

**BOARD OF TRUSTEES  
INVESTMENT SUBCOMMITTEE**

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**Tuesday, February 24, 2015  
1:00 p.m.**

**Tod Hall  
Board Meeting Room**

**AGENDA**

- A. Disposition of Minutes for Meeting Held December 9, 2014**
- B. Old Business**
- C. Subcommittee Items**
  - 1. Discussion Item**
    - a. Hartland February 24, 2015 Assets Update** **Tab 1**  
Mike Shebak and Sarah Parker will report.
  - 2. Action Items**
    - a. Resolution to Approve Revisions to the Asset Allocation Guidelines** **Tab 2**  
Mike Shebak and Sarah Parker will report.
    - b. Resolution to Approve Hartland's Recommendation to Rebalance the Non-Endowment Long-Term Investment Pool** **Tab 3**  
Mike Shebak and Sarah Parker will report.
- D. New Business**
- E. Adjournment**

**AGENDA TOPIC:** Hartland February 24, 2015 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

- U.S. stocks returned 4.9% in the quarter (13.7% in 2014), U.S. bonds returned 1.8% (6.0% in 2014)

II. 4Q14 Performance & Asset Allocation Review

**Non-Endowment Performance, Market Values, and Asset Allocation as of 12/31/2014**

- Operating & Short-Term Pool: \$10.480 million
  - Asset Allocation: 90% cash/10% fixed income
  - 4Q14 return = 0.0%; 1-year return = 0.1%
- Long-Term Pool: \$52.492 million
  - Asset Allocation: 38% equities/62% fixed income
  - 4Q14 return = 1.7%; 1-year return = 4.5%
- Total: \$62.971 million
  - Asset Allocation: 15% cash/31% equities/54% fixed income
  - 4Q14 return = 1.1%; 1-year return = 2.9%

**Endowment Performance and Market Values as of 12/31/2014**

- YSU Endowment: \$9.120 million
  - 4Q14 return = 4.1%; 1-year return = 10.5%
- Kilcawley Center: \$96K
  - 4Q14 return = -0.5%; 1-year return = 8.6%
- Alumni License Plate: \$414K
  - 4Q14 return = 3.7%; 1-year return = 10.6%

III. Long-Term Pool Allocation and Alternatives Discussion

- Hartland will lead a discussion on the overall asset allocation of the Long-Term Pool and educate the Committee on Alternative Investments

IV. Recommended Non-Endowment Asset Allocation Guideline Changes

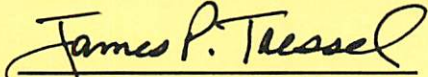
- Hartland recommends updating the Non-Endowment Asset Allocation Guidelines as follows:
  - Addition of Alternative Investment guidelines and benchmarks
  - Revisions to Long-Term Pool target allocations and ranges
    - Target of 10% to Alternative Investments
  - Removal of YSU Foundation references

V. Recommended Long-Term Pool Rebalance

- Hartland recommends the addition of three new investment managers: Wells Fargo Absolute Return I, Diamond Hill Equity Long/Short I, and Voya Global Real Estate I

**RESOLUTION: N/A – DISCUSSION ITEM ONLY**

**REVIEWED AS TO FORM AND CONTENT:**

A handwritten signature in cursive script that reads "James P. Tressel". The signature is written in black ink and is positioned above a horizontal line.

James P. Tressel, President

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February 24, 2015

# YOUNGSTOWN STATE UNIVERSITY NON-ENDOWMENT & ENDOWMENT ASSETS

## CONTENTS

- I. Market Update
- II. 4Q14 Performance & Asset Allocation Review
- III. Long-Term Pool Allocation and Alternative Investments Discussion
- IV. Recommended Non-Endowment Asset Allocation Guideline Changes (Action)
- V. Recommended Long-Term Pool Rebalance (Action)

## PERIODIC CHART: ASSET CLASSES

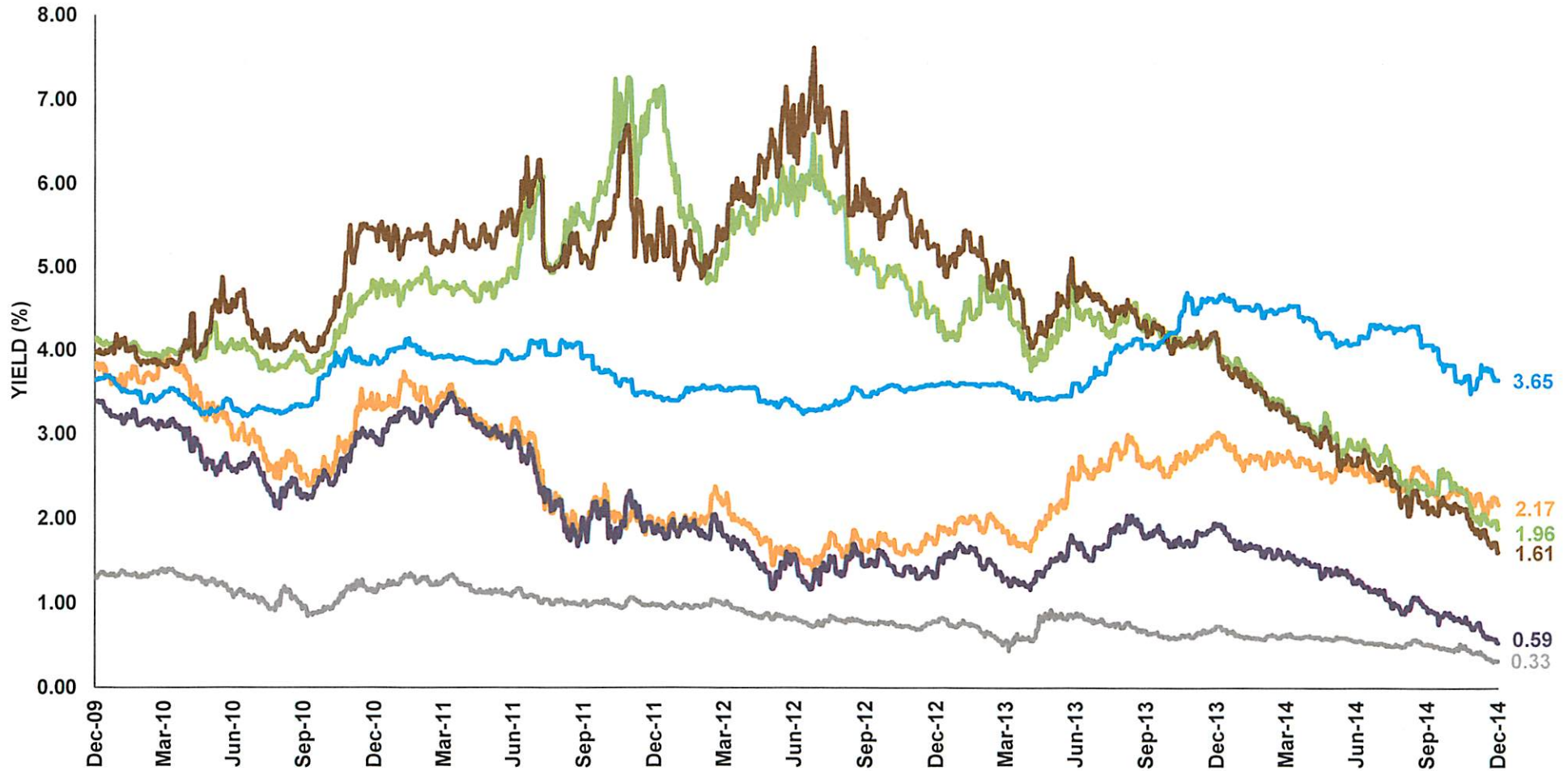
| 2004               | 2005              | 2006               | 2007              | 2008                | 2009               | 2010               | 2011               | 2012               | 2013               | Q1 2014           | Q2 2014           | Q3 2014           | Q4 2014           | 2014               |
|--------------------|-------------------|--------------------|-------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| REITs<br>30.4%     | Em Mkt<br>34.5%   | REITs<br>34.3%     | Em Mkt<br>39.8%   | Glb Bond<br>9.4%    | Em Mkt<br>79.0%    | REITs<br>27.6%     | US Bonds<br>7.8%   | REITs<br>20.1%     | Sm/Mid<br>36.8%    | REITs<br>8.6%     | REITs<br>7.0%     | Large Cap<br>1.1% | REITs<br>12.4%    | REITs<br>27.2%     |
| Em Mkt<br>26.0%    | Dev Intl<br>14.0% | Em Mkt<br>32.6%    | Dev Intl<br>11.6% | US Bonds<br>5.2%    | Hi Yld<br>57.5%    | Sm/Mid<br>26.7%    | REITs<br>7.3%      | Em Mkt<br>18.6%    | Large Cap<br>32.4% | Glb Bond<br>3.1%  | Em Mkt<br>6.7%    | Hdg Fnds<br>0.4%  | Sm/Mid<br>6.8%    | Large Cap<br>13.7% |
| Dev Intl<br>20.7%  | REITs<br>8.3%     | Dev Intl<br>26.9%  | Glb Bond<br>10.9% | Cash<br>2.1%        | Sm/Mid<br>34.4%    | Em Mkt<br>19.2%    | Glb Bond<br>5.2%   | Dev Intl<br>17.9%  | Dev Intl<br>23.3%  | Hi Yld<br>3.0%    | Large Cap<br>5.2% | US Bonds<br>0.2%  | Large Cap<br>4.9% | Sm/Mid<br>7.1%     |
| Sm/Mid<br>18.3%    | Sm/Mid<br>8.1%    | Sm/Mid<br>16.2%    | Hdg Fnds<br>9.7%  | Hdg Fnds<br>-20.8%  | Dev Intl<br>32.5%  | Hi Yld<br>15.2%    | Hi Yld<br>4.4%     | Sm/Mid<br>17.9%    | Hdg Fnds<br>9.0%   | Sm/Mid<br>2.3%    | Dev Intl<br>4.3%  | Cash<br>0.0%      | US Bonds<br>1.8%  | US Bonds<br>6.0%   |
| Glb Bond<br>12.1%  | Hdg Fnds<br>7.5%  | Large Cap<br>15.8% | US Bonds<br>7.0%  | Hi Yld<br>-26.4%    | REITs<br>27.5%     | Large Cap<br>15.1% | Large Cap<br>2.1%  | Large Cap<br>16.0% | Hi Yld<br>7.4%     | US Bonds<br>1.8%  | Sm/Mid<br>3.6%    | Hi Yld<br>-1.9%   | Hdg Fnds<br>1.4%  | Hdg Fnds<br>3.2%   |
| Large Cap<br>10.9% | Large Cap<br>4.9% | Hi Yld<br>11.8%    | Large Cap<br>5.5% | Sm/Mid<br>-36.8%    | Large Cap<br>26.5% | Hdg Fnds<br>10.6%  | Cash<br>0.1%       | Hi Yld<br>15.6%    | REITs<br>3.2%      | Large Cap<br>1.8% | Glb Bond<br>2.8%  | REITs<br>-2.6%    | Cash<br>0.0%      | Hi Yld<br>2.5%     |
| Hi Yld<br>10.9%    | Cash<br>3.1%      | Hdg Fnds<br>10.2%  | Cash<br>5.0%      | Large Cap<br>-37.0% | Hdg Fnds<br>11.5%  | Dev Intl<br>8.2%   | Sm/Mid<br>-2.5%    | Hdg Fnds<br>5.4%   | Cash<br>0.1%       | Dev Intl<br>0.8%  | Hi Yld<br>2.6%    | Em Mkt<br>-3.4%   | Hi Yld<br>-1.1%   | Cash<br>0.0%       |
| Hdg Fnds<br>7.2%   | Hi Yld<br>2.7%    | Glb Bond<br>7.3%   | Hi Yld<br>2.2%    | REITs<br>-37.3%     | US Bonds<br>5.9%   | US Bonds<br>6.6%   | Hdg Fnds<br>-4.9%  | US Bonds<br>4.2%   | US Bonds<br>-2.0%  | Hdg Fnds<br>0.1%  | US Bonds<br>2.0%  | Glb Bond<br>-5.3% | Glb Bond<br>-3.1% | Em Mkt<br>-1.8%    |
| US Bonds<br>4.3%   | US Bonds<br>2.4%  | Cash<br>4.9%       | Sm/Mid<br>1.4%    | Dev Intl<br>-43.1%  | Glb Bond<br>4.4%   | Glb Bond<br>6.1%   | Dev Intl<br>-11.7% | Glb Bond<br>1.8%   | Em Mkt<br>-2.3%    | Cash<br>0.0%      | Hdg Fnds<br>1.5%  | Sm/Mid<br>-5.4%   | Dev Intl<br>-3.5% | Glb Bond<br>-2.8%  |
| Cash<br>1.3%       | Glb Bond<br>-8.8% | US Bonds<br>4.3%   | REITs<br>-17.8%   | Em Mkt<br>-53.2%    | Cash<br>0.2%       | Cash<br>0.1%       | Em Mkt<br>-18.2%   | Cash<br>0.1%       | Glb Bond<br>-4.9%  | Em Mkt<br>-0.4%   | Cash<br>0.0%      | Dev Intl<br>-5.8% | Em Mkt<br>-4.4%   | Dev Intl<br>-4.5%  |

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 12/31/2014 Source: Zephyr Associates.

