1. **Roll Call**

2. **Approval of the Minutes of Previous Meetings**

Will the Board of Trustees approve the minutes of the meeting of the Board held on July 21, 2017?

3. **President's Report**

4. **Reports from Standing Committees**

Discussion of action and/or information items by the Standing Committees for consideration by the Board of Trustees:

A. **Committee on Academic Affairs and Student Life** – William F. Oldsey, Chair

B. **Committee on Audit and Risk** – Walter C. Rakowich, Chair

C. **Committee on Compensation** – Matthew W. Schuyler, Trustee

1) **Presidential Compensation**

The Operating Guidelines for the Committee on Compensation provide that on an annual basis the Committee on Compensation will recommend to the Board of Trustees, based upon an evaluation of performance goals and objectives, the President’s annual compensation, including salary and incentive compensation if applicable.

Will the Board of Trustees adopt the following resolutions:

WHEREAS, The Committee on Compensation has reviewed the Presidential performance goals and objectives as well as market and equity considerations; and

WHEREAS, The Committee on Compensation recommends annually to the Board of Trustees consideration of salary adjustments to the President’s salary based upon the President’s performance in light of established goals and objectives;

THEREFORE BE IT RESOLVED, That the Board of Trustees approves the salary terms for Eric J. Barron as recommended by the Committee on Compensation and presented to the Board of Trustees in executive session.

D. **Committee on Finance, Business and Capital Planning** – Robert E. Fenza, Chair

1. **Proposed Naming of New East Halls Residence Hall “Martin Hall”**

The Facilities Naming Committee has recommended that the Board of Trustees name a new residence hall in East Halls after Edward Martin, the 32nd Governor of Pennsylvania.

Will the Board of Trustees adopt the following resolution:

RESOLVED, That a new residence hall in East Halls on the University Park campus is named “Martin Hall.”

2. **Proposed Naming of Classroom Building at Shaver's Creek Environmental Center "Donald W. Hamer Classroom Building"**

The Facilities Naming Committee has recommended that the Board of Trustees name a classroom building at Shaver's Creek Environmental Center in recognition of two pledges totaling $500,000 from the Hamer Foundation.

Will the Board of Trustees adopt the following resolution:

> RESOLVED, That a classroom building at Shaver's Creek Environmental Center is named "Donald W. Hamer Classroom Building."

3. **Proposed Renaming of the Gary Schultz Child Care Center at Hort Woods "The Child Care Center at Hort Woods"**

The Facilities Naming Committee has recommended that the Board of Trustees rename the Gary Schultz Child Care Center at Hort Woods the "The Child Care Center at Hort Woods."

Will the Board of Trustees adopt the following resolution:

> RESOLVED, That the Gary Schultz Child Care Center at Hort Woods be renamed "The Child Care Center at Hort Woods."

4. **Appointment of Non-University Employees to the Penn State Investment Council**

In September 2000, Penn State's Board of Trustees established the Penn State Investment Council to provide direct oversight of the University's endowment and long-term investment program. The Penn State Investment Council, appointed by the Board of Trustees, includes the: Senior Vice President for Finance and Business/Treasurer of the University (Chair); Chief Executive Officer, Office of Investment Management; and five to nine non-University members (at least one of whom is a voting or emeriti member of the Board of Trustees). The terms are staggered as follows:

2017

Gary A. Glynn, President and Chief Investment Officer (Retired), U.S. Steel & Carnegie Pension Fund (New York, NY)
J. David Rogers, Chief Executive Officer, JD Capital Management (Greenwich, CT)

2018

Blake Gall, President, MicroPlusPlus Investment Management (Boalsburg, PA)
Edward R. Hintz, Jr., President, Hintz Capital Management, Inc. (Morristown, NJ)
Joseph B. Markovich, Managing Director, J.P. Morgan Private Bank (New York, NY)

2019

Carmen J. Gigliotti, Managing Director (Retired), Private Equities, DuPontCapital Management (Wilmington, DE)
Colleen Ostrowski, Senior Vice President and Treasurer, Visa (San Francisco, CA)

It is proposed to re-appoint Gary A. Glynn and J. David Rogers, non-University employees, to membership with terms expiring in 2020. It is also recommended that Ira M. Lubert, a non-University employee and current Trustee, be appointed to a three-year term expiring in 2020.

Will the Board of Trustees adopt the following resolutions:

RESOLVED, That Gary A. Glynn and J. David Rogers, non-University employees, are appointed to the Penn State Investment Council for terms ending in 2020.

FURTHER BE IT RESOLVED, That Ira M. Lubert, non-University employee and voting member of the Board of Trustees, is appointed to the Penn State Investment Council for a term ending in 2020.

5. Proposed Approval of Fiscal Year 2018-19 to Fiscal Year 2022-23 Capital Plan

Will the Board of Trustees adopt the following resolutions:

WHEREAS, Both the University and its controlled affiliate, Penn State Health, have studied their capital needs and plan to make capital expenditures for projects consisting of, among other things, land and interests in land, land improvements, buildings, infrastructure, building improvements, renovations, fixtures, equipment, furnishings, information technology assets, and other capital assets and projects serving both the University and Penn State Health's purposes at various locations (collectively, the "Uses"); and

WHEREAS, Both the University and Penn State Health have developed a Capital Plan for the five year period between July 1, 2018 and June 30, 2023; and

WHEREAS, Individual project approvals will continue to be subject to Board of Trustee approvals to the extent required by the Bylaws; and

WHEREAS, The Capital Plan shall consist of the sources and uses of funds described in Appendix I (Schedules 1 and 2);

THEREFORE BE IT RESOLVED, Total Education and General capital commitments between July 1, 2018 and June 30, 2023 are approved up to $2.131 Billion; and

FURTHER BE IT RESOLVED, Total Self-Supporting Units capital commitments between July 1, 2018 and June 30, 2023 are approved up to $1.159 Billion; and

FURTHER BE IT RESOLVED, Total Penn State Health and College of Medicine capital commitments between July 1, 2018 and June 30, 2023 are approved up to $1.447 Billion; and

FURTHER BE IT RESOLVED, That the Officers of the University and Penn State Health may exceed any of the aforementioned capital spending limits by an amount not to exceed five percent (5%) of such limit; and, with the prior approval of the Committee on Finance, Business and Capital Planning may exceed any of the aforementioned capital spending limits by an amount greater than five percent (5%) but not to exceed ten percent (10%) of such limit; and

FURTHER BE IT RESOLVED, That the Officers of the University may reallocate an amount not to exceed five percent (5%) of any such capital spending limit from one of the three categories of spending (Education and General, Self-Supporting Units and Penn State Health and College of Medicine) to another and, with the prior approval of the Committee on Finance, Business and Capital Planning, may reallocate an amount greater than five percent (5%) but not to exceed ten percent (10%) of any of the aforementioned capital spending limits from one of the three such categories to another, in each case as such Officers determine to be in the best interests of the University.

