

**BOARD OF TRUSTEES  
INVESTMENT SUBCOMMITTEE**

**John R. Jakubek, Chair  
Delores E. Crawford, Vice Chair  
Samuel W. Grooms  
Allan K. Metz**

**Wednesday, June 7, 2017  
3:30 p.m. or immediately following  
previous meeting**

**Tod Hall  
Board Meeting Room**

**AGENDA**

- A. Disposition of Minutes for Meetings Held June 1, 2016; and March 15, 2017**
- B. Old Business**
- C. Committee Items**

**1. Discussion Item**

- Tab C.1.a. a. June 7, 2017 Quarterly Portfolio Asset Allocation and Investment Performance Review**  
Mike Shebak and Sarah Parker will report.

**2. Discussion Item**

- Tab C.2.a. a. Resolution to Approve Hartland's Recommendation to Rebalance the Non-Endowment Long-Term Investment Pool**  
Mike Shebak and Sarah Parker will report.

- D. New Business**
- E. Adjournment**

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June 7, 2017

# YOUNGSTOWN STATE UNIVERSITY NON-ENDOWMENT & ENDOWMENT ASSETS

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## CONTENTS

- I. Accomplishments and Future Initiatives
- II. Market Update
- III. Non-Endowment Assets
  - 1Q17 Performance & Asset Allocation Review
  - Voya Global Real Estate Review & Replacement
  - Rebalance Recommendation (**Action**)
- IV. Endowment Assets
  - 1Q17 Performance & Asset Allocation Review



## ACCOMPLISHMENTS & FUTURE INITIATIVES

	2016	1Q2017	2Q2017	3Q2017	4Q2017
<b>Strategic/Administrative</b>	<ul style="list-style-type: none"> <li>• Endowment Allocation/ Management Review</li> <li>• Non-Endowment Asset Allocation Review</li> </ul>		<ul style="list-style-type: none"> <li>• US Equity Framework (Active vs. Passive – see <i>Appendix</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Peer Comparisons</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic Asset Allocation Review</li> </ul>
<b>Investment Opportunities</b>	<ul style="list-style-type: none"> <li>• Alternative Investments/GARS</li> <li>• High Yield Fixed Income Education and Recommendation</li> </ul>	<ul style="list-style-type: none"> <li>• Fixed Income Portfolio Review</li> </ul>			
<b>Manager Reviews</b>	<ul style="list-style-type: none"> <li>• PNC Fixed Income Review</li> </ul>		<ul style="list-style-type: none"> <li>• Voya Global Real Estate/ Brookfield Global Real Estate</li> </ul>	<ul style="list-style-type: none"> <li>• Fixed Income Review Manager Reviews &amp; Recommendations</li> </ul>	
<b>Fiduciary Responsibilities</b>	<ul style="list-style-type: none"> <li>• Asset Allocation Guidelines Review</li> <li>• Fee Review</li> </ul>				<ul style="list-style-type: none"> <li>• Fee Review</li> <li>• Asset Allocation Guidelines Review</li> </ul>





## MARKET UPDATE

## PERIODIC CHART: ASSET CLASSES

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	04/07 - 03/17	
													Annual	Volatility
REITs	34.3%	Em Mkt	Glb Bond	Em Mkt	REITs	US Bonds	REITs	Sm/Mid	REITs	REITs	Sm/Mid	Em Mkt	Sm/Mid	REITs
		39.8%	9.4%	79.0%	27.6%	7.8%	20.1%	36.8%	27.2%	2.3%	17.6%	11.5%	7.7%	24.0%
Em Mkt	32.6%	Dev Intl	US Bonds	Hi Yld	Sm/Mid	REITs	Em Mkt	Large Cap	Large Cap	Large Cap	Hi Yld	Dev Intl	Large Cap	Em Mkt
		11.6%	5.2%	57.5%	26.7%	7.3%	18.6%	32.4%	13.7%	1.4%	17.5%	7.4%	7.5%	23.5%
Dev Intl	26.9%	Glb Bond	Cash	Sm/Mid	Em Mkt	Glb Bond	Dev Intl	Dev Intl	Balanced	Balanced	Large Cap	Large Cap	Hi Yld	Sm/Mid
		10.9%	2.1%	34.4%	19.2%	5.2%	17.9%	23.3%	10.6%	1.0%	12.0%	6.1%	7.3%	19.0%
Sm/Mid	16.2%	Hdg Fnds	Hdg Fnds	Dev Intl	Hi Yld	Balanced	Sm/Mid	Balanced	Sm/Mid	US Bonds	Em Mkt	Balanced	Balanced	Dev Intl
		9.7%	-20.8%	32.5%	15.2%	5.0%	17.9%	17.6%	7.1%	0.6%	11.6%	4.0%	6.8%	18.7%
Large Cap	15.8%	US Bonds	Balanced	REITs	Large Cap	Hi Yld	Large Cap	Hdg Fnds	US Bonds	Cash	REITs	Sm/Mid	REITs	Large Cap
		7.0%	-21.6%	27.5%	15.1%	4.4%	16.0%	9.0%	6.0%	0.1%	9.3%	3.8%	4.8%	15.3%
Hi Yld	11.8%	Balanced	Hi Yld	Large Cap	Balanced	Large Cap	Hi Yld	Hi Yld	Hdg Fnds	Dev Intl	Balanced	REITs	US Bonds	Hi Yld
		6.2%	-26.4%	26.5%	12.2%	2.1%	15.6%	7.4%	3.4%	-0.4%	8.4%	3.0%	4.3%	10.7%
Balanced	11.1%	Large Cap	Sm/Mid	Balanced	Hdg Fnds	Cash	Balanced	REITs	Hi Yld	Hdg Fnds	US Bonds	Hi Yld	Em Mkt	Balanced
		5.5%	-36.8%	18.5%	10.5%	0.1%	11.4%	3.2%	2.5%	-0.4%	2.7%	2.7%	3.1%	9.2%
Hdg Fnds	10.2%	Cash	Large Cap	Hdg Fnds	Dev Intl	Sm/Mid	Hdg Fnds	Cash	Cash	Sm/Mid	Glb Bond	Glb Bond	Glb Bond	Glb Bond
		5.0%	-37.0%	11.5%	8.2%	-2.5%	5.4%	0.1%	0.0%	-2.9%	1.9%	2.7%	2.7%	8.3%
Glb Bond	7.3%	Hi Yld	REITs	US Bonds	US Bonds	Hdg Fnds	US Bonds	US Bonds	Em Mkt	Hi Yld	Dev Intl	Hdg Fnds	Dev Intl	Hdg Fnds
		2.2%	-37.3%	5.9%	6.6%	-4.9%	4.2%	-2.0%	-1.8%	-4.6%	1.5%	2.0%	1.5%	5.4%
Cash	4.9%	Sm/Mid	Dev Intl	Glb Bond	Glb Bond	Dev Intl	Glb Bond	Em Mkt	Glb Bond	Glb Bond	Hdg Fnds	US Bonds	Hdg Fnds	US Bonds
		1.4%	-43.1%	4.4%	6.1%	-11.7%	1.8%	-2.3%	-2.8%	-4.8%	0.5%	0.8%	1.2%	3.3%
US Bonds	4.3%	REITs	Em Mkt	Cash	Cash	Em Mkt	Cash	Glb Bond	Dev Intl	Em Mkt	Cash	Cash	Cash	Cash
		-17.8%	-53.2%	0.2%	0.1%	-18.2%	0.1%	-4.9%	-4.5%	-14.6%	0.3%	0.1%	0.7%	0.4%

Past performance is not a guarantee of future results. Asset classes represented by: Large Cap – S&P 500 Index; Sm/Mid – Russell 2500 Index; Dev Intl – MSCI EAFE Index; Em Mkt – MSCI Emerging Markets Index; Hi Yld – Bank of America Merrill Lynch U.S. High Yield Master II; US Bonds – Barclays Capital U.S. Aggregate; Glb Bond – Barclays Capital Global Treasury ex US; REITs – NAREIT ALL REITs; Balanced – 60% S&P 500/40% BarCap US Aggregate; Hdg Fnds – HFRI FOF: Diversified Index; Cash – Merrill Lynch 91-day Tbill (rebalanced quarterly). Data as of 3/31/2017. Source: Zephyr Associates.

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## NON-ENDOWMENT ASSETS



## 1Q17 PERFORMANCE & ASSET ALLOCATION REVIEW

Non-Endowment Assets	Market Value	1Q2017	1 Yr	3 Yrs	5 Yrs	2016	2015	2014	Since Inception****
Operating & Short-Term Pool	\$26.145 Million	0.1%	0.3%	0.2%	0.1%	0.3%	0.1%	0.1%	0.1%
	<i>Benchmark*</i>	0.1%	0.4%	0.2%	0.2%	0.4%	0.1%	0.1%	0.2%
Long-Term Pool	\$56.629 Million	3.2%	7.3%	3.7%	4.7%	4.9%	-0.3%	4.5%	4.9%
	<i>Benchmark**</i>	2.7%	6.7%	3.6%	4.2%	4.7%	0.3%	4.0%	4.3%
Total Non-Endowment Assets	\$82.773 Million	2.1%	5.7%	2.6%	3.2%	4.0%	-0.5%	2.9%	3.7%
	<i>Benchmark***</i>	1.5%	3.8%	2.1%	2.3%	2.7%	0.2%	2.3%	3.0%

**1-Year Net Investment Change of \$3,866,758**

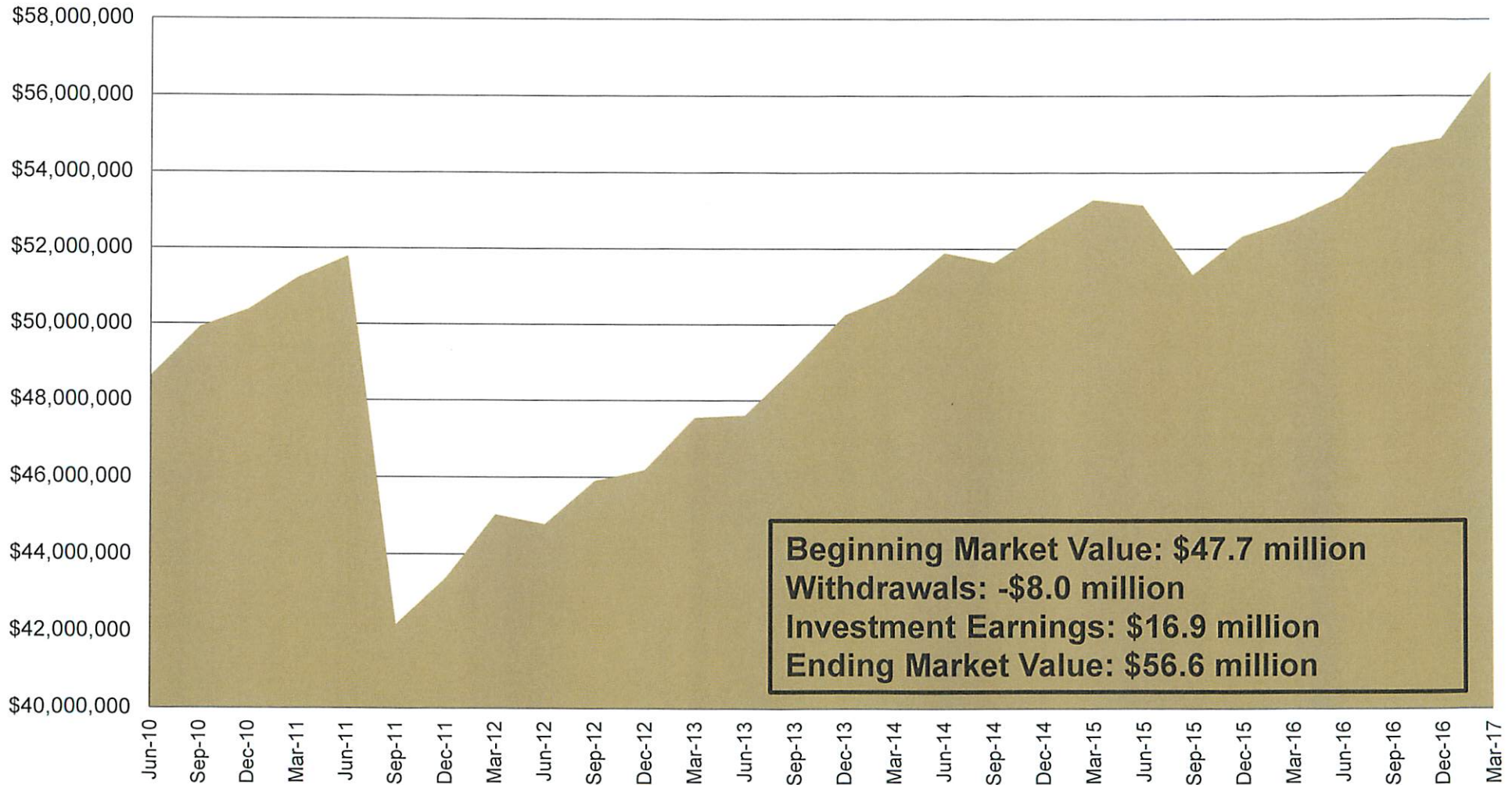
\*95% BofA Merrill Lynch 91-Day T-Bill / 5% Barclays 1-3 Yr. Govt

