

BOARD OF TRUSTEES
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Tuesday, September 16, 2014 2:00 p.m. or immediately following previous meeting Tod Hall Board Meeting Room

AGENDA

- A. Disposition of Minutes for Meeting Held May 29, 2014
- B. Old Business
- C. Subcommittee Item
 - 1. Discussion Item
 - a. Hartland & Co. September 16, 2014 Assets Update Mike Shebak and Sarah Parker will report.

Tab 1

- D. New Business
- E. Adjournment

AGENDA TOPIC: Hartland & Co. September 16, 2014 Assets Update

CONTACT(S): Mike Shebak and Sarah Parker from Hartland and Co.

BACKGROUND: Investment Review of YSU Non-Endowment & Endowed Funds

SUMMARY AND ANALYSIS:

- I. Market Update
 - O U.S. stocks returned +5.2% in the quarter, U.S. bonds returned +2.0%
- II. Non-Endowment Performance, Market Values, and Asset Allocation as of 6/30/2014
 - Operating & Short-Term Pool: \$12.457 million
 - Asset Allocation: 92% cash/8% fixed income
 - 2Q14 return = 0.0%; 1-year return = 0.1%
 - o Long-Term Pool: \$51.886 million
 - Asset Allocation: 37% equities/63% fixed income
 - 2Q14 return = 2.1%; 1-year return = 8.9%
 - o Total: \$64.343 million
 - Asset Allocation: 18% cash/30% equities/52% fixed income
 - 2Q14 return = 1.5%; 1-year return = 4.0%
- III. Endowment Performance and Market Values as of 6/30/2014
 - YSU Endowment: \$9.144 million
 - 2Q14 return = 3.7%; 1-year return = 13.9%
 - o Kilcawley Center: \$95K
 - 2Q14 return = 4.7%; 1-year return = 20.2%
 - o Alumni License Plate: \$406K
 - 2Q14 return = 3.4%; 1-year return = 12.1%

RESOLUTION: N/A - DISCUSSION ITEM ONLY

REVIEWED AS TO FORM AND CONTENT:

James P. Tressel, President

HARTLAND

independence expertise results September 16, 2014

UNIVERSITY NON-ENDOWMENT & ENDOWMENT ASSETS YOUNGSTOWN STATE

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CONTENTS

- I. Market Update
- II. 2Q14 Performance & Asset Allocation Review
- III. Fee Review



