

**BOARD APPROVED**  
 December 3, 2021  
  
 Janice Indrutz  
 Corporate Secretary

To: Members of the Board of Trustees

Fr: Christopher A. Ruhl, Chief Financial Officer and Treasurer  
 David C. Cooper, Chief Investment Officer, Purdue Research Foundation

Date: November 19, 2021

Re: Endorsement of changes to Endowment Investment Policy Statement/Asset Allocation

At the December 3, 2021 meeting we will seek endorsement by the Board (via the Finance Committee) for changes to the Endowment asset allocation approved by the Purdue Research Foundation (PRF) Board on November 17, 2021.

**Background, Timeline and Primary Considerations**

The Office of Investments, in conjunction with Cambridge Associates, with oversight by the Investment Committee, performed an asset allocation study. This prudent practice is conducted every three to five years. The study included modeling portfolios which considered the Endowment imperatives, various risk factors, the current macro environment, and liquidity needs. See Figure 1 below. The result of the study is a recommended asset allocation with relatively minor changes and directionally in-line with the changes made in 2016. While all of the recommended changes to asset class targets are within the current approved asset allocation bands, some targets do modestly change. The allocation bands were also adjusted based on the new recommended asset allocation. The analysis and outcomes of the study were shared in detail with the Investment Committee and the PRF Finance-Audit Committee and received endorsement from both committees. The full PRF Board approved these changes on November 17, 2021.

Figure 1.

**TIMELINE & PRIMARY CONSIDERATIONS** **IPS RECOMMENDATION**

<b>June 2020</b>	Initial Review / Partner Engagement
<b>August 2020</b>	Initial Discussion with Investment Committee
<b>Fall 2020</b>	Further Partner Engagement / Portfolio Modeling & Analysis
<b>December 2020</b>	Investment Committee Endorsement of New Asset Allocation
<b>April 2021</b>	Finance Audit Committee Endorsement of New Asset Allocation

Primary Considerations

- How can we improve upon our approved asset allocation?
- Evaluate individual asset classes and ask, “why not more?, why not less?”
- Create model portfolios for a new asset allocation based on:
  1. Expected Risk / Return
  2. Total Return
  3. Income Generation Potential
  4. Diversification Potential

## Proposed Changes

The proposed changes and commentary are summarized in Figure 2.

Figure 2.



Component	Rationale
+ 5.0% PE/VC	<ul style="list-style-type: none"><li>PE/VC is an asset class with higher expected returns compared to public markets.</li><li>The team has confidence in sourcing strong alpha opportunities in this asset class, expecting to outperform benchmark median performance.</li><li>Strong university liquidity profile and reduced spending distribution create greater tolerance for illiquidity.</li></ul>
- 2.5% Fixed Income	<ul style="list-style-type: none"><li>Fixed Income is an asset class with low expected returns.</li><li>Reducing the Fixed Income allocation allows for capital to be invested in higher returning asset classes.</li><li>With the remaining Fixed Income allocation, overweight U.S. Treasuries relative to Core Fixed Income.</li></ul>
- 2.5% Hedge Funds	<ul style="list-style-type: none"><li>It is challenging to source repeatable, reliable alpha with accretive returns within the liquid Hedge Fund asset class, thus a smaller more concentrated portfolio is appropriate.</li></ul>
+ 1.0% Private Real Estate	<ul style="list-style-type: none"><li>Similar to PE/VC, Private Real Estate is an asset class with higher expected returns than public markets.</li><li>The team has confidence in sourcing strong alpha opportunities in this asset class, which is expected to outperform the benchmark median.</li></ul>
- 3.0% Private Natural Resources	<ul style="list-style-type: none"><li>Natural Resources is an asset class under a lot of regulatory scrutiny and technological change. Locking commitments up into private vehicles in this asset class should only be done selectively.</li></ul>
+ 2.0% Public Natural Resources	<ul style="list-style-type: none"><li>Public (liquid) Natural Resources are expected to produce a quicker response to inflationary surprises, which is the main purpose for the Natural Resource allocation.</li></ul>