\*\*27% Russell 3000 / 8% MSCI EAFE Gross / 15% Total Alternatives Benchmark / 30% BofA Merrill Lynch US Corp & Gov 1-3 Yrs /20% BBgBarc US Govt/Credit Int TR

\*\*\*45% BofA Merrill Lynch 91-Day T-Bill / 17% BofA Merrill Lynch US Corp & Gov 1-3 Yrs / 11% BBgBarc US Govt/Credit Int TR / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE Gross

\*\*\*\*Inception date for Long-Term and Short-Term Pools: June 2010, Inception Date for Total Non-Endowment Assets: March 2004

### Long-Term Pool Market Value Change (6/30/2010-3/31/2017)





# 1Q17 PERFORMANCE & ASSET ALLOCATION REVIEW

(MANAGER DETAILS CONTAINED IN APPENDIX)

Non-Endowment Asset Pool	Current Asset Allocation	Compliance with Policy?	Investment Manager Comments
<b>Short-Term Pool</b>	<ul style="list-style-type: none"> <li>• 96% Cash</li> <li>• 4% Short-Term Fixed Income</li> </ul>	In-Line	Liquidity; modest return overtime (+0.1%/year for 5-years); investments include Star Plus money market.
<b>Long-Term Pool</b>	<ul style="list-style-type: none"> <li>• Domestic Equities = 30%</li> <li>• International Equities = 8%</li> <li>• Alternatives = 15%</li> <li>• Short-Term Fixed Income = 25%</li> <li>• Intermediate-Term Fixed Income = 22%</li> </ul>	<p>In-Line</p> <p>Overweight Domestic Equities by 3%.</p> <p>Underweight Short-Term Fixed Income by 5%.</p> <p>Overweight Intermediate-Term Fixed Income by 2%.</p>	<p><i>Domestic Equity (+6.0% 1Q17):</i> Growth outperformed value, although both provided strong first quarter results; all domestic managers outpaced their respective benchmark in the first quarter.</p> <p><i>International Equity (+8.2% 1Q17):</i> Dodge &amp; Cox Int'l (value bias) delivered strong results into 2017 (+9.3% 1Q17); William Blair (growth bias) was impacted by sector &amp; geographic positioning, but continues to outpace over longer time periods.</p> <p><i>Alternative Investments (+2.5% 1Q17):</i> Wells Fargo Abs Return outpaced its benchmark largely due to emerging markets exposure; Diamond Hill continues to deliver strong results.</p> <p><i>Fixed Income (+0.8% 1Q17):</i> Managers performed mostly in-line with benchmarks; High yield was one of top performers in fixed income (Prudential +2.9% 1Q17).</p>



## REAL ESTATE RECOMMENDATION

- Remove Voya Global Real Estate fund due to relative performance concerns
- Allocate \$1.7 million (2.9% of Long-Term Pool) to Brookfield Global Real Estate fund
  - Favorable risk-adjusted performance relative to benchmark
  - Lower fees (0.95% vs. 1.01% for Voya Global)
  - Tenured, experienced team (co-managers since strategy inception of 2006)
  - Attractive Yield (3.72%)

	YTD	1-Yr	3-Yr	5-Yr
Brookfield Global Real Estate I (NEW Fund)	2.7%	5.0%	6.9%	9.6%
<i>Peer Return Rank</i>	43	14	6	7
Voya Global Real Estate I (CURRENT Fund)	1.1%	-2.7%	3.4%	5.8%
<i>Peer Return Rank</i>	95	97	76	90
<i>FTSE EPRA/NAREIT Developed Index</i>	2.1%	0.9%	5.3%	7.3%

## REBALANCE RECOMMENDATIONS

	Market Value as of 5/1/2017		Change	New Allocation		Policy Target Policy Range Difference		
	\$	%		\$	%			
<b>Total Operating &amp; Short Term</b>	<b>\$21,146,146</b>	<b>100.0%</b>	<b>\$0</b>	<b>\$21,146,146</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>Operating Assets</b>	<b>\$20,074,209</b>	<b>94.9%</b>	<b>\$0</b>	<b>\$20,074,209</b>	<b>94.9%</b>		<b>60-100%</b>	
JPMorgan 100% U.S. Treas. MM Instl	\$15,037,534	71.1%		\$15,037,534	71.1%			
JPMorgan Sweep Account*	\$0	0.0%		\$0	0.0%			
Star Plus Account*	\$5,036,675	23.8%		\$5,036,675	23.8%			
<b>Short-Term Assets</b>	<b>\$1,071,937</b>	<b>5.1%</b>	<b>\$0</b>	<b>\$1,071,937</b>	<b>5.1%</b>		<b>0-40%</b>	
Vanguard Short-Term Federal Adm	\$1,071,937	5.1%		\$1,071,937	5.1%			
<b>Total Long Term Reserves Pool</b>	<b>\$57,028,858</b>	<b>100.0%</b>	<b>\$0</b>	<b>\$57,028,858</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>Domestic Equity</b>	<b>\$16,914,496</b>	<b>29.7%</b>	<b>-\$500,000</b>	<b>\$16,414,496</b>	<b>28.8%</b>	<b>27.0%</b>	<b>20-35%</b>	<b>1.8%</b>
<b>Large Cap</b>	<b>\$11,158,885</b>	<b>19.6%</b>	<b>\$425,000</b>	<b>\$11,583,885</b>	<b>20.3%</b>			
TRP Instl US Structured Research	\$5,455,537	9.6%	-\$750,000	\$4,705,537	8.3%			
Vanguard 500 Index Adm	\$5,703,348	10.0%	\$1,175,000	\$6,878,348	12.1%			
<b>Small/Mid Cap</b>	<b>\$5,755,611</b>	<b>10.1%</b>	<b>-\$925,000</b>	<b>\$4,830,611</b>	<b>8.5%</b>			
Vanguard Mid Cap Index Adm	\$2,888,912	5.1%	-\$500,000	\$2,388,912	4.2%			
Loomis Sayles Small Growth Instl	\$1,488,209	2.6%	-\$225,000	\$1,263,209	2.2%			
Victory Integrity Small Cap Value Y	\$1,378,490	2.4%	-\$200,000	\$1,178,490	2.1%			
<b>International Equity</b>	<b>\$4,764,892</b>	<b>8.4%</b>	<b>\$0</b>	<b>\$4,764,892</b>	<b>8.4%</b>	<b>8.0%</b>	<b>0-15%</b>	<b>0.4%</b>
William Blair International Growth I	\$2,307,455	4.0%		\$2,307,455	4.0%			
Dodge & Cox International Stock	\$2,457,437	4.3%		\$2,457,437	4.3%			
<b>Total Equity</b>	<b>\$21,679,388</b>	<b>38.0%</b>	<b>-\$500,000</b>	<b>\$21,179,388</b>	<b>37.1%</b>	<b>35.0%</b>	<b>25-45%</b>	<b>2.1%</b>
<b>Alternatives</b>	<b>\$8,808,660</b>	<b>15.4%</b>	<b>\$0</b>	<b>\$8,808,660</b>	<b>15.4%</b>	<b>15.0%</b>	<b>0-20%</b>	<b>0.4%</b>
Jhancock Global Absolute Return I	\$2,033,697	3.6%		\$2,033,697	3.6%			
Wells Fargo Adv Absolute Return I	\$2,485,277	4.4%		\$2,485,277	4.4%			
Diamond Hill Long-Short I	\$2,623,705	4.6%		\$2,623,705	4.6%			
Voya Global Real Estate I	\$1,665,981	2.9%	-\$1,665,981	\$0	0.0%			
Brookfield Global Real Estate	\$0	0.0%	\$1,665,981	\$1,665,981	2.9%			
<b>Fixed Income</b>	<b>\$26,540,811</b>	<b>46.5%</b>	<b>\$500,000</b>	<b>\$27,040,811</b>	<b>47.4%</b>	<b>50.0%</b>		
<b>Short Term Fixed Income</b>	<b>\$15,871,249</b>	<b>27.8%</b>	<b>\$500,000</b>	<b>\$16,371,249</b>	<b>28.7%</b>	<b>30.0%</b>	<b>25-45%</b>	<b>-1.3%</b>
YSU Short Term Bond	\$12,791,658	22.4%		\$12,791,658	22.4%			
DFA Five-Year Global	\$1,820,425	3.2%		\$1,820,425	3.2%			
Vanguard Short Term Bond Index	\$1,259,166	2.2%	\$500,000	\$1,759,166	3.1%			
<b>Intermediate Fixed Income</b>	<b>\$10,669,562</b>	<b>18.7%</b>	<b>\$0</b>	<b>\$10,669,562</b>	<b>18.7%</b>	<b>20.0%</b>	<b>10-30%</b>	<b>-1.3%</b>
JPMorgan Core Bond Ultra R6	\$4,114,798	7.2%		\$4,114,798	7.2%			
YSU Intermediate Term Bond	\$3,959,892	6.9%		\$3,959,892	6.9%			
Prudential High Yield	\$2,594,871	4.6%		\$2,594,871	4.6%			
<b>Total University Assets</b>	<b>\$78,175,004</b>			<b>\$78,175,004</b>				

- 1) Replace Voya REIT with Brookfield REIT
- 2) Trim Equities by \$500,000 (allocate to Short-Term Fixed)
- 3) Reduce Small/Mid Cap exposure and actively managed Large Cap



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## ENDOWMENT ASSETS



## 1Q17 PERFORMANCE & ASSET ALLOCATION REVIEW

Endowment Assets	Market Value	Asset Allocation	Composition	1Q2017	1-Yr	3-Yr	2016	2015
YSU Endowment	\$9.8 million	77% Equities/ 23% Fixed Income & Cash	Stocks, Bonds, Mutual Funds	4.0%	8.1%	6.9%	8.5%	-0.3%
<i>60 S&amp;P 500 Index/40% Barclays Index</i>				4.0%	10.3%	7.4%	8.3%	1.3%
Kilcawley Center	\$99,085	60% Equities/ 40% Fixed Income	Mutual Funds	3.7%	10.4%	2.9%	4.9%	-5.3%
<i>60 S&amp;P 500 Index/40% Barclays Index</i>				4.0%	10.3%	7.4%	8.3%	1.3%
Alumni License Plate	\$493,460	67% Equities/ 33% Fixed Income & Cash	Stocks, Mutual Funds	1.7%	11.3%	6.2%	13.8%	-0.2%
<i>60 S&amp;P 500 Index/40% Barclays Index</i>				4.0%	10.3%	7.4%	8.3%	1.3%

### Compliance

- Asset Allocation Guidelines: 70% Equities (60-80%)/30% Cash & Fixed Income (20-40%)
  - YSU Endowment (In-Line)
  - Kilcawley Center (In-Line)
  - Alumni (In-Line)
- Equity and Fixed Income Guidelines
  - YSU Endowment (In-Line)
  - Kilcawley Center (In-Line)
  - Alumni (In-Line)

Allocation to single stock and bond positions can result in differences relative to benchmark. License Plate account weighted in Telecom and Healthcare sectors and Mid/Small Cap stocks

See page 22 in appendix for detail on holdings.