(See Appendix I)

6. <u>Borrowing Authority for The Pennsylvania State University</u>

Will the Board of Trustees adopt the following resolutions:

WHEREAS, The University and its wholly owned subsidiary, Penn State Health (“Penn State Health”), have studied their capital needs and plan to make capital expenditures for projects of the University, Penn State Health and their affiliated organizations included or to be included as part of the capital improvement programs of the University and Penn State Health and consisting of, among other things, land and interests in land, land improvements, buildings, infrastructure, building improvements, renovations, fixtures, equipment, furnishings, information technology assets, and other capital assets and projects serving University or Penn State Health purposes at various locations (collectively, the “Projects”), or to reimburse their other funds for capital expenditures previously made in respect of the Projects, in an amount approximately equal to Two Billion Two Hundred Million ($2,200,000,000) Dollars during the period until June 30, 2023; and

WHEREAS, The University may be required to provide its guaranty of obligations issued by Penn State Health for the payment of costs of capital projects of Penn State Health; and

WHEREAS, It is in the financial interests of the University and Penn State Health to pay for depreciable assets over a period which does not exceed the useful lives of such depreciable assets or such longer period as is permitted by Federal tax law; and

WHEREAS, Depending on the stage of development of the Projects, it may be in the financial interests of the University and Penn State Health to incur obligations for the payment of the cost of the Projects at one time or in part from time to time; and

WHEREAS, The specific timing of University borrowing or guarantees by the University of indebtedness of Penn State Health in light of trends in the financial markets can make a significant difference to the University, Penn State Health and their constituents in the cost of borrowing for capital projects; and

WHEREAS, The decisions as to price, timing, interest rates, terms, serialization and tax exempt or taxable status of such borrowing of the University and the form of any guarantees by the University of indebtedness of Penn State Health may be most effectively made by the officers of the University; and

WHEREAS, It may be advantageous to refund or otherwise refinance certain outstanding obligations of the University from time to time or, prior to, concurrently with or subsequent to the issuance of obligations of the University, to enter into agreements relating to bond insurance, letters of credit or other credit or liquidity facilities (collectively, "Credit Enhancement") or agreements relating to interest rate swaps or other forms of interest rate hedge or similar agreements associated with such obligations (collectively, "Hedge Agreements") and such decisions may be more effectively made by the officers of the University; and

WHEREAS, The University may from time to time issue its obligations directly or indirectly through other qualified governmental entities, and rate subsidies or other benefits may be available if the University's obligations are issued through certain Commonwealth of Pennsylvania public authorities and the proceeds of such obligations are loaned by the issuing public authorities to the University or to Penn State Health (with such loans to Penn State Health guaranteed by the University, if appropriate), and decisions regarding the form of such obligations and borrowing may be more effectively made by the officers of the University; and

NOW THEREFORE, BE IT RESOLVED, That the Board of Trustees of the University acknowledges that decisions regarding the form of University obligations and borrowing of the University and as to the other aspects of such obligations and borrowing described in the recitals to these resolutions may be made from time to time by officers of the University as hereafter described and that, for purposes of these resolutions, the term "officers of the University" shall mean the persons holding the positions of the President, the Senior Vice President for Finance and Business/Treasurer, the Associate Vice President for Finance and Corporate Controller, or any two of them, acting from time to time pursuant to the authority granted by these resolutions; and

FURTHER BE IT RESOLVED, That officers of the University are authorized to cause the University (1) to borrow, through the issuance of bonds, notes, leases, installment sale agreements or other forms of debt obligations, including as part of a line of credit or other credit facility, in one or more series or sub-series, fixed rate or variable rate, taxable or tax-exempt, secured or unsecured, senior or subordinate, in a single issuance or from time to time, and (2) to guaranty or become surety for indebtedness of Penn State Health, in an aggregate principal amount not to exceed Two Billion Two Hundred Million Dollars ($2,200,000,000) (collectively, the "Obligations"), with such Obligations to be issued and sold at such price in a competitive, negotiated or invited sale and to be of such tenor and otherwise to contain or have the benefit of such terms and provisions, including, without limitation, provisions for redemption or mandatory or optional tender for purchase, maturity, collateral security, covenants, representations and warranties and events of default, as the officers of the University shall deem to be necessary or appropriate to the University; and

FURTHER BE IT RESOLVED, That the officers of the University are authorized to execute, in the name and on behalf of the University, agreements, contracts and instruments of every nature and description which are necessary or appropriate to accomplish the foregoing or in connection with the issuance of the Obligations, including without limitation securities disclosure documents, trust indentures, mortgages, deeds of trust, security and pledge agreements, guarantees, loan agreements, bond purchase agreements, letter of credit reimbursement agreements, issuing and paying agency agreements, dealer agreements, refunding escrow agreements, leases, installment sale agreements, interest rate management agreements, investment contracts, tax compliance agreements and other agreements and documents of every nature and description that are necessary or appropriate to accomplish the foregoing or in connection with the issuance and delivery of the Obligations; and

FURTHER BE IT RESOLVED, That the officers of the University are authorized to cause the Obligations to be issued directly by the University and also by and through any appropriate public authorities of the Commonwealth of Pennsylvania having jurisdiction, including, without limitation, The Pennsylvania Higher Educational Facilities Authority and the Centre County Higher Education Authority, with the proceeds of such indebtedness of such public authorities being loaned to the University, or to Penn State Health, as the case may be; and

FURTHER BE IT RESOLVED, That the officers of the University are authorized to refund or otherwise refinance the Obligations and other outstanding indebtedness of the University from time to time and, prior to, concurrently with or subsequent to the issuance of indebtedness of the University, to execute any agreements (including any amendments or supplements thereto or thereof) which are required in connection with Credit Enhancement or Hedge Agreements, all on such terms and conditions as the officers of the University shall deem necessary or appropriate; and

FURTHER BE IT RESOLVED, That it is hereby declared to be the official intent of the University, as referred to in Section 1.150-2 of the Treasury Regulations promulgated under the Internal Revenue Code of 1986, as amended (“Code”), that the University be reimbursed from the proceeds of the Obligations authorized hereby in a maximum principal amount of $2,200,000,000 for expenditures for or in respect of the Projects initially paid from other available funds of the University on or after the date which is sixty days prior to the effective date of these resolutions (except for certain expenditures which are not subject to such time limitation), provided that the issuance of the Obligations providing such reimbursement in any particular case occurs not later than eighteen months after the latest of (i) the date on which the earliest expenditure subject to U.S. Treasury Regulation §1.150-2 is paid, (ii) the date on which the particular Project is placed in service or abandoned, but in no event more than three years after the earliest expenditure is paid, or (iii) the date otherwise permitted by the Code or U.S. Treasury Regulations promulgated thereunder and, in implementation hereof, the officers of the University may approve specific capital expenditures to be reimbursed from the proceeds of Obligations later to be issued, and the funds from which such capital expenditures shall be paid, as required by the said Treasury Regulations; and

FURTHER BE IT RESOLVED, That the borrowing of the University or guarantees of indebtedness of Penn State Health under these resolutions, shall be limited to capital projects approved by the University’s Board of Trustees prior to June 30, 2023; and

FURTHER BE IT RESOLVED, That the authority to borrow of the University or Penn State Health for refunding or refinancing existing indebtedness of the University or Penn State Health shall not be limited in principal amount by this resolution and shall not be taken into account when calculating the $2,200,000,000 amount of indebtedness authorized by this resolution; and

FURTHER BE IT RESOLVED, That the officers of the University are hereby authorized and directed to execute and deliver such other agreements and documents and to take such other action as may be necessary or appropriate in order to effectuate the foregoing resolutions.

7. Proposed Appointment of an Architect, Willard Building Renovation, University Park

The Subcommittee on Architect/Engineer Selection will make a report and recommendation on the appointment of an architect for the Willard Building Renovation at University Park.