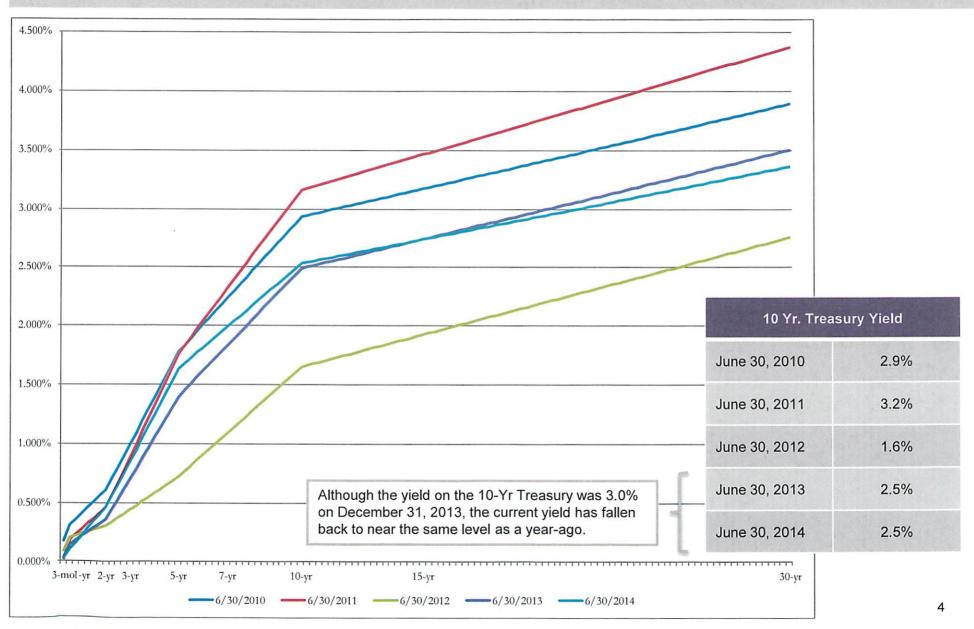
HISTORICAL ASSET CLASS PERFORMANCE

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | <u>2013</u> | Q1 2014 | Q2 2014 | YTD |
|-----------------|----------------|-----------------|-------------|-----------------|------------------|-----------------|-------------|------------------|-------------|-----------------|---------------|---------------|----------------|
| Em Mkt 56.3% | REITs 30.4% | Em Mkt 34.5% | REITs 34.3% | Em Mkt 39.8% | Glb Bond 9.4% | Em Mkt 79.0% | REITs 27.6% | US Bonds 7.8% | REITs 20.1% | Sm/Mid 36.8% | REITs 8.6% | REITs 7.0% | REITs 16.1% |
| Sm/Mid | Em Mkt | Dev Intl | Em Mkt | Dev Intl | US Bonds | Hi Yld | Sm/Mid | REITs | Em Mkt | Large Cap | Glb Bond | Em Mkt | Large Cap |
| 45.5% | 26.0% | 14.0% | 32.6% | 11.6% | 5.2% | 57.5% | 26.7% | 7.3% | 18.6% | 32.4% | 3.1% | 6.7% | 7.1% |
| Dev Intl | Dev Intl | REITs | Dev Intl | Glb Bond | Cash | Sm/Mid | Em Mkt | Glb Bond | Dev Intl | Dev Intl | Hi Yld | Large Cap | Em Mkt |
| 39.2% | 20.7% | 8.3% | 26.9% | 10.9% | 2.1% | 34.4% | 19.2% | 5.2% | 17.9% | 23.3% | 3.0% | 5.2% | 6.3% |
| REITs | Sm/Mid | Sm/Mid | Sm/Mid | Hdg Fnds | Hdg Fnds | Dev Intl | Hi Yld | Hi Yld | Sm/Mid | Hdg Fnds | Sm/Mid | Dev Intl | Glb Bond |
| 38.5% | 18.3% | 8.1% | 16.2% | 9.7% | -20.8% | 32.5% | 15.2% | 4.4% | 17.9% | 9.0% | 2.3% | 4.3% | 6.0% |
| Large Cap | Glb Bond | Hdg Fnds | Large Cap | US Bonds | Hi Yld | REITs 27.5% | Large Cap | Large Cap | Large Cap | Hi Yld | US Bonds | Sm/Mid | Sm/Mid |
| 28.7% | 12.1% | 7.5% | 15.8% | 7.0% | -26.4% | | 15.1% | 2.1% | 16.0% | 7.4% | 1.8% | 3.6% | 6.0% |
| Hi Yld | Large Cap | Large Cap | Hi Yld | Large Cap | Sm/Mid | Large Cap | Hdg Fnds | Cash | Hi Yld | REITs | Large Cap | Glb Bond | Hi Yld |
| 28.2% | 10.9% | 4.9% | 11.8% | 5.5% | -36.8% | 26.5% | 10.6% | 0.1% | 15.6% | 3.2% | 1.8% | 2.8% | 5.6% |
| Glb Bond | Hi Yld | Cash | Hdg Fnds | Cash | Large Cap | Hdg Fnds | Dev Intl | Sm/Mid | Hdg Fnds | Cash | Dev Intl | Hi Yld | Dev Intl |
| 18.2% | 10.9% | 3.1% | 10.2% | 5.0% | -37.0% | 11.5% | 8.2% | -2.5% | 5.4% | 0.1% | 0.8% | 2.6% | 5.1% |
| Hdg Fnds | Hdg Fnds | Hi Yld | Glb Bond | Hi Yld | REITs -37.3% | US Bonds | US Bonds | Hdg Fnds | US Bonds | US Bonds | Hdg Fnds | US Bonds | US Bonds |
| 11.4% | 7.2% | 2.7% | 7.3% | 2.2% | | 5.9% | 6.6% | -4.9% | 4.2% | -2.0% | 0.1% | 2.0% | 3.9% |
| US Bonds | US Bonds | US Bonds | Cash | Sm/Mid | Dev Intl | Glb Bond | Glb Bond | Dev Intl | Glb Bond | Em Mkt | Cash | Hdg Fnds | Hdg Fnds |
| 4.1% | 4.3% | 2.4% | 4.9% | 1.4% | -43.1% | 4.4% | 6.1% | -11.7% | 1.8% | -2.3% | 0.0% | 1.4% | 1.8% |
| Cash | Cash | Glb Bond | US Bonds | REITs | Em Mkt | Cash | Cash | Em Mkt | Cash | Glb Bond | Em Mkt | Cash | Cash |
| 1.2% | 1.3% | -8.8% | 4.3% | -17.8% | -53.2% | 0.2% | 0.1% | -18.2% | 0.1% | -4.9% | -0.4% | 0.0% | 0.0% |