## APPENDIX



## THOUGHTS ON THE CURRENT ENVIRONMENT

**Trump:** Investors remained upbeat that the new President would result in pro-growth policies for most of Q1, though doubts mounted after failed healthcare reform. “Trump trade” sectors (Financials, Energy, Industrials) were among the worst performers.

**Economy:** Continued global growth acceleration. Eurozone business surveys increased to their highest levels in 6 years and point to strong global growth in Q1. US Q4 GDP growth was reported at 2.1%. ISM surveys (both service and manufacturing) reflect strength, which along with consumer confidence and wage growth, support expansion.

**Capital Markets:** Risk assets were up sharply, led by Emerging and Developed Market Equities (+11.5% and +7.4%) as the broad decline in the US\$ boosted international returns for the quarter.

**U.S. Equities:** A strong first quarter with the S&P 500 +6.1% and the technology heavy NASDAQ advancing 10.1%. Growth dominated value styles led by technology. Tech giants Apple and Facebook rose nearly 25%.

**Valuations:** U.S. equity valuations continue to climb; 18.0x one year forward P/E on MSCI US Equity Index.

**Earnings:** 1Q estimated growth of 8.9% for the S&P 500. A rebound in Energy sector earnings is a tailwind.

**“Bring on Brexit”:** Article 50 was triggered. Big tests lie ahead for the European Union.

**“Fed Up with Waiting”:** The Fed raised rates 0.25% taking advantage of declining market volatility and the improving global economy.

**Fixed Income:** The yield curve flattened and credit spreads tightened modestly. Enthusiasm for high yield waned in March.

**Risks:** Populism’s impact on elections, changes to easy monetary policy and valuations.

**Looking Forward:** We are living in a lower return world; low yields, and valuations pose challenges. Risk assets should perform relatively well in a modest growth, easy monetary policy environment.

Past performance is not a guarantee of future results. Asset classes represented by: Large Cap – S&P 500 Index; Dev Intl – MSCI EAFE Index; Emerging Markets – MSCI EM Index; Intermediate Fixed Income – Barclay’s Capital U.S. Aggregate Index, High Yield – Barclay’s Capital High Yield Corporate Index. Data as of 3/31/2017. Source: Zephyr Associates, Factset as of 3/31/17.



Policy Compliance

As of March 31, 2017

Total Plan Asset Allocation Policy	Range	Current
Operating & Short-Term Pool	25% - 50%	32%
Long Term/ Reserves Pool	50% - 75%	68%

Operating & Short-Term Pool	Range	Current
Operating Assets	60% - 100%	96%
Short-Term Assets	0% - 40%	4%

Long Term/ Reserves Pool	Target	Range	Current
Domestic Equity	27%	20% - 35%	30%
International Equity	8%	0% - 15%	8%
Total Equity	35%	25% - 45%	38%
Alternatives	15%	0%-20%	15%
Short-Term Fixed Income	30%	25% - 45%	25%
Intermediate Fixed Income	20%	10% - 30%	22%
Cash & Cash Equivalents	0%	0% - 5%	0%

In Line
  Within Tolerance
  Review

Performance Report Card

	Ending March 31, 2017									Calendar Years			Inception	
	2017 Q1 (%)	YTD (%)	1Yr (%)	2Yrs (%)	3Yrs (%)	5Yrs (%)	7Yrs (%)	10Yrs (%)	2016 (%)	2015 (%)	2014 (%)	Return (%)	Since	
<b>Total University Assets</b>	<b>2.1</b>	<b>2.1</b>	<b>5.7</b>	<b>2.3</b>	<b>2.6</b>	<b>3.2</b>	<b>3.4</b>	<b>3.7</b>	<b>4.0</b>	<b>-0.5</b>	<b>2.9</b>	<b>3.7</b>	<b>Mar-04</b>	
<i>Total Policy Benchmark</i>	1.5	1.5	3.8	1.8	2.1	2.3	2.4	2.8	2.7	0.2	2.3	3.0	Mar-04	
<i>InvestorForce Education E&amp;F Net Rank</i>	99	99	99	93	95	99	99	81	94	22	76	99	Mar-04	
<b>Total Operating &amp; Short Term</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>	<b>--</b>	<b>--</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>Jun-10</b>	
<i>Total Operating &amp; Short Term Benchmark</i>	0.1	0.1	0.4	0.3	0.2	0.2	0.2	0.7	0.4	0.1	0.1	0.2	Jun-10	
<i>InvestorForce Education E&amp;F Total Fix Inc Net Rank</i>	99	99	99	95	99	99	--	--	97	15	99	99	Jun-10	
JPMorgan 100% U.S. Tr Sec MM Inst	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.5	0.2	0.0	0.0	0.0	Sep-11	
<i>BofA Merrill Lynch 91-Day T-Bill</i>	0.1	0.1	0.4	0.2	0.2	0.1	0.1	0.7	0.3	0.1	0.0	0.1	Sep-11	
<i>Money Market - Taxable MStar MF Rank</i>	49	49	61	65	61	61	62	76	60	93	85	62	Sep-11	
Vanguard Short-Term Federal Adm	0.4	0.4	0.3	0.9	1.1	0.9	1.5	2.7	1.2	0.8	1.3	1.1	Sep-10	
<i>BBgBarc US Govt 1-5 Yr TR</i>	0.4	0.4	-0.1	0.7	1.1	0.9	1.5	2.6	1.0	0.9	1.2	1.1	Sep-10	
<i>Short Government MStar MF Rank</i>	28	28	30	4	19	27	33	25	17	14	33	31	Sep-10	
StarPlus	0.1	0.1	0.4	0.3	0.3	--	--	--	0.4	0.2	--	0.3	Jan-14	
<i>BofA Merrill Lynch 91-Day T-Bill</i>	0.1	0.1	0.4	0.2	0.2	0.1	0.1	0.7	0.3	0.1	0.0	0.2	Jan-14	
<b>Total Long Term/ Reserves Pool</b>	<b>3.2</b>	<b>3.2</b>	<b>7.3</b>	<b>3.1</b>	<b>3.7</b>	<b>4.7</b>	<b>--</b>	<b>--</b>	<b>4.9</b>	<b>-0.3</b>	<b>4.5</b>	<b>4.9</b>	<b>Jun-10</b>	
<i>Total Long Term/ Reserves Fund Benchmark</i>	2.7	2.7	6.7	3.1	3.6	4.2	4.3	4.5	4.7	0.3	4.0	4.3	Jun-10	
<i>InvestorForce Education E&amp;F Net Rank</i>	95	95	97	65	73	98	--	--	83	18	43	99	Jun-10	
<b>Total Domestic Equity</b>	<b>6.0</b>	<b>6.0</b>	<b>18.1</b>	<b>8.0</b>	<b>9.4</b>	<b>13.0</b>	<b>--</b>	<b>--</b>	<b>11.7</b>	<b>0.7</b>	<b>11.6</b>	<b>15.3</b>	<b>Jun-10</b>	
<i>Russell 3000</i>	5.7	5.7	18.1	8.5	9.8	13.2	12.9	7.5	12.7	0.5	12.6	15.4	Jun-10	
<i>InvestorForce Education E&amp;F US Eq Net Rank</i>	35	35	41	55	47	21	--	--	49	27	41	24	Jun-10	



Performance Report Card

	Ending March 31, 2017								Calendar Years			Inception	
	2017 Q1 (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	2016 (%)	2015 (%)	2014 (%)	Return (%)	Since
TRP Instl US Structured Rsch	6.8	6.8	17.6	9.4	10.4	13.1	12.7	--	10.4	2.9	12.4	15.3	Jun-10
S&P 500	6.1	6.1	17.2	9.2	10.4	13.3	12.9	7.5	12.0	1.4	13.7	15.5	Jun-10
Large Blend MStar MF Rank	14	14	27	6	5	25	30	--	56	11	45	25	Jun-10
Vanguard 500 Index Adm	6.1	6.1	17.1	9.2	10.3	13.3	12.9	7.5	11.9	1.4	13.6	15.5	Jun-10
S&P 500	6.1	6.1	17.2	9.2	10.4	13.3	12.9	7.5	12.0	1.4	13.7	15.5	Jun-10
Large Blend MStar MF Rank	29	29	35	9	8	16	16	28	28	24	21	16	Jun-10
Vanguard Mid Cap Index Adm	6.2	6.2	16.7	5.7	8.7	12.9	13.0	7.8	11.2	-1.3	13.8	13.8	Sep-10
Vanguard Mid Cap Index Benchmark	6.2	6.2	16.8	5.7	8.7	12.9	13.1	7.9	11.2	-1.3	13.8	13.8	Sep-10
Mid-Cap Blend MStar MF Rank	12	12	63	40	30	35	25	40	74	19	7	30	Sep-10
Loomis Sayles Sm Growth Instl	8.1	8.1	20.1	4.3	4.8	11.3	13.6	9.2	5.7	1.1	1.1	13.8	Sep-10
Russell 2000 Growth	5.3	5.3	23.0	4.1	6.7	12.1	12.9	8.1	11.3	-1.4	5.6	13.5	Sep-10
Small Growth MStar MF Rank	19	19	72	51	66	48	31	16	85	20	67	35	Sep-10
Victory Integrity Sm-Cap Value Y	1.1	1.1	24.7	6.3	7.4	13.1	12.6	8.2	24.4	-6.7	7.3	13.8	Sep-10
Russell 2000 Value	-0.1	-0.1	29.4	9.3	7.6	12.5	11.6	6.1	31.7	-7.5	4.2	12.9	Sep-10
Small Value MStar MF Rank	27	27	34	70	45	26	33	17	61	62	18	24	Sep-10
<b>Total International Equity</b>	<b>8.2</b>	<b>8.2</b>	<b>15.1</b>	<b>-0.1</b>	<b>0.7</b>	<b>6.4</b>	<b>--</b>	<b>--</b>	<b>2.7</b>	<b>-5.9</b>	<b>-1.4</b>	<b>4.5</b>	<b>Sep-10</b>
MSCI EAFE Gross	7.4	7.4	12.2	1.7	1.0	6.3	5.2	1.5	1.5	-0.4	-4.5	5.5	Sep-10
MSCI ACWI ex USA Gross	8.0	8.0	13.7	1.8	1.0	4.8	4.3	1.8	5.0	-5.3	-3.4	4.3	Sep-10
InvestorForce Education E&F ex-US Eq Net Rank	86	86	25	92	71	21	--	--	71	62	11	45	Sep-10
William Blair International Growth I	7.0	7.0	7.7	-0.6	0.7	5.5	5.9	1.8	-2.5	0.0	-2.9	7.1	Jun-12

