collaborate	329,250	335,835	2.0%	335,835	0	_					
8. Zoom (replaces Blackboard Collaborate)	0	0	_	0	187,975	_					
 Sonic Foundry Mediasite Customer Assurance EX Server Maintenance* 	5,250	5,250	0.0%	5,250	5,295	0.9%					
10. Sonic Foundry MyMediasite Enterprise Campus*	19,399	19,699	1.5%	25,000	25,000	0.0%					
 Shippensburg University Mediasite Shared Server Hosting* 	26,887	30,487	13.4%	30,487	66,603	118.5%					
12. Quality Matters Consortia Subscription	26,400	27,850	5.5%	27,850	27,850	0.0%					
13. Kaltura Open Source Video Products	75,740	251,781	232.4%	135,702	135,702	0.0%					
Total Costs	\$932,961	\$1,103,558	18.3%	\$994,220	\$882,521	-11.2%					

The 2018/19 request is based on the following:

- Respondus includes options added by the universities.
- The Blackboard Collaborate contract ends June 2018. Zoom replaces Blackboard Collaborate at major savings with no annual increases. Zoom will be allocated to the universities based on FTE employees; students are free.
- Shippensburg University Mediasite Shared Server Hosting includes \$50,726 for the purchase of additional backup hardware and servers, as well as a five-year maintenance contract.
- Costs for all other products are based on the pricing per the contract, if known,* or an estimated increase. Annual
 pricing for remaining software/services is provided by vendors in April. Individual emails are sent to universities to
 confirm optional participation.

In FY 2015/16, Millersville and Slippery Rock paid for a 17-month license for Kaltura. These universities did not pay Kaltura charges in FY 2016/17, as the license term continued until June 30, 2017. The increase for FY 2017/18 reflects the renewal of licenses by Slippery Rock, as well as the addition of options by West Chester and IUP during FY 2016/17.

	System Contracts/Programs								
Contract/Program: Desire2Learn (D2L) Learning Management System (LMS) and Helpdesk									
Mission/Function:	n: To provide Learning Management System (LMS) software, Insights Learning Analytics, and Helpdesk								
External Contractor Name:	Desire2Learn (D2L)								
Cost Proration Basis:	Student FTE (N	/lillersville does	not participa	te in the D2L H	elpdesk).				
	FY 2016/17 FY 2017/18 FY 2017/18 FY 2018/19 Actual Projection % Change Budget Request % Change								
Total Costs	\$1,592,669	\$1,613,483	1.3%	\$1,526,073	\$1,526,073	0.0%			

As required by the Commonwealth, a Request for Proposals for an LMS was issued in Fall 2016. D2L was again selected as the winning vendor by all 14 universities. The FY 2018/19 request, which is year two of the five-year contract that runs from July 1, 2017, to June 30, 2022, includes not only the cost of the LMS, but also the Helpdesk and Insights, D2L's learning analytics package.

Maintenance increases were held at 0% over the five years of the contract, which will net an additional \$471,764 in savings across the State System.

Function: The Harrisburg Internship Semester (THIS)

Cost Proration Basis: <u>Student intern personnel expenses and child abuse clearances allocated to intern's home university;</u> remaining costs split equally among 14 universities.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement*: Authorized Filled	1.15 1.07	1.15 1.15	0.0% 7.5%	1.15 1.15	1.15 1.15	0.0% 0.0%
Revenue	\$0	\$0		\$0	\$0	
Personnel Expenditures:						
Salary	135,239	80,926	-40.2%	101,081	117,106	15.9%
Benefits	12,233	10,707	-12.5%	12,835	13,811	7.6%
Total Personnel Expenditures	147,472	91,633	-37.9%	113,916	130,917	14.9%
Operating Expenditures:						
Postage/Freight	3	15	400.0%	25	20	-20.0%
Telecommunications Charges	0	0	_	0	0	—
Advertising	0	0	_	0	0	—
Subscriptions	0	0	_	0	0	_
Memberships	0	0	_	0	0	—
Printing and Duplicating	0	0	_	0	0	_
Travel, Transportation, and Meetings	3,641	3,600	-1.1%	3,600	3,600	0.0%
Computing and Data Processing	0	0	_	0	0	_
Professional Services	0	0	_	0	0	—
Other Services	105	45	-57.1%	1,050	60	-94.3%
Insurance	0	0		0	0	—
Utilities	0	0		0	0	
Rental and Lease (Excluding Vehicles)	256	256	0.0%	256	256	0.0%
Miscellaneous Services	0	500		1,440	1,680	16.7%
Supplies	30	0		140	0	—
Overhead	10,660	13,360	25.3%	13,360	13,515	1.2%
Payments to State System Universities	44,952	47,133	4.9%	47,133	50,750	7.7%
Expensed Assets	136	0	_	150	0	—
Renewal and Replacement Transfer	437	0	—	0	627	—
Total Operating Expenditures	60,220	64,909	7.8%	67,154	70,508	5.0%
Capital Expenditures	0	0		0	0	_
Total Expenditures	207,692	156,542	-24.6%	181,070	201,425	11.2%
Less Renewal and Replacement Released	(124)	0		0	0	
Net Expenditures	\$207,568	\$156,542	-24.6%	\$181,070	\$201,425	11.2%

*In addition to the FTEs listed, an estimated 28 students will receive a stipend during FY 2018/19.

Function: The Harrisburg Internship Semester (THIS)

Describe the mission of this operation.

Since 1989, the State System has sponsored a semester-long internship program for outstanding students in all academic majors. The Harrisburg Internship Semester (THIS) program provides an important and enriching academic experience. Students are placed in working relationships with policymakers in the executive and legislative branches of Pennsylvania government, as well as with independent boards, agencies, and commissions. Students learn the dynamics of state government in new and powerful ways through direct involvement in report and speech writing, research, and program design and evaluation. In turn, policymakers benefit from the fresh points of view of these outstanding students. Every effort is made to tailor the student's internship placement to his/her academic major. Each student earns a total of 15 semester credit hours for the internship experience from the State System university in which he/she is enrolled. Nine credit hours are earned for the internship placement experience, three credit hours for completing an individualized directed project involving substantial research and analysis, and three credit hours for participating in a rigorous academic seminar.

Explain the benefits of centralizing this operation.

Student interns in the THIS program come from the 14 State System universities. Each university selects a THIS representative independently and has a THIS faculty coordinator who is responsible for the student selection process. By centralizing this operation, opportunities are achieved in enhancing the students' academic experience, engaging in public policy, promoting State System/Commonwealth relations, and engaging State System university students in the Commonwealth's future.

Describe any cost savings made to the universities.

Universities jointly sponsor one faculty member to serve as the faculty director. The faculty director coordinates and supervises student interns and their research activities and is responsible for program administration, resulting in cost savings to the universities since a faculty member from each participating university does not need to travel to Harrisburg for internship coordination and supervision activities. The current THIS director began in spring 2015 and will continue through fall 2018.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

A review of the student stipend was undertaken to determine if there were a need for adjustment. Information and data reviewed included monthly leases in Harrisburg, most common room and board charges at the universities, financial aid implications, and historical information. When the THIS program began, the cost of housing in Harrisburg was significantly higher than the room and board charges at the universities. This trend is no longer the case. In addition, monthly leases were not an option in Harrisburg, and many students had to pay six-month leases for a four-month program. Finally, PHEAA now computes on-campus and off-campus room/board in a similar formula. In FY 2017/18, the student stipend was reduced from \$5,500 to \$4,000, and it will remain the same for FY 2018/19.

The administrative assistant's allocation to this budget was increased from 10% to 15% in FY 2015/16 to better reflect actual time spent working on the THIS program.

Per conversations with previous THIS directors and APSCUF, transitions between THIS directors (after a three-year term) will occur between the fall and spring semesters to ensure more stable knowledge transition. There will be a search for a new THIS director in early fall 2018 to start a three-year term beginning in spring 2019.

In addition to the costs in the CUO, there is a one-third credit per intern of additional pay for the faculty member serving as the THIS campus coordinator each semester.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable). There may be a budget adjustment midyear with a new THIS director beginning in spring 2019. The replacement costs do not change but rather the mileage associated with the home campus of the new director. Other expenses remain the same.

Function: SSHEnet

Cost Proration Basis: Split equally among the universities, the Office of the Chancellor, and Vartan Way.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	2.90	2.90	0.0%	2.90	2.90	0.0%
Filled	2.90	2.90	0.0%	2.90	2.90	0.0%
Revenue	\$0	\$0	_	\$0	\$0	_
Personnel Expenditures:						
Salary	286,015	292,001	2.1%	294,588	296,213	0.6%
Benefits	98,745	103,474	4.8%	104,592	101,088	-3.4%
Total Personnel Expenditures	384,760	395,475	2.8%	399,180	397,301	-0.5%
Operating Expenditures:						
Postage/Freight	307	150	-51.1%	300	250	-16.7%
Telecommunications Charges	154,580	136,000	-12.0%	136,457	136,400	0.0%
Advertising	0	0		0	0	_
Subscriptions	0	0		0	0	
Memberships	30,000	30,000	0.0%	30,000	30,000	0.0%
Printing and Duplicating	0	0		0	0	
Travel, Transportation, and Meetings	1,750	2,300	31.4%	4,500	4,500	0.0%
Computing and Data Processing	41,819	44,239	5.8%	49,161	59,792	21.6%
Professional Services	0	0	_	0	0	_
Other Services	0	0		0	0	_
Insurance	0	0	_	0	0	_
Utilities	0	0	_	0	0	_
Rental and Lease (Excluding Vehicles)	0	0		0	0	
Miscellaneous Services	100	50	-50.0%	100	100	0.0%
Supplies	50	0		0	0	
Overhead	29,287	29,801	1.8%	29,801	23,894	-19.8%
Payments to State System Universities	17,160	17,160	0.0%	18,940	17,280	-8.8%
Expensed Assets	2,329	2,568	10.3%	2,700	2,600	-3.7%
Renewal and Replacement Transfer	105,532	0		0	212,008	
Total Operating Expenditures	382,914	262,268	-31.5%	271,959	486,824	79.0%
Capital Expenditures	0	0		0	0	_
Total Expenditures	767,674	657,743	-14.3%	671,139	884,125	31.7%
Less Renewal and Replacement Released	0	0		0	0	
Net Expenditures	\$767,674	\$657,743	-14.3%	\$671,139	\$884,125	31.7%

Function: SSHEnet

Describe the mission of this operation.

SSHEnet is the high-speed, state-of-the-art, private digital Wide Area Network (WAN) that delivers System-wide IP-based applications and services to the State System and its affiliates. SSHEnet supports secure applications (e.g., ERP and payroll), private applications (e.g., videoconferencing and email), and public applications available on the Internet and Internet2. SSHEnet is considered by the State System to be a mission-critical asset. During FY 2016/17, SSHEnet continued to be fine-tuned as a multiprovider design with services provided by Keystone Initiative for Network Based Education and Research (KINBER), CenturyLink (formerly Level 3 Communications), Comcast, and Windstream. The new design architecture (implemented in FY 2014/15) continues to provide the State System with a robust, diverse, and redundant network to support the growing bandwidth demands on our campuses. KINBER is the organization that supports and operates the Pennsylvania Research and Education Network (PennREN)—a federal-grant-sponsored initiative of which the State System is an original founding member.

Explain the benefits of centralizing this operation.