GLOBAL GOVERNMENT BOND YIELDS: 12/31/2014

10-Year Bond Yields

United States Germany Japan Italy Spain China



Source: Bloomberg as of 12/31/2014



## 4Q14 PERFORMANCE & ASSET ALLOCATION REVIEW



## POLICY TARGETS AND RANGES

| As-of 12/31/2014<br>(\$ in millions) | Total<br>Range | Total<br>Weight | Market<br>Value | Pool<br>Weight | Pool Target | Pool Range |
|--------------------------------------|----------------|-----------------|-----------------|----------------|-------------|------------|
| Cash                                 |                |                 | \$9.4           | 90.4%          | -           | 60-100%    |
| Short-Term Bond                      |                |                 | <u>\$1.0</u>    | 9.6%           | -           | 0-40%      |
| <b>Total Operating / ST Pool</b>     | <b>25-50%</b>  | <b>16.6%</b>    | <b>\$10.4</b>   |                |             |            |
| U.S. Equity                          |                |                 | \$15.4          | 29.3%          | 27%         | 0-35%      |
| Non-U.S. Equity                      |                |                 | <u>\$4.4</u>    | <u>8.4%</u>    | 8%          | 0-15%      |
| Total Equity                         |                |                 | \$19.8          | 37.7%          | 35%         | 0-45%      |
| Alternative Investments              |                |                 | \$0             | 0%             | -           | -          |
| Cash                                 |                |                 | \$0             | 0%             | 0%          | 0-5%       |
| Short-Term Bonds                     |                |                 | \$21.0          | 39.9%          | 40%         | 35-55%     |
| Intermediate-Term Bonds              |                |                 | <u>\$11.7</u>   | <u>22.4%</u>   | 25%         | 20-40%     |
| Total Bonds                          |                |                 | \$32.7          | 62.3%          |             |            |
| <b>Total Long-Term Pool</b>          | <b>50-75%</b>  | <b>84.4%</b>    | <b>\$52.5</b>   |                |             |            |

As of 12/31/2014, combined pools were allocated approximately 31% equity and 69% cash and bonds

## EXECUTIVE SUMMARY (AS OF 12/31/14)

| Non-Endowment Assets                                  | Market Value            | %   | 4Q2014 | 1 Yr | 2 Yrs | 3 Yrs | Since Inception**** |
|---|-------------------------|---|--------|------|-------|-------|---------------------|
| <b>Non-Endowment: Operating &amp; Short-Term Pool</b> | \$10.480 Million        | 90% cash/<br>10% short-term fixed income      | 0.0%   | 0.1% | 0.0%  | 0.0%  | 0.1%                |
| <i>Benchmark*</i>                                     |                         |   | 0.0%   | 0.1% | 0.1%  | 0.1%  | 0.1%                |
| <b>Non-Endowment: Long-Term Pool</b>                  | \$52.492 Million        | 38% equities/<br>62% fixed income             | 1.7%   | 4.5% | 6.5%  | 6.5%  | 5.7%                |
| <i>Benchmark**</i>                                    |                         |   | 1.4%   | 4.0% | 5.6%  | 5.6%  | 4.8%                |
| <b>Total Non-Endowment Assets</b>                     | <b>\$62.971 Million</b> | <b>15% cash/31% equities/54% fixed income</b> | 1.1%   | 2.9% | 4.2%  | 4.2%  | 3.9%                |
| <i>Benchmark***</i>                                   |                         |   | 0.8%   | 2.3% | 2.9%  | 2.9%  | 3.2%                |

| Endowment Assets                               | Market Value    | 4Q2014 | 1-Yr  |
|--|-----------------|--------|-------|
| <b>YSU Endowment</b>                           | \$9.120 million | 4.1%   | 10.5% |
| <i>60 S&amp;P 500 Index/40% Barclays Index</i> |                 | 3.7%   | 10.6% |
| <b>Kilcawley Center</b>                        | \$96,341        | -0.5%  | 8.6%  |
| <i>60 S&amp;P 500 Index/40% Barclays Index</i> |                 | 3.7%   | 10.6% |
| <b>Alumni License Plate</b>                    | \$414,430       | 3.7%   | 7.1%  |
| <i>60 S&amp;P 500 Index/40% Barclays Index</i> |                 | 3.7%   | 10.6% |

1-year net-investment change: \$2,238,860

\*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

|   | Ending December 31, 2014 |             |             |              |              |              |              |               | Calendar Years |             |             | Inception     |               |
|---|--------------------------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|----------------|-------------|-------------|---------------|---------------|
|   | 2014<br>Q4<br>(%)        | YTD<br>(%)  | 1 Yr<br>(%) | 2 Yrs<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 7 Yrs<br>(%) | 10 Yrs<br>(%) | 2014<br>(%)    | 2013<br>(%) | 2012<br>(%) | Return<br>(%) | Since         |
| <b>Total University Assets</b>                        | <b>1.1</b>               | <b>2.9</b>  | <b>2.9</b>  | <b>4.2</b>   | <b>4.2</b>   | <b>3.8</b>   | <b>3.9</b>   | <b>4.1</b>    | <b>2.9</b>     | <b>5.6</b>  | <b>4.1</b>  | <b>3.9</b>    | <b>Mar-04</b> |
| <i>YSU Policy Benchmark</i>                           | 0.8                      | 2.3         | 2.3         | 2.9          | 2.9          | 2.6          | 2.7          | 3.3           | 2.3            | 3.6         | 2.8         | 3.2           | Mar-04        |
| <b>Total Operating &amp; Short Term</b>               | <b>0.0</b>               | <b>0.1</b>  | <b>0.1</b>  | <b>0.0</b>   | <b>0.0</b>   | --           | --           | --            | <b>0.1</b>     | <b>0.0</b>  | <b>0.0</b>  | <b>0.1</b>    | <b>Jun-10</b> |
| <i>YSU Total Operating &amp; Short Term Benchmark</i> | 0.0                      | 0.1         | 0.1         | 0.1          | 0.1          | 0.1          | 0.4          | 1.6           | 0.1            | 0.1         | 0.1         | 0.1           | Jun-10        |
| <b>Total Long Term/ Reserves Pool</b>                 | <b>1.7</b>               | <b>4.5</b>  | <b>4.5</b>  | <b>6.5</b>   | <b>6.5</b>   | --           | --           | --            | <b>4.5</b>     | <b>8.7</b>  | <b>6.4</b>  | <b>5.7</b>    | <b>Jun-10</b> |
| <i>YSU Total Long Term/ Reserves Fund Benchmark</i>   | 1.4                      | 4.0         | 4.0         | 5.6          | 5.6          | 4.8          | 4.5          | 4.6           | 4.0            | 7.1         | 5.5         | 4.8           | Jun-10        |
| <b>Total Domestic Equity</b>                          | <b>5.7</b>               | <b>11.6</b> | <b>11.6</b> | <b>22.8</b>  | <b>20.3</b>  | --           | --           | --            | <b>11.6</b>    | <b>35.2</b> | <b>15.3</b> | <b>19.0</b>   | <b>Jun-10</b> |
| <i>Russell 3000</i>                                   | 5.2                      | 12.6        | 12.6        | 22.6         | 20.5         | 15.6         | 7.5          | 7.9           | 12.6           | 33.6        | 16.4        | 19.2          | Jun-10        |
| <b>Total International Equity</b>                     | <b>-3.2</b>              | <b>-1.4</b> | <b>-1.4</b> | <b>10.3</b>  | <b>13.5</b>  | --           | --           | --            | <b>-1.4</b>    | <b>23.4</b> | <b>20.1</b> | <b>5.8</b>    | <b>Sep-10</b> |
| <i>MSCI EAFE Gross</i>                                | -3.5                     | -4.5        | -4.5        | 8.5          | 11.6         | 5.8          | 0.0          | 4.9           | -4.5           | 23.3        | 17.9        | 6.5           | Sep-10        |
| <i>MSCI ACWI ex USA Gross</i>                         | -3.8                     | -3.4        | -3.4        | 5.7          | 9.5          | 4.9          | -0.2         | 5.6           | -3.4           | 15.8        | 17.4        | 4.8           | Sep-10        |
| <b>Total Fixed Income</b>                             | <b>0.5</b>               | <b>2.2</b>  | <b>2.2</b>  | <b>1.0</b>   | <b>1.7</b>   | --           | --           | --            | <b>2.2</b>     | <b>-0.1</b> | <b>3.2</b>  | <b>2.4</b>    | <b>Jun-10</b> |
| <i>YSU Fixed Income Benchmark</i>                     | 0.4                      | 1.7         | 1.7         | 0.9          | 1.4          | 2.3          | 3.0          | 3.4           | 1.7            | 0.1         | 2.4         | 1.9           | 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.
- YSU Fixed Income Benchmark = BofA Merrill Lynch US Corp & Gov 1-3 Yrs 60% / Barclays Int Govt/Credit 40%



## LONG-TERM POOL ALLOCATION AND ALTERNATIVE INVESTMENTS DISCUSSION

## OVERVIEW

### Portfolio Objectives

- Compliance with Ohio Revised Code 3345.05 (25% average rule\*)
- Support YSU cash-flow and financial needs
- Target a prudent level of investment return once risks have been mitigated

### Risk Considerations

- Compliance with Ohio Revised Code 3345.05 (25% average rule\*)
- Mitigate volatility of portfolio market value
- Maintain ample liquidity
- Pursue return objectives in recognition of portfolio risks: volatility, drawdown and liquidity

### Constraints

- The Short-Term Pool will experience fluctuations in cash levels throughout the year
- During periods of low cash, the long-term pool supports ORC Compliance
- YSU may require \$2-\$3 million of cash next year to support operations
- Since June 2010, spending has been limited in frequency, but the one draw was significant (\$8 million in June and July 2011)

***Goal of analysis: Can YSU and the Non-Endowment assets tolerate greater investment risk in pursuit of higher investment returns?***

\*A minimum of 25% of the average amount of the University's investment portfolio over the course of the previous fiscal year must be invested according to ORC guidelines (i.e. US government bonds, cash equivalents)