Past performance is no 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; Hdg Fnds – HFRI FOF: Diversified Index; Cash – Merrill Lynch 91-day Tbill . Data as of 6/30/2014 Source: Zephyr Associates.

ECO.

U.S. Treasury Yield Curve





2Q14 PERFORMANCE & ASSET ALLOCATION REVIEW



NON-ENDOWMENT & ENDOWMENT STRUCTURE

| Fund | Custodian | Advisor | Manager | Purpose | Investment Objective | Results |
|---------------------------------|------------|----------|--|--|--|-----------------------------------|
| Non-Endowment Assets | | | | | | |
| Operating & Short- Term Pool | PNC | Hartland | Various (Mutual Funds/ Separate Accounts) | Support the University's working capital, liquidity purposes, and other short-term needs | ORC Compliance; meet short-term needs | Cash & Short-Term Fixed Income |
| Long-Term Pool | PNC | Hartland | Various (Mutual Funds/ Separate Accounts) | Buffer to University's near-term financial needs | ORC Compliance; modest capital appreciation | Fixed Income and Equities |
| Endowment Assets | | | | | | |
| YSU Endowment | Huntington | Hartland | Huntington | General scholarships | Long-term capital appreciation | Primarily Equities |
| Kilcawley Center | Farmers | Hartland | Farmers | Support the costs of the student union center renovation | Long-term capital appreciation | Primarily Equities |
| Alumni License Plate | Farmers | Hartland | Farmers | General scholarships | Long-term capital appreciation | Primarily Equities |



Hartland assumed an advisory relationship with the Endowed Funds on November 1, 2013, when assets were transferred from the Foundation to YSU.



EXECUTIVE SUMMARY (AS OF 6/30/14)

| Non-Endowment Assets | Market Value | % | 2Q2014 | 1 Yr | 2 Yrs | 3 Yrs | Since Inception**** |
|---|---------------------|--|--------|------|-------|-------|------------------------|
| Non-Endowment: Operating &Short-Term Pool | \$12.457 Million | 92% cash/ 8% short-term fixed income | 0.0% | 0.1% | 0.0% | 0.1% | 0.1% |
| | | Benchmark* | 0.0% | 0.1% | 0.1% | 0.1% | 0.1% |
| Non-Endowment: Long- Term Pool | \$51.886 Million | 37% equities/ 63% fixed income | 2.1% | 8.9% | 7.6% | 5.8% | 6.1% |
| | | Benchmark** | 2.1% | 7.7% | 6.4% | 5.1% | 5.1% |
| Total Non- Endowment Assets | \$64.343 Million | 18% cash/30% equities/52% fixed income | 1.5% | 6.0% | 4.9% | 3.8% | 4.1% |
| | | Benchmark*** | 1.1% | 4.0% | 3.3% | 2.6% | 3.3% |

| Endowment Assets | Market Value | 2Q2014 | 1-Yr |
|----------------------|-----------------------|--------|-------|
| YSU Endowment | \$9.144 Million | 3.7% | 13.9% |
| 60 S&P 500 Inde | ex/40% Barclays Index | 4.0% | 16.2% |
| Kilcawley Center | \$95K | 4.7% | 20.2% |
| 60 S&P 500 Inde | ex/40% Barclays Index | 4.0% | 16.2% |
| Alumni License Plate | \$406K | 3.4% | 12.1% |
| 60 S&P 500 Inde | ex/40% Barclays Index | 4.0% | 16.2% |