8. Proposed Appointment of an Architect, Innovation Pavilion, Penn State College of Medicine

The Subcommittee on Architect/Engineer Selection will make a report and recommendation on the appointment of an architect for the Innovation Pavilion at the Penn State College of Medicine.

9. Proposed Appointment of a Design Build Team, West Campus Parking Garage, Penn State Health Milton S. Hershey Medical Center

The University is planning construction on the Penn State Hershey campus that will increase the demand for vehicle parking. Currently, the campus has approximately 6,400 surface parking spots and approximately 2,700 parking spots within two parking structures. A new parking structure on the west side of campus is being planned to accommodate the pending growth as well as to replace parking lost to building construction.

A related building program and feasibility study was completed in August of 2016, which included siting and scope for the proposed west campus parking structure. It is anticipated that the parking structure will accommodate approximately 1,100 parking spots. The successful design-build team will verify the capacity based on traffic and parking study data provided by the University.

Will the Board of Trustees adopt the following resolutions:

WHEREAS, The interview process has been conducted by the University's Office of Physical Plant.

RESOLVED, That the Officers of the University are authorized to employ Clayco, Inc., of St. Louis, Missouri, to design and build the West Campus Parking Garage at Penn State Health Milton S. Hershey Medical Center.

FURTHER BE IT RESOLVED, Final plans for the project will be brought to the Board of Trustees for approval when designed and costs have been established.

10. Proposed Final Plan Approval and Authorization to Expend Funds, Emergency Department Expansion, Penn State Health Milton S. Hershey Medical Center

Penn State Health Milton S. Hershey Medical Center is the only Hospital in Central Pennsylvania with both an Adult Level I and Pediatric Level I Trauma Center. The volume of emergency medicine patients seen at the Medical Center has steadily increased since it moved to its current location on campus in 1995. The Emergency Department currently serves approximately 75,000 patients per year. Penn State Health Milton S. Hershey Medical Center intends to expand and renovate its Emergency Department to continue to effectively provide this vital service to the community.

The project scope will include patient care spaces, an additional resuscitation (trauma) room, EMS staging areas, a procedure room, a dedicated sexual assault exam area, an expanded decontamination and infectious disease isolation area, a security center, and other support spaces. The total project program includes approximately 7,000 square feet of renovation to the existing Emergency

Department and 28,000 square feet of new addition space, including shell space on the second and third floors.

Will the Board of Trustees adopt the following resolutions:

> RESOLVED, That the final plans for the Emergency Department Expansion at Penn State Health Milton S. Hershey Medical Center, as designed by Pyramid Construction, are approved.
>
> FURTHER BE IT RESOLVED, That authorization to expend funds to accomplish the project is approved in the amount of $29,200,000.

11. Review of Long Term Investment Pool as of June 30, 2017

Appendix II is an information report on the University's Endowment and Similar Funds as of June 30, 2017. A brief presentation will be made at the meeting.

(See Appendix II)

12. Conflict of Interest – Approval of Lease and Lease Renewals with PSRP Developers, Inc.

Article VIII, Section 8.05 (a) of the *Bylaws* of the University, provides that, "A contract or transaction between the University and a Trustee, family member or an entity in which the Trustee or family member has a beneficial interest of ten percent (10%) or more and the contract or transaction is valued at $10,000 or more must be approved by the Board of Trustees in accordance with this Section." Further, the Section provides that "the University official responsible for the matter must first conclude that it is in the best interests of the University to consider entering into such a contract or transaction" and that "the officer must first explore alternatives that do not involve an interest of the Trustee, family member or entity in which the Trustee or family member owns a beneficial interest of ten percent (10%) or more." The interested Trustee shall leave the meeting during discussion and voting. Finally, Section 8.05(a) provides that "[t]he Board shall determine by a majority vote of the disinterested Trustees whether the transaction or arrangement is in the University's best interests, the price and value provided are fair and reasonable to the University and whether to approve the transaction or arrangement."

Trustee Ira Lubert has a beneficial ownership of more than ten percent of PSRP Developers, Inc. which owns 101 Innovation Boulevard (the "Lubert Building") and 103 Innovation Boulevard (the "103 Building"). The University proposes to enter into a new lease for space in the Lubert Building and to renew three existing leases in other spaces in the 103 Building, as set forth below.

The University is contractually obligated to provide office space to Penn State Sports Properties, Inc. and its affiliate, Learfield Communications, Inc. (collectively, "Learfield"), in connection with its role as sales and marketing agent for the Department of Intercollegiate Athletics. Currently, the University provides 2,394 square feet of office space in Suite 105 of the White Building for this purpose. The University is seeking to relocate Learfield employees to an alternative off-campus location in Suite 114 of the Lubert Building.

The University currently leases 6,977 square feet of office space for the Donald P. Bellisario College of Communications at 103 Innovation Boulevard, Suite 205, at current annual base rent of $140,410 with an expiration date of December 31, 2017. The Donald P. Bellisario College of Communications staff currently at this location are expected to move back to the University Park campus per recent donor gift requirements. However, that move is not expected prior to the expiration of the current lease and the Donald P. Bellisario College of Communications will continue to have ongoing office space needs until such time.

The University currently leases 4,123 square feet of office space for the Office of Gift Planning at 103 Innovation Boulevard, Suite 212, at current annual base rent of $81,429 with an expiration date of November 30, 2017. The Office of Gift Planning has continuing office space needs beyond November 30, 2017.

The University currently leases 3,978 square feet of office space for the Finance and Business Information Technology Office at 103 Innovation Boulevard, Suite 214 at current annual base rent of $78,804 with an expiration date of November 30, 2017. The Finance and Business Information Technology Office has continuing office space needs beyond November 30, 2017.

Will the Board of Trustees adopt the following resolutions:

WHEREAS, Kurt A. Kissinger, associate vice president for finance and business, serves as the responsible official for exercising due diligence in exploring alternatives in real estate matters in accordance with Article VIII, Section 8.05 (a) of the Bylaws of the University; and

WHEREAS, The responsible official has evaluated both on and off-campus office space alternatives for each of the above described leases in consideration of price, quality, amenities, accessibility and timing of availability, among others; and

WHEREAS, The responsible official has concluded that 101 Innovation Boulevard, Suite 114 presents the best alternative to meet the University's contractual obligations to provide sufficient office space to Learfield and that it is in the best interests of the University to enter into the lease on the terms proposed; and

WHEREAS, The responsible official has concluded that 103 Innovation Boulevard, Suite 205 presents the best alternative to meet the Donald P. Bellisario College of Communications' ongoing office space needs and that it is in the best interests of the University to enter into the lease renewal on the terms proposed; and

WHEREAS, The responsible official has concluded that 103 Innovation Boulevard, Suite 212 presents the best alternative to meet the Office of Gift Planning's ongoing office space needs and that it is in the best interests of the University to enter into the lease renewal on the terms proposed; and

WHEREAS, The responsible official has concluded that 103 Innovation Boulevard, Suite 214 presents the best alternative to meet the Finance and Business Information Technology Office's ongoing office space needs and that it is in the best interests of the University to enter into the lease renewal on the terms proposed; and

THEREFORE BE IT RESOLVED, That the proposal to enter into a five-year lease with 2 one-year options at 101 Innovation Boulevard, Suite 114 with PSRP Developers, Inc., totaling 2,616 square feet at the initial annual base rent of $43,164 is hereby approved; and

THEREFORE BE IT FURTHER RESOLVED, That the proposal to extend the current lease for an additional 24 months, plus two six-month renewal options, at 103 Innovation Boulevard, Suite 205 with PSRP Developers, Inc., totaling 6,977 square feet at the annual base rent of $140,410 plus annual CPI escalation, until December 31, 2020 is hereby approved; and

THEREFORE BE IT FURTHER RESOLVED, That the proposal to exercise the final five-year option to extend the lease at 103 Innovation Boulevard, Suite 212 with PSRP Developers, Inc., totaling 4,123 square feet at the annual base rent of $81,429 plus annual CPI escalation until November 30, 2022, is hereby approved; and

THEREFORE BE IT FURTHER RESOLVED, That the proposal to extend the lease for up to two years at 103 Innovation Boulevard, Suite 214 with PSRP Developers, Inc., totaling 3,978 square feet at the annual base rent of $78,804 plus annual CPI escalation until November 30, 2019 is hereby approved.