## ACCOUNTING FOR RISKS

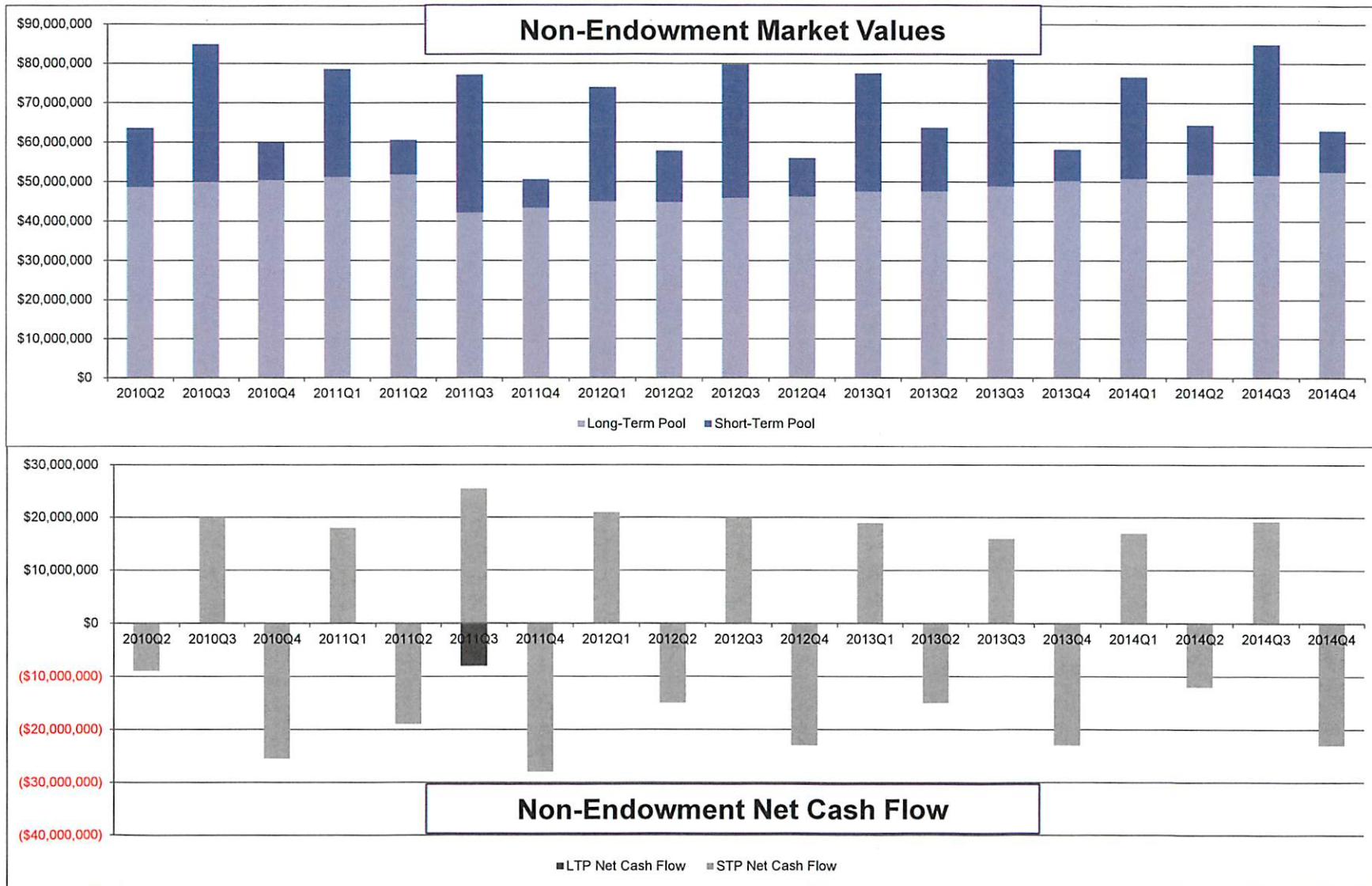
| Issue / Risk         | Comments   |
|----------------------|--|
| ORC Compliance       | Short-Term pool provides compliance; additionally, approximately 10-15% of the Long-Term Pool assets provide additional support.                       |
| Cash Flow Forecast   | 3-yr cash-flow expected to be positive; YSU does not anticipate needing to withdrawal funds from the Long-Term Pool.                                   |
| Historical Outflows  | Withdrawals have been rare, although one withdrawal was large (\$8 million).   |
| Outstanding YSU Debt | Support outstanding University debt; per YSU staff no financial covenants exist and a debt service reserve fund has been created to service this debt. |
| Senate Bill 6        | Support Senate Bill 6 ratios; per YSU staff these ratios are in sufficient standing.   |
| Liquidity            | 100% of the Non-Endowment assets have daily liquidity.   |
| Investment Return    | YSU staff and trustees have expressed a willingness to except higher investment risk in pursuit of higher investment return.                           |

## ORC COMPLIANCE TEST: 2014 ESTIMATES

|          | Total Non-Endow.<br>ORC 3345.05<br>Defined Assets | % from<br>Short-Term Pool | % from<br>Long-Term Pool |
|----------|---|---------------------------|--------------------------|
| 3/31/14  | 45%   | 32%                       | 13%                      |
| 6/30/14  | 30%   | 18%                       | 12%                      |
| 9/30/14  | 49%   | 38%                       | 11%                      |
| 12/31/14 | 30%   | 15%                       | 15%                      |

As of 12/31/2014, approximately \$18.8 million, or 30%, of the \$63 million of total YSU Non-Endowment Assets were assets as defined under ORC 3345.05.

## HISTORICAL MARKET VALUES AND CASH FLOW



Source: Hartland Quarterly Reports.



## YSU PROJECTIONS

| Date          | Revenue        | Expense        | Net          |
|---------------|----------------|----------------|--------------|
| 2014 (Actual) | \$ 219,649,238 | \$ 217,012,534 | \$ 2,636,704 |
| 2015 forecast | \$ 224,042,222 | \$ 221,352,785 | 2,689,438    |
| 2016 forecast | \$ 226,282,644 | \$ 225,779,840 | 502,804      |
| 2017 forecast | \$ 230,808,297 | \$ 230,295,437 | 512,860      |

***Although positive projections, YSU may need to take \$2-3 million from the Non-Endowment over the next year.***

## ASSET CLASS RISK AND RETURN

| Asset Class  | 10-Year Return<br>(as of<br>12/31/14) | 10-Year Risk<br>(Standard<br>deviation) | Maximum<br>Drawdown | Projected<br>Return | Projected Risk |
|--|---------------------------------------|---|---------------------|---------------------|----------------|
| <b>Stocks</b><br>(S&P 500 Index)                                     | 7.7%                                  | 14.7%                                   | -51.0%              | 10.1%               | 15.0%          |
| <b>Intermediate-Term Bonds</b><br>(Barclays<br>Aggregate<br>Index)   | 4.7%                                  | 3.2%                                    | -3.8%               | 2.6%                | 3.2%           |
| <b>Short-Term Bonds</b><br>(Barclays 1-5 Yr<br>Govt/Credit<br>Index) | 3.3%                                  | 1.9%                                    | -1.8%               | 2.4%                | 1.9%           |
| <b>Alternative Investments</b><br>(HFRI Fund of<br>Funds Index)      | 3.0%                                  | 5.5%                                    | -22.2%              | 4.3%                | 5.5%           |
| <b>REITS</b><br>(FTSE NAREIT<br>Index)                               | 7.5%                                  | 24.0%                                   | -67.9%              | 12.5%               | 21.5%          |

Source: Zephyr; historical risk/return data of major market indices in each asset class; the common period begins 3/2005-12/2014; past performance is not a guarantee of future results. Source of the projected risk/return analysis is the Black-Litterman Model (risk free rate = 2.21%; equity risk premium = 25-year US Balanced of 4.06%).

## WHY CONSIDER ALTERNATIVE INVESTMENTS?

### 1. Improve opportunity set

- Broad equity markets are fairly valued relative to historical levels and fixed income returns face challenges
- Alternatives present an opportunity to target improved returns over fixed income while taking less risk than equities

### 2. Downside protection

- This is primarily accomplished by the fact that, in general, many Alternatives offer better downside protection from traditional investments such as stocks thereby preserving capital

### 3. Attractive risk-adjusted returns

- Consequently, many Alternatives provide attractive risk-adjusted returns

### 4. Low correlations

- Additionally, Alternatives are typically less correlated with traditional asset classes resulting in better portfolio diversification

### 5. Hedge against inflation and/or capital appreciation

- Certain Alternatives are a hedge against inflation, whereas other Alternatives offer greater capital appreciation potential relative to traditional asset classes

## ASSESSMENT OF LONG-TERM POOL ALLOCATION

| Asset Class                        | Long-Term Pool Today | Proposed Changes | Scenario 1   | Proposed Changes | Scenario 2   |
|------------------------------------|----------------------|------------------|--------------|------------------|--------------|
| <b>Stocks</b>                      | <b>35%</b>           |                  | <b>35%</b>   | <b>+10%</b>      | <b>45%</b>   |
| <b>Intermediate-Term Bonds</b>     | <b>25%</b>           | <b>-5%</b>       | <b>20%</b>   | <b>-10%</b>      | <b>15%</b>   |
| <b>Short-Term Bonds</b>            | <b>40%</b>           | <b>-5%</b>       | <b>35%</b>   | <b>-15%</b>      | <b>25%</b>   |
| <b>Alternative Investments</b>     | <b>0%</b>            | <b>+10%</b>      | <b>10%</b>   | <b>+15%</b>      | <b>15%</b>   |
| Expected Return                    | <b>5.1%</b>          |                  | <b>5.6%</b>  |                  | <b>6.6%</b>  |
| Expected Risk (Standard Deviation) | <b>5.5%</b>          |                  | <b>6.3%</b>  |                  | <b>8.2%</b>  |
| One Year Worst Case Return         | <b>-5.3%</b>         |                  | <b>-6.2%</b> |                  | <b>-8.6%</b> |

Source: Zephyr; historical risk/return data of major market indices in each asset class; the common period begins 3/2005-12/2014; past performance is not a guarantee of future results. Source of the projected risk/return analysis is the Black-Litterman Model (risk free rate = 2.21%; equity risk premium = 25-year US Balanced of 4.06%).

# HISTORICAL RISK AND RETURN (LONG-TERM POOL ONLY)

Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

## Calendar Year Return As of December 2014

|                | 2014  | 2013   | 2012  | 2011  | 2010   | 2009   | 2008    | 2007  | 2006   | 2005  |
|----------------|-------|--------|-------|-------|--------|--------|---------|-------|--------|-------|
| YSU Current    | 6.76% | 9.81%  | 7.59% | 4.44% | 8.96%  | 12.78% | -11.07% | 6.66% | 8.23%  | 2.92% |
| YSU Scenario 1 | 7.42% | 10.72% | 8.19% | 3.69% | 9.60%  | 14.14% | -14.05% | 6.08% | 9.53%  | 3.52% |
| YSU Scenario 2 | 8.98% | 14.42% | 9.90% | 3.18% | 11.09% | 17.08% | -19.81% | 5.47% | 11.45% | 4.15% |

## Custom Table

January 1995 - December 2014: Summary Statistics

|                | Return | Standard Deviation | Sharpe Ratio | Maximum Drawdown |
|----------------|--------|--------------------|--------------|------------------|
| YSU Current    | 7.77%  | 7.37%              | 0.68         | -21.01%          |
| YSU Scenario 1 | 7.92%  | 7.56%              | 0.69         | -21.44%          |
| YSU Scenario 2 | 8.43%  | 8.99%              | 0.63         | -29.37%          |
| S&P 500        | 9.85%  | 15.15%             | 0.47         | -50.95%          |

## APPROPRIATENESS FOR YSU

| Alternative Categories         | Investment Vehicle                    | Daily Liquidity        | Appropriate for YSU Long-Term Pool? |
|--------------------------------|---------------------------------------|------------------------|-------------------------------------|
| Private Equity                 | Limited Partnership                   | No                     | No                                  |
| Hedge Funds<br>Absolute Return | Limited Partnership<br>or Mutual Fund | HF / LP: No<br>MF: Yes | HF / LP: No<br>MF: Yes              |
| Real Estate                    | Mutual Fund or ETF                    | Yes                    | Yes                                 |
| Real Assets/<br>Commodities    | Mutual Fund or ETF                    | Yes                    | Yes                                 |
| Tactical Asset<br>Allocation   | Mutual Fund                           | Yes                    | Yes                                 |