Performance Report Card

	Ending March 31, 2017									Calendar Years			Inception	
	2017 Q1 (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	2016 (%)	2015 (%)	2014 (%)	Return (%)	Since	
Dodge & Cox Internat'l Stock	9.3	9.3	23.0	0.3	0.7	7.3	5.7	2.5	8.3	-11.4	0.1	6.0	Sep-10	
<i>MSCI EAFE Gross</i>	7.4	7.4	12.2	1.7	1.0	6.3	5.2	1.5	1.5	-0.4	-4.5	5.5	Sep-10	
<i>Foreign Large Value MStar MF Rank</i>	2	2	3	76	36	10	16	11	18	95	2	18	Sep-10	
<b>Total Alternatives</b>	<b>2.5</b>	<b>2.5</b>	<b>5.6</b>	<b>0.9</b>	--	--	--	--	<b>3.5</b>	--	--	<b>0.3</b>	<b>Mar-15</b>	
<i>Total Alternatives Benchmark</i>	2.3	2.3	4.9	0.2	--	--	--	--	1.5	--	--	--	Mar-15	
John Hancock Global Absolute Return I	0.5	0.5	1.5	-2.0	1.3	1.9	--	--	-2.5	1.7	4.0	1.5	Mar-16	
<i>HFRI Relative Value (Total) Index</i>	2.2	2.2	10.4	3.8	3.7	5.4	5.5	5.1	7.7	-0.3	4.0	10.4	Mar-16	
Wells Fargo Adv Absolute Return Instl	4.6	4.6	7.6	0.7	0.8	3.5	--	--	3.0	-4.6	0.9	-0.5	Mar-15	
<i>CPI +3%</i>	1.7	1.7	5.8	4.9	4.3	4.4	4.7	4.9	4.7	3.5	4.4	5.1	Mar-15	
<i>GMO Benchmark-Free Alloc III</i>	4.7	4.7	8.1	1.1	1.2	3.8	4.6	5.1	3.4	-4.3	1.2	-0.2	Mar-15	
Diamond Hill Long-Short I	2.9	2.9	13.2	6.0	5.8	8.6	7.8	4.7	10.5	-1.4	7.5	5.3	Mar-15	
<i>HFRI Equity Hedge (Total) Index</i>	3.8	3.8	11.5	3.1	3.0	4.9	4.2	3.0	5.5	-1.0	1.8	3.1	Mar-15	
<i>Long-Short MStar MF Rank</i>	53	53	12	18	21	23	43	47	15	53	18	15	Mar-15	
Voya Global Real Estate I	1.1	1.1	-2.7	-2.0	3.4	5.8	6.9	1.2	0.4	-1.7	14.0	-2.0	Mar-15	
<i>FTSE NAREIT Developed</i>	2.1	2.1	0.9	0.7	5.3	7.3	8.1	1.1	4.1	-0.8	15.0	0.5	Mar-15	
<i>Global Real Estate MStar MF Rank</i>	95	95	97	97	76	90	75	49	75	77	55	87	Mar-15	



Performance Report Card

	Ending March 31, 2017								Calendar Years			Inception	
	2017 Q1 (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	2016 (%)	2015 (%)	2014 (%)	Return (%)	Since
<b>Total Fixed Income</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>1.1</b>	<b>1.5</b>	<b>1.5</b>	<b>--</b>	<b>--</b>	<b>1.6</b>	<b>0.8</b>	<b>2.1</b>	<b>2.0</b>	<b>Jun-10</b>
<i>Total Fixed Income Benchmark</i>	0.5	0.5	0.6	1.0	1.4	1.3	1.9	2.9	1.6	0.8	1.7	1.7	Jun-10
<i>InvestorForce Education E&amp;F Total Fix Inc Net Rank</i>	94	94	89	72	78	91	--	--	91	5	87	96	Jun-10
<b>JPMorgan Core Bond Ultra</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>	<b>1.4</b>	<b>2.7</b>	<b>2.5</b>	<b>3.7</b>	<b>4.7</b>	<b>2.5</b>	<b>1.0</b>	<b>5.4</b>	<b>3.2</b>	<b>Apr-11</b>
<i>BBgBarc US Aggregate TR</i>	0.8	0.8	0.4	1.2	2.7	2.3	3.5	4.3	2.6	0.6	6.0	3.0	Apr-11
<i>Intermediate-Term Bond MStar MF Rank</i>	69	69	78	57	54	68	61	41	76	14	63	60	Apr-11
<b>YSU Intermediate Term Bond</b>	<b>0.8</b>	<b>0.8</b>	<b>0.5</b>	<b>1.0</b>	<b>1.7</b>	<b>1.9</b>	<b>2.9</b>	<b>4.1</b>	<b>2.0</b>	<b>0.5</b>	<b>3.0</b>	<b>3.8</b>	<b>Mar-04</b>
<i>BBgBarc US Govt/Credit Int TR</i>	0.8	0.8	0.4	1.2	2.0	1.9	2.9	3.8	2.1	1.1	3.1	3.5	Mar-04
<i>Intermediate-Term Bond MStar MF Rank</i>	79	79	80	78	92	92	92	76	90	34	91	81	Mar-04
<b>Prudential High Yield Z</b>	<b>2.9</b>	<b>2.9</b>	<b>14.8</b>	<b>6.2</b>	<b>4.9</b>	<b>6.8</b>	<b>7.7</b>	<b>7.3</b>	<b>15.3</b>	<b>-2.6</b>	<b>2.8</b>	<b>4.8</b>	<b>Dec-16</b>
<i>BBgBarc US High Yield TR</i>	2.7	2.7	16.4	5.9	4.6	6.8	7.8	7.5	17.1	-4.5	2.5	4.6	Dec-16
<i>High Yield Bond MStar MF Rank</i>	24	24	41	12	13	20	21	17	30	38	22	29	Dec-16
<b>YSU Short Term Bond</b>	<b>0.4</b>	<b>0.4</b>	<b>0.7</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>1.3</b>	<b>2.5</b>	<b>1.1</b>	<b>0.6</b>	<b>0.7</b>	<b>2.6</b>	<b>Mar-04</b>
<i>BofA Merrill Lynch US Corp &amp; Gov 1-3 Yrs</i>	0.4	0.4	0.7	0.9	1.0	1.0	1.2	2.3	1.3	0.7	0.8	2.4	Mar-04
<i>Short-Term Bond MStar MF Rank</i>	85	85	90	86	88	92	95	77	90	46	88	76	Mar-04
<b>Vanguard Short-Term Bond Instl</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>1.0</b>	<b>1.3</b>	<b>1.2</b>	<b>--</b>	<b>--</b>	<b>1.5</b>	<b>1.0</b>	<b>1.3</b>	<b>1.2</b>	<b>Dec-11</b>
<i>BBgBarc US Govt/Credit 1-5 Yr. TR</i>	0.6	0.6	0.5	1.1	1.4	1.3	1.9	2.9	1.6	1.0	1.4	1.3	Dec-11
<i>Short-Term Bond MStar MF Rank</i>	80	80	96	81	60	77	--	--	84	15	48	84	Dec-11
<b>DFA Five-Yr Global Fxd-Inc I</b>	<b>0.8</b>	<b>0.8</b>	<b>0.2</b>	<b>1.3</b>	<b>2.0</b>	<b>1.9</b>	<b>2.7</b>	<b>3.3</b>	<b>1.8</b>	<b>1.4</b>	<b>2.9</b>	<b>2.1</b>	<b>Jun-13</b>
<i>Citi WGBI 1-5 Yr Hdg USD</i>	0.3	0.3	0.6	1.1	1.4	1.4	1.6	2.5	1.5	1.0	1.9	1.4	Jun-13
<i>World Bond MStar MF Rank</i>	89	89	74	57	32	58	64	83	80	3	42	46	Jun-13

## Performance Report Card

- Total Policy Benchmark = 45% BofA Merrill Lynch 91-Day T-Bill / 17% BofA Merrill Lynch US Corp & Gov 1-3 Yrs / 11% BBgBarc US Govt/Credit Int TR / 8% Total Alternatives Benchmark / 15% Russell 3000 / 4% MSCI EAFE Gross
- Total Operating & Short Term Benchmark = 95% BofA Merrill Lynch 91-Day T-Bill / 5% BBgBarc US Govt 1-3 Yr TR
- Total Long Term/ Reserves Fund Benchmark = 27% Russell 3000 / 8% MSCI EAFE Gross / 15% Total Alternatives Benchmark / 30% BofA Merrill Lynch US Corp & Gov 1-3 Yrs / 20% BBgBarc US Govt/Credit Int TR
- Vanguard Mid Cap Index Benchmark = 100% CRSP US Mid Cap TR USD
- Total Alternatives Benchmark = 25% FTSE NAREIT Developed / 75% HFRI Fund of Funds Composite Index
- CPI +3% = Consumer Price Index Shifted
- GMO Benchmark-Free Alloc III = GMO Benchmark-Free Allocation Fu
- Total Fixed Income Benchmark = 64% BofA Merrill Lynch US Corp & Gov 1-3 Yrs / 36% BBgBarc US Govt/Credit Int TR

**HARTLAND**

 independence  
expertise  
results



## ENDOWMENT HOLDINGS

- YSU Endowment (Huntington)
  - Equity Mutual Funds – 10% (12 Mutual Funds)
  - Stocks – 67% (50-60 Stocks, U.S. Large Cap)
  - Fixed Income Mutual Funds – 2% (Federated Total Return Bond)
  - Bonds – 14% (9 Bonds, U.S. Corporate Debt)
  - Cash – 7%
- Kilcawley (Farmer's Trust)
  - Vanguard Balanced Index Fund (Inst) – 98%
  - Cash – 2%
- Alumni License Plate (Farmer's Trust)
  - Equity Mutual Funds – 56% (WisdomTree Midcap, Small Cap, and European Small Cap)
  - Stocks – 11% (Merck (8%) and Verizon(3%))
  - Fixed Income Mutual Funds – 10% (Federated Ultra Short)
  - Cash – 23%

## REAL ESTATE CANDIDATES: OVERVIEW

Firm Name	Brookfield Asset Management	CBRE Clarion
<b>Product Name</b>	Brookfield Global Listed Real Estate	CBRE Clarion Global Real Estate Securities Strategy
<b>Firm: Year Firm Founded</b>	1899	1969
<b>Firm: City</b>	New York	Radnor
<b>Firm: State/ Province</b>	New York	Pennsylvania
<b>Firm Asset Under Management: (\$ millions)</b>		
2016	13,200	17,465
2015	16,795	20,755
2014	18,085	24,776
2013	20,146	22,756
2012	16,621	23,648
<b>Employee Owned</b>	---	23.00%
<b>Parent Owned</b>	---	77.00%
<b>Publicly Held</b>	100.00%	---
<b>Joint-Venture Owned</b>	---	---
<b>Government Owned</b>	---	---
<b>Family Owned</b>	---	---
<b>Private Equity Owned</b>	---	---
<b>Other Ownership</b>	---	---
<b>Strategy Inception Date</b>	11/30/2011	11/1/2001
<b>Strategy Asset Under Management: (\$ millions)</b>		
2016	3,208 (1)	8,114
2015	2,691	10,620
2014	1,789	13,535
2013	641	13,453
2012	150	13,480
<b>Portfolio Managers/Dual Role PMs</b>	2	10
<b>Research Analysts</b>	9	14



## REAL ESTATE CANDIDATES: OVERVIEW

	Brookfield Asset Management <sup>1</sup>	CBRE Clarion <sup>2</sup>	FTSE EPRA/NAREIT Developed Index <sup>1</sup>
Ticker	BLRIX	IGLIX	
Subadvisor	Brookfield Asset Management	CBRE Clarion	
Expense Ratio %	0.95%	1.01%	
Manager Tenure (Longest # yrs)	5	15	
# of Stock Holdings	57	85	334
Top Ten Holdings %	33.19	29.29	20.62
Cash %	0.00	0.78	
Turnover Ratio %	88	34	
<b>Market Cap</b>			
Average Market Cap (\$ millions)	8,914	11,601	8,072
Market Cap Giant %	14.19	10.40	9.34
Market Cap Large %	40.28	42.85	35.53
Market Cap Mid %	29.34	42.42	41.23
Market Cap Small %	15.29	4.33	12.59
Market Cap Micro %	0.90	0.00	1.31
<b>Sector Allocation</b>			
Diversified %	11.4	15.5	
Retail %	26.7	22.9	
Residential %	4.6	9.3	
Office Buildings %	13.0	13.0	
Industrial Properties %	3.2	10.5	
Healthcare Facilities %	8.9	6.1	
Hotel/Resort & Entertainment %	7.9	2.6	
Real Estate Services %	8.5	4.6	
Real Estate General %	14.7	11.6	
Other %	1.1	3.5	

**Brookfield Asset Management (BAM)** was formed in 1899 and is headquartered in New York, New York (NYSE: "BAM") with over \$240 billion under management. There are two portfolio managers in the global real estate strategy - they have worked together since 2006 and are supported by a team of nine research analysts. With the goal of outperforming the FTSE EPRA/NAREIT Developed Index over a market cycle, this strategy has the ability to invest up to 30% of the funds outside the benchmark for greater return opportunities. The team uses proprietary screening and valuation tools, in conjunction with independent analysis of the trends in the real estate markets and rigorous bottom-up company research for selective investing in high conviction securities.