E. Committee on Governance and Long-Range Planning – David C. Han, Chair

1) <u>Proposed Approval of Granting of Trustee Emeritus Status</u>

In accordance with *Standing Order IX*, the Committee on Governance and Long-Range Planning will make a report and accompanying recommendations to the Board with respect to the granting of trustee emeritus status.

2) <u>Election of At-Large Membership to the Executive Committee</u>

In accordance with the *Bylaws* (Article III; Section 3.02), at-large members for appointment to the Executive Committee can be nominated by the Committee on Governance and Long-Range Planning, with election by the Board, as necessary to have an executive committee of thirteen (13) members.

Will the Board of Trustees adopt the following resolution:

RESOLVED, That Barbara L. Doran and Julie Anna Potts be elected as at-large members to the Executive Committee of the Board of Trustees.

F. Committee on Legal and Compliance – Richard K. Dandrea, Chair

G. Committee on Outreach, Development and Community Relations – M. Abraham Harpster, Chair

5. Election of Directors of The Corporation for Penn State

According to the *Bylaws* of The Corporation for Penn State, the members of the Corporation shall meet annually for the purpose of electing directors. The Pennsylvania State University is the sole member of The Corporation for Penn State.

Will the Board of Trustees adopt the following resolution:

RESOLVED, That the following persons be elected to the Board of Directors of The Corporation for Penn State:

Eric J. Barron	Ira M. Lubert
Kathleen L. Casey	Keith E. Masser
Mark H. Dambly	William F. Oldsey
David J. Gray	Matthew W. Schuyler
A. Craig Hillemeier	Robert J. Tribeck
Nicholas P. Jones	

6. Informational Report on the Penn State Alumni Association by the Chief Executive Officer/Secretary-Treasurer of the Alumni Association

A report on the Penn State Alumni Association will be presented by Paul J. Clifford, Chief Executive Officer/Secretary-Treasurer of the Penn State Alumni Association.

7. Announcements by the Chairman of the Board of Trustees

Five-Year Capital Uses (Commitments), Schedule 1

University Capital Use	E&G	PSH & COM	Self-Supporting Units*	Total
'Keep Up'**	$ 550.0	$ 104.2	$ 203.9	$ 858.1
'Catch Up'***	473.0	131.9	550.6	1,155.5
New Buildings and Additions	473.0	702.0	318.6	1,493.6
Capital Leases and Contingencies	166.3	133.3	49.8	349.4
Infrastructure	245.0	12.7	5.9	263.6
Information Technology	100.0	150.0	-	250.0
Equipment	25.0	200.0	-	225.0
Energy Savings Program	79.0	12.6	-	91.6
Student Initiated Fees Projects (Facilities)	20.0	-	30.0	50.0
Total	$ 2,131.3	$ 1,446.7	$ 1,158.8	$ 4,736.8

PennState

* Includes Auxiliary and Business Services, Intercollegiate Athletics, and the Applied Research Laboratory
** The required funding to keep the backlog at a steady state.
*** The funding needed to buy down the total backlog to a reasonable target.

All dollars are expressed in millions

Five-Year Capital Sources, Schedule 2

Funding Source	E&G	PSH & COM	Self-Supporting Units*	Total	
Education and General Borrowing	$ 750.0	-	-	$ 750.0	
Self-Supported Borrowing	-	455.0	645.6	1,100.6	2,200
Capital Leases and Contingencies	166.3	133.3	49.8	349.4	
Debt Proceeds from prior Capital Plan	70.0	-	-	70.0	
Unit Reserves, Energy Savings Program, and Other	180.0	858.4	313.4	1,351.8	
Reserves (from Central)	320.0	-	-	320.0	1,742
Reserves (from Capital Assessment)	70.0	-	-	70.0	
Philanthropy	80.0	-	120.0	200.0	
Commonwealth Capital	200.0	-	-	200.0	
Major Maintenance (E&G Only)	200.0	-	-	200.0	
Utilities Renewal Program	75.0	-	-	75.0	
Student Initiated Fees Projects (Facilities)	20.0	-	30.0	50.0	
Total	$ 2,131.3	$ 1,446.7	$ 1,158.8	$ 4,736.8	

PennState

* Includes Auxiliary and Business Services, Intercollegiate Athletics, and the Applied Research Laboratory

All dollars are expressed in millions

Long-Term Investment Pool & Similar Funds (LTIP)

Investment Review for Fiscal 2017

Submitted September 2017

This cover page provides a summary overview of the Pennsylvania State University Long-Term Investment Pool (LTIP) for Fiscal Year 2017. The second page summarizes LTIP-related data that is discussed in detail on the remaining pages, along with performance analysis.

Executive Overview

Long-Term Investment Pool (LTIP) Performance

Annualized *net* investment returns for the Penn State University LTIP (adjusted for the impact of gifts and spending, and after external investment management expenses) for periods ending June 30, 2017 are:

Fiscal 17	3 Years	5 Years	10 Years
12.6%	**4.8%**	**8.6%**	**5.6%**

Long-Term Investment Pool Market Value (pg 3)

As of June 30, 2017, Penn State University's LTIP was valued at $4.00 billion, which includes $2.62 billion in endowment assets and $1.38 billion in non-endowed funds. An additional $133.1 million was held as Similar Funds (see page 2 for details). Endowment spending is reviewed on pages 2 and 3.

Review of Investment Markets (pg 4)

The graph below compares respective returns for the 12-months ending June 30, 2017 and June 30, 2016 for the S&P500, MSCI All Country World (ACWI) ex-US, Bloomberg Commodity Index, Bloomberg Barclays Aggregate Bonds, and publicly-traded Real Estate Investment Trusts (REITs) Indexes. The market index returns shown below are discussed on the bottom of the next page.

Investment Diversification and Asset Mix (pg 5)

At Fiscal year-end, 50% of LTIP assets were invested in public equities (domestic and foreign) and 22% in private equity and venture capital, for a combined 72% of LTIP representing growth-oriented assets. In addition, 17% was invested in fixed income/cash, 4% in real assets, and 7% in diversifying (hedged) strategies.