## LIQUID ALTERNATIVE INVESTMENTS: RECOMMENDED MANAGERS

| Alternative Investments       | Type                      | Process Description   |
|-------------------------------|---------------------------|---|
| Wells Fargo Absolute Return   | Tactical Asset Allocation | Tactical allocations to equity, fixed income, and alternative investments; identification of asset class mispricing |
| Diamond Hill Long-Short       | Equity Long/Short         | Invest in companies selling for less than and shorting companies selling for more than “intrinsic value”            |
| ING (Voya) Global Real Estate | Real Estate               | Exposure to the global real estate market using Real Estate Investment Trusts (REITs)                               |

## MANAGER RECOMMENDATIONS

| Manager                | Wells Fargo Absolute Return           | Diamond Hill Long-Short                        | ING (Voya) Global Real Estate |
|------------------------|---------------------------------------|--|-------------------------------|
| Ticker                 | WABIX                                 | DHLSX  | IGLIX                         |
| Inception Date         | 2003                                  | 2000   | 2001                          |
| Fee                    | 1.14%                                 | 1.16%  | 0.98%                         |
| Assets                 | \$12.1 Billion                        | \$4.0 Billion                                  | \$5.4 Billion                 |
| Managers               | Jeremy Grantham/Ben Inker/Sam Wildman | Ric Dillon/Chris Bingaman/Chuck Bath           | Steve Burton/Ritson Ferguson  |
| Underlying Investments | GMO Mutual Funds                      | 40-60 long positions and 10-30 short positions | 100-120 REITs                 |
| Leverage Employed?*    | No                                    | No   | No                            |
| Equity                 | 39%                                   | 100%   | 100%                          |
| Fixed Income           | 30%                                   | 0%   | 0%                            |
| Alternatives & Other   | 31%                                   | 0%   | 0%                            |
| Non-U.S.               | 39%                                   | 0%   | 51%                           |
| Non-U.S. Emerging      | 19%                                   | 0%   | 0%                            |
| Long                   | 100%                                  | 81%  | 100%                          |
| Short                  | 0%                                    | 20%  | 0%                            |
| Gross                  | 100%                                  | 101%   | 100%                          |
| Net                    | 100%                                  | 61%  | 100%                          |
| Average Credit Quality | AA                                    | N/A  | N/A                           |
| Maturity/Duration      | 7-10 yrs                              | N/A  | N/A                           |

Source: Morningstar as of 12/31/2014.

\*The managers do not use leverage in the traditional sense – borrowing cash to buy assets or increasing their gross long exposures to 200-300% or more, but a small amount may exist as a result of having short positions in their portfolios.



## MANAGER RISK/RETURNS (AS OF 12/31/3014)

| Alternative Investments                | Annualized Returns |       |       | Annualized Risk |       |       | 10-Yr Max Drawdown |
|--|--------------------|-------|-------|-----------------|-------|-------|--------------------|
|  | 3-Yrs              | 5-Yrs | 7-Yrs | 3-Yrs           | 5-Yrs | 7-Yrs |                    |
| <b><u>Strategies</u></b>               |                    |       |       |                 |       |       |                    |
| <b>Wells Fargo Absolute Return</b>     | 5.1%               | 5.3%  | 4.5%  | 5.2%            | 6.1%  | 6.9%  | -19.5%             |
| <i>CPI + 3%</i>                        | 4.2%               | 4.7%  | 4.7%  | 4.2%            | 1.1%  | 1.5%  | -3.2%              |
| <b>Diamond Hill Long-Short</b>         | 11.4%              | 8.3%  | 4.4%  | 6.8%            | 8.9%  | 11.8% | -36.6%             |
| <i>HFRI Equity Hedge Index</i>         | 5.9%               | 4.9%  | 2.1%  | 5.5%            | 7.6%  | 9.7%  | -30.6%             |
| <b><u>Real Assets</u></b>              |                    |       |       |                 |       |       |                    |
| <b>Voya Global Real Estate</b>         | 10.9%              | 10.2% | 3.5%  | 12.9%           | 16.2% | 22.8% | -63.2%             |
| <i>NAREIT Developed Property Index</i> | 11.8%              | 11.7% | 3.3%  | 12.5%           | 16.3% | 24.1% | -67.2%             |
|  |                    |       |       |                 |       |       |                    |
| S&P 500 Index                          | 17.3%              | 15.5% | 7.3%  | 9.1%            | 13.0% | 16.8% | -51.0%             |
| Barclays Aggregate Index               | 2.8%               | 4.5%  | 4.8%  | 2.7%            | 2.7%  | 3.4%  | -3.8%              |

Past performance and no guarantee of future results.

# REBALANCE RECOMMENDATION

| Total Plan                             | Asset Class               | Market Value as of 12/31/14 |       | Recommendation | Proposed Allocation |       | Pool Target | Pool Range | Total Range |
|--|---------------------------|-----------------------------|-------|----------------|---------------------|-------|-------------|------------|-------------|
|  |                           | \$62,969,590                |       |                | \$62,969,590        |       |             |            |             |
| <b>Operating &amp; Short Term Pool</b> |                           | \$10,479,574                | 16.6% |                | \$10,479,574        | 16.6% |             | 100%       | 25 - 50%    |
| <b>Operating Assets</b>                |                           | \$9,434,460                 | 90.0% |                | \$9,434,460         | 90.0% | n/a         | 60-100%    |             |
| JPMorgan High Balance Savings          | Money Market              | \$2,120                     | 0.0%  |                | \$2,120             | 0.0%  |             |            |             |
| JPMorgan Sweep Account                 | Money Market              | \$4,429,132                 | 42.3% |                | \$4,429,132         | 42.3% |             |            |             |
| Star Plus Account                      | Money Market              | \$5,003,208                 | 47.7% |                | \$5,003,208         | 47.7% |             |            |             |
| <b>Short Term Assets</b>               |                           | \$1,045,114                 | 10.0% |                | \$1,045,114         | 10.0% | n/a         | 0-40%      |             |
| Vanguard Short-Term Federal Adm        | Intermediate Gov't        | \$1,045,114                 | 10.0% |                | \$1,045,114         | 10.0% |             |            |             |
| <b>Long-Term Reserves Pool</b>         |                           | \$52,490,016                | 83.4% |                | \$52,490,016        | 83.4% |             | 100%       | 50 - 75%    |
| <b>Domestic Equity</b>                 |                           | \$15,371,965                | 29.3% |                | \$15,371,965        | 29.3% | 27%         | 20-35%     |             |
| T. Rowe Price U.S. Structured Research | Large Blend               | \$5,105,263                 | 9.7%  |                | \$5,105,263         | 9.7%  |             |            |             |
| Vanguard 500 Index Adm                 | Large Blend               | \$5,170,159                 | 9.8%  |                | \$5,170,159         | 9.8%  |             |            |             |
| Vanguard Mid Cap Index Adm             | Mid-Cap Blend             | \$2,621,442                 | 5.0%  |                | \$2,621,442         | 5.0%  |             |            |             |
| Loomis Sayles Small Cap Growth Instl   | Small Growth              | \$1,253,698                 | 2.4%  |                | \$1,253,698         | 2.4%  |             |            |             |
| Victory Integrity Small Cap Value      | Small Value               | \$1,221,403                 | 2.3%  |                | \$1,221,403         | 2.3%  |             |            |             |
| <b>International Equity</b>            |                           | \$4,428,355                 | 8.4%  |                | \$4,428,355         | 8.4%  | 8%          | 0-15%      |             |
| William Blair International Growth I   | Foreign Large Growth      | \$2,143,593                 | 4.1%  |                | \$2,143,593         | 4.1%  |             |            |             |
| Dodge & Cox Int'l Stock                | Foreign Large Value       | \$2,284,762                 | 4.4%  |                | \$2,284,762         | 4.4%  |             |            |             |
| <b>Total Equity</b>                    |                           | \$19,800,320                | 37.7% |                | \$19,800,320        | 37.7% | 35%         | 25-45%     |             |
| <b>Alternatives</b>                    |                           |                             |       |                |                     |       |             |            |             |
| Wells Fargo Absolute Return I          | Tactical Asset Allocation | \$0                         | 0.0%  | \$2,000,000    | \$2,000,000         | 3.8%  |             |            |             |
| Diamond Hill Equity Long/Short I       | Equity Long/Short         | \$0                         | 0.0%  | \$2,000,000    | \$2,000,000         | 3.8%  |             |            |             |
| Voya Global Real Estate                | Global Real Estate        | \$0                         | 0.0%  | \$1,500,000    | \$1,500,000         | 2.9%  |             |            |             |
| <b>Total Alternatives</b>              |                           | \$0                         | 0%    |                | \$5,500,000         | 10.5% | 10%         | 0-20%      |             |
| <b>ST Fixed Income</b>                 |                           | \$21,025,327                | 40.1% |                | \$17,025,327        | 32.4% | 35%         | 25-45%     |             |
| YSU Short Term Bond                    | Short-Term Bond           | \$14,293,105                | 27.2% | (\$2,000,000)  | \$12,293,105        | 23.4% |             |            |             |
| DFA Five-Year Global                   | Global Fixed Income       | \$1,541,893                 | 2.9%  |                | \$1,541,893         | 30.8% |             |            |             |
| Vanguard Short-Term Bond Index         | Short-Term Bond           | \$5,190,329                 | 9.9%  | (\$2,000,000)  | \$3,190,329         | 6.1%  |             |            |             |
| <b>Total Int. Fixed Income</b>         |                           | \$11,664,369                | 22.2% |                | \$10,164,369        | 19.4% | 20%         | 10-30%     |             |
| JPMorgan Core Bond                     | Intermediate-Term Bond    | \$6,127,611                 | 11.7% | (\$1,000,000)  | \$5,127,611         | 9.8%  |             |            |             |
| YSU Intermediate Term Bond             | Intermediate-Term Bond    | \$5,536,758                 | 10.5% | (\$500,000)    | \$5,036,758         | 9.6%  |             |            |             |
| <b>Total Fixed Income</b>              |                           | \$32,689,696                | 62.3% |                | \$27,189,696        | 51.8% | 55%         |            |             |

\$0

## ACTION ITEMS

- **Approve the edits to the Non-Endowment Asset Allocation Guidelines**
  - Addition of Alternative Investment guidelines and benchmarks
  - Revisions to Long-Term Pool target allocations and ranges