SSHEnet provides connectivity and resource sharing between all State System universities and the Office of the Chancellor. SSHEnet is the main throughway for access to such mission-critical services as distance education (Desire2Learn); the Keystone Library Network; the Shared Administrative System for finance, procurement, and human resources/payroll processing; the Business Warehouse for Web-based reporting and analysis templates; the enterprise portal for Employee Self-Service (ESS) and Manager Self-Service (MSS); System-wide videoconferencing capabilities used by faculty and staff; and Internet2. The model of aggregating WAN services provides the opportunity to leverage best pricing from Internet Service Providers (ISP) and data service providers. Ongoing operational costs are also reduced significantly by having a small staff of highly skilled network and video engineers supporting the State System universities and the Office of the Chancellor.

Describe any cost savings made to the universities.

The SSHEnet design takes advantage of strategic sourcing opportunities to drive down costs for network circuits/ports, Commodity Internet bandwidth, and connectivity among State System universities. A significant benefit of the existing agreement between the State System and KINBER/PennREN that provides peering servers for high-bandwidth services (e.g., Netflix) is that universities do not have to increase Commodity Internet bandwidth to meet demands.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

During FY 2018/19, universities will continue to benefit from the SSHEnet design and contracts for services to support the Intranet and point-to-point data circuits that were put in place in prior years. The design and contracts are fulfilling their intended purpose to minimize the demand for Internet bandwidth, while continuing to provide a more robust and redundant network in case of outages. A multiyear contract with KINBER is in place to provide full access to PennREN services for data traffic to increase bandwidth for Internet2, bandwidth among all KINBER members, and the implementation of direct access to Content Delivery Networks (CDNs). The latter service provides universities access to servers connected to PennREN that download high-volume content from Netflix, Google (mostly YouTube), and other services, minimizing the need for each request to consume more costly Commodity Internet bandwidth. This new design will serve to slow the growth of required Commodity Internet bandwidth (and associated costs), as well as to improve service for end users. In fact, Commodity Internet bandwidth is projected to remain steady in FY 2018/19. Since FY 2014/15, the Payments on Behalf of Universities consolidated billing process has been used to charge back the costs of these services to the universities based specifically on usage and the capacity requested by each university.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable).

The initial purchase in FY 2015/16 included three years of maintenance on the SSHEnet routers. Since the three-year period has ended, this budget request includes \$9,176 for maintenance. In addition, the bulk of the increase in the budget request is for Renewal and Replacement (R&R), which was reduced significantly in the FY 2017/18 budget. This year's request is to restore the R&R balance so that funds are available for the SSHEnet router refresh and replacement of the multipoint control units (MCUs) supporting videoconferencing.

System Contracts/Programs							
Contract/Program:	SSHEnet Band	width, Circuits,	and Routers	3			
Mission/Function:	Provide Interne	et bandwidth, ci	rcuits/ports,	and routers.			
External Contractor Name:	KINBER and C	KINBER and CenturyLink (formerly Level 3 Communications)					
Cost Proration Basis:	s: Based on level of service/usage by university.						
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
Bandwidth	\$642,496	\$696,103	8.3%	\$699,480	\$708,000	1.2%	
Circuits/Ports	840,527	890,286	5.9%	891,642	969,042	8.7%	
Routers	0	0	_	0	0	—	
Maintenance for routers	0	0	—	0	93,124	—	
Total Costs	\$1,483,023	\$1,586,389	7.0%	\$1,591,122	\$1,770,166	11.3%	

During FY 2017/18, both Internet bandwidth and circuit/port charges remained close to projections. The utilization of KINBER/PennREN content delivery servers for universities to access high-volume, high-data volume content (e.g., Netflix, YouTube) has served to stabilize the need for commodity Internet bandwidth while still meeting the needs of both administration and students. The projected budget for FY 2018/19 reflects known and potential expansion of circuit/port capacity to get from campus networks to KINBER/PennREN. In addition, several universities are beginning to add dedicated ports to utilize off-site storage for backup purposes at sister institutions. It is important to note that these services will only be charged to universities based on actual charges incurred at their request.

The FY 2018/19 request reflects an estimate for maintenance on the SSHEnet routers. While this appears to be a new expense for this year, it is not. At the time of hardware purchase in FY 2015/16, maintenance was paid up front for the first three years in order to take advantage of a significant discount. Universities have most likely been charging the appropriate portion of this expenditure to each of the three fiscal years; the above costs will be a continuation of those charges, albeit at a higher rate because the discount period has ended.

System Contracts/Programs								
Contract/Program:	Federally Requ	iired Annual Sir	ngle Audit					
Mission/Function:	In accordance with the U.S. Office of Management and Budget's Uniform Guidance, perform annual single audit of federal student financial assistance and other federal awards received by the State System.							
External Contractor Name:	CliftonLarsonA	CliftonLarsonAllen LLP						
Cost Proration Basis:	Vendor bills each university directly for the student financial aid audits. The cost of audits of the other major programs is allocated to the universities based on each university's expenditures in the audited program in relation to total expenditures for all universities in the program.							
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change		
Student Financial Aid	(2015/16 Audit— 5 Universities) \$104,669	(2016/17 Audit— 6 Universities) \$120,310		(2016/17 Audit— 5 Universities) \$106,369	(2017/18 Audit— 4 Universities) \$84,304			
Additional Major Programs	(11 Samples @ \$5,335) 58,685	(12 Samples @ \$5,422) 65,064		(18 Samples @ \$5,422) 97,596	(16 Samples @ \$5,000) 80,000			
Total Costs	\$163,354	\$185,374	13.5%	\$203,965	\$164,304	-19.4%		

Note: Billing is one year behind, e.g., the costs to audit FY 2017/18 are not billed until FY 2018/19.

Fiscal year 2016/17 was the last year of CliftonLarsonAllen's five-year contract. This contract went out for bid for the audit of fiscal years beginning in 2017/18. The contract was again awarded to CliftonLarsonAllen, whose total three-year bid for the OMB financial audit was \$16,296, or 5.4%, less than the previous three-year cost. In addition, the per-program audit cost of the Major Programs will decrease by 4.4% over the three-year term of the contract.

Financial Aid

Universities' federal student financial aid is audited on a rotational basis. Under the plan, each university is to be audited once every three years, but it has been necessary to audit Cheyney each year: five universities, including Cheyney, were audited in FY 2016/17; five universities, including Cheyney, are scheduled to be audited in FY 2017/18; and four universities, including Cheyney, are scheduled to be audited in FY 2018/19.

Additional Major Programs

The requirement to audit a major program/cluster is dependent upon the dollar amount of the program/cluster, its proportion to total State System federal programs, and the audit risk associated with the program/cluster.

For the FY 2015/16 audit (which was not charged until FY 2016/17), CliftonLarsonAllen determined that it was necessary to test 11 samples, which were charged at a cost of \$5,335 per sample.

For the FY 2016/17 audit (which is not charged until FY 2017/18), CliftonLarsonAllen has determined that it is necessary to test 12 samples, which are being charged at a cost of \$5,422 per sample.

For the FY 2017/18 audit (which will not be charged until FY 2018/19), it is not known at this time what additional major programs/clusters will be subject to audit. The FY 2017/18 projection is based on an estimate of 16 samples at \$5,000 per sample.

System Contracts/Programs							
Contract/Program: Annual Financial Statements Audit							
Mission/Function:	Perform an audit of the annual financial statements of the State System and each of its universities in accordance with Generally Accepted Auditing Standards.						
External Contractor Name:	CliftonLarsonAllen LLP						
Cost Proration Basis:	Vendor bills ead	ch university an	ld System off	ice directly.			
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
Total Costs	\$675,267	\$616,220	-8.7%	\$709,030	\$628,500	-11.4%	

Fiscal year 2016/17 was the last year of CliftonLarsonAllen's five-year contract. This contract went out for bid for the audit of fiscal years beginning in 2017/18. The contract was again awarded to CliftonLarsonAllen, whose total three-year bid for the financial statements audit was \$107,586, or 5.4%, less than the previous three-year cost.

System Contracts/Programs							
Contract/Program:	Central Banking	Central Banking Agreement					
Mission/Function:	•	Provide integrated cash management services including disbursements, deposits, sweep accounts, and investment management.					
External Contractor Name:	M&T Bank (11/	M&T Bank (11/01/16 to 10/31/21)					
Cost Proration Basis:	Based on university activity and investment balances.						
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
Cash Management	\$217,027	\$218,081	0.5%	\$230,046	\$226,229	-1.7%	
Trust Management	237,899	238,106	0.1%	237,645	240,303	1.1%	
Total Costs	\$454,926	\$456,187	0.3%	\$467,691	\$466,532	-0.2%	

The FY 2018/19 request is based on current and new services used by the universities and the current unit cost for cash management services. In January 2018, the universities implemented payee positive pay, a higher level of check fraud protection, resulting in an increased cost of approximately \$5,000 annually. The request for cash management services represents a 3.7% increase over the FY 2017/18 projection.

Trust management fees are based solely on average investment balances maintained by the universities. The FY 2018/19 request for trust management services is based on current contract prices and represents a 0.9% increase over the FY 2017/18 projection.

	S	System Contra	cts/Program	IS		
Contract/Program:	Memberships					
Mission/Function:	To promote pro	fessional devel	opment for fa	aculty and staff.		
External Contractor Name:	Various (listed	below)				
Cost Proration Basis:	does not partici divided equally Association (UI WICHE Cooper Network (SAN)	Educause uses tiered pricing based on institution type and expenditures (Cheyney does not participate). The Council on Undergraduate Research (CUR) membership is divided equally among the 14 universities. The University Economic Development Association (UEDA) membership is divided equally among participating universities. WICHE Cooperative for Educational Technologies (WCET) and State Authorization Network (SAN) memberships are divided equally among the 14 universities and Office of the Chancellor (OC).				
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
Educause	\$28,399	\$44,889	58.1%	\$44,889	\$44,889	0.0%
Council on Undergraduate Research (CUR)	8,330	10,045	20.6%	8,610	9,478	10.1%
University Economic Development Association (UEDA)	2,975	2,975	0.0%	2,975	2,975	0.0%
WICHE Cooperative for Educational Technologies (WCET) and State Authorization Network (SAN)	6,500	6,650	2.3%	6,500	6,650	2.3%
Total Costs	\$46,204	\$64,559	39.7%	\$62,974	\$63,992	1.6%

The significiant increase for Educause between FY 2016/17 and FY 2017/18 was due to an increase in pricing from the vendor.

System Contracts/Programs							
Contract/Program:	Career Service	Career Services					
Mission/Function:		To streamline and manage job postings, job seekers information, employer registration, contacts, and reports.					
External Contractor Name:	Symplicity Corp	Symplicity Corporation					
Cost Proration Basis:	Based on level of service received by each university.						
	FY 2016/17FY 2017/18FY 2017/18FY 2018/19ActualProjection% ChangeBudgetRequest% Change						
Total Costs	\$100,315	\$100,080	-0.2%	\$79,800	\$67,796	-15.0%	
Explain in detail signific	cant cost chang	es with justific	ation on the	e basis of bene	fits to the univ	versities.	
The FY 2018/19 request services and some unive			•		onger using Syr	nplicity	

System Contracts/Programs							
Contract/Program:	Analyst Softwa	Analyst Software Licenses for Economic Modeling (EMSI)					
Mission/Function:	sources in one Portfolio. This p understand stu	Provides a one-stop shop for labor market and educational data from 90 different sources in one dashboard. In addition, it includes the State System's Academic Portfolio. This portfolio is a web-based tool that provides universities with the ability to understand student demand for their instructional programs in light of the employer demand for the programs.					
External Contractor Name:	Economic Mod	eling Specialist	s Internation	al (EMSI)			
Cost Proration Basis:	Divided among university.	the 14 univers	ities based o	n the number o	f licenses selec	ted by each	
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
Total Costs	\$93,750	\$93,750	0.0%	\$93,750	\$93,750	0.0%	
Explain in detail signific	cant cost chang	es with justific	ation on the	e basis of bene	fits to the univ	versities.	
	Number of						
University	Users	Cost					
Bloomsburg	10	\$15,000					
California	1	3,750					
Cheyney	1	3,750					
Clarion	1	3,750					
East Stroudsburg	4	10,000					
Edinboro	1	3,750					
Indiana	1	3,750					
Kutztown	1	3,750					
Lock Haven	1	3,750					
Mansfield	1	3,750					
Millersville	1	3,750					
	_	12,500					
Shippensburg	5	12,000					
Shippensburg Slippery Rock	5 2	7,500					
			_				
Slippery Rock	2	7,500					

4-5 Users = \$2,500/each

6-10 Users = \$15,000 flat

In addition to the amounts shown above, the EIS budget will pay for the Academic Program Inventory, onsite training, and institutional license, at an estimated total cost of \$66,250 for FY 2018/19.