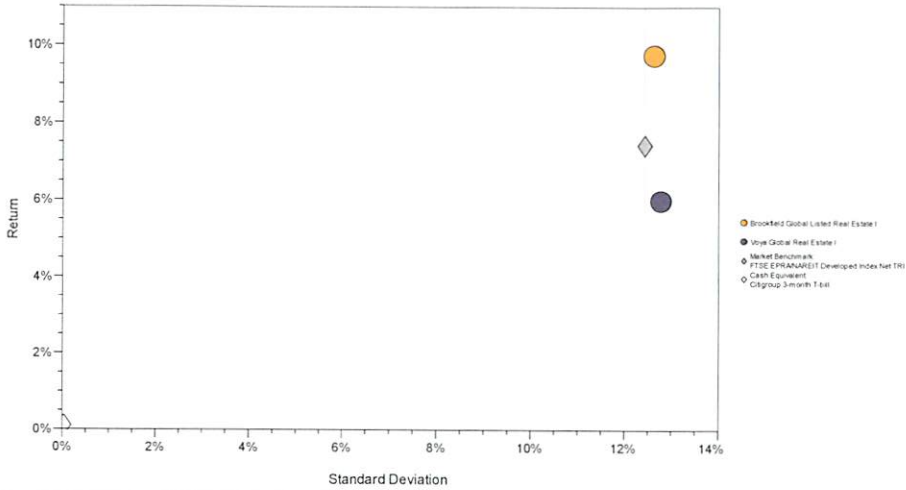
Source: Morningstar. 1. As of 12/31/2016. 2. As of 2/28/2017

# 5-YEAR PERFORMANCE STATISTICS

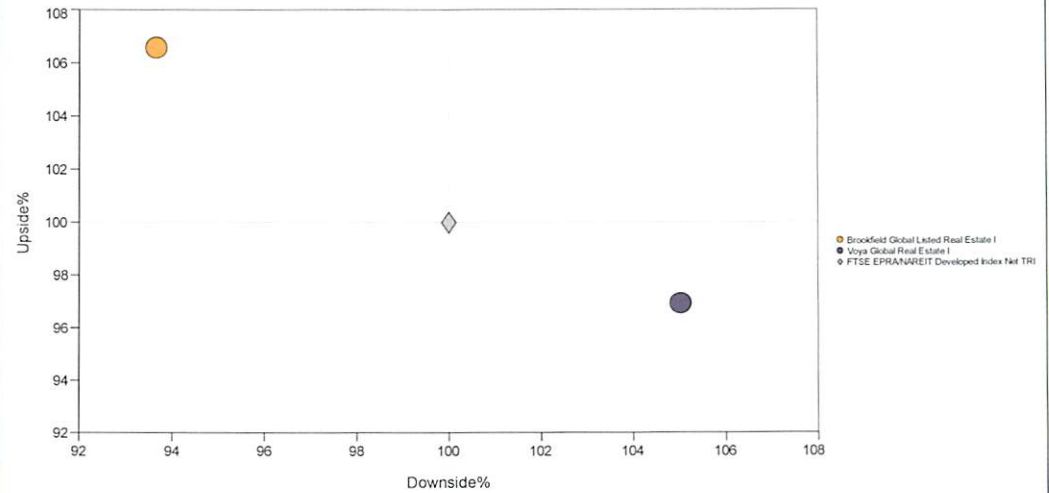
## Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

**Risk / Return**  
 March 2012 - March 2017 (Single Computation)



**Upside / Downside**  
 March 2012 - March 2017 (Single Computation)



### Custom Table

March 2012 - March 2017: Summary Statistics

	Return	Standard Deviation	Sharpe Ratio	Up Capture vs. Market	Down Capture vs. Market	Alpha vs. Market	Beta vs. Market	R-Squared vs. Market
Brookfield Global Listed Real Estate I	9.75%	12.62%	0.76	106.58%	93.66%	2.27%	0.99	94.94%
Voya Global Real Estate I	6.00%	12.77%	0.46	96.94%	105.01%	-1.46%	1.02	98.46%
FTSE EPRA/NAREIT Developed Index Net TRI	7.43%	12.42%	0.59	100.00%	100.00%	0.00%	1.00	100.00%

Source: Zephyr.

Past performance is not an indicator of future results

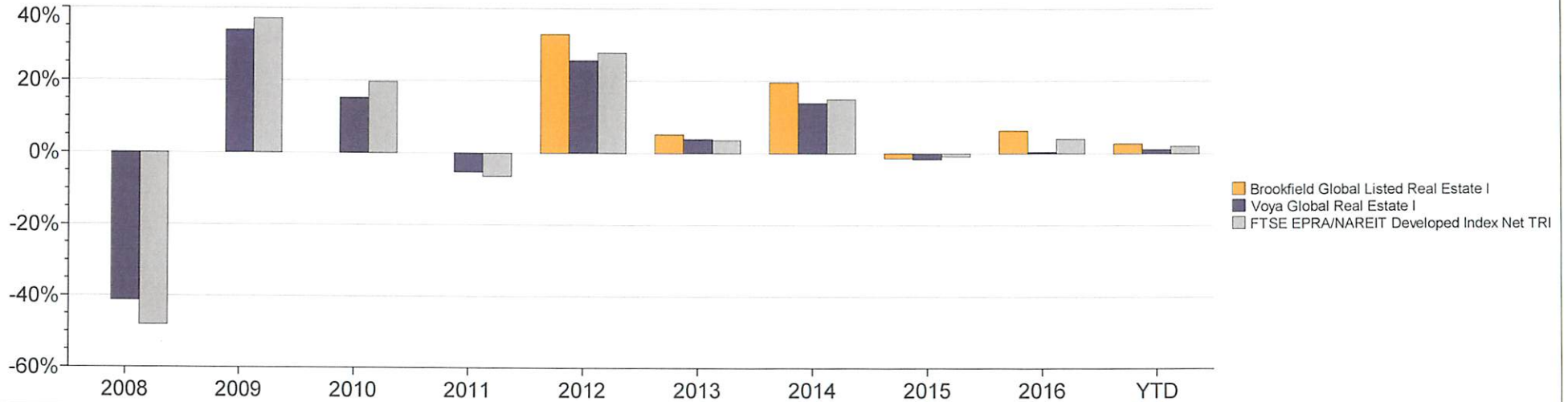


## CALENDAR YEAR PERFORMANCE

### Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

#### Calendar Year Return As of March 2017



#### Calendar Year Return As of March 2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD
Brookfield Global Listed Real Estate I	N/A	N/A	N/A	N/A	32.83%	5.20%	19.61%	-1.40%	6.27%	2.69%
Voya Global Real Estate I	-41.29%	33.89%	15.23%	-5.32%	25.63%	3.90%	13.96%	-1.67%	0.39%	1.12%
FTSE EPRA/NAREIT Developed Index Net TRI	-48.16%	37.13%	19.63%	-6.46%	27.73%	3.67%	15.02%	-0.79%	4.06%	2.07%

Source: Zephyr.

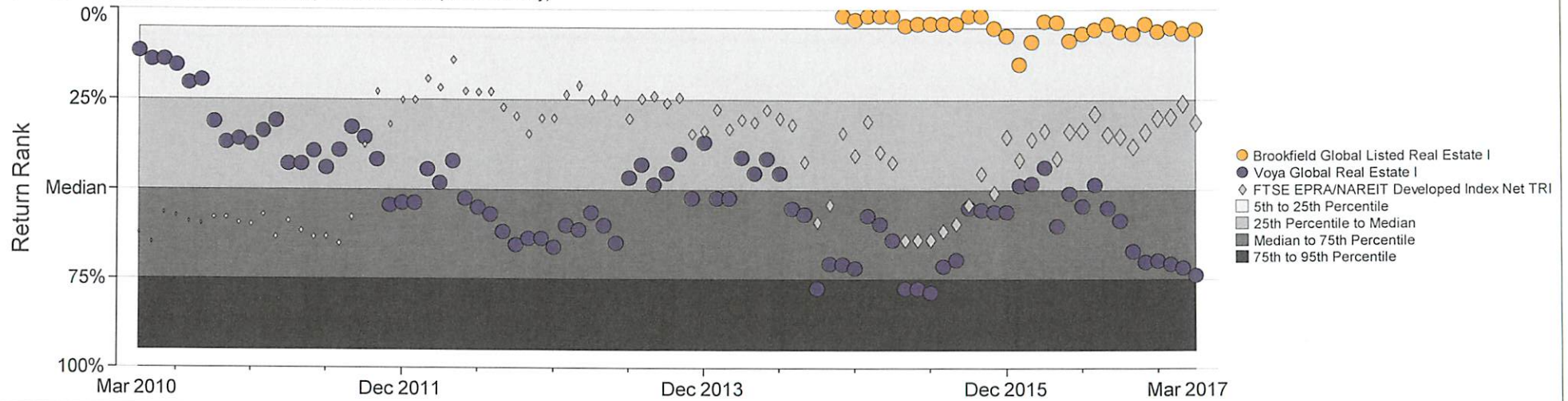
Past performance is not an indicator of future results

## ROLLING 3-YEAR RETURNS AND PEER RANKINGS

### Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

Manager vs Morningstar Global Real Estate: Return Rank  
April 2007 - March 2017 (36-Month Moving Windows, Computed Monthly)



Manager vs Morningstar Global Real Estate: Return Rank  
April 2007 - March 2017 (36-Month Moving Windows, Computed Monthly)

	Median Rank	Oct 2010	May 2011	Dec 2011	Jul 2012	Feb 2013	Sep 2013	Apr 2014	Nov 2014	Jun 2015	Jan 2016	Aug 2016	Mar 2017
		134 mng	141 mng	150 mng	163 mng	166 mng	166 mng	175 mng	179 mng	179 mng	179 mng	199 mng	199 mng
Brookfield Global Listed Real Estate I	4.04%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.69%	3.93%	15.17%	4.04%	5.56%
Voya Global Real Estate I	53.69%	36.84%	39.29%	53.69%	56.79%	61.21%	45.45%	45.40%	70.79%	78.65%	48.88%	55.05%	73.74%
FTSE EPRA/NAREIT Developed Index Net TRI	34.15%	57.83%	63.17%	25.13%	22.75%	21.04%	25.81%	31.16%	34.15%	63.85%	41.67%	34.61%	31.27%

Source: Zephyr.