1-year net-investment change: \$4.3 Million

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

^{** 27%} Russell 3000 / 8% MSCI EAFE Gross / 25% Barclays Int Govt/Credit / 40% Barclays 1-3 Yr. Govt

^{*** 45%} BofA Merrill Lynch 91-Day T-Bill/ 22% Barclays 1-3 Yr Govt/ 15% Russell 3000 / 4% MSCI EAFE Gross / 14% Barclays Int Govt/Credit

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



NON-ENDOWMENT ASSETS

| | Asset Class | Market Value 3/31/14 (\$) | Market Value 6/30/14 (\$) | % of Total Plan |
|-----------------------------------|----------------------------|------------------------------|------------------------------|-----------------|
| Total University Assets | | 76,543,216 | 64,343,362 | 100.0 |
| Total Operating & Short Term | | 25,744,057 | 12,457,136 | 19.4 |
| JPMorgan 100% U.S. Tr Sec MM Inst | Cash | 15,825,665 | 3,825,665 | 5.9 |
| JPMorgan Sweep Account | Cash | 3,880,432 | 2,586,357 | 4.0 |
| Star Plus | Cash | 5,002,217 | 5,003,888 | 7.8 |
| Vanguard Short-Term Federal Adm | US Fixed Income Short Term | 1,035,742 | 1,041,226 | 1.6 |
| Total Long Term/ Reserves Pool | | 50,799,159 | 51,886,226 | 80.6 |
| Total Domestic Equity | | 14,028,284 | 14,636,695 | 22.7 |
| TRP InstI US Structured Rsch | US Stock Large Cap Core | 4,599,024 | 4,844,737 | 7.5 |
| Vanguard 500 Index Signal | US Stock Large Cap Core | 4,631,081 | 4,872,746 | 7.6 |
| Vanguard Mid Cap Index Signal | US Stock Mid Cap Core | 2,379,703 | 2,486,969 | 3.9 |
| Loomis Sayles Sm Growth Instl | US Stock Small Cap Growth | 1,260,155 | 1,223,892 | 1.9 |
| Munder Veracity Sm-Cap Value Y | US Stock Small Cap Value | 1,158,320 | 1,208,351 | 1.9 |
| Total International Equity | | 4,536,497 | 4,739,830 | 7.4 |
| William Blair Int'l Gr I | International | 2,190,371 | 2,276,477 | 3.5 |
| Dodge & Cox Internat'l Stock | International | 2,346,126 | 2,463,353 | 3.8 |
| Total Fixed Income | | 32,234,379 | 32,509,701 | 50.5 |
| JPMorgan Core Bond Ultra | US Fixed Income Core | 5,905,162 | 6,007,541 | 9.3 |
| YSU Intermediate Term Bond | US Fixed Income Core | 5,431,320 | 5,500,603 | 8.5 |
| PIMCO Low Duration InstI | US Fixed Income Short Term | 3,316,330 | 3,343,742 | 5.2 |
| YSU Short Term Bond | US Fixed Income Short Term | 14,214,536 | 14,262,274 | 22.2 |
| Vanguard Short-Term Bond Instl | US Fixed Income Short Term | 1,856,258 | 1,867,167 | 2.9 |
| DFA Five-Yr Global Fxd-Inc I | Global Fixed Income | 1,510,772 | 1,528,375 | 2.4 |