System Contracts/Programs							
Contract/Program:	Data Miner Sub	Data Miner Subscription					
Mission/Function:	service that pro	The Voluntary System of Education (VSE) Data Miner is a web-based benchmarking service that provides access to more than 350 variables about charitable giving to educational institutions.					
External Contractor Name:	Council for Aid to Education (CAE)						
Cost Proration Basis:	Divided equally	among the 14	universities a	and Office of the	e Chancellor.		
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
Total Costs	\$6,400	\$6,600	3.1%	\$6,500	\$6,800	4.6%	

The Voluntary System of Education (VSE) survey is the authoritative national source of data on charitable giving in higher education. Each year, the Council for Aid to Education (CAE) gathers data about charitable support of higher education via its VSE online survey. CAE provides the only tool for benchmarking fundraising in the nation's colleges and universities. Through its web-based Data Miner application, CAE provides advancement professionals with more than 350 variables related to fundraising each year.

The data can be organized into tables, graphed, sorted, and summarized. In addition, the site provides access to the complete surveys of all participating institutions. Data Miner's functionality also enables users to create groups of institutions to study—called comparison groups. These can be designed manually by listing institutions, or they can be designed by querying the system for like features, such as size, location, control, type of degree, and more. Subscribers have access to 10 years of survey data from over 1,000 survey respondents. This data is also used by the Office of Educational Intelligence in the State System's Performance Funding Program.

Significant savings are realized by subscribing as a System. The expected cost for FY 2018/19 is \$6,800, which includes free copies of the VSE Report. If each university were to subscribe on its own, the total charge would be \$17,735, and any extra VSE Reports would need to be purchased separately at a cost of \$121 each plus shipping.

System Contracts/Programs							
Contract/Program:	Microsoft (Enro	ellment for Educa	tion Solutior	ns [EES] and Pr	emier Support)		
Mission/Function:		EES provides faculty, staff, and students access to Microsoft products, including Office. Premier Support provides support for Microsoft products and IT systems.					
External Contractor Name:	Zones (EES) a	Zones (EES) and Microsoft (Premier Support)					
Cost Proration Basis:		EES is based on student/employee FTE or university product usage. Premier Support is based on level of services requested by each participating university.					
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
EES	\$1,093,541	\$1,194,771	9.3%	\$1,181,502	\$1,194,771	1.1%	
Premier Support	179,024	179,824	0.4%	179,824	197,806	10.0%	
Total Costs	\$1,272,565	\$1,374,595	8.0%	\$1,361,326	\$1,392,577	2.3%	

In FY 2017/18, a new Microsoft EES contract was issued for significantly less than originally projected. In addition, in FY 2017/18, Mansfield, Millersville, and the Office of the Chancellor added Option B for the Enterprise Mobility Suite; Cheyney, Clarion, East Stroudsburg, Edinboro, Indiana, Lock Haven, Mansfield, the Office of the Chancellor, and Slippery Rock all added Option C for Advanced Threat Protection services.

The estimated allocation for FY 2018/19 is based on fall 2016 FTE counts. This is the most recent year for which FTE data is currently available. Fall 2017 FTE counts will be used to calculate actual FY 2018/19 costs.

System Contracts/Programs									
Contract/Program:	Adobe Enterpri	Adobe Enterprise Term License Agreement							
Mission/Function:	such as Photos	Creative Cloud Suites provides Adobe professional creative desktop applications such as Photoshop and Illustrator to faculty and staff. Captivate provides e-learning software to faculty. EchoSign is electronic signature software.							
External Contractor Name:	Adobe Systems	Adobe Systems							
Cost Proration Basis:	Captivate is ba	Creative Cloud Suites is based on employee FTE at participating universities. Captivate is based on FTE users at participating universities. EchoSign is a flat fee per year per university (only Bloomsburg participates).							
	FY 2016/17FY 2017/18FY 2017/18FY 2018/19ActualProjection% ChangeBudgetRequest% Change								
Creative Cloud Suites	\$377,085	\$782,643	107.6%	\$782,643	\$782,643	0.0%			
Captivate	1,378	11,025	700.1%	11,025	11,025	0.0%			
EchoSign	12,400	7,350	-40.7%	7,350	7,350	0.0%			
Total Costs	\$390,863	\$801,018	104.9%	\$801,018	\$801,018	0.0%			

The FY 2016/17 actuals for Creative Cloud Suites and Captivate are the amounts paid in FY 2016/17, which reflect only a six-month contract extension (January–June 2017).

System Contracts/Programs							
Contract/Program:	Red Hat Site Li	Red Hat Site Licenses					
Mission/Function:	Enterprise platf	Enterprise platform software					
External Contractor Name:	Dell Marketing	Dell Marketing					
Cost Proration Basis:	Satellite license charged per en based upon qu	nployee FTE at	participating	universities. O	ther product ch		
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change	
Total Costs	\$150,551	\$167,951	11.6%	\$167,951	\$172,989	3.0%	

For FY 2018/19, the universities are considering adding the collaborative purchase of "Red Hat license for Oracle" to this agreement.

Indiana University of Pennsylvania (IUP) continues to consider joining this collaborative procurement. If IUP joins, it is anticipated that the vendor will place the System in a higher discount pricing band, which would lower costs for all participating universities.

System Contracts/Programs								
Contract/Program:	Internet Security							
Mission/Function:	Malwarebytes i	Malwarebytes is antimalware software. McAfee is antivirus software.						
External Contractor Name:		1. Dell Marketing 2. Source IT Technologies						
Cost Proration Basis:	Malwarebytes is based on the number of licenses at each participating university. McAfee software is based on the number of nodes for each product at each participating university.							
	FY 2016/17 FY 2017/18 FY 2017/18 FY 2018/19 Actual Projection % Change Budget Request % Change							
1. Malwarebytes	\$22,088	\$54,098	144.9%	\$54,098	\$61,189	13.1%		
2. McAfee	48,287	49,070	1.6%	49,070	51,524	5.0%		
Total Costs	\$70,375	\$103,168	46.6%	\$103,168	\$112,713	9.3%		

The FY 2016/17 amount for Malwarebytes is only for six months (January 1, 2017, through June 30, 2017). Beginning in December 2017, Indiana University of Pennsylvania and the Office of the Chancellor added Malwarebytes Endpoint Protection, which is the reason for the substantial increase. A 5.0% increase is projected for the new McAfee contract.

System Contracts/Programs								
Contract/Program:	CISCO Smartnet Maintenance and Support							
Mission/Function:	Provide technical support services							
External Contractor Name:	Integra Business Center							
Cost Proration Basis:	Each university submits a line item list of equipment for Smartnet maintenance. Combining these lists allows our aggregate purchase to receive additional discounts. Each university is allocated the cost of maintenance for their equipment.							
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change		
Total Costs	\$12,461	\$476,243	3721.9%	\$476,243	\$490,530	3.0%		

FY 2016/17 is for one university. FY 2017/18 is for four universities and the Office of the Chancellor. A 3.0% cost increase is being projected for FY 2018/19; however, each university's actual cost will be based on its list of assets. A revised list of equipment to be covered has not yet been compiled. If a university submits a request for more equipment, the increased cost will be offset by what the university pays directly to CISCO.

System Contracts/Programs									
Contract/Program:	VMware Licenses and Annual Support								
Mission/Function:	Enterprise platform software								
External Contractor Name:	CDW-G								
Cost Proration Basis:	VMware licenses charged per employee FTE at participating universities. Other "ado on" product charges based upon quantities requested by participating universities.								
	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Chang			
Total Costs	\$321,785	\$321,785	0.0%	\$321,785	\$321,785	0.0%			
		es with justific							

Function: Shared Administrative System (SAP)

Cost Proration Basis: Allocated to the 14 universities and Office of the Chancellor based on share of student enrollment FTE and employee headcount.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	36.44	35.69	-2.1%	35.69	35.69	0.0%
Filled	34.44	33.30	-3.3%	35.19	34.69	-1.4%
Revenue	\$0	\$0		\$0	\$0	_
Personnel Expenditures:						
Salary	3,215,390	3,244,979	0.9%	3,433,206	3,382,042	-1.5%
Benefits	1,384,962	1,468,654	6.0%	1,586,376	1,522,811	-4.0%
Total Personnel Expenditures	4,600,352	4,713,633	2.5%	5,019,582	4,904,853	-2.3%
Operating Expenditures:						
Postage/Freight	1	415	41400.0%	1,500	1,500	0.0%
Telecommunications Charges	53,439	53,751	0.6%	57,114	52,614	-7.9%
Advertising	0	750		1,500	1,500	0.0%
Subscriptions	198	995	402.5%	750	1,790	138.7%
Memberships	1,725	4,421	156.3%	1,725	1,725	0.0%
Printing and Duplicating	0	0		0	0	
Travel, Transportation, and Meetings	31,018	51,898	67.3%	67,400	67,000	-0.6%
Computing and Data Processing	1,611,565	1,647,560	2.2%	1,794,472	1,753,112	-2.3%
Professional Services	728,986	765,580	5.0%	734,555	737,368	0.4%
Other Services	776	484	-37.6%	800	750	-6.3%
Insurance	0	0		0	0	—
Utilities	0	0		0	0	
Rental and Lease (Excluding Vehicles)	0	0		0	0	—
Miscellaneous Services	0	0		1,500	1,500	0.0%
Supplies	8,850	16,445	85.8%	15,150	10,150	-33.0%
Overhead	460,883	467,137	1.4%	467,137	488,036	4.5%
Payments to State System Universities	668,473	649,811	-2.8%	664,050	617,768	-7.0%
Expensed Assets	17,207	25,800	49.9%	33,500	61,570	83.8%
Renewal and Replacement Transfer	853,186	191,700	-77.5%	191,700	896,832	367.8%
Total Operating Expenditures	4,436,307	3,876,747	-12.6%	4,032,853	4,693,215	16.4%
Capital Expenditures	305,487	0	_	0	0	_
Total Expenditures	9,342,146	8,590,380	-8.0%	9,052,435	9,598,068	6.0%
Net Expenditures	\$9,342,146	\$8,590,380	-8.0%	\$9,052,435	\$9,598,068	6.0%

Shared Administrative System Five-Year University Allocation Schedule

	2014/15	2015/16	2016/17	2017/18	2018/19
	Actual	Actual	Actual	Projection	Request
Bloomsburg	\$781,934	\$824,424	\$862,280	\$810,073	\$897,419
California	602,080	613,675	637,134	567,824	652,669
Cheyney	107,912	99,993	76,606	72,159	81,584
Clarion	435,930	431,168	437,212	402,889	457,828
East Stroudsburg	519,862	559,244	607,239	569,542	643,071
Edinboro	515,579	532,558	547,450	490,511	513,497
Indiana	1,109,095	1,136,047	1,179,913	1,034,282	1,130,652
Kutztown	742,537	771,052	813,701	725,028	810,077
Lock Haven	422,227	416,144	427,870	372,822	391,601
Mansfield	232,953	234,553	224,212	195,002	192,921
Millersville	617,496	638,626	669,832	619,366	692,981
Shippensburg	575,531	591,098	615,647	570,401	613,317
Slippery Rock	673,165	721,051	781,003	758,531	875,343
West Chester	1,185,320	1,281,434	1,415,336	1,358,999	1,597,118
Office of the Chancellor	42,822	44,317	46,711	42,952	47,990
Total	\$8,564,443	\$8,895,384	\$9,342,146	\$8,590,381	\$9,598,068

Allocation Method

Amounts based on university share of enrollment and employee headcount.