Past performance is not an indicator of future results

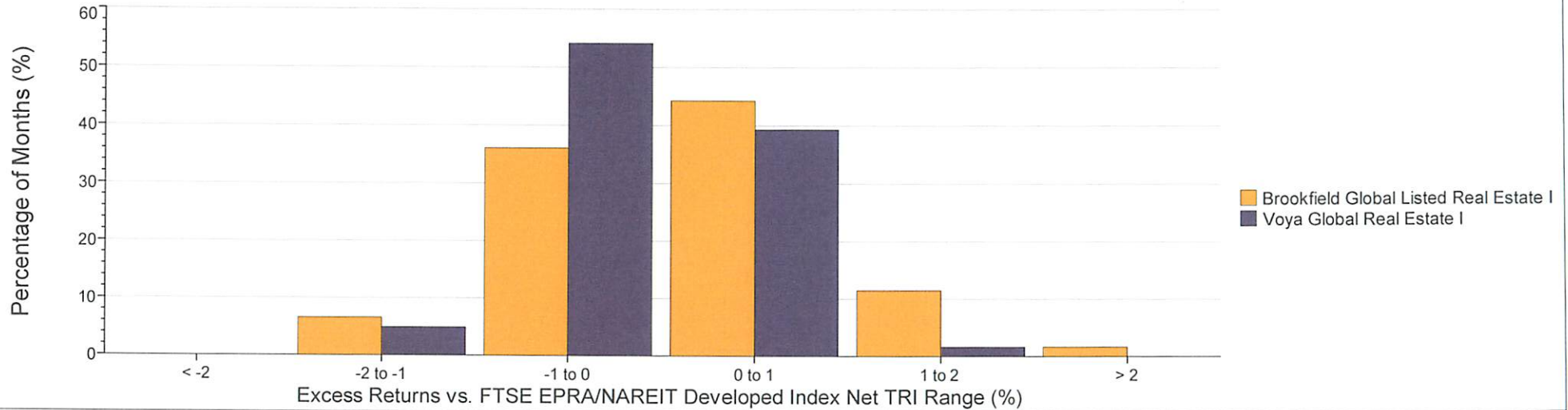


## HISTORICAL RISK CHARACTERISTICS

### Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

Histogram of Excess Returns vs. FTSE EPRA/NAREIT Developed Index Net TRI  
March 2012 - March 2017



### Custom Table

March 2012 - March 2017: Summary Statistics

	Standard Deviation	Maximum Drawdown	Maximum Drawdown End Date	Maximum Drawdown Length	Maximum Drawdown Recovery Date	Tracking Error vs. Market	Down Capture vs. Market	Beta vs. Market
Brookfield Global Listed Real Estate I	12.62%	-11.62%	Feb 2016	12	Jun 2016	2.84%	93.66%	0.99
Voya Global Real Estate I	12.77%	-13.31%	Aug 2013	4	May 2014	1.61%	105.01%	1.02
FTSE EPRA/NAREIT Developed Index Net TRI	12.42%	-13.21%	Aug 2013	4	May 2014	0.00%	100.00%	1.00

Source: Zephyr.

Past performance is not an indicator of future results

## U.S. LARGE CAP RECOMMENDATION

- Reduce T.Rowe Price Institutional U.S. Structured Research Fund position due to passive manager preference.
- Why Passive in U.S. Large Cap?
  - Challenging environment for U.S. Large Cap Blend managers to outperform benchmark
    - ❖ Over the past three years, only 5% of U.S. Large Cap Blend managers have outperformed the Russell 1000 Index\*
  - Lower expenses
  - Limited excess return provided by managers

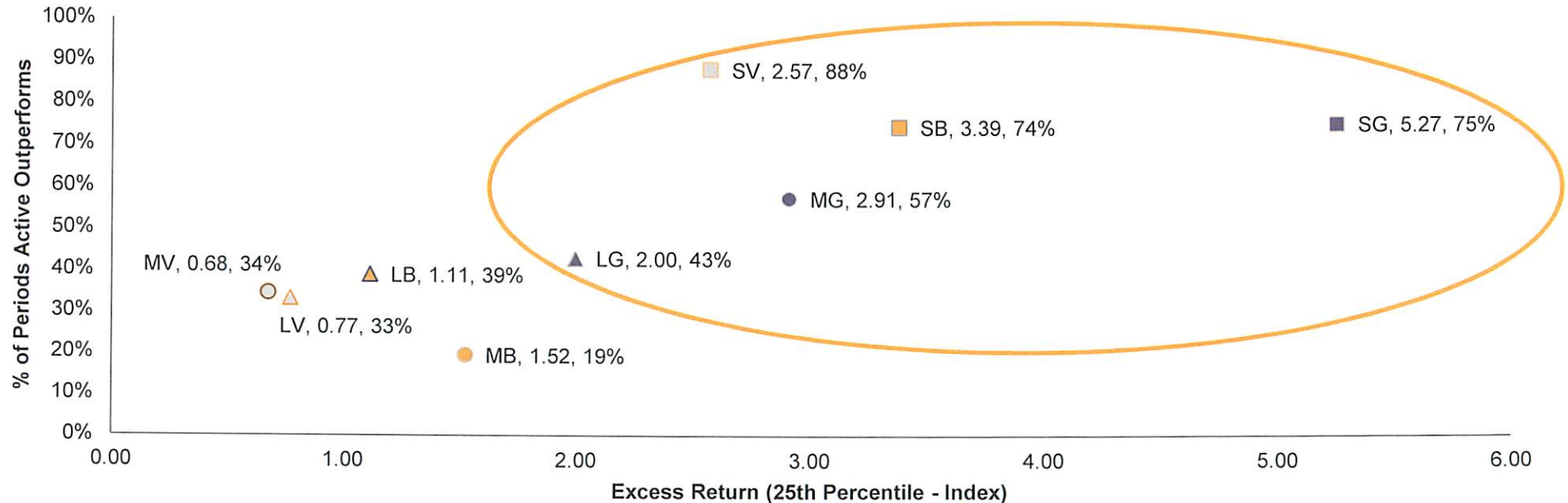
	YTD	1-Yr	3-Yr	5-Yr	7-Yr
T.Rowe Price Institutional U.S. Structured Research Fund	6.8%	17.6%	10.4%	13.1%	12.7%
<i>Peer Return Rank</i>	14	27	5	25	30
Vanguard 500 Index	6.1%	17.1%	10.3%	13.3%	12.9%
<i>Peer Return Rank</i>	29	35	8	16	16
S&P 500 Index	6.1%	17.2%	10.4%	13.3%	12.9%

\*As of 3/31/2017. See page 31 in appendix for detailed analysis.  
 Source: Zephyr, 1Q 2017 YSU Quarterly Report.  
 Peer Universe: Large Blend MStar.  
 Performance as of 3/31/2017.



## DOMESTIC EQUITY ACTIVE MANAGEMENT

### 5-Year Rolling - Active, I Shares, Cheap



The data shown on the X and Y axes show two things:

- **Y-Axis** = the percentage of time the median active managers rank better than the index. We are using the filtered universes of only active, institutional share class and cheaper funds<sup>1</sup>.
- **X-Axis** = the spread between the top quartile manager performance and the index. We want to understand by how much the top performers add alpha.
- **Example:** The Large Growth median active manager outperformed the Russell 10000 Growth Index 43% of the time. The top quartile Large Growth active manager beat the index by an average of 2.00%

LB: Large Blend vs. S&P 500 11/01/1984-7/31/2016, LG: Large Growth vs. Russell 1000 Growth 11/01/1983-7/31/2016, LV: Large Value vs. Russell 1000 Value 1/01/1987-7/31/2016, MB: Mid Blend vs. Russell Mid Cap 10/01/1998-7/31/2016, MG: Mid Growth vs. Russell Mid Cap Growth 3/01/1992-7/31/2016, MV: Mid Value vs. Russell Mid Cap Value 4/01/2001-7/31/2016, SB: Small Blend vs. Russell 2000 2/01/1994-7/31/2016, SG: Small Growth vs. Russell 2000 Growth 5/01/1992-7/31/2016, SV: Small Value vs. Russell 2000 Value 7/01/1998-7/31/2016,

Source: Morningstar

As of 7/31/2016

<sup>1</sup>Removed 25% most expensive funds

# BENCHMARK RANK RELATIVE TO UNIVERSE: DOMESTIC EQUITY



50 - 100%

Managers Outperformed Index

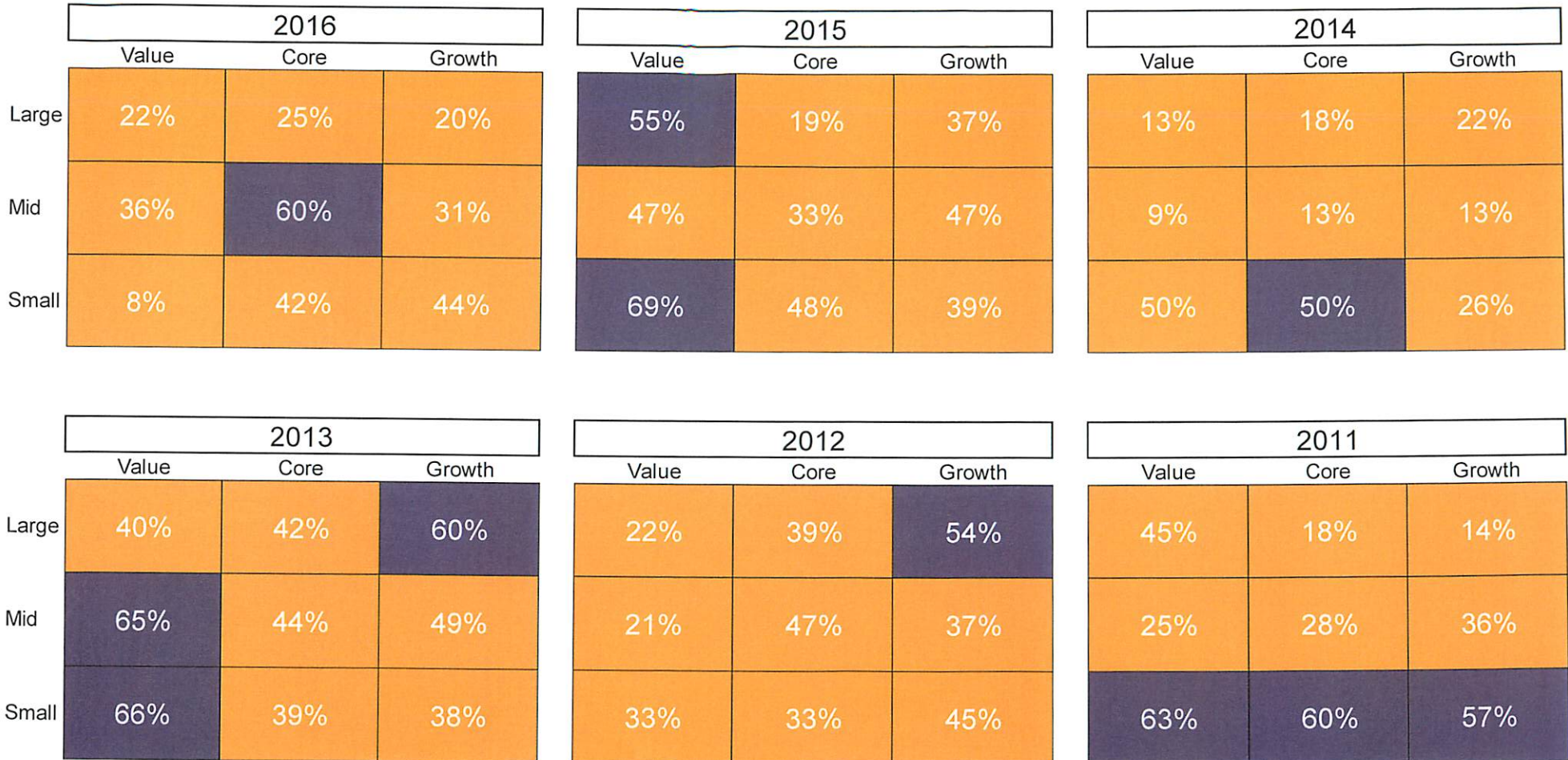
0 - 50%

Managers Underperformed Index

Past performance is no guarantee of future results. The above styles are represented by the following indexes: Large Value – Russell 1000 Value; Large Core - Russell 1000; Large Growth – Russell 1000 Growth; Mid Value – Russell MidCap Value; Mid Core – Russell MidCap; Mid Growth – Russell MidCap Growth; Small Value – Russell 2000 Value; Small Core – Russell 2000; Small Growth – Russell 2000 Growth. Data as of 3/31/2017. Source: Zephyr Associates