NON-ENDOWMENT ASSETS

| | Ending June 30, 2014 | | | | | Calendar Years | | | | Inception | | | |
|--|----------------------|------------|-------------|--------------|--------------|----------------|--------------|---------------|-------------|-----------|-------------|---------------|--------|
| | 2014 Q2 (%) | YTD (%) | 1 Yr (%) | 2 Yrs (%) | 3 Yrs (%) | 5 Yrs (%) | 7 Yrs (%) | 10 Yrs (%) | 2013 (%) | 2012 (%) | 2011 (%) | Return (%) | Since |
| Total University Assets | 1.5 | 2.2 | 6.0 | 4.9 | 3.8 | 4.3 | 4.3 | 4.2 | 5.6 | 4.1 | 1.2 | 4.1 | Mar-04 |
| YSU Policy Benchmark | 1.1 | 1.7 | 4.0 | 3.3 | 2.6 | 3.0 | 3.2 | 3.5 | 3.6 | 2.8 | 1.1 | 3.3 | Mar-04 |
| Total Operating & Short Term | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | - | - | | 0.0 | 0.0 | 0.2 | 0.1 | Jun-10 |
| YSU Total Operating & Short Term Benchmark | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 1.6 | 0.1 | 0.1 | 0.2 | 0.1 | Jun-10 |
| Total Long Term/ Reserves Pool | 2.1 | 3.3 | 8.9 | 7.6 | 5.8 | - | - | | 8.7 | 6.4 | 1.9 | 6.1 | Jun-10 |
| YSU Total Long Term/ Reserves Fund Benchmark | 2.1 | 3.0 | 7.7 | 6.4 | 5.1 | 5.4 | 5.1 | 4.7 | 7.1 | 5.5 | 1.9 | 5.1 | Jun-10 |
| Total Domestic Equity | 4.3 | 6.2 | 24.7 | 23.6 | 16.0 | - | | 1 | 35.2 | 15.3 | 0.8 | 20.1 | Jun-10 |
| Russell 3000 | 4.9 | 6.9 | 25.2 | 23.3 | 16.5 | 19.3 | 6.5 | 8.2 | 33.6 | 16.4 | 1.0 | 20.2 | Jun-10 |
| Total International Equity | 4.5 | 5.6 | 25.1 | 23.0 | 7.3 | | - | | 23.4 | 20.1 | -18.9 | 8.6 | Sep-10 |
| MSCI EAFE Gross | 4.3 | 5.1 | 24.1 | 21.6 | 8.6 | 12.3 | 1.5 | 7.4 | 23.3 | 17.9 | -11.7 | 10.2 | Sep-10 |
| MSCI ACWI ex USA Gross | 5.2 | 5.9 | 22.3 | 18.1 | 6.2 | 11.6 | 1.7 | 8.2 | 15.8 | 17.4 | -13.3 | 8.1 | Sep-10 |
| Total Fixed Income | 8.0 | 1.6 | 2.3 | 1.4 | 2.2 | - | - | | -0.1 | 3.2 | 3.8 | 2.5 | Jun-10 |
| YSU Fixed Income Benchmark | 0.7 | 1.3 | 1.9 | 1.3 | 1.8 | 2.7 | 3.6 | 3.5 | 0.1 | 2.4 | 3.2 | 2.0 | Jun-10 |

⁻ YSU Policy Benchmark = 45% BofA Merrill Lynch 91-Day T-Bill / 22% Barclays 1-3 Yr. Govt. / 14% Barclays Int Govt/Credit / 15% Russell 3000 / 4% MSCI EAFE Gross

⁻ YSU Total Operating & Short Term Benchmark = BofA Merrill Lynch 91-Day T-Bill 95% / Barclays 1-3 Yr. Govt. 5%

⁻ YSU Total Long Term/ Reserves Fund Benchmark = 27% Russell 3000 / 8% MSCI EAFE Gross / 25% Barclays Int Govt/Credit / 40% Barclays 1-3 Yr. Govt.