Purdue Research Foundation Endowment  
Policy Portfolio Asset Allocation

Asset Class	Long-Term Targets (%)	Range (%)
U.S. Equity	20.0	10 - 30
International Developed Market Equity	15.0	5 - 20
Emerging Markets Equity	5.0	0 - 10
Marketable Alternative Assets	<del>15.0</del> 12.5	0 - <del>22.55</del>
Venture Capital and Private Equity	<del>20.0</del> 25.0	<del>10-15</del> - <del>25</del> 30
Real Estate	<del>9.0</del> 10.0	<del>5-6</del> - <del>15</del> 16
Natural Resources	65.0	0 - <del>40</del> 9
Fixed Income	<del>10.0</del> 7.5	<del>5-2.5</del> - <del>15</del> 12.5
Cash and Cash Equivalents	0.0	0 - 10
<b>Total</b>	<b>100.0</b>	

For audit purposes the Investment Committee will classify the individual managers within one of the asset classes listed in the Policy Portfolio Asset Allocation table.

A single active manager or affiliated groups of active managers will not represent more than 10 percent of the total Endowment's market value. A single passive manager or affiliated groups of passive managers will not represent more than 25 percent of the total Endowment's market value.

### Guidelines for Equity Investments

1. Equities include all "ownership" positions, not just common stocks. The Investment Committee has adopted a Policy Portfolio allocation which seeks to achieve investment objectives without exposing the Endowment to unacceptable levels of systematic (U.S. stock market) risk. In addition to U.S. and non-U.S. marketable securities, at the discretion of the Investment Committee and within parameters established by these policies, the Endowment's funds may be invested in other forms of equity investments with the objective of enhancing returns and/or reducing the Endowment's volatility.
2. The capitalization and style characteristics of the U.S. equity component of the equity investments should not be overly different from the broad market.
3. Equity managers may invest in common stocks, preferred stocks or fixed income instruments convertible into common stocks, and ADRs of domestic and foreign corporations. All common stocks, and common stocks into which convertible securities may be converted, must be listed on the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX), or the National Association of Securities Dealers Automated Quote System (NASDAQ), or, for foreign securities, equivalent exchanges in their country of domicile.
4. The return objective for the equity investments is to, at a minimum, achieve or beat (net of fees) the blended benchmark as established by the Investment Committee. Performance will be monitored on a regular basis and evaluated over rolling five-year periods.
5. Diversification will be achieved at the equity investments level and not necessarily at the level of

**Appendix A**  
**Current Asset Class Performance Benchmarks**

Adopted by the Investment Committee on February 13, 2012

<u>Asset Classes</u>	<u>Benchmarks</u>
<b>U.S. Equity</b>	Russell 3000
<b>International Developed Market Equity</b>	MSCI EAFE
<b>Emerging Market Equity</b>	MSCI Emerging Markets Index
<b>Marketable Alternatives</b>	Hedge Fund Research Fund of Funds Diversified Index
<b>Private Equity and Venture Capital</b>	Russell 3000
<b>Real Estate</b>	FTSE EPRA/NAREIT Developed Index
<b>Natural Resources</b>	MSCI World Natural Resources Index
<b>Fixed Income</b>	Barclays Aggregate Bond Index
<b>Cash and Cash Equivalents</b>	91 Day T-Bills
<b>Total Endowment</b>	CA Endowment Median Benchmarks A and B (see below)

**Blended Benchmark A (by Target Allocation)**

Measures success of tactical asset allocation

Benchmark Weight	Component
<del>40-45.0</del> percent	R3000
15.0 percent	MSCI EAFE
<del>15-12.5</del> percent	HFRI Diversified Index
<del>10-7.5</del> percent	Barclays Aggregate Bond Index
10.09 percent	FTSE EPRA/NAREIT Developed Index
5.06 percent	MSCI World NR Index
5.0 percent	MSCI Emerging Markets

**Blended Benchmark B (by Actual Allocation)**

Measures success of manager selection

Actual allocation at quarter-end applied to target policy asset class indices