## BENCHMARK RANK RELATIVE TO UNIVERSE: DOMESTIC EQUITY



50 - 100%

Managers Outperformed Index

0 - 50%

Managers Underperformed Index

Past performance is no guarantee of future results. The above styles are represented by the following indexes: Large Value – Russell 1000 Value; Large Core - Russell 1000; Large Growth – Russell 1000 Growth; Mid Value – Russell MidCap Value; Mid Core – Russell MidCap; Mid Growth – Russell MidCap Growth; Small Value – Russell 2000 Value; Small Core – Russell 2000; Small Growth – Russell 2000 Growth. Data as of 3/31/2017. Source: Zephyr Associates



# DEFINITIONS AND DISCLOSURES

Information provided is general in nature, is provided for informational purposes only, and should not be construed as investment advice. Any views expressed are based upon the data available at the time the information was produced and are subject to change at any time based on market or other conditions. Hartland disclaims any liability for any direct or incidental loss incurred by applying any of the information in this presentation. All investment decisions must be evaluated as to whether it is consistent with their investment objectives, risk tolerance, and financial situation.

Past performance is no guarantee of future results. Investing involves risk, including risk of loss. Diversification does not ensure a profit or guarantee against loss.

All indices are unmanaged and performance of the indices includes reinvestment of dividends and interest income and, unless otherwise noted. An investment cannot be made in any index.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments. Additionally, bonds and short-term investments entail greater inflation risk, or the risk that the return of an investment will not keep up with increases in the prices of goods and services, than stocks.

Lower-quality debt securities generally offer higher yields, but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Any fixed income security sold or redeemed prior to maturity may be subject to loss.

The municipal market is volatile and can be significantly affected by adverse tax, legislative, or political changes and by the financial condition of the issuers of municipal securities. Interest rate increases can cause the price of a debt security to decrease. A portion of the dividends you receive may be subject to federal, state, or local income tax or may be subject to the federal alternative minimum tax. Generally, tax-exempt municipal securities are not appropriate holdings for tax advantaged accounts such as IRAs and 401(k)s.

Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which are magnified in emerging markets. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Growth stocks can perform differently from the market as a whole and other types of stocks and can be more volatile than other types of stocks. Value stocks can perform differently than other types of stocks and can continue to be undervalued by the market for long periods of time.

The commodities industry can be significantly affected by commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

Changes in real estate values or economic conditions can have a positive or negative effect on issuers in the real estate industry, which may affect your investment.

## Index Definitions:

The **S&P 500 Index** is a broad-based market index, comprised of 500 large-cap companies, generally considered representative of the stock market as a whole. The **S&P 400 Index** is an unmanaged index considered representative of mid-sized U.S. companies. The **S&P 600 Index** is a market-value weighted index that consists of 600 small-cap U.S. stocks chosen for market size, liquidity and industry group representation.

The **Russell 1000 Value Index**, **Russell 1000 Index** and **Russell 1000 Growth Index** are indices that measure the performance of large-capitalization value stocks, large-capitalization stocks and large-capitalization growth stocks, respectively. The **Russell 2000 Value Index**, **Russell 2000 Index** and **Russell 2000 Growth Index** are indices that measure the performance of small-capitalization value stocks, small-capitalization stocks and small-capitalization growth stocks, respectively. The **Russell Midcap Value Index**, **Russell Midcap Index** and **Russell Midcap Growth Index** are indices that measure the performance of mid-capitalization value stocks, mid-capitalization stocks and mid-capitalization growth stocks, respectively. The **Russell 2500 Value Index**, **Russell 2500 Index** and **Russell 2500 Growth Index** measure the performance of small to mid-cap value stocks, small to mid-cap stocks and small to mid-cap growth stocks, respectively, commonly referred to as "smid" cap. The **Russell 3000 Value Index**, **Russell 3000 Index** and **Russell 3000 Growth Index** measure the performance of the 3,000 largest U.S. value stocks, 3,000 largest U.S. stocks and 3,000 largest U.S. growth stocks, respectively, based on total market capitalization.

The **Wilshire 5000 Index** represents the broadest index for the U.S. equity market, measuring the performance of all U.S. equity securities with readily available price data. The **Wilshire Micro Cap Index** is a market capitalization-weighted index comprised of all stocks in the Wilshire 5000 Index below the 2,501<sup>st</sup> rank.

The **MSCI EAFE (Europe, Australasia, Far East) Index** is designed to measure developed market equity performance, excluding the U.S. and Canada. The **MSCI Emerging Markets (EM) Index** is designed to measure global emerging market equity performance. The **MSCI World Index** is designed to measure global developed market equity performance. The **MSCI World Index Ex-U.S. Index** is designed to measure the equity market performance of developed markets and excludes the U.S. The **MSCI Europe Index** is an unmanaged index considered representative of developed European countries. The **MSCI Japan Index** is an unmanaged index considered representative of stocks of Japan. The **MSCI Pacific ex. Japan Index** is an unmanaged index considered representative of stocks of Asia Pacific countries excluding Japan.

The **U.S. 10-Year treasury Yield** is generally considered to be a barometer for long-term interest rates.

**Merrill Lynch 91-day T-bill index** includes U.S. Treasury bills with a remaining maturity from 1 up to 3 months.

The **Barclays Capital® (BC) U.S. Treasury Index** is designed to cover public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **BC Aggregate Bond Index** is an unmanaged, market value-weighted performance benchmark for investment-grade fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities with maturities of at least one year. The **BC U.S. Credit Bond Index** is designed to cover publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements; bonds must be SEC-registered to qualify. The **BC U.S. Agency Index** is designed to cover publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government. The **BC CMBS Index** is designed to mirror commercial mortgage-backed securities of investment-grade quality (Baa3/BBB-/BBB- or above) using Moody's, S&P, and Fitch respectively, with maturity of at least one year. The **BC MBS Index** covers agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARMs) issued by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The **BC U.S. Municipal Bond Index** covers the U.S. dollar-denominated, long-term tax-exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The **BC TIPS Index** is an unmanaged market index made up of U.S. Treasury Inflation Linked Index securities. The **BC U.S. Government Bond Index** is a market value-weighted index of U.S. Government fixed-rate debt issues with maturities of one year or more. The **BC ABS Index** is a market value-weighted index that covers fixed-rate asset-backed securities with average lives greater than or equal to one year and that are part of a public deal; the index covers the following collateral types: credit cards, autos, home equity loans, stranded-cost utility (rate-reduction bonds), and manufactured housing. The **BC Global Aggregate Index** is composed of three sub-indices, the U.S. Aggregate Index, Pan-European Aggregate Index, and the Asian-Pacific Aggregate Index. In aggregate the index is created to be a broad-based measure of the performance of investment grade fixed rate debt on a global scale. The **BC US Corporate Long Aa Index** is an unmanaged index representing public obligations of U.S. corporate and specified foreign debentures and secured notes with a remaining maturity of 10 years or more. The **BC U.S. Corporate High-Yield Index** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. The **BC Intermediate Corporate Index** includes dollar-denominated debt from U.S. and non-U.S. industrial, utility, and financial institutions issuers with a duration of 1-10 years. The **BC U.S. Treasury Long Index** is an unmanaged index representing public obligations of the U.S. Treasury with a remaining maturity of one year or more. The **BC U.S. Government 10 Year Treasury Index** measures the performance of U.S. Treasury securities that have a remaining maturity of less than 10 years. The **BC BAA Corporate Index** measures the performance of the taxable Baa rated fixed-rate U.S. dollar-denominated corporate bond market. The **BC Global Treasury ex US Index** includes government bonds issued by investment-grade countries outside the United States, in local currencies, that have a remaining maturity of one year or more and are rated investment grade or higher. The **BC Emerging Market Bond Index** is an unmanaged index that total returns for external-currency-denominated debt instruments of the emerging markets. The **BC U.S. Securitized Bond Index** is a composite of asset-backed securities, collateralized mortgage-backed securities (ERISA-eligible) and fixed rate mortgage-backed securities. The **BC Quality Distribution AAA, B, and CC-D indices** measure the respective credit qualities of U.S. corporate and specified foreign debentures and secured notes. The **BC Universal Index** represents the union of the U.S. Aggregate Index, the U.S. High Yield Corporate Index, the 144A Index, the Eurodollar Index, the Emerging Markets Index, and the non-ERISA portion of the CMBS Index. The **BC 1-3 Year Government Credit Index** is an unmanaged index considered representative of performance of short-term U.S. corporate bonds and U.S. government bonds with maturities from one to three years. The **BC Long-term Government Index** is an unmanaged index reflecting performance of the long-term government bond market. The **BC Intermediate Aggregate Index** measures the performance of intermediate-term investment grade bonds. The **BC Intermediate 1-3 Year Government/Credit Index** measures the performance of U.S. Dollar denominated U.S. Treasuries, government-related and investment grade U.S. corporate securities that have a remaining maturity of greater than one year and less than ten years.

The **Bank of America ML U.S. High Yield Index** tracks the performance of below investment grade US Dollar Denominated corporate bonds publicly issued in the US market. Qualifying bonds have at least one year remaining term to maturity, are fixed coupon schedule and minimum outstanding of \$100 million.



## DEFINITIONS AND DISCLOSURES

**Signal Identification Model (SIM)** - The balance between fixed income and equity securities is guided by a proprietary, quantitative modeling technique we call "SIM". SIM is a four factor model that measures short-term under or over-valuation of equity markets. When SIM is negative, for example, the Investment Review Committee (IRC) may recommend that Consultants reduce equity ratios within prescribed ranges in client portfolios; when positive, that Consultants increase equity ratios within prescribed ranges. Other judgments, such as short-term, relative weights between different asset classes often come from fundamental assessments of IRC members. Unemployment – Total labor force seasonally adjusted (U.S. Bureau of Labor Statistics); ISM - An index based on surveys of more than 300 manufacturing firms by the Institute of Supply Management; Spread – indicates the difference in yield between Moody's AAA corporate bonds and Moody's BAA corporate bonds; S&P Earnings Yield – earnings per share for the most recent 12-month period divided by the current market price per share of the stocks in the S&P 500.