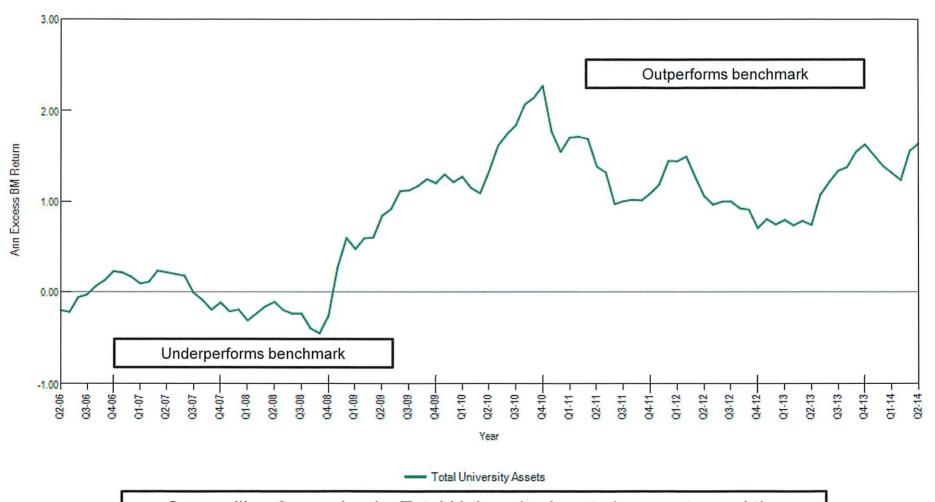
⁻ Vanguard Mid Cap Index Benchmark = 100% CRSP US Mid Cap TR USD

⁻ YSU Fixed Income Benchmark = BofA Merrill Lynch US Corp & Gov 1-3 Yrs 60% / Barclays Int Govt/Credit 40%



NON-ENDOWMENT ASSETS: CONSISTENCY OF RETURNS

Total University Assets vs. YSU Policy Benchmark



On a rolling 2-year basis, Total University Assets have outpaced the benchmark 76% of the time since March 2004.

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FEE REVIEW



NON-ENDOWMENT ASSETS: FEE REVIEW

Non-Endowment Assets (as of 6/30/14)

| Operating & Short-Term Pool | Market Value | % of Portfolio | Estimated Annual Fee (\$) | Expense Ratio | Morningstar Category Average Fee (%) | Morningstar Institutional Average Fee (%) |
|---|--------------|----------------|------------------------------|---------------|---|---|
| JPMorgan 100% U.S. Tr Sec MM Inst | \$3,825,665 | 30.7% | \$2,295 | 0.06% | n/a | n/a |
| JPMorgan Sweep Account | \$2,586,357 | 20.8% | \$0 | 0.00% | n/a | n/a |
| Vanguard Short-Term Federal Adm | \$1,041,226 | 8.4% | \$1,041 | 0.10% | 0.85% | 0.53% |
| Star Plus | \$5,003,888 | 40.2% | \$0 | 0.00% | n/a | n/a |
| Total Operating & ST Investment Management Fee | \$12,457,136 | 100% | \$3,336 | 0.01% | | |
| Long-Term Pool | | | | | | |
| Total Domestic Equity | \$14,636,695 | 28.2% | \$57,929 | | | |
| TRP Inst US Structured Rsch | \$4,844,737 | 9.3% | \$26,646 | 0.55% | 1.09% | 0.82% |
| Vanguard 500 Index Signal | \$4,872,746 | 9.4% | \$2,436 | 0.05% | 1.09% | 0.82% |
| Vanguard Mid Cap Index Signal | \$2,486,969 | 4.8% | \$2,238 | 0.09% | 1.23% | 0.89% |
| Loomis Sayles Sm Growth Instl | \$1,223,892 | 2.4% | \$11,505 | 0.94% | 1.42% | 1.10% |
| Munder Veracity Sm-Cap Value Y | \$1,208,351 | 2.3% | \$15,104 | 1.25% | 1.38% | 1.06% |
| Total International Equity | \$4,739,830 | 9.1% | \$41,034 | | | |
| William Blair Int'l Gr I | \$2,276,477 | 4.4% | \$25,269 | 1.11% | 1.43% | 1.06% |
| Dodge & Cox Internat'l Stock | \$2,463,353 | 4.7% | \$15,765 | 0.64% | 1.24% | 0.95% |
| Total Fixed Income | \$32,509,702 | 62.7% | \$74,641 | | | |
| JPMorgan Core Bond Ultra | \$6,007,541 | 11.6% | \$24,030 | 0.40% | 0.89% | 0.57% |
| YSU Intermediate Term Bond | \$5,500,603 | 10.6% | \$8,251 | 0.15% | 0.89% | 0.57% |
| PIMCO Low Duration Inst | \$3,343,742 | 6.4% | \$15,381 | 0.46% | 0.85% | 0.50% |
| YSU Short Term Bond | \$14,262,274 | 27.5% | \$21,393 | 0.15% | 0.85% | 0.50% |
| Vanguard Short-Term Bond Inst | \$1,867,167 | 3.6% | \$1,307 | 0.07% | 0.85% | 0.50% |
| DFA Five-Yr Global Fxd-Inc I | \$1,528,375 | 2.9% | \$4,279 | 0.28% | 1.08% | 0.75% |
| Total LT/ Reserves Pool Investment Management Fee | \$51,886,227 | 100% | \$173,604 | 0.27% | | |
| Consulting Fee | | | \$49,500 | 0.08% | | |
| Trustee Fee (PNC) | | | \$19,303 | 0.03% | | |
| Total Fees | \$64,343,363 | | \$245,743 | 0.38% | | |