Function: Shared Administrative System (SAP)

Describe the mission of this operation.

To provide an administrative application environment to meet the business office functional needs for each of the State System universities.

Explain the benefits of centralizing this operation.

The SAS is an integrated software application that supports business office operations such as budget, accounting, procurement, human resources, payroll, and benefits administration on behalf of each university and the Office of the Chancellor. The SAS is also used widely at the universities for employees to manage/review budgets, make purchase requests, review pay statements, manage and approve leave requests, enroll in benefit programs, etc. The SAS also includes a robust business intelligence component that provides reporting and analytical capabilities used for decision support at both the university- and System-levels.

Describe any cost savings made to the universities.

Maintaining a System-level enterprise resource planning environment allows universities to share a lower cost basis for hardware, software maintenance, and staff support, and provides consistency of business processes and data. Since the SAS supports the universities' business operations using similar functional processes, some of the universities are rethinking their business organizations to allow a single university to provide necessary business administration support for multiple universities. The use of a common administrative application, with common processes, will allow universities to reduce the number of functional staff needed at each university to provide the necessary support.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

The recent migration to the SAP HANA in-memory database platform is not only providing significant performance improvements, but reducing reliance on disk storage. A migration to a new backup solution and more reliance on third-party providers for maintenance, as opposed to buying extended maintenance from vendors, has provided cost savings.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable).

A cost increase of \$546,000 is requested for next fiscal year, to restore full funding for the Renewal and Replacement of future hardware refresh cycles. This increase is more significant than it would have been if Renewal and Replacement had not been reduced last fiscal year.

FY 2016/17 FY 2017/18 FY 2017/18 FY 2018/19 Actual Projection % Change Budget Request % Change FTE Complement: Authorized 3.33 3.13 -6.0% 3.13 3.13 0.0% Filled 3.24 3.13 -3.4% 3.13 3.13 0.0% Projected Prior Year Carryover \$182,809 **Revenue:** University/Office of the Chancellor Contributions \$600,000 \$600,000 \$600,000 \$600,000 0.0% 0.0% Other Revenue 0 0 0 0 Total Revenue 600,000 600,000 0.0% 600,000 600,000 0.0% Personnel Expenditures: Salarv 227.533 216.431 -4.9% 228.281 228.321 0.0% **Benefits** 120,019 140,403 17.0% 145,468 141,885 -2.5% Total Personnel Expenditures 347,552 356,834 2.7% 373,749 370,206 -0.9% **Operating Expenditures:** Postage/Freight 0 0 0 0 **Telecommunications Charges** 0 0 0 0 ____ ____ 183 0 500 500 0.0% Advertising ____ 0 Subscriptions 200 2,500 500 -80.0% ____ 8,548 Memberships 8,236 3.8% 8,500 8,900 4.7% Printing and Duplicating 42 0 _ 0 0 Travel, Transportation, and Meetings 4.947 2,521 -49.0% 5,920 10,695 80.7% Computing and Data Processing 11,909 60.3% 1,225 19,750 1512.2% 19,087 171,983 179,500 17.0% **Professional Services** 181,235 5.4% 210,000 Other Services 36,081 36,027 -0.1% 56,790 56,790 0.0% Insurance 0 0 0 0 ____ ____ Utilities 0 0 0 0 0 0 Rental and Lease (Excluding Vehicles) 0 0 ____ ____ Miscellaneous Services 0 100 200 200 0.0% 87 150 400 400 72.4% 0.0% Supplies Overhead 41.059 41.059 41.935 33,994 20.8% 2.1% Payments to State System Universities 64,912 0 0 _ 0 ____ 1,940 1,080 **Expensed Assets** 3,030 2,108 -30.4% -44.3% **Total Operating Expenditures** 335,604 290,835 -13.3% 298,534 350,750 17.5% 0 0 0 0 Capital Expenditures Total Expenditures \$683,156 \$647,669 -5.2% \$672,283 \$720,956 7.2% Projected Carryforward to FY 2019/20 \$61,853

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BUDGET SUMMARY

Function: Executive Information System (EIS)

Cost Proration Basis: The 14 universities and the Office of the Chancellor each contribute \$40,000 per fiscal year.

Function: Executive Information System (EIS)

Describe the mission of this operation.

Executive Information System (EIS) is a shared service between the State System universities and the Office of the Chancellor that generates and disseminates educational intelligence to support the State System's vision for excellence, relevance, and value in education. The mission of EIS is to support the universities and gain cost savings by grouping initiatives in which all universities participate, such as the State System's Gap Analysis project, National Survey of Student Engagement (NSSE) surveys, the Consortium for Student Retention Data Exchange (CSRDE) survey, and the Voluntary System of Education (VSE) Data Miner database, in one department. By initiating the cost of these surveys from EIS, the System and its universities can more efficiently pay for consolidated operations.

Explain the benefits of centralizing this operation.

One of the goals of the Strategic Plan 2020 was to "*promote effective and efficient operations in support of university missions.*" In order to do this, the System has developed Shared Services such as EIS to increase operational efficiency while maintaining or increasing effectiveness. By utilizing the EIS budget, the System is able to gain cost efficiencies, as well as be more effective and efficient at procuring, administering, and monitoring each joint program as mentioned above. Select examples include:

- With student engagement as a cornerstone of any student success agenda, the importance of NSSE has increased for higher education institutions. By joining NSSE as a system, the System is able to participate as a consortium. A NSSE consortium is a group of at least six colleges or universities that participate during the same NSSE administration and append additional questions to the core instrument to explore a topic of mutual interest. Participating as a consortium adds another dimension to NSSE results by providing an opportunity to gather information of local interest. Universities receive consortium results as one of three Institutional Report comparison groups, and they also receive their students' responses to consortium questions in their NSSE data file. In addition, Consortium coordinators (one at each university) receive a Consortium Report with aggregate results, as well as institution-specific results or data through data sharing agreements.
- By paying for the CSRDE membership through the EIS budget, the State System again realizes cost savings and each university gains access to comprehensive retention and graduation data that span from 2 to 11 years. All CSRDE report data is given by total cohort and is broken down by gender and race/ethnicity. An Institutional Membership provides access to timely, comprehensive benchmarking data on retention and graduation. This information is not available from any other source. Participants submit data for our annual reports, and the CSRDE handles the data auditing, internal consistency checking, analyses, and reporting, saving the institution time and money. Both NSSE and CSRDE memberships are cost efficient when combined in a consortium or system pricing structure.
- The State System's Gap Analysis project and the upcoming Pennsylvania's Workforce Needs Assessment are intensive bodies of research that require collaboration with multiple state and national partners. By doing this at the System level, significant economies of scale are achieved.

Describe any cost savings made to the universities.

See section directly above.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

The universities will continue to see significant improvements in how their EIS dollars are leveraged. The State System's handling of data and conversion to valuable user-friendly information has morphed. Some select examples that will be added to the FY 2018/19 platform include:

- Improvements to the analytics platform including the newly released State System's EdHub.
- Continued training and development to ensure capacity is created in the State System in strategic use of data.
- Engagement with workforce and economic development partners mirroring the work that has occurred in FY 2017/18. One goal in this area is to arrive at concrete metrics that reflect the robust engagement of State System universities in workforce and economic development.
- Improvements to the State System's platform that analyzes real-time employer demand using state-of-theart job-scraping mechanisms.

- Assurance that the State System's Alumni Insight data is available to all universities, including detailed profiles.
- Analysis of the talent production within the State System universities and a user-friendly comparison to skills required by Pennsylvania employers.
- Support in analyzing the university's education and labor market.

Explain in detail cost increases with justification based on benefits to the universities (if applicable).

This has been provided in the previous section. The FY 2018/19 budget has a slight increase that reflects the new analysis of alumni insight, economic development engagement, continued focus on training, and assurance that all State System universities participate in NSSE so a comprehensive framework of student engagement can be created.

BUDGET SUMMARY

Function: Strategic Information Management System (SIMS)

Cost Proration Basis: Fixed licensing and operational costs are divided equally among the 14 universities and the Office of the Chancellor. Remaining costs allocated based on a pro rata share of fall 2017 student and employee headcounts.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement*: Authorized	5.34	6.28	17.6%	5.84	6.14	5.1%
Filled	5.26	5.61	6.7%	5.84	6.14	5.1%
Revenue	\$0	\$0	_	\$0	\$0	_
Personnel Expenditures:						
Salary	430,923	435,750	1.1%	0	471,127	_
Benefits	207,370	280,459	35.2%	0	298,812	—
Total Personnel Expenditures	638,293	716,209	12.2%	777,810	769,939	-1.0%
Operating Expenditures:						
Postage/Freight	22	200	809.1%	356	356	0.0%
Telecommunications Charges	0	0	_	0	0	_
Advertising	152	1,000	557.9%	1,000	1,000	0.0%
Subscriptions	0	750	_	1,000	1,000	0.0%
Memberships	93	300	222.6%	600	600	0.0%
Printing and Duplicating	62	250	303.2%	250	250	0.0%
Travel, Transportation, and Meetings	12,418	16,100	29.7%	15,600	20,851	33.7%
Computing and Data Processing	181,309	719,534	296.9%	290,307	352,100	21.3%
Professional Services	372,585	382,114	2.6%	116,565	248,800	113.4%
Other Services	0	0	_	17,793	86,573	386.6%
Insurance	0	0	_	0	0	_
Utilities	0	0	_	0	0	_
Rental and Lease (Excluding Vehicles)	0	0	_	0	0	_
Miscellaneous Services	0	0	_	0	0	_
Supplies	67	250	273.1%	500	500	0.0%
Overhead	49,545	85,417	72.4%	85,417	87,666	2.6%
Payments to State System Universities	1,162,709	1,329,691	14.4%	1,290,700	1,339,456	3.8%
Expensed Assets	2,263	4,577	102.3%	5,990	5,490	-8.3%
Renewal and Replacement Transfer	0	0	—	0	0	_
Total Operating Expenditures	1,781,225	2,540,183	42.6%	1,826,078	2,144,642	17.4%
Capital Expenditures	0	321,635		277,000	285,000	2.9%
Total Expenditures	2,419,518	3,578,027	47.9%	2,880,888	3,199,581	11.1%
Less Renewal and Replacement Released	0	0	_	0	0	_
Net Expenditures	\$2,419,518	\$3,578,027	47.9%	\$2,880,888	\$3,199,581	11.1%

*Does not include FTEs at Indiana University of Pennsylvania.