**Hartland Research Portfolio (HPR)** - Our Optimal Long-Term Strategic Asset Allocation, called the Hartland Research Portfolio, sets forth our best thinking on the mix of different asset classes; it is the benchmark we use in considering appropriate asset allocation for all client portfolios. The Hartland Research Portfolio is developed with two major inputs. One is quantitative, based on the Black-Litterman model, and one is qualitative, based on the input of the professionals on our Investment Research Committee (IRC). The Hartland & Co. research team begins with the Black-Litterman model, a mathematical model that seeks asset allocations that are optimal; those that produce the best results with the lowest level of volatility or risk. Black-Litterman is more dynamic than other models and builds on traditional mean-variance techniques to create stable and consistent return forecasts for a set of asset classes. The IRC assess the quantitative output from Black-Litterman and integrate it with their own fundamental or qualitative judgments. The result is the Hartland Research Portfolio, which combines quantitative and qualitative inputs and our capital market projections.

**The HFRI Funds of Funds Index (HFRI FOF)** is an equal weighted index designed to measure the performance of hedge fund of fund managers. The more than 800 multi-strategy constituents are required to have at least \$50 million in assets under management and a trading track record spanning at least 12 months. The index includes both on and offshore funds and all returns are reported in USD.

**The NCREIF Property Index (NPI)** represents quarterly time series composite total rate of return measure of a very large pool of individual commercial real estate properties acquired in the private market. The index represents apartments, hotels, industrial properties, office buildings and retail properties which are at least 60% occupied and owned or controlled, at least in part by tax-exempt institutional investors or its designated agent. In addition these properties that are included must be investment grade, non-agricultural and income producing and all development projects are excluded. Constituents included in the NPI be valued at least quarterly, either internally or externally, using standard commercial real estate appraisal methodology. Each property must be independently appraised a minimum of once every three years.

**The FTSE NAREIT All REITs Index** is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified Real Estate Investment Trusts (REITs) that are listed on the New York Stock Exchange, the American Stock Exchange, or the NASDAQ National Market List.

**The Dow Jones U.S. Select Real Estate Securities Index** is a float-adjusted market capitalization-weighted index of publicly traded real estate securities such as real estate investment trusts (REITs) and real estate operating companies (REOCs).

**The Cambridge PE Index** is a representation of returns for over 70% of the total dollars raised by U.S. leveraged buyout, subordinated debt and special situation managers from 1986 to December 2007. Returns are calculated based on the pooled time weighted return and are net of all fees. These pooled means represent the end to end rate of return calculated on the aggregate of all cash flows and market values reported by the general partners of the underlying constituents in the quarterly and annual reports.

**The University of Michigan Consumer Sentiment Index** is a consumer confidence index published monthly by the University of Michigan and Thomson Reuters. The index is normalized to have a value of 100 in December 1964.

**VIX** - The CBOE Volatility Index (VIX) is based on the prices of eight S&P 500 index put and call options.

**Gold** – represented by the dollar spot price of one troy ounce

**WTI Crude** – West Texas Intermediate is a grade of crude oil used as a benchmark in oil pricing.

**The Affordability Index** measures of a population's ability to afford to purchase a particular item, such as a house, indexed to the population's income

**The Homeownership %** is computed by dividing the number of owner-occupied housing units by the number of occupied housing units or households.

**HFRI Emerging Markets: Asia ex-Japan, Global Index, Latin America Index, Russia/Eastern Europe Index:** The constituents of the HFRI Emerging Markets Indices are selected according to their Regional Investment Focus only. There is no Investment Strategy criteria for inclusion in these indices. Funds classified as Emerging Markets have a regional investment focus in one of the following geographic areas: Asia ex-Japan, Russia/Eastern Europe, Latin America, Africa or the Middle East. **HFRI EH: Energy/Basic Materials** strategies which employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintains a level of expertise which exceeds that of a market generalist. **HFRI EH: Equity Market Neutral** strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. **HFRI EH: Quantitative Directional** strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. **HFRI EH: Short-Biased** strategies employ analytical techniques in which the investment thesis is predicated on assessment of the valuation characteristics on the underlying companies with the goal of identifying overvalued companies. **HFRI EH: Technology/Healthcare** strategies employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintain a level of expertise which exceeds that of a market generalist in identifying opportunities in companies engaged in all development, production and application of technology, biotechnology and as related to production of pharmaceuticals and healthcare industry. **HFRI ED: Distressed Restructuring** strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. **HFRI ED: Merger Arbitrage** strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction. **HFRI ED: Private Issue/Regulation D** strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are primarily private and illiquid in nature. **HFRI Macro: Systematic Diversified** strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. **HFRI RV: Fixed Income - Asset Backed** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed income instrument backed physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. **HFRI RV: Fixed Income - Convertible Arbitrage** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument. **HFRI RV: Fixed Income - Corporate** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed income instrument. **HFRI RV: Multi-Strategies** employ an investment thesis is predicated on realization of a spread between related yield instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. **HFRI RV: Yield Alternatives Index** strategies employ an investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread contains a derivative, equity, real estate, MLP or combination of these or other instruments. Strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager.

**The Consumer Price Index (CPI)** is an inflationary indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation. The CPI is published monthly. Unless otherwise noted, the CPI figure is as of the date this report is created.

**The Credit Suisse Leveraged Loan Index** is a market value-weighted index designed to represent the investable universe of the U.S. dollar-denominated leveraged loan market.

**The Dow Jones-UBS Commodity Index** measures the performance of the commodities market. It consists of exchange-traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity.



**RESOLUTION TO APPROVE  
HARTLAND'S RECOMMENDATION TO REBALANCE THE  
NON-ENDOWMENT LONG-TERM INVESTMENT POOL**

**WHEREAS**, the Investment Subcommittee of the Board of Trustees of Youngstown State University is responsible for identification of asset classes, strategic asset allocation, acceptable asset ranges above and below the strategic asset allocation, and selecting investment managers, pursuant to University policy 3356-03-10; and

**WHEREAS**, the Investment Subcommittee has consulted with the University's investment advisors and recommends rebalancing the Non-Endowment Long-Term Investment Pool.

**NOW, THEREFORE, BE IT RESOLVED**, that the Investment Subcommittee of the Board of Trustees of Youngstown State University does hereby approve the rebalance, as shown on page 11 of the June 7, 2017, Investment Subcommittee Agenda item C.1.a.

**Board of Trustees Meeting  
June 14, 2017  
YR 2017-**



## REBALANCE RECOMMENDATIONS

	Market Value as of 5/1/2017		Change	New Allocation		Policy Target Policy Range Difference		
	\$	%		\$	%			
<b>Total Operating &amp; Short Term</b>	<b>\$21,146,146</b>	<b>100.0%</b>	<b>\$0</b>	<b>\$21,146,146</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>Operating Assets</b>	<b>\$20,074,209</b>	<b>94.9%</b>	<b>\$0</b>	<b>\$20,074,209</b>	<b>94.9%</b>		<b>60-100%</b>	
JPMorgan 100% U.S. Treas. MM Instl	\$15,037,534	71.1%		\$15,037,534	71.1%			
JPMorgan Sweep Account*	\$0	0.0%		\$0	0.0%			
Star Plus Account*	\$5,036,675	23.8%		\$5,036,675	23.8%			
<b>Short-Term Assets</b>	<b>\$1,071,937</b>	<b>5.1%</b>	<b>\$0</b>	<b>\$1,071,937</b>	<b>5.1%</b>		<b>0-40%</b>	
Vanguard Short-Term Federal Adm	\$1,071,937	5.1%		\$1,071,937	5.1%			
<b>Total Long Term Reserves Pool</b>	<b>\$57,028,858</b>	<b>100.0%</b>	<b>\$0</b>	<b>\$57,028,858</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>Domestic Equity</b>	<b>\$16,914,496</b>	<b>29.7%</b>	<b>-\$500,000</b>	<b>\$16,414,496</b>	<b>28.8%</b>	<b>27.0%</b>	<b>20-35%</b>	<b>1.8%</b>
<b>Large Cap</b>	<b>\$11,158,885</b>	<b>19.6%</b>	<b>\$425,000</b>	<b>\$11,583,885</b>	<b>20.3%</b>			
TRP Instl US Structured Research	\$5,455,537	9.6%	-\$750,000	\$4,705,537	8.3%			
Vanguard 500 Index Adm	\$5,703,348	10.0%	\$1,175,000	\$6,878,348	12.1%			
<b>Small/Mid Cap</b>	<b>\$5,755,611</b>	<b>10.1%</b>	<b>-\$925,000</b>	<b>\$4,830,611</b>	<b>8.5%</b>			
Vanguard Mid Cap Index Adm	\$2,888,912	5.1%	-\$500,000	\$2,388,912	4.2%			
Loomis Sayles Small Growth Instl	\$1,488,209	2.6%	-\$225,000	\$1,263,209	2.2%			
Victory Integrity Small Cap Value Y	\$1,378,490	2.4%	-\$200,000	\$1,178,490	2.1%			
<b>International Equity</b>	<b>\$4,764,892</b>	<b>8.4%</b>	<b>\$0</b>	<b>\$4,764,892</b>	<b>8.4%</b>	<b>8.0%</b>	<b>0-15%</b>	<b>0.4%</b>
William Blair International Growth I	\$2,307,455	4.0%		\$2,307,455	4.0%			
Dodge & Cox International Stock	\$2,457,437	4.3%		\$2,457,437	4.3%			
<b>Total Equity</b>	<b>\$21,679,388</b>	<b>38.0%</b>	<b>-\$500,000</b>	<b>\$21,179,388</b>	<b>37.1%</b>	<b>35.0%</b>	<b>25-45%</b>	<b>2.1%</b>
<b>Alternatives</b>	<b>\$8,808,660</b>	<b>15.4%</b>	<b>\$0</b>	<b>\$8,808,660</b>	<b>15.4%</b>	<b>15.0%</b>	<b>0-20%</b>	<b>0.4%</b>
Jhancock Global Absolute Return I	\$2,033,697	3.6%		\$2,033,697	3.6%			
Wells Fargo Adv Absolute Return I	\$2,485,277	4.4%		\$2,485,277	4.4%			
Diamond Hill Long-Short I	\$2,623,705	4.6%		\$2,623,705	4.6%			
Voya Global Real Estate I	\$1,665,981	2.9%	-\$1,665,981	\$0	0.0%			
Brookfield Global Real Estate	\$0	0.0%	\$1,665,981	\$1,665,981	2.9%			
<b>Fixed Income</b>	<b>\$26,540,811</b>	<b>46.5%</b>	<b>\$500,000</b>	<b>\$27,040,811</b>	<b>47.4%</b>	<b>50.0%</b>		
<b>Short Term Fixed Income</b>	<b>\$15,871,249</b>	<b>27.8%</b>	<b>\$500,000</b>	<b>\$16,371,249</b>	<b>28.7%</b>	<b>30.0%</b>	<b>25-45%</b>	<b>-1.3%</b>
YSU Short Term Bond	\$12,791,658	22.4%		\$12,791,658	22.4%			
DFA Five-Year Global	\$1,820,425	3.2%		\$1,820,425	3.2%			
Vanguard Short Term Bond Index	\$1,259,166	2.2%	\$500,000	\$1,759,166	3.1%			
<b>Intermediate Fixed Income</b>	<b>\$10,669,562</b>	<b>18.7%</b>	<b>\$0</b>	<b>\$10,669,562</b>	<b>18.7%</b>	<b>20.0%</b>	<b>10-30%</b>	<b>-1.3%</b>
JPMorgan Core Bond Ultra R6	\$4,114,798	7.2%		\$4,114,798	7.2%			
YSU Intermediate Term Bond	\$3,959,892	6.9%		\$3,959,892	6.9%			
Prudential High Yield	\$2,594,871	4.6%		\$2,594,871	4.6%			
<b>Total University Assets</b>	<b>\$78,175,004</b>			<b>\$78,175,004</b>				

- 1) Replace Voya REIT with Brookfield REIT
- 2) Trim Equities by \$500,000 (allocate to Short-Term Fixed)
- 3) Reduce Small/Mid Cap exposure and actively managed Large Cap