

Long-Term Investment Pool (LTIP) Review

June 30, 2022

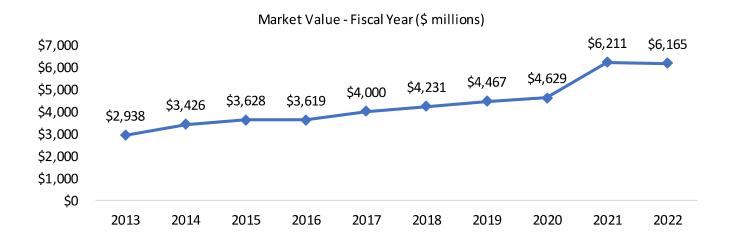
The Long-Term Investment Pool (LTIP) is Penn State's investment portfolio in which most of the endowed funds established at the University are invested as well as other non-endowment assets that have similar long term investment objectives. This commingled pool operates much like a mutual fund. Each participant owns units in LTIP, just as an individual would purchase shares in a mutual fund. As with a mutual fund, the value of each unit at the time funds are invested in the pool determines how many units an individual fund acquires.

Endowed gifts are held by Penn State in perpetuity. The initial gift is invested, and annually a portion of the investment return is spent for the purpose designated by the donor. Thus, an endowed gift today is intended to have relatively the same value for future generations.

Penn State strives to be a good steward of its endowed gifts and follows a prudent management philosophy in investing these gifts so they may maintain their value in real, inflation-adjusted terms, over time.

LTIP Market Value

As of June 30, 2022, LTIP was valued at approximately \$6.17 billion, which includes approximately \$4.45 billion in endowment assets and approximately \$1.72 billion in non-endowed funds. This amount reflects the impact of investment returns and generous giving, net of consistent spending including support for student scholarships and other University programs.



LTIP Performance (net of investment manager fees)

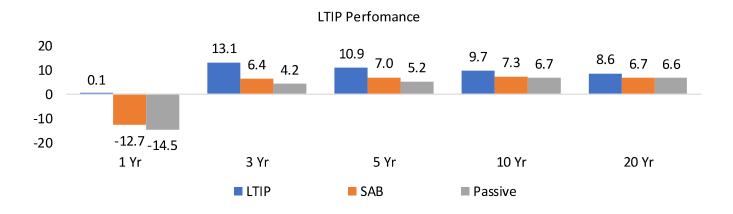
In the year ending June 30, 2022, equity markets posted negative returns, with the US equity markets represented by the S&P 500 index at -10.6 percent and the non-US equity markets represented by the MSCI All Country World Index ex-US returned -19.4 percent. US Fixed income markets represented by the Bloomberg U.S. Aggregate finished the year negative posting an overall return of -10.3 percent.

Penn State's diversified approach has allowed the endowment to support program spending, such as scholarships and faculty positions, while maintaining real, inflation-adjusted growth for the future generations.

As of June 30, 2022, LTIP's investment return was 0.1 percent over the last year, 10.9 percent per year over the five-year period, 9.7 percent over the 10-year period, and 8.6 percent over the 20-year period. These annualized investment returns are net of external investment manager fees. These results demonstrate long-term growth even when considering periods of negative investment returns, such as the credit crisis, and more recent declines during March 2020 and Spring 2022.

LTIP's investment performance is measured against a Strategic Allocation Benchmark (SAB) that is comprised of index returns representing different asset classes: public equities (46%), private equity (20%), fixed income (10%), diversifying strategies (12%), and real assets (12%). The Strategic Allocation Benchmark serves as a blended benchmark against which the performance of the actual, broadly-diversified LTIP portfolio is monitored. LTIP's performance varies from the static SAB due to several factors including, but not limited to, the timing of cash-flows, tactical shifts in the asset mix, and individual investment manager performance and turnover. Additionally, the SAB provides a guidepost to help achieve long-term results that are consistent with the twin objectives of purchasing-power preservation and stable LTIP spending.