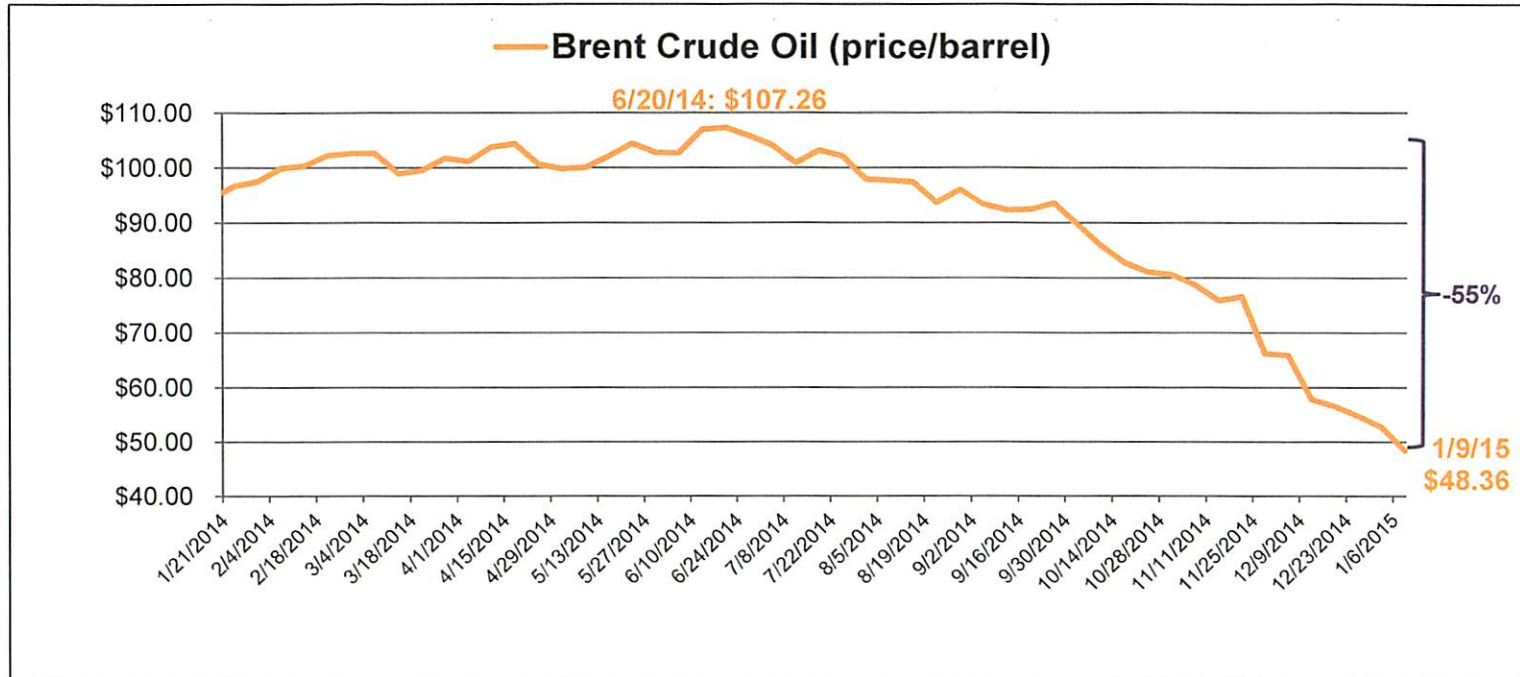
| <b>Operating &amp; Short Term Pool</b> |                    | <b>Allocation</b> |                    |
|--|--------------------|-------------------|--------------------|
| <b>Asset Class/Investment Strategy</b> | <b>Pool Target</b> | <b>Pool Range</b> | <b>Total Range</b> |
| Total Cash/Operating Assets            | n/a                | 60-100%           |                    |
| Total Short-Term Fixed Income          | n.a                | 0-40%             |                    |
|  |                    |                   | 25-50%             |
| <b>Long Term/Reserves Pool</b>         |                    |                   |                    |
| Total Domestic Equity                  | 27%                | 20-35%            |                    |
| Total International Equity             | 8%                 | 0-15%             |                    |
| <b>Total Equity</b>                    | <b>35%</b>         | <b>25-45%</b>     |                    |
| Total Alternatives                     | 10%                | 0-20%             |                    |
| Total Short-Term Fixed Income          | 35%                | 25-45%            |                    |
| Total Intermediate-Term Fixed Income   | 20%                | 10-30%            |                    |
| Cash                                   | 0%                 | 0-5%              |                    |
|  | 100%               |                   | 50-75%             |

- Removal of YSU Foundation references
- **Approve the rebalance recommendation which includes the addition of three investment managers to the Non-Endowment Long-Term Pool**
  1. Wells Fargo Absolute Return I
  2. Diamond Hill Equity Long/Short I
  3. Voya Global Real Estate I



## APPENDIX

## IMPACT OF FALLING OIL PRICES



- Increased discretionary income for consumers
- Reduced Q4 earnings expectations for energy companies (-19.1% growth versus +8.1% as of 9/30)
- Energy related investments (debt and equity) have sold off
- Uncertainty regarding future capital intensive energy projects
- Lower inflation expectations

## 2014 INTERNATIONAL EQUITY PERFORMANCE

### Developed Markets

|                | USD Return | Local Return | Weighting |
|----------------|------------|--------------|-----------|
| AUSTRALIA      | -3.2%      | 5.8%         | 7.5%      |
| AUSTRIA        | -29.4%     | -19.6%       | 0.2%      |
| BELGIUM        | 4.9%       | 19.4%        | 1.3%      |
| DENMARK        | 6.8%       | 21.3%        | 1.5%      |
| FINLAND        | 0.8%       | 14.8%        | 0.9%      |
| FRANCE         | -9.0%      | 3.6%         | 9.7%      |
| GERMANY        | -9.8%      | 2.8%         | 9.2%      |
| HONG KONG      | 5.1%       | 5.1%         | 3.1%      |
| IRELAND        | 2.6%       | 16.9%        | 0.3%      |
| ISRAEL         | 23.7%      | 38.7%        | 0.6%      |
| ITALY          | -9.0%      | 3.6%         | 2.3%      |
| JAPAN          | -3.7%      | 9.8%         | 21.2%     |
| NETHERLANDS    | -3.2%      | 10.2%        | 2.8%      |
| NEW ZEALAND    | 8.2%       | 13.9%        | 0.2%      |
| NORWAY         | -21.2%     | -2.6%        | 0.7%      |
| PORTUGAL       | -37.7%     | -29.1%       | 0.2%      |
| SINGAPORE      | 3.1%       | 8.1%         | 1.6%      |
| SPAIN          | -4.4%      | 8.9%         | 3.5%      |
| SWEDEN         | -6.6%      | 13.9%        | 3.1%      |
| SWITZERLAND    | 0.7%       | 12.5%        | 9.3%      |
| UNITED KINGDOM | -5.4%      | 0.5%         | 21.1%     |

**EAFE**                      **-4.5%**                      **6.4%**

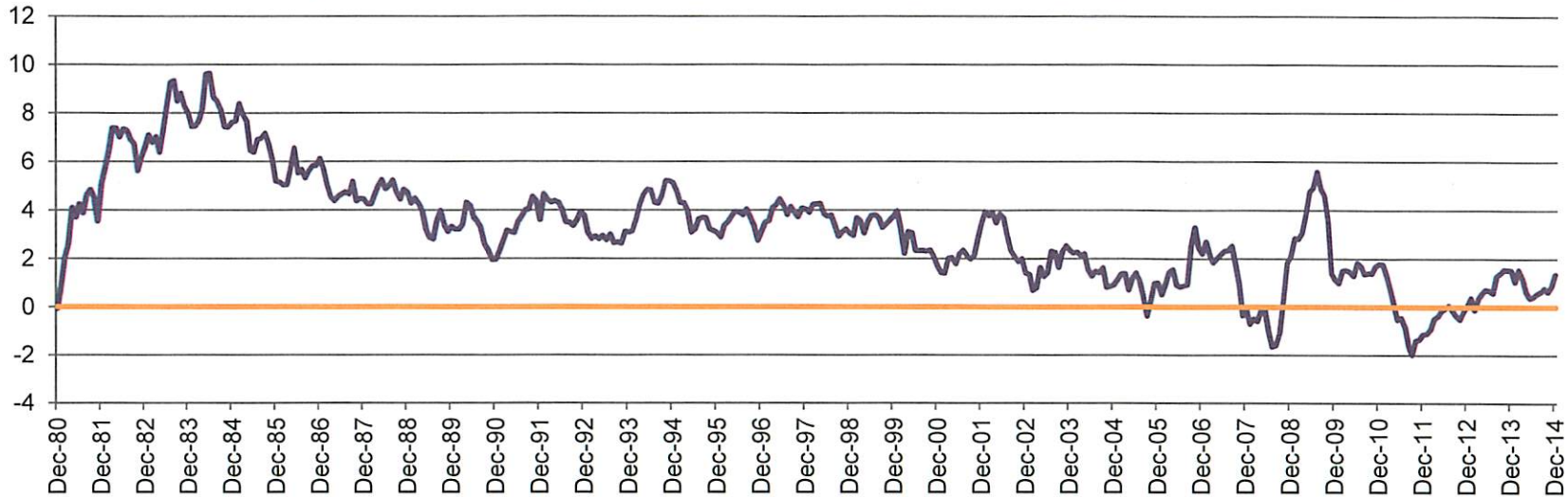
### Emerging Markets

|                | USD Return | Local Return | Weighting |
|----------------|------------|--------------|-----------|
| BRAZIL         | -13.7%     | -2.8%        | 8.9%      |
| CHILE          | -12.2%     | 1.4%         | 1.4%      |
| CHINA          | 8.3%       | 8.3%         | 21.8%     |
| COLOMBIA       | -19.8%     | -1.4%        | 0.8%      |
| CZECH REPUBLIC | -2.4%      | 12.5%        | 0.2%      |
| EGYPT          | 29.4%      | 33.1%        | 0.3%      |
| GREECE         | -39.9%     | -31.6%       | 0.5%      |
| HUNGARY        | -27.4%     | -12.2%       | 0.2%      |
| INDIA          | 23.9%      | 26.4%        | 7.2%      |
| INDONESIA      | 27.2%      | 29.5%        | 2.8%      |
| KOREA          | -10.7%     | -7.0%        | 14.7%     |
| MALAYSIA       | -10.7%     | -4.6%        | 3.6%      |
| MEXICO         | -9.2%      | 2.2%         | 4.9%      |
| PERU           | 10.5%      | 10.5%        | 0.5%      |
| PHILIPPINES    | 26.4%      | 27.4%        | 1.3%      |
| POLAND         | -13.6%     | 1.7%         | 1.6%      |
| RUSSIA         | -45.9%     | -12.1%       | 3.2%      |
| SOUTH AFRICA   | 5.7%       | 16.7%        | 7.9%      |
| TAIWAN         | 10.1%      | 16.7%        | 12.6%     |
| THAILAND       | 16.8%      | 17.0%        | 2.4%      |
| TURKEY         | 19.1%      | 29.6%        | 1.8%      |

**EM (EMERGING MARKETS)**                      **-1.8%**                      **5.6%**

## FIXED INCOME VALUATION

### Treasury 10-YR Less CPI



### One Year Change in Nominal Interest Rates

|                  | Down 25 bps | No Change | Up 25 bps | Up 50 bps | Up 100 bps |
|------------------|-------------|-----------|-----------|-----------|------------|
| High Yield Corp. | 7.70%       | 6.61%     | 5.53%     | 4.44%     | 2.27%      |
| Emerging Markets | 7.14%       | 5.66%     | 4.18%     | 2.70%     | -0.26%     |
| Aggregate        | 3.64%       | 2.25%     | 0.86%     | -0.53%    | -3.30%     |
| 3-YR TSY         | 1.79%       | 1.07%     | 0.35%     | -0.37%    | -1.80%     |
| 10-Yr TSY        | 4.37%       | 2.17%     | -0.03%    | -2.23%    | -6.62%     |

No Coupon  
Cushion In  
Investment  
Grade  
Bonds

Past performance is no guarantee of future results. High Yield – Barclay's High Yield Corporate Index; Emerging Market – Barclay's Emerging Market Aggregate Index; U.S. Aggregate – Barclay's U.S. Aggregate Index; 3-Ye & 10-Yr TSY represent constant maturity treasuries. Data as of 12/31/2014. Source: Barclays

## NON-ENDOWMENT & ENDOWMENT STRUCTURE

| Fund                        | Custodian  | Advisor  | Manager                                   | Purpose  | Investment Objective                        | Results                        |
|-----------------------------|------------|----------|---|--|---|--------------------------------|
| <b>Non-Endowment Assets</b> |            |          |   |  |   |                                |
| 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      |
| <b>Endowment Assets</b>     |            |          |   |  |   |                                |
| 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.