Comparative Fund Performance (pg 6)

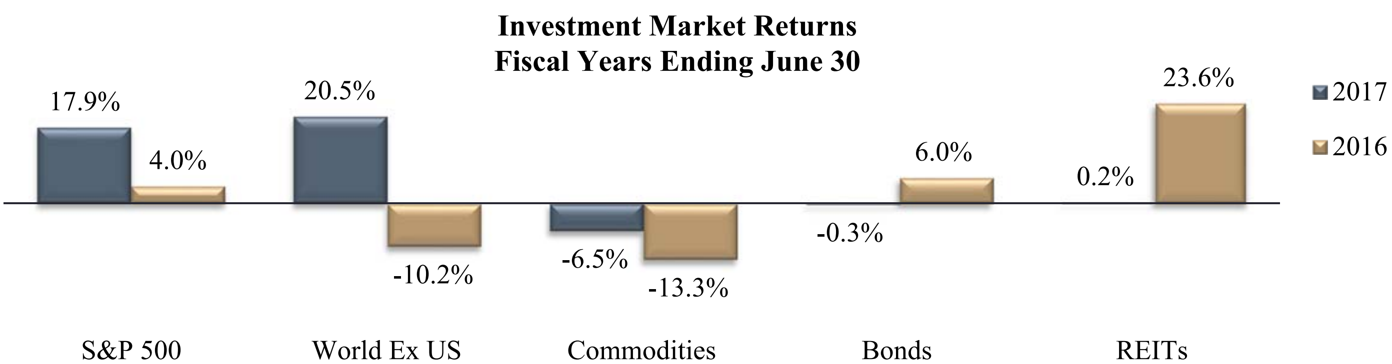
Penn State's LTIP returned 12.6% net for the year ending June 30, 2017, surpassing the 11.6% return of the Passive Policy Portfolio, while LTIP's 3-yr and 5-yr relative performance was notably better than the respective passive benchmark returns.

LTIP Performance and Spending (pg 7)

LTIP's average annual net returns of 5.6% and 7.3% for the last 10- and 20-year periods, respectively, have generally enabled LTIP to attain inflation-adjusted returns in excess of spending, achieving long-term intergenerational equity.

LTIP Liquidity (pg 8)

With nearly one-half of assets convertible to cash in a matter of days, the LTIP maintains adequate liquidity to satisfy anticipated cash requirements.



5-Year LTIP Facts and Figures

	Annual Periods Ending June 30				
	2017	2016	2015	2014	2013
Investment Performance					
Endowment[1] (annualized net returns)	12.6%	-0.8%	3.1%	17.9%	11.3%
Market Values ($ millions)					
Endowment[1]	2,624.5	2,347.4	2,375.7	2,285.0	1,933.2
Similar Funds[2]	133.1	123.7	115.9	113.5	95.7
Endowment and Similar Funds	2,757.6	2,471.1	2,491.6	2,398.5	2,028.9
Gifts & Other Additions ($ mils)	108.6	94.9	130.3	92.2	73.9
Annual Spending ($ mils)	98.7	95.4	84.0	75.4	71.5
Non-Endowed Funds[3]	1,375.6	1,271.9	1,252.2	1,140.6	1,004.8
Total LTIP[4] & Similar Funds	4,133.2	3,743.0	3,743.8	3,539.1	3,033.7

1) Endowment — donor-restricted gifts

2) Similar Funds — deferred gifts and donor-restricted funds in transit to Endowment

3) Non-Endowed Funds earmarked for FAS 106 liability (employee post-retirement health care benefits) & President's Strategic Initiative Fund. These funds were phased in between 2009 and 2017.

4) Commingled assets over which Penn State's Office of Investment Management (OIM) has investment responsibility, as approved by the Penn State Investment Council (PSIC), exclusive of Similar Funds

Investment Market Returns for Fiscal Years Ending 2017 and 2016

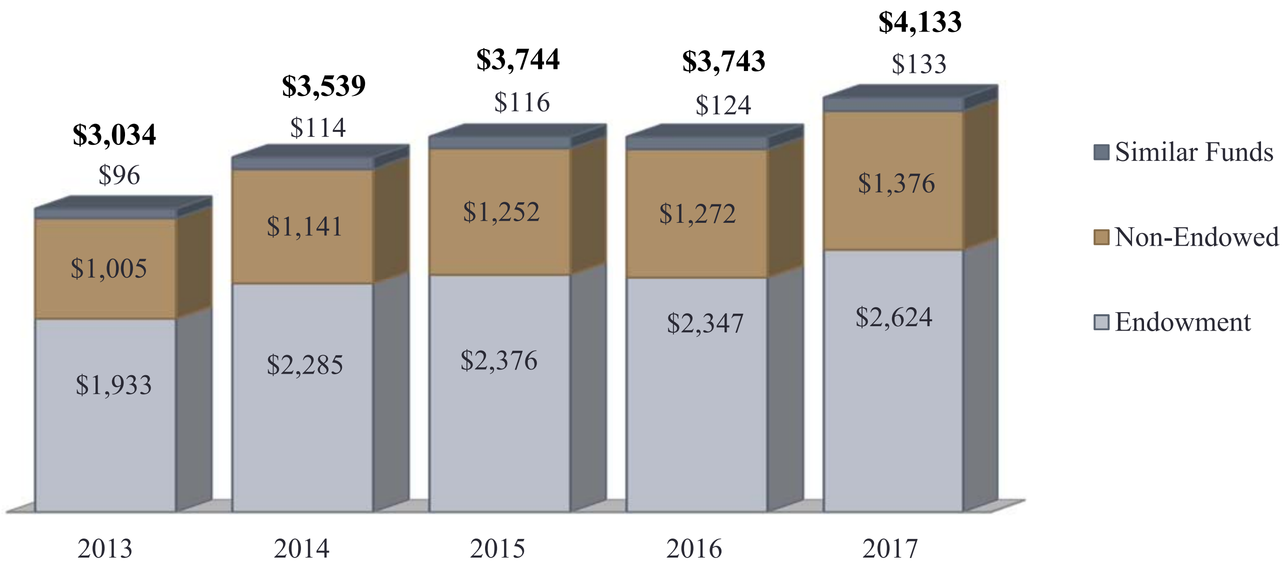
The performance of major investment market indexes that impact Penn State University's Long-Term Investment Pool (LTIP) are illustrated on the previous page and discussed below for the Fiscal years ending 2017 and 2016:

- **Equities:** US Equities, as represented by the S&P 500, returned 17.9% and 4.0%, respectively, for the Fiscal years ended June 30, 2017 and 2016. Non-US Equities, as represented by the MSCI All Country Index, showed a marked increase during Fiscal 2017, returning 20.5% vs -10.2% for 2016.
- **Commodities:** The Bloomberg Commodities Index returned -6.5% in 2017, which was an improvement over the -13.3% return in 2016. Gold declined noticeably from 12.5% to -6.9% in Fiscal 2017.
- **Fixed Income:** In Fiscal 2017 the fixed income sector as a whole trended negative, the Bloomberg Barclay's US Aggregate Fixed Income index returned -0.3% well below the 6.0% return of June 2016.
- **REITS:** Private Real Estate Investment Trusts reversed fortunes, returning 0.2% in 2017 versus 23.6% in 2016.

Long-Term Investment Pool Market Value

As of June 30, 2017, Penn State's Long-Term Investment Pool was valued at $4.00 billion, including non-endowed funds in the amount of $1.38 billion that have been commingled into the LTIP. Non-pooled assets — charitable remainder trusts, charitable gift annuities, and other life income funds in addition to donor restricted funds — accounted for an additional $133 million, shown below as Similar Funds, for a total $4.13 billion in assets.

Long-Term Investment Pool Market Value
Fiscal Years Ending June 30
($ millions)



Endowment Assets

Endowment assets increased by $277.1 million during Fiscal 2017, from $2.35 billion to $2.62 billion. As seen in the table on page 2, endowed gifts added over the last 12 months totaled $108.6 million, while endowment program support (spending) amounted to $98.7 million. Current endowment spending has been approved by the Board of Trustees to remain at an annual rate of 4.5%.