SIMS—Strategic Information Management System

Background

The State System's Strategic Information Management System (SIMS) is a modernized student data warehouse that positions the System and its universities to utilize information strategically and introduces insight and transparency to make fact-based, data-driven decisions efficiently. Moving forward, SIMS will assist with predictive analytics and additional data mining of both student data and external economic data. SIMS builds a foundation to address the information needs and requirements of today, but also establishes a scalable architecture that is adaptable, modular, interoperable, and configurable, laying the foundation for future growth and additional data needs.

Select SIMS Benefits

- Replaces an outdated data collection and reporting process with a secure, efficient, modern, and streamlined process that extracts data from five disparate student information systems. This includes both a modernized data warehouse architecture and an advanced business intelligence platform.
- Establishes a unified repository of analytics at the System level with common data definitions.
- Reduces manual data collection activities through automated extract, transform, and load processes that collect, store, and report student data from the System's 14 universities.
- Provides an industry-leading technology stack to support data storage, integration, and business intelligence.

SIMS Review

In 2017, a comprehensive review of SIMS was conducted by a Review Team with representation from universities and the Office of the Chancellor. The overarching goal of the Review Team was to establish a mechanism for continuous collaboration and feedback to help ensure that SIMS addresses the information needs and requirements of today, but also establishes a scalable architecture that lays the foundation for future growth and additional data needs. More than a dozen sessions were held with SIMS Review Team members focused on the following areas:

- Process improvements.
- Principles for a multiyear budget.
- Strategies to increase project transparency.
- Consideration of other data warehouse solutions (ongoing verification and validation).
- Guidance in the creation of a permanent Data Users Advisory Council that assists with the development and implementation of a strategic data plan.

Recent SIMS Achievements and Accomplishments

Over the course of the past year, the SIMS team has implemented a series of analytic solutions, processes, and tools to help State System stakeholders improve fact-based, data-driven decision making. A major accomplishment of the SIMS Review Team was developing a collective vision around the SIMS strategy and budget, which is illustrated in the next section regarding the budget. Select accomplishments for SIMS are listed below.

- Changed the process to include a **SIMS Review Team** and incorporate their input and insight.
- Presented Review Team recommendations to the Council of Presidents and Chancellor to develop a SIMS long-term strategy that reflects the collective vision of the Office of the Chancellor and 14 universities.
- Created the **State System's Analytics Platform**. Implemented Single Sign On in this platform to streamline the ability to efficiently access analytics without a separate license. This platform provides multiple visualization dashboards to track key performance indicators (KPIs) related to enrollments, completions, graduation, and more.

- Hosted **webinars focused on data security**, FERPA, and data governance in conjunction with U.S. Department of Education's Privacy Technical Assistance Center (PTAC).
- **Migrated** the legacy data submission process to a modern reporting platform.
- Successfully deployed SIMS Student Enrollment v1.0 module to production for 12 universities. (One university is currently in the data validation stage, and one is on hold.) The module includes 280+ data fields in the Student Data Warehouse.
- Created the **State System EdHub**, an external-facing tool to make the State System's student data accessible to the public.
- Created a charter for upcoming **data governance**.

SIMS Budget

To accomplish the above SIMS goals and objectives, as well as to maintain the SIMS infrastructure, the FY 2018/19 budget is \$3,199,581. This is \$74,000 more than the draft budget presented for Alternative 1, which is the option chosen by the Review Team, who considered five distinct alternatives. This budget represents the combined support of the two parties working collaboratively on SIMS—the Office and Chancellor and SIMS host site, Indiana University of Pennsylvania (IUP).

Budget Item	FY 2017/18	FY 2018/19
Full-Time Employees (FTEs)	12.74	12.14
Personnel	\$1,547,810	\$1,578,439
Hardware	322,990	475,891
Software	250,307	266,100
Consulting	424,358	473,972
Training and Development	42,000	43,360
Overhead	170,117	278,472
Contingency	100,000	60,000
Miscellaneous	23,306	23,347
Total	\$2,880,888	\$3,199,581

Budget Summary

Estimated University Cost Allocation, FY 2018/19

A two-factor methodology is used to calculate the SIMS FY 2018/19 estimated university cost allocation as follows:

- 1. A fixed licensing and operational cost of \$29,318 per university.
- 2. Remaining costs based on fall 2017 student and employee headcounts.

While FY 2018/19 budgeted expenditure requirements are \$3,199,581, the amount allocated for FY 2018/19 is equal to the FY 2017/18 budget amount of \$2,880,888.

	Fall 2017 Headcount			FY 2018/19 Estimated Allocation		
			Total			
			(Enrollment and	Licensing	Remaining Cost	Total
University	Enrollment	Employees	Employees)	Cost (Fixed)	(By Headcount)	Allocation
BL	9,287	1,176	10,463	\$29,318	\$221,773	\$251,091
CA	7,788	828	8,616	29,318	182,623	211,941
CH	755	187	942	29,318	19,966	49,284
CL	5,225	704	5,929	29,318	125,670	154,988
EA	6,742	763	7,505	29,318	159,075	188,393
ED	5,575	713	6,288	29,318	133,279	162,597
IN	12,316	1,578	13,894	29,318	294,495	323,813
KU	8,329	1,005	9,334	29,318	197,842	227,160
LO	3,827	534	4,361	29,318	92,435	121,753

	F	all 2017 Headc	ount	FY 2018/19 Estimated Allocation		
			Total			
			(Enrollment and	Licensing	Remaining Cost	Total
University	Enrollment	Employees	Employees)	Cost (Fixed)	(By Headcount)	Allocation
MA	1,897	434	2,331	29,318	49,407	78,725
MI	7,748	1,053	8,801	29,318	186,544	215,862
SH	6,581	856	7,437	29,317	157,633	186,950
SL	8,895	960	9,855	29,317	208,885	238,202
WE	17,336	1,928	19,264	29,317	408,316	437,633
OC	0	150	150	29,317	3,179	32,496
Total	102,301	12,869	115,170	\$439,766	\$2,441,122	\$2,880,888

Key Budget Highlights

- The budget represents the combination of both the SIMS Host Site (IUP) and the Office of the Chancellor expenditures. Of the total budget, the Office of the Chancellor portion is \$1,860,125, and the IUP portion is \$1,339,456.
- The licensing fixed cost reflects \$29,318 and includes software, hardware, and overhead expenditures.
- Per decision by the universities during the FY 2017/18 budget cycle, \$275,000 of the FY 2017/18 hardware request was delayed to FY 2018/19. This cost for storage is reflected in the FY 2018/19 budget.
- In FY 2017/18, one-time resources were identified to reduce the impact on the universities in FY 2017/18, including \$250,000 from the Executive Information System reserves and the remaining \$103,000 of SIMS reserves that previously had been designated for equipment. There are no reserves that can be applied to the FY 2018/19 budget.
- After FY 2018/19, the SIMS projected budget is anticipated to decrease by more than \$500,000. This is due in large part to reduction in personnel required to support SIMS as it enters the maintenance and operations phase.

BUDGET SUMMARY

Function: State System @ Center City Philadelphia

Cost Proration Basis: Based on number of assigned classrooms and office space occupied by each participating university. This budget is provided for informational purposes only. The participating universities approve the final budget.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	4.20	3.58	-14.8%	4.20	3.68	-12.4%
Filled	3.04	2.66	-12.5%	4.20	3.68	-12.4%
Revenue	\$41,991	\$7,100	-83.1%	\$10,000	\$5,000	-50.0%
Personnel Expenditures:						
Salary	210,802	175,433	-16.8%	243,483	222,400	-8.7%
Benefits	99,649	91,989	-7.7%	138,253	128,208	-7.3%
Total Personnel Expenditures	310,451	267,422	-13.9%	381,736	350,608	-8.2%
Operating Expenditures:						
Postage/Freight	196	550	180.6%	1,600	1,600	0.0%
Telecommunications Charges	35,617	36,060	1.2%	30,000	36,640	22.1%
Advertising	50,558	30,000	-40.7%	50,000	50,000	0.0%
Subscriptions	1,341	0	_	600	100	-83.3%
Memberships	1,850	1,418	-23.4%	1,500	2,000	33.3%
Printing and Duplicating	625	4,300	588.0%	3,000	3,000	0.0%
Travel, Transportation, and Meetings	38	17,100	44900.0%	4,000	11,875	196.9%
Computing and Data Processing	12,705	16,094	26.7%	17,200	37,800	119.8%
Professional Services	24,621	61,540	149.9%	26,000	30,000	15.4%
Other Services	18,382	5,285	-71.2%	4,500	15,500	244.4%
Insurance	0	0	_	0	0	—
Utilities	0	0		0	0	—
Rental and Lease (Excluding Vehicles)	514,242	673,784	31.0%	743,216	766,641	3.2%
Miscellaneous Services	859	2,000	132.8%	1,000	1,000	0.0%
Supplies	6,723	9,809	45.9%	6,500	12,300	89.2%
Overhead	13,464	15,524	15.3%	15,524	11,927	-23.2%
Payments to State System Universities	0	9,921	_	0	34,500	—
Expensed Assets	5,071	125,011	2365.2%	7,400	13,450	81.8%
Renewal and Replacement Transfer	71,000	0		0	90,000	—
Total Operating Expenditures	757,292	1,008,396	33.2%	912,040	1,118,333	22.6%
Capital Expenditures	16,774	295,674	1662.7%	0	30,000	
Total Expenditures	1,084,517	1,571,492	44.9%	1,293,776	1,498,941	15.9%
Less Renewal and Replacement Released	(3,671)	(340,334)	9170.9%	0	(43,000)	_
Net Expenditures	\$1,038,855	\$1,224,058	17.8%	\$1,283,776	\$1,450,941	13.0%

Function: State System @ Center City Philadelphia

Describe the mission of this operation.

To provide academic programming to working adults in the greater Philadelphia area and to support the meeting and conference needs of the State System universities and a variety of other non-State System meeting service customers at the State System @ Center City location.

Explain the benefits of centralizing this operation.

The State System @ Center City provides one convenient location for State System universities (currently Bloomsburg and West Chester) to hold academic programs, meetings, events, and conferences in the Philadelphia area.

Describe any cost savings made to the universities.

The State System @ Center City provides one team of staff members to support all of the academic and meeting activities at the center. Universities do not have to try to find locations, pay rent, or hire their own facility and logistics staff to support their efforts in this area.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

Renewal and replacement (R&R) dollars have been added back into the budget after being removed in FY 2017/18. R&R dollars will be used to purchase additional classroom chairs and any required audio/visual (AV) equipment and programming. There has been a significant increase in maintenance budgets for AV and network equipment due to the increase in office and classroom space. The part-time staff assistant position included in the FY 2017/18 budget has been converted to an administrative assistant. West Chester University will hire the employee and 50% of the cost will be charged to this budget to represent the portion of the employee's time spent working on behalf of the State System @ Center City.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable). The FY 2018/19 budget reflects the following increases:

- Addition of funds for overtime in the event the IT/AV technician is required to come in early to support daytime meetings or classes.
- Increase in telephone and telecommunication fees due to increase in number of office and classroom phones.
- Increase in memberships and dues to accommodate initiatives of the new communications and outreach manager.
- Increase in administrative travel to accommodate executive director travel.
- Increase in EDP equipment maintenance and repair for UPS battery replacement, SSHEnet router maintenance, OpenGear maintenance, AV maintenance, and firewall maintenance.
- Increase in software license fees for an increase in EMS maintenance fees.
- Increase in professional services to accommodate a potential increase in hours for the security guard.
- Addition of funds for facilities maintenance, e.g., painting and repairs.
- Increase in contracted maintenance for office equipment to reflect the increase from two to five multifunction copy/print machines.
- Increase in lease costs per previous agreement with West Chester University.
- Increase in office supplies to cover copy paper needed for additional multifunction copy/print machines.
- Addition of money for maintenance supplies.
- Increase in contracted food services to accommodate more community outreach events and activities.
- Addition of contracted food supplies to support the addition of water coolers for students and faculty.
- R&R funds have been added back into the budget at the usual annual amount of \$90,000.