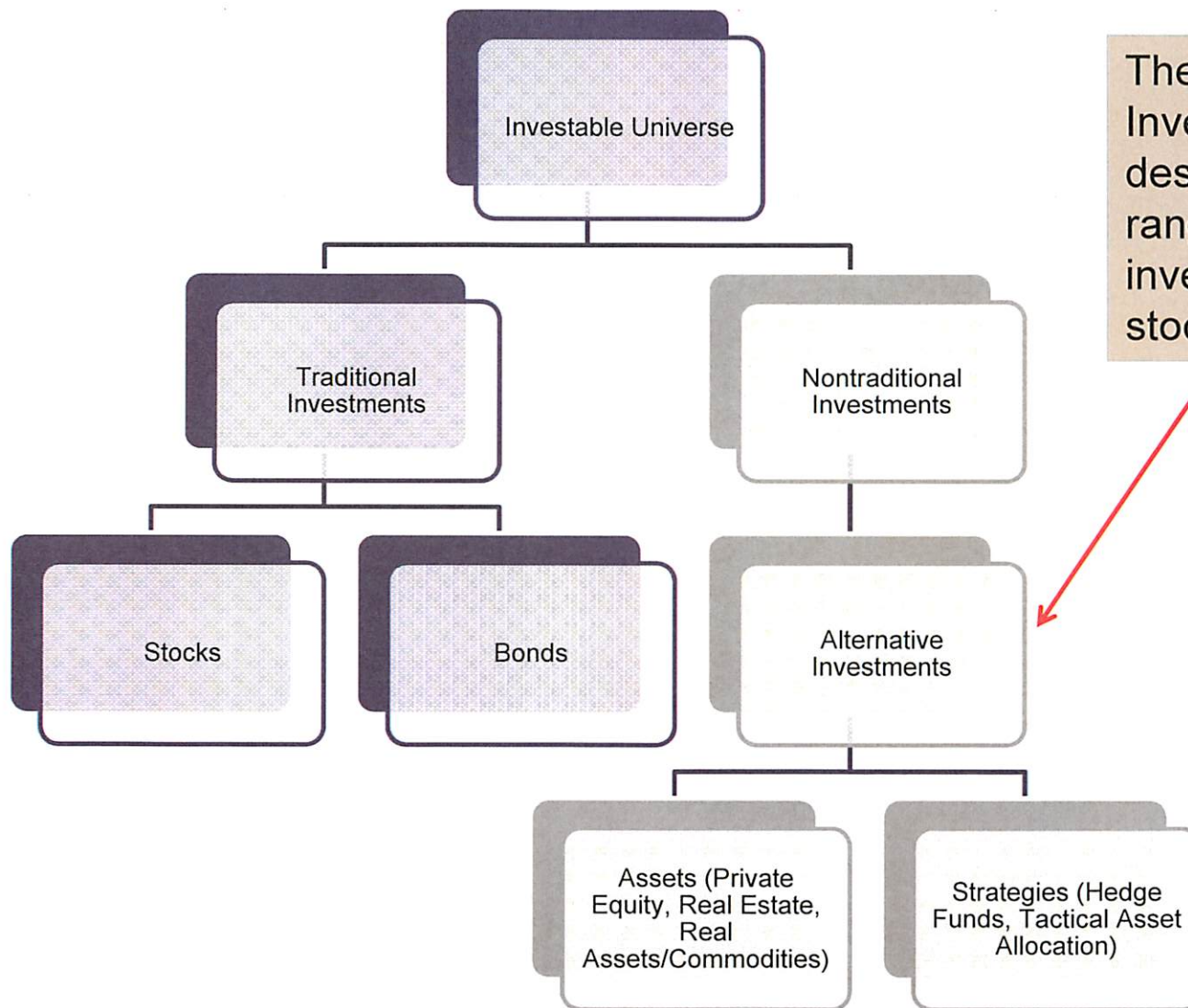
## NON-ENDOWMENT REPORT CARD

|   | Ending December 31, 2014 |             |             |              |              |              |              |               | Calendar Years |             |             | Inception     |               |
|---|--------------------------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|----------------|-------------|-------------|---------------|---------------|
|   | 2014<br>Q4<br>(%)        | YTD<br>(%)  | 1 Yr<br>(%) | 2 Yrs<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 7 Yrs<br>(%) | 10 Yrs<br>(%) | 2014<br>(%)    | 2013<br>(%) | 2012<br>(%) | Return<br>(%) | Since         |
| <b>Total University Assets</b>                        | <b>1.1</b>               | <b>2.9</b>  | <b>2.9</b>  | <b>4.2</b>   | <b>4.2</b>   | <b>3.8</b>   | <b>3.9</b>   | <b>4.1</b>    | <b>2.9</b>     | <b>5.6</b>  | <b>4.1</b>  | <b>3.9</b>    | <b>Mar-04</b> |
| <i>YSU Policy Benchmark</i>                           | 0.8                      | 2.3         | 2.3         | 2.9          | 2.9          | 2.6          | 2.7          | 3.3           | 2.3            | 3.6         | 2.8         | 3.2           | Mar-04        |
| <b>Total Operating &amp; Short Term</b>               | <b>0.0</b>               | <b>0.1</b>  | <b>0.1</b>  | <b>0.0</b>   | <b>0.0</b>   | --           | --           | --            | <b>0.1</b>     | <b>0.0</b>  | <b>0.0</b>  | <b>0.1</b>    | <b>Jun-10</b> |
| <i>YSU Total Operating &amp; Short Term Benchmark</i> | 0.0                      | 0.1         | 0.1         | 0.1          | 0.1          | 0.1          | 0.4          | 1.6           | 0.1            | 0.1         | 0.1         | 0.1           | Jun-10        |
| JPMorgan 100% U.S. Tr Sec MM Inst                     | 0.0                      | 0.0         | 0.0         | 0.0          | 0.0          | 0.0          | 0.2          | 1.3           | 0.0            | 0.0         | 0.0         | 0.0           | Sep-11        |
| <i>BofA Merrill Lynch 91-Day T-Bill</i>               | 0.0                      | 0.0         | 0.0         | 0.1          | 0.1          | 0.1          | 0.4          | 1.5           | 0.0            | 0.1         | 0.1         | 0.1           | Sep-11        |
| JPMorgan Sweep Account                                |                          |             |             |              |              |              |              |               |                |             |             |               |               |
| Vanguard Short-Term Federal Adm                       | 0.4                      | 1.3         | 1.3         | 0.5          | 0.9          | 1.7          | 2.7          | 3.2           | 1.3            | -0.2        | 1.5         | 1.1           | Sep-10        |
| <i>Barclays 1-5 Yr. Govt.</i>                         | 0.5                      | 1.2         | 1.2         | 0.5          | 0.7          | 1.8          | 2.6          | 3.1           | 1.2            | -0.1        | 1.0         | 1.1           | Sep-10        |
| Star Plus   | 0.0                      | --          | --          | --           | --           | --           | --           | --            | --             | --          | --          | 0.2           | Jan-14        |
| <b>Total Long Term/ Reserves Pool</b>                 | <b>1.7</b>               | <b>4.5</b>  | <b>4.5</b>  | <b>6.5</b>   | <b>6.5</b>   | --           | --           | --            | <b>4.5</b>     | <b>8.7</b>  | <b>6.4</b>  | <b>5.7</b>    | <b>Jun-10</b> |
| <i>YSU Total Long Term/ Reserves Fund Benchmark</i>   | 1.4                      | 4.0         | 4.0         | 5.6          | 5.6          | 4.8          | 4.5          | 4.6           | 4.0            | 7.1         | 5.5         | 4.8           | Jun-10        |
| <b>Total Domestic Equity</b>                          | <b>5.7</b>               | <b>11.6</b> | <b>11.6</b> | <b>22.8</b>  | <b>20.3</b>  | --           | --           | --            | <b>11.6</b>    | <b>35.2</b> | <b>15.3</b> | <b>19.0</b>   | <b>Jun-10</b> |
| <i>Russell 3000</i>                                   | 5.2                      | 12.6        | 12.6        | 22.6         | 20.5         | 15.6         | 7.5          | 7.9           | 12.6           | 33.6        | 16.4        | 19.2          | Jun-10        |
| TRP Instl US Structured Rsch                          | 4.8                      | 12.4        | 12.4        | 22.2         | 20.2         | 14.9         | 7.4          | --            | 12.4           | 32.9        | 16.2        | 18.7          | Jun-10        |
| <i>S&amp;P 500</i>                                    | 4.9                      | 13.7        | 13.7        | 22.7         | 20.4         | 15.5         | 7.3          | 7.7           | 13.7           | 32.4        | 16.0        | 19.1          | Jun-10        |
| Vanguard 500 Index Adm                                | 4.9                      | 13.6        | 13.6        | 22.6         | 20.4         | 15.4         | 7.3          | 7.6           | 13.6           | 32.3        | 16.0        | 19.1          | Jun-10        |
| <i>S&amp;P 500</i>                                    | 4.9                      | 13.7        | 13.7        | 22.7         | 20.4         | 15.5         | 7.3          | 7.7           | 13.7           | 32.4        | 16.0        | 19.1          | Jun-10        |
| Vanguard Mid Cap Index Adm                            | 6.6                      | 13.8        | 13.8        | 24.0         | 21.3         | 17.0         | 8.7          | 9.5           | 13.8           | 35.1        | 16.0        | 17.5          | Sep-10        |
| <i>Vanguard Mid Cap Index Benchmark</i>               | 6.7                      | 13.8        | 13.8        | 24.1         | 21.3         | 17.1         | 8.8          | 9.5           | 13.8           | 35.3        | 16.0        | 17.6          | Sep-10        |
| Loomis Sayles Sm Growth Instl                         | 8.3                      | 1.1         | 1.1         | 22.2         | 18.1         | 17.4         | 8.5          | 10.8          | 1.1            | 47.7        | 10.3        | 17.8          | Sep-10        |
| <i>Russell 2000 Growth</i>                            | 10.1                     | 5.6         | 5.6         | 23.0         | 20.1         | 16.8         | 8.7          | 8.5           | 5.6            | 43.3        | 14.6        | 17.3          | Sep-10        |