Long-Term Investment Pool

Excluding $133 million in similar funds that are managed externally, the market value of the Long-Term Investment Pool (LTIP) totaled $4.00 billion as of June 30, 2017. In addition to endowment assets of $2.62 billion, LTIP includes $1.38 billion in non-endowed assets that have been commingled for investment purposes, but are restricted to the ongoing funding of the University's FAS 106 liability. Also included in LTIP is $210 million for the Presidents' Strategic Initiative Fund.

The remainder of this report will focus on the Long-Term Investment Pool, including all commingled funds.

Review of Investment Markets in Fiscal 2017

In the table below, representative financial market returns are listed for 1-, 3-, and 5-year periods covering four major asset categories: Global Equities (divided into US Equities and Non-US Equities), Fixed Income, Commodities, and Private Capital. The performance of investment markets that impact Penn State University's Long-Term Investment Pool (LTIP) is discussed below

Annualized Percentage Returns as of June 30, 2017	1 Year	3 Years	5 Years
Global Equities U.S.			
S&P 500 Index (US Large Cap Equities)	17.9	9.6	14.6
Russell 3000 Index (Total US Equities)	18.5	9.1	14.6
Russell 2000 Index (US Small Cap Equities)	24.6	7.4	13.7
Global Equities Non-U.S.			
MSCI All Country Ex-U.S. Index (ACWI Ex-US)	20.5	0.8	7.2
MSCI Developed Non-U.S. Index (EAFE)	20.3	1.1	8.7
MSCI Emerging Markets Index (EME)	23.7	1.1	4.0
Fixed Income			
Bloomberg Barclays US Aggregate Bond Index	-0.3	2.5	2.2
Bloomberg Barclays US Treasury TIPS Bond Index	-0.6	0.6	0.3
Citigroup World Global Bond Index (WGBI)	-4.1	-1.0	-0.2
Commodities			
Bloomberg Commodities Index	-6.5	-14.8	-9.2
Gold (SPDR GLD)	-6.9	-2.7	-5.1
Private Capital (3/31/17)			
Venture Capital (Cambridge Associates)	7.1	10.8	13.4
Private Equity (Cambridge Associates)	17.3	10.2	12.4
Private Real Estate (Cambridge Associates)	7.3	10.6	10.7

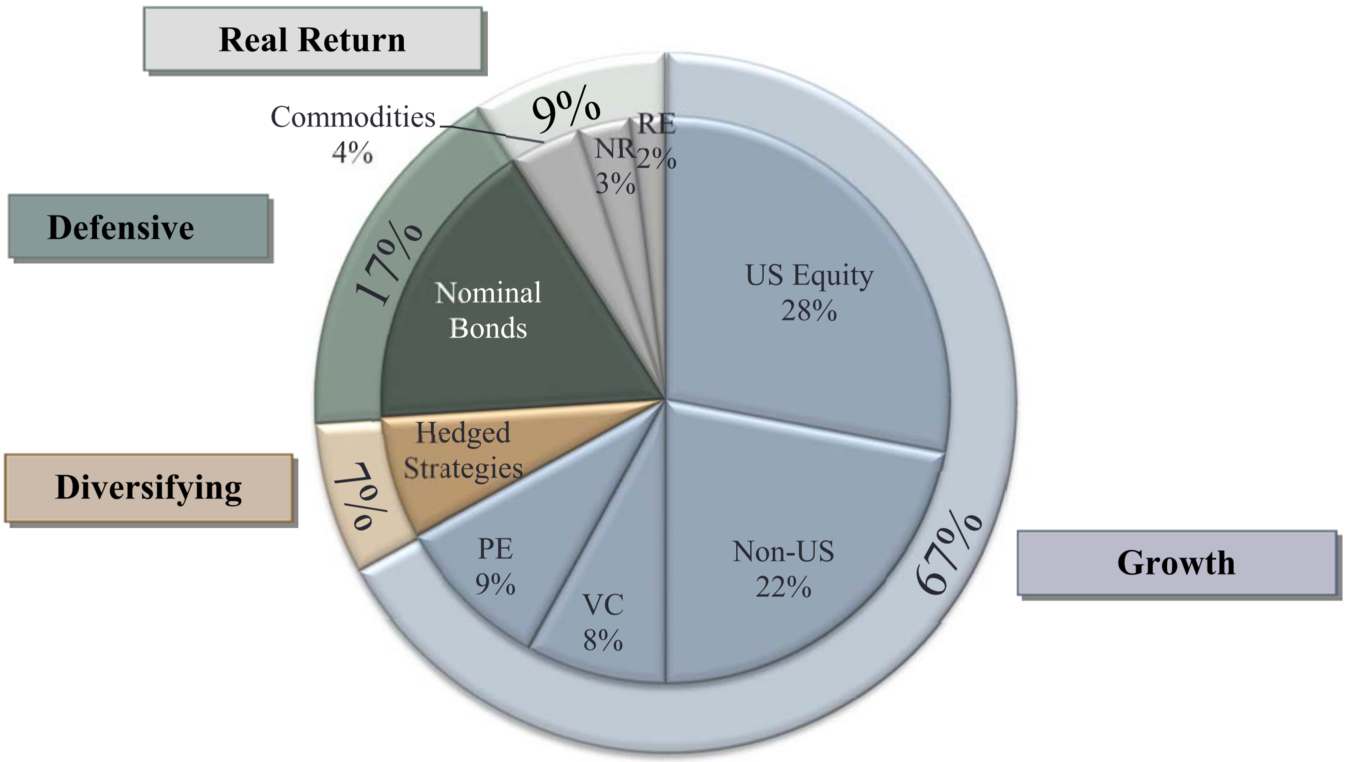
Market Notes:

- **Global Equities:** US Equities recorded double-digit advances for the Fiscal year, as well as the 5-year period ending June 30, 2017. Non-US Equities overall (MSCI ACWI ex-US) outpaced US equities in Fiscal 2017 and were up 20.5% in Fiscal 2017, with Developed Markets (EAFE) returning 20.3% and Emerging Market Equities (EME) returning 23.7%.
- **Fixed Income:** In Fiscal 2017, US Aggregate Fixed Income returned -0.3%, while US TIPS returned -0.6%, and Citigroup WGBI posted -4.1%.
- **Commodities:** The Bloomberg Commodities Index returned -6.5% for the year, while 3- and 5- years continued to post declines, at -14.8%, and -9.2% respectively. In fiscal 2017 gold's -6.9% return lagged commodities but continued to outpace longer term.
- **Private Capital:** Private Real Estate and Venture Capital slowed to single digit returns for the last year, but continued with gains for each of the 3- and 5-year periods ending 3/31/2017, which is the latest reporting period for non-marketable investments. Private Equity maintained double digit returns for all three time periods.

On the following two pages, LTIP's broad and detailed asset mix is discussed, followed by the composite investment returns for each of the four above asset categories compared to corresponding LTIP returns.

Investment Diversification and Asset Mix

Asset allocation is a primary determinant of investment performance and risk control. LTIP's asset mix combines four strategic investment themes – growth (economic-sensitive), diversifying (low sensitivity to economic/investment market fluctuations), real (inflation-sensitive), and defensive (counter-sensitive to market turbulence) – to maximize potential returns, while tempering volatility. In the graph below, the four macro investment themes are shown in the outermost ring with their June 30, 2017 allocations of 67%, 7%, 9%, and 17%, respectively. Over time, the percentages vary depending on market trends and allocations approved by the Penn State Investment Council.