BUDGET SUMMARY

Function: Treasury Accounting

Cost Proration Basis: Based on number of bond-financed projects at each university and the Office of the Chancellor.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	1.20	1.20	0.0%	1.20	1.20	0.0%
Filled	1.20	1.20	0.0%	1.20	1.20	0.0%
Revenue	\$0	\$0		\$0	\$0	
Personnel Expenditures:						
Salary	67,327	69,241	2.8%	69,427	70,559	1.6%
Benefits	35,998	38,499	6.9%	38,630	37,503	-2.9%
Total Personnel Expenditures	103,325	107,740	4.3%	108,057	108,062	0.0%
Operating Expenditures:						
Postage/Freight	78	125	60.3%	200	200	0.0%
Telecommunications Charges	0	0	_	0	0	
Advertising	0	0	_	0	0	
Subscriptions	0	0		0	0	
Memberships	0	0		0	0	
Printing and Duplicating	0	0		0	0	
Travel, Transportation, and Meetings	105	1,000	852.4%	2,300	2,300	0.0%
Computing and Data Processing	0	0	_	0	0	_
Professional Services	120,355	135,367	12.5%	135,367	151,086	11.6%
Other Services	0	0		0	0	
Insurance	0	0	—	0	0	—
Utilities	0	0		0	0	
Rental and Lease (Excluding Vehicles)	0	0		0	0	
Miscellaneous Services	0	0		0	0	
Supplies	0	75		150	150	0.0%
Overhead	13,004	15,137	16.4%	15,137	15,510	2.5%
Payments to State System Universities	0	0	_	0	0	_
Expensed Assets	0	1,882	—	2,040	0	—
Renewal and Replacement Transfer	0	0	—	0	0	_
Total Operating Expenditures	133,542	153,586	15.0%	155,194	169,246	9.1%
Capital Expenditures	0	0		0	0	
Total Expenditures	236,867	261,326	10.3%	263,251	277,308	5.3%
Less Renewal and Replacement Released	0	0		0	0	
Net Expenditures	\$236,867	\$261,326	10.3%	\$263,251	\$277,308	5.3%

Function: Treasury Accounting

Describe the mission of this operation.

The Treasury office administers a capital management operation by procuring low-cost financing, optimizing investment return, and managing finance programs efficiently. The office manages and funds the financing of System, university, and Office of the Chancellor projects through the issuance of tax-exempt and taxable bonds. The Treasury office also provides cash management products through procurement of central banking that includes checking accounts and investment services, as well as credit card merchant services and a commercial card program. The mission of Treasury Accounting is to provide support to the Treasury office in bond accounting, operational, and administrative services.

Explain the benefits of centralizing this operation.

The State System is the legal entity that can borrow funds on behalf of the universities, so integrating this function is essential. Treasury Accounting manages and maintains the computerized bond accounting system, prepares bond accounting statements for all university bond projects, processes bond requisitions, and calculates and collects biannual debt service payments. In addition, Treasury Accounting ensures quarterly billing of cash management and trust fees are in compliance with the bank contract, resolves any issues, and collects from universities for payment to the provider. Concentrating these administrative processes in the Treasury office provides operating and administrative efficiencies benefiting all the universities.

Centralized bank vendor services provide fiscal and administrative efficiencies through economies of scale in negotiating considerably larger contracts.

Describe any cost savings made to the universities.

This office realizes cost savings primarily through leveraging the universities' collective borrowing needs; avoiding duplicate functions at the universities, and ensuring compliance with regulatory federal tax laws and GASB requirements relating to bond issuance and bond accounting, respectively. Additionally, in consultation with a financial advisor, the office accepts bids to refinance bonds, resulting in significant savings to the universities. As a result of bond refinancing, the universities have realized present value savings of approximately \$92.4 million since inception as a System.

The competitive bid process of a central banking contract resulted in an award to the current provider, M&T Bank/Wilmington Trust, with a five-year contract with no service rate increases.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

With the recently enacted tax law, the ability to advance-refund tax-exempt bonds is no longer an option for the State System. Refinancing will only be possible for current refunding, usually ten years to the call date from the issuance of the bonds. In FY 2018/19, the budget request does not include fees for a current refunding; however, Series AI will become current in August 2018, and an analysis will be done to determine if it will be feasible to do a refund. Additional budget funds have been requested for fees associated with new financing of university projects.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable).

The bond accounting fees line item reflects an increase of approximately \$16,000, which is the result of a new bond series planned for FY 2018/19. Bond accounting fees include the annual maintenance costs associated with each bond series: the trustee fee (BNYM), the authority fee (PHEFA), and the rating agency's annual fee (Moody's). These are pass-through fees from the respective parties that are involved in the issuance, annual maintenance, and credit monitoring of the State System.

BUDGET SUMMARY

Function: Office of Internal Audit and Risk Assessment (OIARA)

Cost Proration Basis: Funding taken off the top of each university's annual state appropriation.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	7.00	7.00	0.0%	7.00	7.00	0.0%
Filled	6.67	6.64	-0.4%	7.00	7.00	0.0%
Projected Carryover from FY 2017/18					\$78,312	
Revenue:						
State Appropriations	\$900,533	\$919,000	2.1%	\$919,000	\$950,944	3.5%
Other Revenue (Anticipated Turnover Savings)	0	0	_	26,792	0	
Total Revenue	900,533	919,000	2.1%	945,792	950,944	0.5%
Personnel Expenditures:						
Salary	545,249	549,905	0.9%	588,144	590,105	0.3%
Benefits	240,020	276,343	15.1%	299,397	303,661	1.4%
Total Personnel Expenditures	785,269	826,248	5.2%	887,541	893,766	0.7%
Operating Expenditures:						
Postage/Freight	325	470	44.6%	400	400	0.0%
Telecommunications Charges	1,025	659	-35.7%	750	750	0.0%
Advertising	0	0	_	0	0	_
Subscriptions	299	499	66.9%	700	700	0.0%
Memberships	1,865	2,100	12.6%	2,100	2,100	0.0%
Printing and Duplicating	0	0	_	0	0	_
Travel, Transportation, and Meetings	11,236	17,750	58.0%	25,000	23,750	-5.0%
Computing and Data Processing	7,403	7,502	1.3%	10,000	9,000	-10.0%
Professional Services	0	0		0	0	
Other Services	750	552	-26.4%	800	750	-6.3%
Insurance	0	0	—	0	0	—
Utilities	0	0		0	0	_
Rental and Lease (Excluding Vehicles)	0	0		0	0	_
Miscellaneous Services	0	250		500	500	0.0%
Supplies	428	600	40.2%	1,000	900	-10.0%
Overhead	53,219	72,733	36.7%	72,733	94,840	30.4%
Payments to State System Universities	107	0	_	0	0	_
Expensed Assets	1,396	7,840	461.6%	8,500	1,800	-78.8%
Total Operating Expenditures	78,053	110,955	42.2%	122,483	135,490	10.6%
Capital Expenditures	0	0	_	0	0	_
Total Expenditures	\$863,322	\$937,203	8.6%	\$1,010,024	\$1,029,256	1.9%
Projected Carryforward to FY 2019/20					\$0	

Function: Office of Internal Audit and Risk Assessment (OIARA)

Describe the mission of this operation.

To provide independent, objective assurance, and consulting services designed to add value and improve operations of the 14 State System universities and the Office of the Chancellor. The Office of Internal Audit and Risk Assessment (OIARA) helps the universities and the Office of the Chancellor accomplish their objectives in bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, internal control structures, and governance processes.

The OIARA's primary activity is to implement a program of regular internal audits of the System's business operations. However, the complete range of services may also include special projects and consultations as requested by the university presidents and/or the chancellor and approved by the Audit and Compliance Committee chairperson. Additional responsibility includes oversight and management of the System's Fraud/Waste/Abuse Incident Reporting System.

Explain the benefits of centralizing this operation.

The centralized operation provides System universities with access to professionally trained and certified internal audit experts on a shared-cost basis (1:3 ratio of auditors to universities). As a centralized function, the operation provides leadership with assessments of operations, evaluation of internal control structures, and recommendations to strengthen controls and improve the effectiveness of operations.

The centralized internal audit function provides a process of uniform internal audit coverage to all member institutions through an established and ongoing independent capability to review all System operations, including affiliated organization where authorized and appropriate to (1) ensure compliance with statutes, regulations, and policies; (2) review reliability and integrity of financial data, operating information, and the means used to identify, measure, and report it; (3) make value-added recommendations for improvement regarding economy, efficiency, and effectiveness; and (4) perform appropriate follow-up procedures and assess the effectiveness of actions taken.

Describe any cost savings made to the universities.

Each year, internal audit reports generate significant recommendations provided to leadership regarding necessary enhancements to internal controls and opportunities to improve operations.

In the current 2017/18 fiscal year, completion of NCAA Agreed-Upon Procedure reviews at seven institutions identified \$6,720,404 in reporting category adjustments. OIARA evaluations supported the accuracy of data reported to the NCAA.

Completion (as of February 2018) of two Jeanne Clery Act compliance reviews as part of the fiscal year 2017/18 work plan identified six audit exceptions. Two additional Clery audits are planned for the work plan year. When cited, fines of up to \$54,789 per violation, occurring after November 2, 2015, and assessed after April 20, 2017, of the Clery Act can be issued by the Department of Education for substantial misrepresentation of statistics or for noncompliance with required safety/security disclosures or other provisions.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

In fiscal year 2018/19, the OIARA plans to increase focus on supporting university leadership with information, assessment, and audits regarding externally governed compliance requirements. As a centralized function, the Office will provide assessments and recommendations concerning the universities' responsibilities regarding certain mandated external compliance reporting, reducing consequences of noncompliance.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable).

The fiscal year 2018/19 budget increased \$19,232 over the prior year and is comprised of increases of \$6,225 in personnel costs and \$13,007 in operating expenditures. Personnel cost increases reflect normal salary and benefit escalations. All operating expense categories remain constant or were reduced from the prior year with the exception of the Office of the Chancellor overhead charges, which increased by \$22,107; the bulk of this increase is due to an off-site auditor position relocating to the Office of the Chancellor's Vartan Way location in Harrisburg.

BUDGET SUMMARY

Function: Dixon University Center Academic Consortium

Cost Proration Basis: Funding taken off the top of each university's annual state appropriation.