## NON-ENDOWMENT REPORT CARD

|   | Ending December 31, 2014 |             |             |              |              |              |              |               | Calendar Years |             |             | Inception     |               |
|---|--------------------------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|----------------|-------------|-------------|---------------|---------------|
|   | 2014<br>Q4<br>(%)        | YTD<br>(%)  | 1 Yr<br>(%) | 2 Yrs<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 7 Yrs<br>(%) | 10 Yrs<br>(%) | 2014<br>(%)    | 2013<br>(%) | 2012<br>(%) | Return<br>(%) | Since         |
| Victory Integrity Sm-Cap Value Y                    | 8.7                      | 7.3         | 7.3         | 23.0         | 19.9         | 16.9         | 10.5         | --            | 7.3            | 41.0        | 14.0        | 17.3          | Sep-10        |
| <i>Russell 2000 Value</i>                           | 9.4                      | 4.2         | 4.2         | 18.4         | 18.3         | 14.3         | 7.6          | 6.9           | 4.2            | 34.5        | 18.1        | 14.9          | Sep-10        |
| <b>Total International Equity</b>                   | <b>-3.2</b>              | <b>-1.4</b> | <b>-1.4</b> | <b>10.3</b>  | <b>13.5</b>  | --           | --           | --            | <b>-1.4</b>    | <b>23.4</b> | <b>20.1</b> | <b>5.8</b>    | <b>Sep-10</b> |
| <i>MSCI EAFE Gross</i>                              | -3.5                     | -4.5        | -4.5        | 8.5          | 11.6         | 5.8          | 0.0          | 4.9           | -4.5           | 23.3        | 17.9        | 6.5           | Sep-10        |
| <i>MSCI ACWI ex USA Gross</i>                       | -3.8                     | -3.4        | -3.4        | 5.7          | 9.5          | 4.9          | -0.2         | 5.6           | -3.4           | 15.8        | 17.4        | 4.8           | Sep-10        |
| William Blair Int'l Gr I                            | -1.6                     | -2.9        | -2.9        | 7.5          | 12.7         | 8.2          | 0.1          | 6.1           | -2.9           | 19.0        | 24.0        | 12.0          | Jun-12        |
| <i>MSCI EAFE Gross</i>                              | -3.5                     | -4.5        | -4.5        | 8.5          | 11.6         | 5.8          | 0.0          | 4.9           | -4.5           | 23.3        | 17.9        | 12.5          | Jun-12        |
| <i>MSCI ACWI ex USA Gross</i>                       | -3.8                     | -3.4        | -3.4        | 5.7          | 9.5          | 4.9          | -0.2         | 5.6           | -3.4           | 15.8        | 17.4        | 10.1          | Jun-12        |
| Dodge & Cox Internat'l Stock                        | -4.7                     | 0.1         | 0.1         | 12.4         | 15.2         | 7.9          | 2.0          | 6.7           | 0.1            | 26.3        | 21.0        | 8.0           | Sep-10        |
| <i>MSCI EAFE Gross</i>                              | -3.5                     | -4.5        | -4.5        | 8.5          | 11.6         | 5.8          | 0.0          | 4.9           | -4.5           | 23.3        | 17.9        | 6.5           | Sep-10        |
| <b>Total Fixed Income</b>                           | <b>0.5</b>               | <b>2.2</b>  | <b>2.2</b>  | <b>1.0</b>   | <b>1.7</b>   | --           | --           | --            | <b>2.2</b>     | <b>-0.1</b> | <b>3.2</b>  | <b>2.4</b>    | <b>Jun-10</b> |
| <i>YSU Fixed Income Benchmark</i>                   | 0.4                      | 1.7         | 1.7         | 0.9          | 1.4          | 2.3          | 3.0          | 3.4           | 1.7            | 0.1         | 2.4         | 1.9           | Jun-10        |
| JPMorgan Core Bond Ultra                            | 1.5                      | 5.4         | 5.4         | 1.8          | 3.0          | 4.7          | 5.4          | 5.1           | 5.4            | -1.6        | 5.2         | 3.9           | Apr-11        |
| <i>Barclays Aggregate</i>                           | 1.8                      | 6.0         | 6.0         | 1.9          | 2.7          | 4.4          | 4.8          | 4.7           | 6.0            | -2.0        | 4.2         | 3.8           | Apr-11        |
| YSU Intermediate Term Bond                          | 0.7                      | 3.0         | 3.0         | 1.2          | 2.6          | 3.7          | 4.6          | 4.5           | 3.0            | -0.5        | 5.2         | 4.3           | Mar-04        |
| <i>Barclays Int Govt/Credit</i>                     | 0.9                      | 3.1         | 3.1         | 1.1          | 2.0          | 3.5          | 4.0          | 4.1           | 3.1            | -0.9        | 3.9         | 3.9           | Mar-04        |
| PIMCO Low Duration Instl                            | -0.1                     | 0.8         | 0.8         | 0.4          | 2.3          | 2.7          | 3.6          | 3.8           | 0.8            | 0.1         | 6.2         | 0.4           | Mar-13        |
| <i>BofA Merrill Lynch US Treasuries 1-3 Yrs</i>     | 0.2                      | 0.6         | 0.6         | 0.5          | 0.5          | 1.1          | 1.8          | 2.5           | 0.6            | 0.4         | 0.4         | 0.5           | Mar-13        |
| YSU Short Term Bond                                 | 0.2                      | 0.8         | 0.8         | 0.7          | 1.1          | 1.5          | 2.5          | 3.0           | 0.8            | 0.6         | 1.8         | 2.9           | Mar-04        |
| <i>BofA Merrill Lynch US Corp &amp; Gov 1-3 Yrs</i> | 0.1                      | 0.8         | 0.8         | 0.7          | 1.0          | 1.5          | 2.3          | 2.9           | 0.8            | 0.7         | 1.5         | 2.7           | Mar-04        |
| Vanguard Short-Term Bond Instl                      | 0.3                      | 1.3         | 1.3         | 0.7          | 1.2          | --           | --           | --            | 1.3            | 0.2         | 2.1         | 1.2           | Dec-11        |
| <i>Barclays 1-5 Yr. Govt/Credit</i>                 | 0.4                      | 1.4         | 1.4         | 0.9          | 1.3          | 2.2          | 3.0          | 3.4           | 1.4            | 0.3         | 2.2         | 1.3           | Dec-11        |
| DFA Five-Yr Global Fxd-Inc I                        | 1.0                      | 2.9         | 2.9         | 1.2          | 2.4          | 3.4          | 3.6          | 3.6           | 2.9            | -0.4        | 4.8         | 2.5           | Jun-13        |
| <i>Citi WGBI 1-5 Yr Hdg USD</i>                     | 0.5                      | 1.9         | 1.9         | 1.3          | 1.5          | 1.8          | 2.5          | 3.1           | 1.9            | 0.6         | 2.1         | 1.7           | Jun-13        |

## WHAT ARE ALTERNATIVE INVESTMENTS?



The term “Alternative Investment” is used to describe the broad range of nontraditional investments (i.e., not stocks or bonds).

## ALTERNATIVE INVESTMENT CATEGORIES

Alternatives are segregated into assets and strategies.

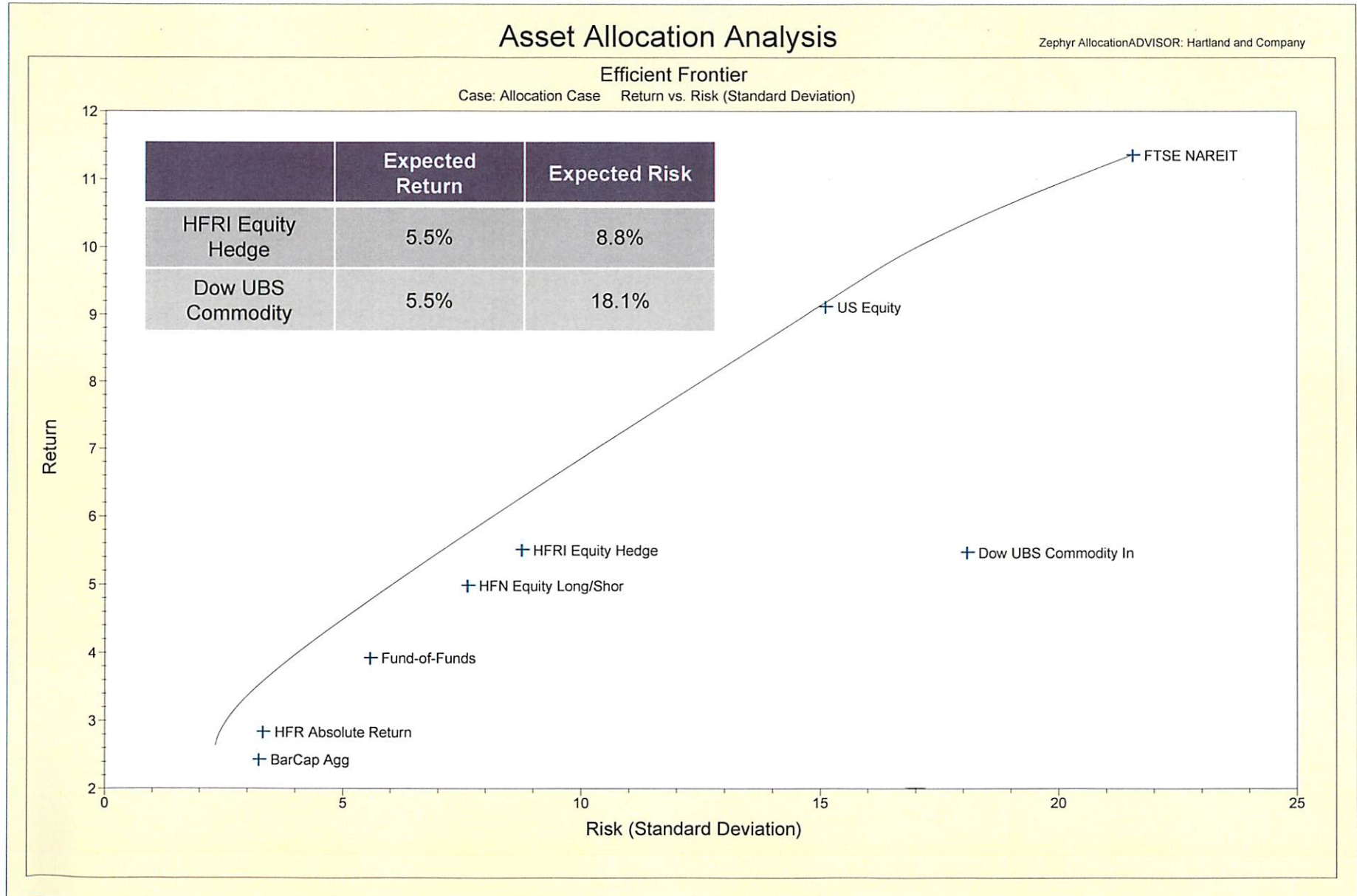
### Alternative Investment Assets

- **Private Equity**
  - Equity investment in a company or asset that is not publically traded.
- **Real Estate**
  - Investments made in buildings and/or buildable land (offices, retail, REITS, etc.).
- **Real Assets/Commodities**
  - Investments made in an instrument that derive their value from assets such as metals, energy, and agricultural products.

### Alternative Investment Strategies

- **Hedge Funds**
  - Typically offers “plays” against the markets (e.g., short selling, futures, and other derivatives) in search of absolute returns.
- **Tactical Asset Allocation (TAA)**
  - Investments into a fund where a manager is able to make tactical rebalances amongst asset classes to achieve returns and uncover inefficiencies.

# DIFFERENT ALTERNATIVE INVESTMENTS HAVE DIFFERENT RISK/RETURN PROFILES



## 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.

**AGENDA ITEM: C.2.a.**

**AGENDA TOPIC:** Resolution to Approve Revisions to the Asset Allocation Guidelines

**STAFF CONTACT(S):** Neal McNally, Interim Vice President for Finance & Administration

**BACKGROUND:** Pursuant to the University's investment policy, the Board of Trustees Investment Subcommittee has the responsibility of updating the Asset Allocation Guidelines. The Subcommittee has consulted with the University's investment advisors, Hartland, and recommends revisions to the Asset Allocation Guidelines.

**SUMMARY AND ANALYSIS:** Hartland recommends the following revisions to the Asset Allocation Guidelines: 1) Addition of Alternative Investment guidelines and benchmarks, 2) Revisions to Long-Term Pool target allocations and ranges, and 3) Removal of YSU Foundation references.

**RESOLUTION:**

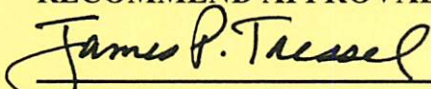
**RESOLUTION TO APPROVE  
REVISIONS TO THE ASSET ALLOCATION GUIDELINES**

**WHEREAS,** the Investment Subcommittee of the Board of Trustees of Youngstown State University is responsible for developing sound and consistent asset allocation guidelines and setting forth an investment structure for managing the University's assets pursuant to *University Guidebook* policy 3356:03-10 (Previous Policy Number 3007.01); and

**WHEREAS,** the Investment Subcommittee has consulted with the University's investment advisors and recommends revisions to the Asset Allocation Guidelines.

**NOW, THEREFORE, BE IT RESOLVED,** that the Investment Subcommittee of the Board of Trustees of Youngstown State University does hereby approve the changes to the Asset Allocation Guidelines, shown as Exhibit \_\_ attached here to.