At a more granular level, LTIP's diversified portfolio includes a variety of traditional asset classes that comprise the four strategic themes, as shown by the slices within the inner pie (percentages are rounded):

- Growth (67%): 28% in publicly-traded US and 22% in publicly-traded non-US common stocks, as well as 8% in venture capital (VC), and 9% in private equity (PE) funds.
- Diversifying (7%): 5% in credit-related, and 2% in equity-related strategies.
- Defensive (17%): 7% in investment grade bonds, 3% in global bonds, and 7% in short-term investments.
- Real Return (9%): 2% in private real estate (RE), 3% in natural resources (NR), and 4% in commodities.

The above grouping by investment themes provides insight to the functional role of the various asset classes within LTIP. The relative allocations represent comparative long-term return expectations, tempered by risk-mitigating assets to offset capital market turbulence. Hence, the approximately 67% currently allocated to growth is intended to take advantage of the capital appreciation and purchasing power protection historically offered by higher returning equity investments. Given the sometimes volatile nature of equity returns, 17% is invested in defensive (fixed income) and 7% in various hedged strategies to provide stability and diversification during times of market turbulence and uncertain economic conditions. In addition, 9% of LTIP is allocated to real return in order to help neutralize inflationary episodes.

LTIP Performance Compared to Passive Portfolio

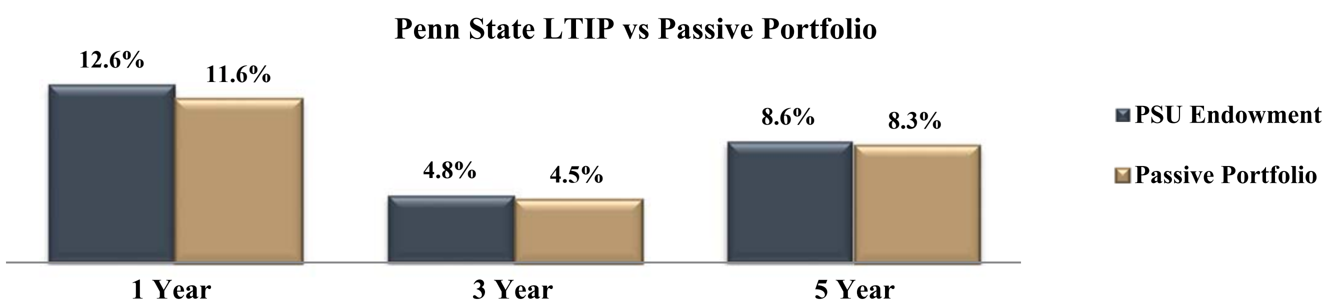
The Long-Term Investment Pool's investment performance is measured against a hypothetical *Passive Portfolio,* comprised of four broad asset categories: Public Equities (55%), Private Capital (20%), Fixed Income (20%) and Commodities (5%). This passive portfolio serves as a blended benchmark against which the performance of the actual, actively-managed, and more broadly-diversified LTIP portfolio is monitored. This approach represents practical implementation of investable targets based on the foregoing conceptual, strategic themes.

These categories are very broadly defined: the equity and fixed income categories include hedge funds whose strategies are equity and/or credit oriented, respectively, while commodities include hedged and long-only strategies. The custom index for Private Capital includes representative private equity, venture capital, and private real estate partnership time-weighted returns.

In the table below, the respective static weightings of the four asset categories are associated with corresponding market benchmarks and their respective index returns to generate *Passive Portfolio* returns over 1-, 3-, and 5-year horizons for the Fiscal years ending 6/30/2017:

			Annualized Benchmark Returns		
Asset Class	**Benchmark**	**Weighting**	**1 Year**	**3 Years**	**5 Years**
Public Equities	MSCI All Country World	55%	18.8	4.8	10.5
Total Private Capital	Custom Index	20	8.2	10.3	12.6
Fixed Income	Bloomberg Barclays Agg Bond	20	-0.3	2.5	2.2
Commodities	Bloomberg Commodities	5	-6.5	-14.8	-9.2
Total Passive Portfolio (net)		**100%**	**11.6%**	**4.5%**	**8.3 %**

Note: The weightings used above are assumed to be constant over the entire 5-year period.

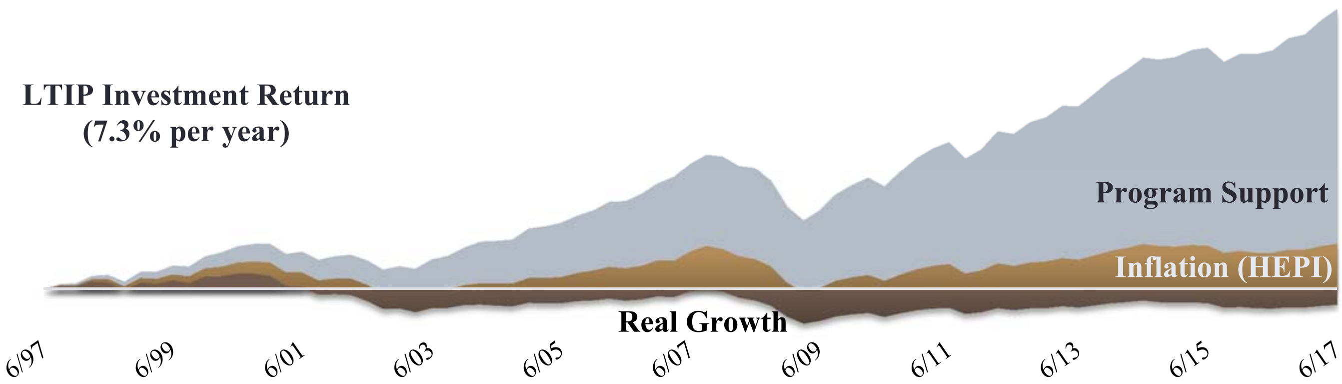


As shown above, Penn State's LTIP returned 12.6% net for Fiscal 2017, surpassing the 11.6% return of the Passive Portfolio over the trailing 12 months. For the 3- and 5-year periods, the Long-Term Investment Pool's annualized returns of 4.8% and 8.6% outpaced the Passive Portfolio's returns of 4.5% and 8.3%, respectively. These returns indicate that, over the long term, LTIP was able to outperform passive indexes through selection of active investment managers and broad diversification of assets as shown on the previous page.

The Passive Portfolio provides a guidepost to help achieve long-term results that are consistent with the twin objectives of purchasing-power preservation, along with stable LTIP spending. LTIP's performance varies from the *static* Passive Portfolio as a consequence of several factors, including, but not limited to, the timing of cash-flows, tactical shifts in asset mix, and individual investment manager performance and turnover

Long-Term LTIP Growth and Spending

In the chart below, the top line represents the cumulative net investment return of the Penn State Long-Term Investment Pool (LTIP) over the last 20 years, averaging 7.3% per year. The layers illustrate investment returns apportioned to program support (spending, as previously discussed on pages 2 and 3) and inflation (as measured by the Higher Education Price Index [HEPI]), with the remaining residual representing net, real (inflation-adjusted) growth.