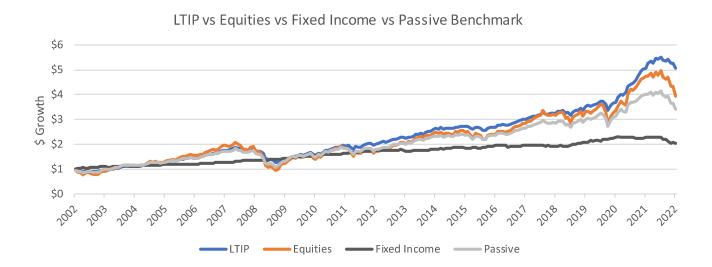
LTIP's performance is also measured against a Passive Benchmark, which is a blend of 70% MSCI All Country World Investable Market Index (MSCI ACWI IMI Index) and 30% Bloomberg US Aggregate Bond Index. This benchmark serves as an easily replicable and liquid alternative to the actively managed LTIP portfolio.



Growth of \$1 invested in LTIP during the last 20 years

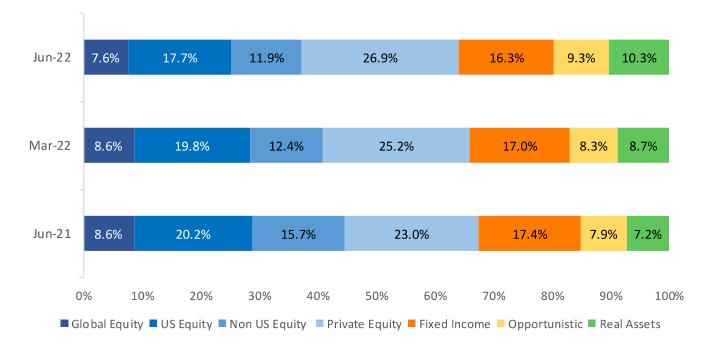
The chart below represents the growth of \$1 compounded using LTIP's returns for the 20-year period ending June 30, 2022 and is compared to the returns for the MSCI AWCI IMI Index (Equities), the Bloomberg Aggregate Bond Index (Fixed Income), and the Passive Benchmark (70% Equities and 30% Fixed Income).

As shown, the 20-year cumulative growth for LTIP's diversified portfolio outperformed the MSCI ACWI IMI Index with less-pronounced oscillations, indicating that LTIP was less volatile than equities over the same period. LTIP also outpaced the growth of \$1 invested in a diversified portfolio of bonds.



Asset Allocation: \$6.17 Billion as of June 30, 2022

LTIP's investments consist of a diversified investment portfolio of public and private equities, fixed income, real assets, and other diversifying strategies. In managing our investments, we adhere to a prudent, long-term investment strategy.



LTIP Spending

The University spending target for the year ending June 2022 was 4.5 percent, based on a 20-quarter average of the market value per unit of endowed pool assets. Beginning with fiscal year 2023, the spending rate has been increased to 5 percent, aimed at providing increased support for scholarships and educational programs.

The University's spending policy of using rolling 20-quarter average balances is intended to smooth out the "peaks" and "troughs" in the investment markets, saving a portion of the earnings in the good years to offset the less profitable years. This provides generous current spending while preserving future purchasing power, which is known as "intergenerational equity."

Over the last five fiscal years, the endowment assets invested in LTIP have provided \$622 million of program support, including \$140 million in fiscal 2022.

June 30 (\$ millions)	2018	2019	2020	2021	2022
Endowment ¹	2,851.6	3,108.1	3,265.1	4,435.7	4,447.0
Non-Endowed Funds ²	1,379.0	1,358.7	1,363.9	1,775.4	1,717.8
Total LTIP	4,230.6	4,466.8	4,629.0	6,211.1	6,164.8
Gifts & Other Additions	170.7	182.2	128.9	136.5	187.7
Program Spending	105.2	117.0	126.4	132.9	140.1
Non-Endowed Spending	46.5	48.1	49.4	50.1	50.7

¹⁾ Endowment — donor-restricted gifts

²⁾ Non-Endowed Funds earmarked for post-retirement benefit obligation & President's Strategic Initiative Fund. These funds were phased in between 2009 and 2015.