Total Fees

ENDOWMENT ASSETS: FEE REVIEW

Endowment Assets (as of 6/30/14) Estimated Annual Market Value Fee (\$) Expense Ratio Manager YSU Endowment \$9,114,202 \$45,571 0.50% Huntington Kilcawley Center \$95,288 \$753 0.79% Farmers Alumni License Plate \$406,011 Farmers \$3,207 0.79%

\$9,615,501

\$49,531

0.52%

APPENDIX

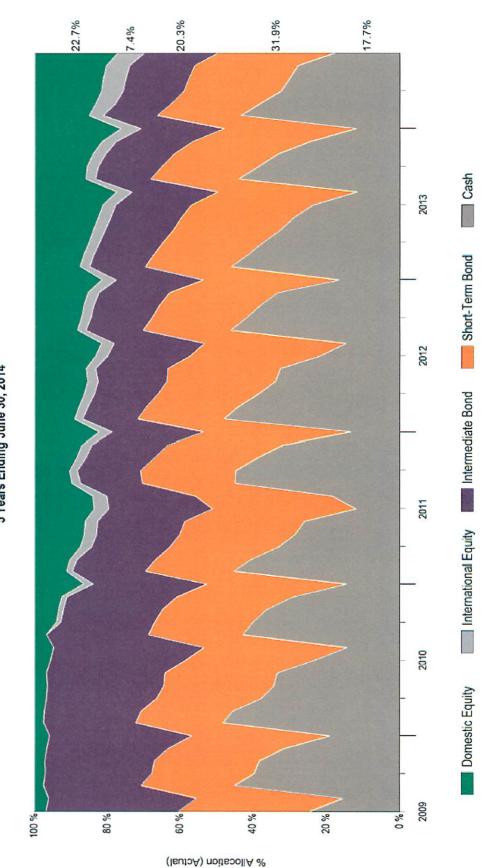
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NON-ENDOWMENT ASSETS: HISTORICAL ASSET ALLOCATION





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DEFINITIONS AND DISCLOSURES



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 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 growth stocks, respectively. The Russell Midcap Value Index, Russell Midcap Under and Russell 2000 Growth Index are indices that measure the performance of mid-capitalization stocks and mid-capitalization stocks and mid-capitalization growth stocks, respectively. The Russell 2500 Index and Ru

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 2.501st rank.

The MSCI EAFE (Europe, Australasia, Far East) Index is designed to measure global emerging 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 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 stocks of Japan. The MSCI Pacific ex. 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 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 (FNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The BC U.S. Municipal Bond Index covers the U.S. dollardenominated, long-term tax-exempt bond market with four main sectors: state and local general obligation bonds, revenue 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 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-currencydenominated debt instruments of the emerging markets. The BC U.S. Securitized Bond Index is a composite of asset-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

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; 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 lack-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 sec 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.