Cumulative 20-year Returns

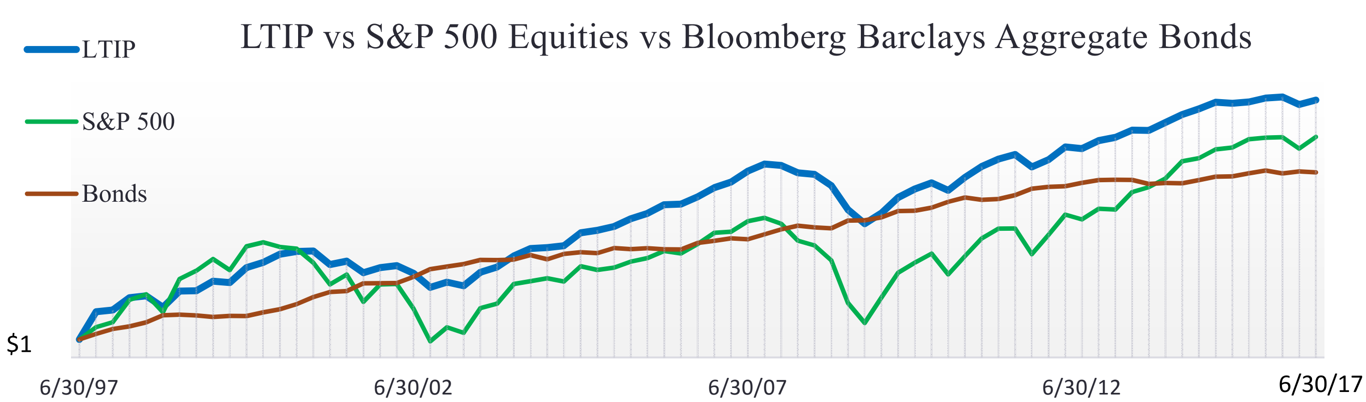
LTIP's primary investment goal is to earn a long-term rate of return sufficient to support *current* spending and to preserve *future* purchasing power. This two-pronged objective is illustrated by apportioning total nominal (i.e., before adjusting for inflation) investment return (topmost line above) into discrete layers, representing program support and inflation, along with a residual layer corresponding to net *real* growth.

Because investment returns periodically fluctuate (illustrated by the jagged topography above), real growth, which nets out program support and inflation from total LTIP return, oscillates around the horizontal line, which represents "intergenerational equity". While market fluctuations have caused real growth to swing positive and negative across the horizontal line, intergenerational equity has largely been achieved.

20 Years of LTIP Growth Relative to Equities and Bonds

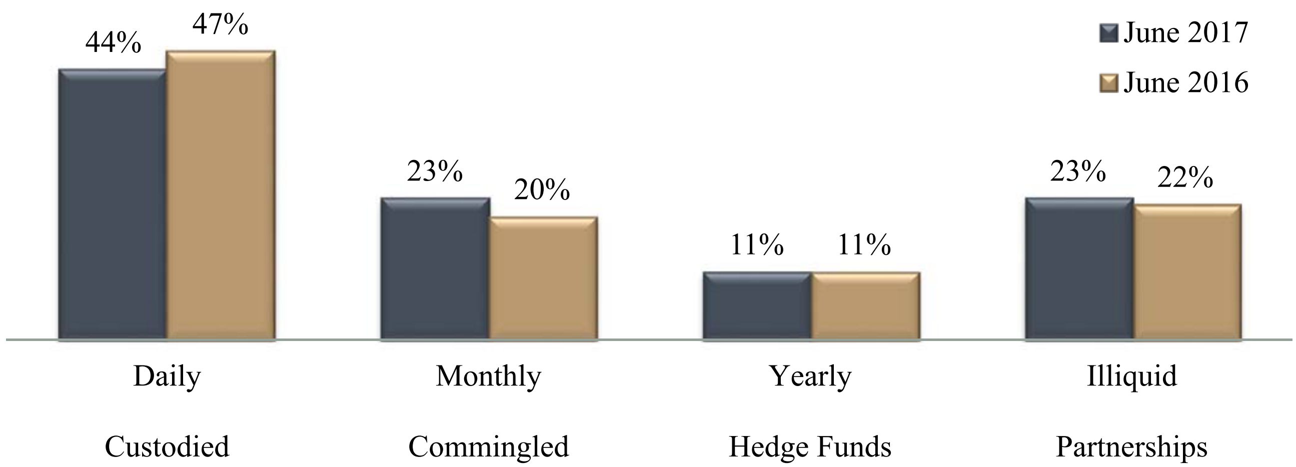
The top line of the chart above, representing the growth of $1 compounded at LTIP's average annual return of 7.3% for 20 years ending 6/30/2017, is compared in the chart below (LTIP- thick blue line) to the same period cumulative returns for the S&P 500 Index (S&P 500- green line) and Bloomberg Barclays Aggregate Bonds (BBAGG- brown line).

As shown, the 20-year cumulative growth for LTIP's diversified portfolio has essentially matched that of the S&P 500 Index with less-pronounced oscillations, indicating that LTIP was less volatile than equities over the same period. Both have clearly outpaced the growth of $1 invested in bonds (BBAGG). LTIP's return also outpaced the blended return of a hypothetical balanced portfolio comprised of 70% equities and 30% bonds, as represented on the previous page.



Long-Term Investment Pool Liquidity

Financial crises are characterized, among other considerations, by lack of liquidity, as institutions are unable to meet current obligations due to lack of available cash. In the graph below, LTIP assets are classified according to how quickly they can be converted to cash. Securities listed on exchanges or traded over-the-counter, and held in custody as separately managed accounts, can be liquidated on a daily basis (typically 1- and 3-day settlement for bonds and stocks, respectively). Commingled portfolios, i.e., collectively-managed investment pools of publicly-traded securities, are eligible for purchase or sale at least once a month. Hedge fund partnerships are typically open for at least partial liquidation once a year, with a few having more and/or less frequent liquidity "windows." Non-marketable partnerships are considered illiquid primarily because of the inability of limited partner investors to transact at will.



Observations from the blue (left) bars of each of the four pairs above for the period ending June 30, 2017:

- 44% percent of LTIP assets are invested in stocks and bonds that can be converted to cash in a matter of days. Of this, 9% is currently held in money market accounts and short-term fixed income investments.
- Commingled portfolios, primarily non-US public equities, comprise 23% of LTIP assets and can be converted to cash within 30 days or, in some cases, sooner. Commingled investment structures are used for non-US holdings in lieu of registering in individual countries where foreign companies are headquartered.
- 11% of LTIP assets are invested in various diversifying hedge fund partnerships and can be at least partially converted to cash annually or, in many cases, quarterly.
- 23% percent of LTIP assets are invested in more than 120 different partnership funds or other non-marketable investments that are considered illiquid because underlying holdings are typically not readily marketable or the timing of future realizations into cash distributions is uncertain.

The foregoing indicates that LTIP maintains sufficient liquidity to satisfy anticipated cash requirements.

Liquidity Trends

As shown above, the liquidity profile of Penn State's LTIP has shifted somewhat from the end of Fiscal 2016 (tan bars) to the end of Fiscal 2017 (blue bars). Daily liquidity dipped slightly to 44% with increased short-term investments, while monthly liquidity increased from 20% to 23%. Yearly liquidity remained at 11%, while illiquid non-marketable alternative assets increased from 22% to 23%. Over time, stepped up commitments to partnerships will gradually result in larger representation by non-marketable investments.