	FY 2016/17 Actual	FY 2017/18 Projection	% Change	FY 2017/18 Budget	FY 2018/19 Request	% Change
FTE Complement: Authorized	5.38	5.20	-3.3%	5.54	5.06	-8.7%
Filled	5.38	5.20	-3.3%	5.54	5.06	-8.7%
Projected Prior Year Carryover					\$67,705	
Revenue:						
State Appropriations	\$1,235,000	\$1,260,000	2.0%	\$1,260,000	\$1,301,580	3.3%
Vending Machine Income/Commissions	2,588	2,476	-4.3%	2,500	2,100	-16.0%
Conferences and Workshops	59,267	56,229	-5.1%	60,000	55,000	-8.3%
State System Consortium Income	79,856	74,204	-7.1%	70,000	75,372	7.7%
Miscellaneous Revenue	0	0	—	59,396	0	_
Total Revenue	1,376,711	1,392,909	1.2%	1,451,896	1,434,052	-1.2%
Personnel Expenditures:						
Salary	337,964	330,429	-2.2%	344,704	325,166	-5.7%
Benefits	191,434	183,656	-4.1%	201,158	187,373	-6.9%
Total Personnel Expenditures	529,398	514,085	-2.9%	545,862	512,539	-6.1%
Operating Expenditures:						
Postage/Freight	92	198	115.2%	350	350	0.0%
Telecommunications Charges	912	941	3.2%	930	990	6.5%
Advertising	125,460	134,294	7.0%	170,550	173,143	1.5%
Subscriptions	0	100		100	100	0.0%
Memberships	1,823	1,823	0.0%	2,350	1,850	-21.3%
Printing and Duplicating	762	1,550	103.4%	1,100	1,600	45.5%
Travel, Transportation, and Meetings	6,380	10,875	70.5%	10,205	11,400	11.7%
Computing and Data Processing	5,780	9,547	65.2%	9,688	14,875	53.5%
Professional Services	22,325	32,852	47.2%	30,750	65,000	111.4%
Other Services	36,300	35,337	-2.7%	48,275	46,723	-3.2%
Insurance	0	0	_	0	0	
Utilities	0	0	_	0	0	
Rental and Lease (Excluding Vehicles)	2,329	2,329	0.0%	2,329	2,329	0.0%
Miscellaneous Services	1,746	1,650	-5.5%	1,750	1,750	0.0%
Supplies	4,851	7,025	44.8%	6,800	7,350	8.1%
Overhead	473,865	520,520	9.8%	520,520	520,016	-0.1%
Payments to State System Universities	0	0		0	0	
Expensed Assets	47,562	39,406	-17.1%	10,350	3,026	-70.8%
Transfer to Renewal and Replacement	137,000	113,500	-17.2%	113,500	130,000	14.5%
Total Operating Expenditures	867,187	911,947	5.2%	929,547	980,502	5.5%
Capital Expenditures	34,720	92,774	167.2%	85,000	68,716	-19.2%
Total Expenditures	1,431,305	1,518,806	6.1%	1,560,409	1,561,757	0.1%
Transfer from Renewal and Replacement	(77,812)	(67,774)	-12.9%	(60,000)	(60,000)	0.0%
Surplus/(Deficit)	\$23,218	(\$58,123)	-350.3%	(\$48,513)	(\$67,705)	39.6%
Projected Carryforward to FY 2019/20	,, _ · O	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(; :=,= :0)	(¢01,180) \$0	

Function: Dixon University Center Academic Consortium

Describe the mission of this operation.

To provide academic programming to working adults in the greater Harrisburg area and to support the meeting and conference needs of the State System universities and a variety of other non-State System meeting service customers at the Dixon University Center (DUC).

Explain the benefits of centralizing this operation.

The DUC provides one convenient location for State System universities to offer academic programs, meetings, events, and conferences in the Harrisburg area.

Describe any cost savings made to the universities.

The DUC Academic Consortium provides one team of staff members to support all of the academic and meeting activities at the DUC. Universities do not have to try to find locations, pay rent, or hire their own facility and logistics staff to support their efforts in this area.

Describe any recent program changes or improvements relevant to the FY 2018/19 budget year.

Recent changes and improvements include the addition of a community outreach program, continued technology improvements, and an increase in security due to procurement of a new security firm. There is an increase in training costs as this department has assumed meeting and academic technology responsibilities for the DUC.

Explain in detail cost increases with justification on the basis of benefits to the universities (if applicable). N/A

CATALOG OF BEST PRACTICES

Institution / Practice	Implementation	Impact
Kutztown U., gain-sharing year end department budget savings	With the gain sharing program, departments automatically keep 50% of their year-end carry over balances. With appropriate documentation, departments can petition to keep 100% of their carry over balances.	It has created a source of funds to support high priority University projects, improved the level of planning by individual university departments, and created a very visible link between planning and resource allocation.
West Chester U., centralized classroom and lab space management to optimize space utilization	Utilizes event management software https://corp.collegenet.com/products/scheduling/sche dule25.html to allocate space.	WCU operates with an E&G space shortfall of 270K ASF and avoids \$4M in annual operating expenses.
Slippery Rock U., bond financing for deferred maintenance funded from energy savings projects	See article https://www.businessofficermagazine.org/features/p owering-forward/	Fast-tracks deferred maintenance, lowers carbon footprint, reduces energy costs, increases access by lowering tuition, enhances the university image and working and learning environments. Reduces risk and increases accountability. Improves campus safety.
Millersville U., utilizes a revolving strategic initiative fund to provide seed funding for new revenue initiatives	A revolving fund set aside from year end savings is used to provide seed funding for revenue-generating strategic initiatives; new programs require net positive revenue within 3 years and payback of seed funding within 5 years.	Used to fund multiple new academic programs, student success coaches, online program marketing and administration, mentoring and student research initiatives.
Kutztown U., 24 hour ("MyTime") dining program	See article https://www.businessofficermagazine.org/features/d ining-do-over/	Students eat healthier and food consumption (costs) decrease. "This change to our dining program dramatically improved its value to the student and led to a large increase in student satisfaction after we implemented the new program."

Slippery Rock U., incentive budgeting for academic divisions	All units describe how their budget plans address specific performance measures (including student persistence). A portion of future state funding allocations are tied to goal attainment, while other appropriated funding is based on credit hour production (and passed on to units via productivity allocations).	SRU has consistently been at or near the top of the system for performance funding and faculty productivity rates, and has significantly improved four and six year graduation rates.
Centralized accounting, procurement and accounts payable (Oregon University System)	Campus business offices feed all accounting transactions to a central office; division level service centers process travel and AP vouchers. (In PA, procurement change would require Act 188 revision or presidential delegation of authority).	One system controller and campus business service directors (staff savings), procurement and AP staff savings, more efficient and consistent transaction processing.
Shared data center for all administrative systems (Oregon and Connecticut systems)	Single data center serving all campuses. Within PASSHE, IUP currently hosts SIMS and Millersville hosts SAP.	Single installations but multiple running instances of major administrative systems; staff savings for hardware, software and DBAs.
Shared student system and shared chart of accounts (Oregon University System)	All institutions standardized on one student system and agreed upon CIP codes, making student transfers and comparisons significantly easier. Similarly, institutions shared a single chart of accounts for financial transactions, facilitating combined financial reporting and auditing.	Significant software savings, ease of financial reporting and systemwide analyses and reports.

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6 November 2018



RATINGS State System of Higher Education (PA) Revenue Bonds Aa3 stable

Source: Moody's Investors Service

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State System of Higher Education (PA)

PASSHE seeks system solutions to confront operating challenges as enrollment declines

Pennsylvania's <u>State System of Higher Education</u> (PASSHE, Aa3 stable) will face growing challenges managing operations and its mission of affordable higher education in the medium to longer term due to rising expenses and limited prospects for meaningful revenue growth. Favorably, the Board of Governors has launched a "System Redesign" to determine changes aimed at achieving long-term sustainability, and leadership has acted to adjust expenses in order to maintain fiscal stability. PASSHE's size, scale, essentiality and liquidity support still strong credit quality. However, it will be the system's ability over the next three to five years to enact more systemic solutions that will be essential to sustaining credit quality. There are material impediments, including governance challenges, that could impair timely progress in this effort.

» PASSHE's credit challenges are mounting, with limited revenue growth

opportunities and rising expenses. PASSHE faces growing credit challenges as the system's Board of Governors seeks long-term financial stability for all 14 member universities. Systemwide enrollment fell 18% between its peak in fall 2010 and fall 2018. With two-thirds of revenue derived from student charges, revenue growth is limited. The system also has limited pricing flexibility given its key student population of lower-and middle-income families. Expense pressures continue, with rising labor and post-retirement benefit costs being the largest drivers.

» Systemic and structural challenges include financial disparities between campuses, a largely unionized labor force and a governance structure unable to quickly respond to market changes. There are significant disparities in the financial health of the system's 14 campuses, with several of them struggling. Over 85% of its employees are subject to collective bargaining agreements, so PASSHE is constrained in how far it can adjust universities' programs and staffing, and in modifying benefits. A decentralized governance structure also makes quick decision-making difficult.

» PASSHE's strong centralized financial and budgeting oversight has maintained near-term fiscal stability within these constraints. Despite enrollment losses, the system has demonstrated good financial performance thanks to strong fiscal oversight. In the near term, PASSHE will maintain fiscal stability through tuition increases, modest increases in state funding and continued expense management efforts. The board is seeking solutions to the more fundamental structural challenges, but those are material and unlikely to be quickly resolved.

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2018

Credit challenges are mounting because of limited revenue growth opportunities and rising expenses

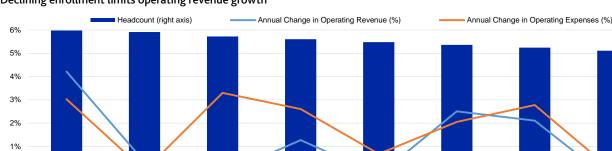
State System of Higher Education will face ever-growing challenges in meeting its mission of providing access and affordability in an intensively competitive market with weak demographics. Revenues grew less than expenses for five of the past seven years (see Exhibit 1), in large part because of enrollment declines. During fiscal 2011 (fiscal year ending June 30) and 2018, headcount enrollment fell nearly 14%.

Exhibit 1

0%

-1%

Exhibit 2



2014

Declining enrollment limits operating revenue growth

Headcount enrollment is for fall 2010 to fall 2017

2011

Operating revenue and expenses are for fiscal year 2011-2018 ending June 30 Source: PASSHE, Moody's Investors Service

2012

2013

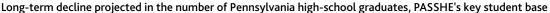
Systemwide, about 90% of enrollment is in-state students, a problem with Pennsylvania's weak demographics. The Western Interstate Commission for Higher Education (WICHE) is projecting the number of high-school graduates to fall 4% from 2017 through 2032 (see Exhibit 2).¹ This follows a nearly 9% decline from the graduating classes in 2010 (PASSHE's fall 2010 semester in fiscal 2011) to 2016.

2015

2016

2017





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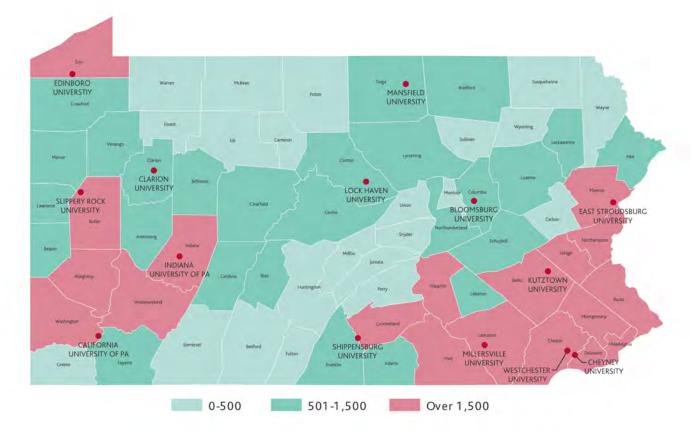
State System of Higher Education (PA): PASSHE seeks system solutions to confront operating challenges as 129 liment declines

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PASSHE's universities are located across the commonwealth, including western and northern regions with the most challenging demographics. Many of the universities have limited recruiting options, facing strong competition for in-state and out-of-state students from public and private colleges and universities both within and outside Pennsylvania. PASSHE universities compete with each other as they reach beyond their usual regions to recruit from other counties across the state. Exhibit 3 shows the universities' locations and the concentration of draw for system-wide enrollment, illustrating the high competition of the universities for limited regions.

Exhibit 3

PASSHE universities compete for most of its enrollment from limited number of Pennsylvania counties



Legend indicates PASSHE's enrollment by counties for Fall 2014 Source: PASSHE

Many of PASSHE's universities are in rural, less economically vibrant counties with economically sensitive student populations highly reliant on financial aid. Students' own limited financial capacity, coupled with the PASSHE board's commitment to access and affordability, constrain significant future tuition increases. Further, PASSHE's current systemwide tuition charge provides little differentiation across universities to adjust for enrollment trends, local regions or particular programs.

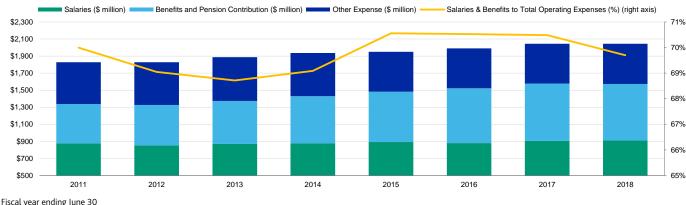
With revenue from student charges representing 66% of operating revenues, total revenue growth has accordingly slowed. Net tuition revenue was up only 1.1% and 1.4% for fiscal years 2016 and 2017, respectively, below the Higher Education Price Index (HEPI) of 1.8% and 3.3% for the same years, and shows a small decline in fiscal 2018 compared to a preliminary HEPI increase of 2.8%.² State funding, accounting for 23% of operating revenues, increased 5% in 2016 but only 2.5% and 2.0% in fiscals 2017 and 2018, respectively, not fully offsetting shortfalls in student-derived revenues. From fiscal 2011, the year of PASSHE's peak enrollment, to 2018, revenues increased only 5%. Based on the enrollment declines in fall 2018, fiscal 2019 is likely to show weak revenue growth even with a 3.3% increase in state funding.

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In contrast, while still relatively constrained, expense growth was steeper at 12% in aggregate for fiscal years 2011-2018. Salary and benefits drove the increase, with pension costs the key contributor (see Exhibit 4). PASSHE's contribution rate for the State Employees Retirement System (SERS) Class AA jumped to nearly 34% of gross salaries in fiscal 2018 from only 4% in fiscal 2011. With about half of PASSHE's employees members in the state pension plan, the result was a 627% increase in contributions to SERS to \$95 million in fiscal 2018 from only \$13 million in 2011.



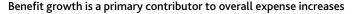


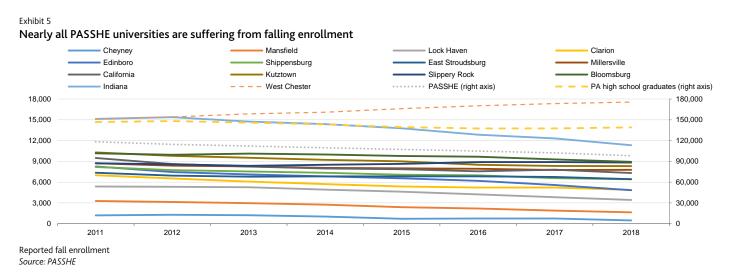
Exhibit 4

Source: PASSHE, Moody's Investors Service

PASSHE faces systemic and structural challenges

Significant financial disparities across the system, a long history of shared yet distributed governance, and inflexible labor structure will be notable impediments to PASSHE implementing material change in a short time. However, the commissioning of various consultant studies highlights the board's intent to begin addressing the system's structural challenges. Over the next five to ten years, we anticipate there will be gradual, incremental structural changes that will, along with continued strong financial management, sustain the system's overall financial strength.

Although systemwide enrollment fell 18% from the fall 2010 peak to fall 2018, not all universities reported similar experiences. As seen in Exhibit 5, West Chester University reported a 21% enrollment gain. On the other hand, Cheyney University reported a 70% plunge, and many of the others had enrollment losses of 20% or more.



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The enrollment drop drives weak cash flow for some universities, especially during summer months before receipt of fall semester tuition payments. In its 2018 financial statement, PASSHE noted Clarion University stabilized at June 30, 2018 following three years of decreases. Following stablization in fiscal 2017, Mansfield University's cash decreased in fiscal 2018. Other than Cheyney University, the other PASSHE universities reported stronger cash balances.

Cheyney University, the most challenged with a severe cash shortage, has required loans from PASSHE's administrative office. Cheyney also faces possible loss of its accreditation from Middle States Commission on Higher Education, its accrediting agency that has required the university to "show cause," by September 2017, as to why its accreditation should not be withdrawn. In November 2017 Middle States extended Cheyney's accreditation for one year, indicating the university made significant progress toward addressing the concerns raised in 2017. It was required to report in September 2018 to demonstrate its progress on the remaining concerns. Cheyney submitted its report to Middle States as directed and is now awaiting the decision.

While PASSHE and its member universities continue to reconfigure or right-size academic programs, the system's labor structure is a particular impediment. Over 87% of the system's employees are subject to collective bargaining agreements. This high degree of unionization is a challenge to making changes in academic programs or course offerings or quickly adjusting faculty and staff levels based on changing enrollment.

PASSHE's relationship with the various collective bargaining units, particularly the faculty, has historically been at times challenging, as evidenced by the faculty union's unprecedented strike in 2016. Although only three days in length with little financial impact, the strike illustrated PASSHE's difficulty to implement reforms it views critical to maintaining system financial sustainability. Subsequently the system was able to quickly negotiate in October 2017 a one-year extension to the faculty contract, indicating improvement in the relationship that is particularly evident since the new chancellor joined in September 2018.

In spring 2017, five universities served notice to faculty about possible layoffs and program cuts depending on the trajectory of revenues, including state funding. With the passage of the fiscal 2018 state budget, the notices at four universities were canceled. The notices demonstrate PASSHE's willingness to take difficult actions. Because of the system's expense containment efforts and faculty retirements, total faculty declined 4% from fiscal 2011 to 2018, driven by a 8% decrease in full-time faculty. However, the pace of decline in faculty did not match that of students, with total student headcount to faculty actually declining to 17.1x in fiscal 2018 from 19.3x in fiscal 2011 (see Exhibit 6).

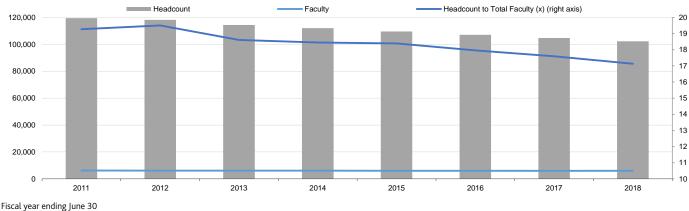


Exhibit 6

Governance and oversight is another key issue. The system was created in 1982 by Act 188 from 14 previously independent universities and has operated under a model of shared yet distributed governance. PASSHE is led by its board of governors and the chancellor, each with very specific responsibilities and authority. As a vestige of their past as independent institutions, each university has a president and a council of trustees with their own specific authorities. Adding additional governance complexity are the unions, particularly the faculty union, that are represented by single agreements across the entire system.

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State System of Higher Education (PA): PASSHE seeks system solutions to confront operating challenges as 132 llment declines

Reduction in faculty does not match steep enrollment decline

Source: PASSHE

While this governance structure generally worked while PASSHE's enrollment was growing, the system and university leaders now are considering often difficult actions. However, the nature, breadth and timing of the actions are restricted by the roles and authorities of the constituencies, including the system board, the universities' leadership and faculty. In addition, the state has an interest in PASSHE's decisions, since each university is a key economic driver for its community and often the largest employer. As a result, PASSHE has faced, and will face, significant resistance to attempts to fundamentally shift its structure or operating scale.

PASSHE's very good centralized financial and budgeting oversight will maintain near-term fiscal stability.

Even as PASSHE tackles more fundamental structural issues, we expect the system will maintain its track record of good financial management over the next two to three years. PASSHE's scale, diversification and importance to the state are additional credit-stabilizing elements.

Favorably, PASSHE's board commissioned an in-depth assessment and strategic review to identify areas of change to ensure the longterm success of the system and its 14 member universities. The National Center for Higher Education Management Systems (NCHEMS) provided the results in July 2017,³ making a number of recommendations, including some which require legislative action by the Pennsylvania governor and legislature. One significant recommendation, to amend Act 188, will be difficult and the likelihood and timing highly uncertain.

After reviewing the study and recommendations, PASSHE's board stated its commitment to ensuring the sustainability of all 14 campuses and launched a system redesign to achieve it. Task groups were created to examine and address three strategic priorities: 1) ensure student success, 2) leverage university strengths, and 3) transform the governance/leadership structure.

The task groups provided reports and proposals for board review and approval in the spring/summer of 2018. The board has already launched an accelerated program approval process, and PASSHE reports 29 new programs were approved since January 2018 to address market needs, particularly in STEM sciences. The task groups proposals aim to address strategic priorities, including a revamp of its pricing and financial aid policies and a proposal for continued strategic sourcing and procurement efforts. A new set of task groups is underway as the second phase of system redesign with anticipated recommendations provided in winter/spring 2019.

However, the proposals will still fall short of solving or changing some of the major challenges PASSHE faces. The governance structure cannot change without the legislature amending Act 188, and the unions continue to significantly influence PASSHE's efforts to address its staffing relative to enrollment. Unless PASSHE and the commonwealth can deal with those issues, it will continue to find it hard to maintain its historically strong fiscal performance.

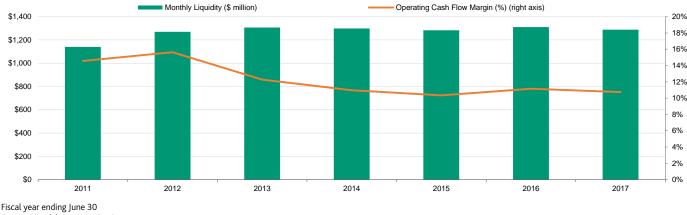
The State System has historically demonstrated sound fiscal oversight. PASSHE notably produced good operating cash flow and maintained strong unrestricted liquidity despite lower enrollment, as shown in Exhibit 7. This was accomplished through tuition increases, modest increases in state funding and expense management actions. Over the past six years, PASSHE has worked to improve and centralize the procurement process through greater collaboration. It also led the universities' cost reviews and actions, including program eliminations, reporting the universities placed 300 programs in moratorium or were discontinued.

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Exhibit 7



Strong liquidity and good operating cash flow despite enrollment declines

Source: Moody's Investors Service

Moody's Related Research

Rating Action: Moody's revises State System of Higher Education's (PA) outlook to stable and assigns Aa3 to Series AV

Credit Opinion: Update following revision of outlook to stable

Sector in Depth: Changing demographics present credit risks and opportunities

Sector in Depth: Rural America confronts growing economic and demographic challenges

Sector Comment: Midyear update: Favorable government funding and investment returns, tuition revenue pressure continues

Medians - Public university median revenue growth falls for second year

Endnotes

<u>1</u> Western Interstate Commission for Higher Education, Knocking at the College Door

- 2 Commonfund Institute, Higher Education Price Index, Preliminary 2018 HEPI Table
- 3 National Center for Higher Education Management Systems, Strategic System Review Findings & Recommendations

6 November 2018

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