**RECOMMEND APPROVAL:**

  
James P. Tressel, President

**Board of Trustees Meeting  
March 11, 2015  
YR 2015-**



**YOUNGSTOWN STATE UNIVERSITY**  
**Asset Allocation and Other Investment Guidelines**  
**Investment of Non-Endowment University Funds**

ASSET ALLOCATION GUIDELINES

The Assets of the University are to be allocated between short-term assets and long-term assets. The Asset Allocation section of the Policy is specifically intended to address short-term assets and long-term assets as two distinct asset pools of the University's balance sheet assets. ~~The University's endowment assets managed by the YSUF are primarily invested in equities in accordance with the YSUF investment policy, a copy of which is attached to the contract entered into between the University and the YSUF.~~

The objectives that the University has established in conjunction with a comprehensive review of the current and projected financial requirements are as follows:

1. The strict adherence to the Ohio Revised Code and the authority granted under Ohio Revised Code §3345.05. Specifically:
  - a. ORC 3345.05 (C)(1): A minimum of 25% of the average amount of the University's investment portfolio over the course of the previous fiscal year must be invested in securities of the United States government or of its agencies or instrumentalities, the treasurer of state's pooled investment program, obligations of this state or any political subdivision of this state, certificates of deposit of any national bank located in this state, written repurchase agreements with any eligible Ohio financial institution that is a member of the federal reserve system or federal home loan bank, money market funds, or bankers acceptances maturing in two hundred seventy days or less which are eligible for purchase by the federal reserve system, as a reserve.
  - b. ORC 3345.05 (C)(2): Eligible funds above those that meet the conditions described in ORC 3345.05 (C)(1) may be pooled with other institutional funds and invested in accordance with section 1715.52 of the Revised Code.

The Operating and Short-Term Pool will be comprised of cash and short-term assets required for working capital, liquidity purposes, and other short-term needs. It is understood that assets classified as short-term are to be maintained primarily in cash and cash equivalents, and may also invest partially in short term fixed income (guidelines defined within), in order to meet the daily liquidity needs of the University. The asset allocation guidelines of the Operating and Short-Term Pool are outlined in the table below.

The Long-Term / Reserves Pool are investments with a time horizon in excess of one year. It is assumed that financial needs of the University ranging from one to five years

will be maintained in fixed income investments. It is further assumed that any equity or alternative investments will have a time horizon greater than five years. As shown in the table below, short-term and intermediate-term fixed income, alternative investments, and equity are classified as long-term assets.

Based on the investment objectives and risk tolerances stated in these guidelines, the following asset allocation strategy is considered appropriate for the University's investment Assets:

| <u>Operating &amp; Short Term Pool</u>      |                    | <u>Allocation</u> |                    |
|---|--------------------|-------------------|--------------------|
| <u>Asset Class/Investment Strategy</u>      | <u>Pool Target</u> | <u>Pool Range</u> | <u>Total Range</u> |
| <u>Total Cash/Operating Assets</u>          | <u>n/a</u>         | <u>60-100%</u>    |                    |
| <u>Total Short-Term Fixed Income</u>        | <u>n.a</u>         | <u>0-40%</u>      |                    |
|   |                    |                   | <u>25-50%</u>      |
| <u>Long Term/Reserves Pool</u>              |                    |                   |                    |
| <u>Total Domestic Equity</u>                | <u>27%</u>         | <u>20-35%</u>     |                    |
| <u>Total International Equity</u>           | <u>8%</u>          | <u>0-15%</u>      |                    |
| <u>Total Equity</u>                         | <u>35%</u>         | <u>25-45%</u>     |                    |
| <u>Total Alternatives</u>                   | <u>10%</u>         | <u>0-20%</u>      |                    |
| <u>Total Short-Term Fixed Income</u>        | <u>35%</u>         | <u>25-45%</u>     |                    |
| <u>Total Intermediate-Term Fixed Income</u> | <u>20%</u>         | <u>10-30%</u>     |                    |
| <u>Cash</u>                                 | <u>0%</u>          | <u>0-5%</u>       |                    |
|   | <u>100%</u>        |                   | <u>50-75%</u>      |

| <u>Operating &amp; Short Term Pool</u> |             |            |             |
|--|-------------|------------|-------------|
| Asset Class/Investment Strategy        | pool target | Allocation |             |
|  |             | pool range | total range |
| Operating Assets                       | n/a         | 60-100%    |             |
| Short Term Assets                      | n/a         | 0-40%      |             |
|  |             | 100%       | 25 - 50%    |
| <u>Long Term/Reserves Pool</u>         |             |            |             |
| Asset Class/Investment Strategy        | pool target | Allocation |             |
|  |             | pool range | % - total   |
| Total Domestic Equity                  | 27%         | 0 - 35%    |             |
| Total International Equity             | 8%          | 0 - 15%    |             |
| Total Equity                           | 35%         | 0-45%      |             |
| Total ST Fixed Income                  | 40%         | 35-55%     |             |
| Total Int. Fixed Income                | 25%         | 20 - 40%   |             |
| Cash                                   | 0%          | 0 - 5%     |             |
|  | 100%        | 100%       | 50 - 75%    |

According to the University's Policy, the operating and short term funds of the non-endowment funds are allocated to the Operating and Short-Term Pool of the asset allocation guidelines. Adequate balance of 60 to 100% of the pool will be invested in cash and cash equivalents in order to provide the University with liquidity to meet its operational needs. The Pool may also invest 0-40% in 1-3 year average maturity U.S. Government fixed income investments. The Operating and Short Term Pool should represent no less than 25% of the total market value of the Investments. Although the actual percentage will fluctuate with market conditions, levels in excess of 50% or below 25% will result in rebalancing the Investments to target levels. The Subcommittee will review the pool level allocations on a quarterly basis.

According to the University's Policy, funds with a longer time horizon are allocated to the Long-Term / Reserves Pool. This Pool will be comprised of short-term fixed income, intermediate-term fixed income, [alternative investments](#), and equity.

Short-term fixed income should normally represent ~~35~~40% of the total market value of the Pool. Although the actual percentage will fluctuate with market conditions, short-term fixed income levels in excess of ~~45~~55% or below ~~25~~35% will result in rebalancing

the short-term fixed income component of the pool to its target level. The Subcommittee will review the short-term fixed income allocation on a quarterly basis.

Intermediate-term fixed income should normally represent ~~20~~5% of the total market value of the pool. Although the actual percentage will fluctuate with market conditions, short-term fixed income levels in excess of ~~30~~40% or below ~~12~~0% will result in rebalancing the intermediate-term fixed income component of the pool to its fixed income target level. The Subcommittee will review the intermediate-term fixed income allocation on a quarterly basis.

The equity component should normally represent 35% of the total market value of the long-term pool, ~~excluding the endowment assets managed for the University by the YSUF~~. Although the actual percentage of equities will vary with market conditions, equity levels in excess of 45% or below 25% will result in rebalancing the equity component of the fund to its equity target level. The Subcommittee will review the equity allocation on a quarterly basis.

The alternative investments component should normally represent 10% of the total market value of the long-term pool. Although the actual percentage will vary with market conditions, levels in excess of 20% will result in rebalancing the alternatives component of the fund to its target level. The Subcommittee will review the alternative allocation on a quarterly basis.

Depending upon market conditions, the percentage allocation to each asset class may fluctuate within the above policy ranges. Such strategic allocations should be reviewed and approved by the Investment Subcommittee on an ongoing basis. In the event that the allocation to a certain investment Pool and asset class falls above or below the above established ranges, the Consultant should make a recommendation to the Investment Subcommittee to rebalance the portfolio.

Investment objectives and guidelines will be established for each separate account investment manager. Mutual funds are not subject to the Guidelines set forth below. As it relates to the selection and retention decisions regarding mutual funds, the stated Guidelines should be used as references.

#### CASH AND CASH EQUIVALENTS GUIDELINES

Such investments should be prudently diversified and would include:

- any instrument issued by, guaranteed by, or insured by the U.S. Government, agencies, or other full faith instruments;
- commercial paper issued by domestic corporations which is rated both "P-1" and "A-1" by Moody's and Standard & Poor's, respectively;
- certificates of deposit, bankers acceptances, or other such irrevocable primary obligations from a list of approved banks provided by the managers; and

- commingled, short-term cash reserve funds managed generally in accordance with the principles set forth above.

#### FIXED INCOME GUIDELINES

The objective of the fixed-income portion of the Assets shall be both to provide a secure, above-average stream of income (i.e., income in excess of U.S. Treasury Bill rates) and to provide a relatively stable market value base. The following directions are intended to apply to all fixed-income investment managers:

- Within the Operating and Short Term Pool, non-cash investments are limited to U.S. government only fixed income securities with a 1 to 3 year average maturity and duration +/- 20% of the stated benchmark.
- Fixed-income investments may include U.S. and Non-U.S. issues of Government and Agency obligations, marketable corporate bonds, mortgage or asset-backed bonds, and preferred stocks with sinking funds as deemed prudent by the investment managers.
- Fixed income investments are to be prudently diversified by security type, with an emphasis toward avoiding concentrated positions in any one fixed income sector or security type.
- Fixed-income portfolio maturity, as measured by portfolio duration, should be in the range of 80% to 120% of the applicable benchmark.
- Fixed-income investments shall be rated “BAA” (investment grade) or better by Moody’s and BBB (investment grade) or better by Standard & Poor’s with emphasis toward “A” or better issues. Regarding below investment grade holdings, YSU will target the use of investment managers that, as a part of their investment process, strategy and risk controls, do not initially purchase bonds that are below investment grade. However, it is understood that, from time to time, individual bonds or holdings may fall below investment grade. It is expected that investment managers will handle these instances consistent with their stated investment process, strategy and risk controls. Therefore, it is accepted that from time to time, a nominal amount of the non-endowment assets may be held in a below investment grade bond.
- No more than 5% of the fixed income investments, at market, shall be invested in securities of any one issuer, except Government and Agency obligations, without the Subcommittee’s prior approval.
- Cash equivalent investments (maturities less than one year) are permitted, up to 10% of the total market value of the account, when the managers’ investment policies discourage longer-term commitments. However, the Subcommittee must be consulted in the event that the manager chooses to increase its cash equivalent position beyond 10% of the assets under its supervision.

- Investment assets allocated to fixed income investment management firms and institutions shall be properly diversified so as to avoid over concentration with any one investment manager or institution.

## EQUITY GUIDELINES

The objective of the equity portion of the Assets shall be to provide for potential growth of principal with a long term time horizon. The use of both passively managed equity index strategies and actively managed separate accounts and comingle funds is permitted. The following acceptable sub asset classes will serve as a guideline for equity investments:

- A. Large Cap Domestic - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ) and readily marketable with market capitalization generally exceeding \$5 billion. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, “generally exceeding \$5 billion” means that greater than 67% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$5 billion.
- B. Small/Mid Cap Domestic - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ) and readily marketable with market capitalization generally exceeding \$500 million. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, “generally exceeding \$500 million” means that greater than 67% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$500 million.
- C. International - common stocks or equivalents listed on an established stock market (e.g., NYSE, AMEX, NASDAQ, FTSE, NIKKEI, DAX) and readily marketable with market capitalization generally exceeding \$1 billion. Non-marketable securities may not be purchased or held without prior approval from the Subcommittee. As used herein, “generally exceeding \$1 billion” means that greater than 50% of the value of the portfolio is invested in securities when the market capitalization of which exceeds \$1 billion.

## Equity Diversification

Each investment manager should diversify the portfolio in an attempt to minimize the impact of substantial losses in any specific industry or issue. Therefore, each equity account:

- May not invest more than approximately 5% of the account valued at cost in a given issuer
- May not invest more than approximately 10% of the account valued at market in a given issuer
- Large Cap, Mid Cap and Small Cap Domestic - Shall be broadly diversified by industry or sector groups and not represent over concentration relative to the mandate's relevant benchmark. Additionally, domestic equity managers shall limit international-domiciled securities to 10% of their portfolio value, absent Subcommittee approval.
- International – Shall be broadly diversified by county, industry or sector groups and not represent over concentration relative to the mandate's relevant benchmark; and limit emerging market exposure to 25% of total international exposure.

## ALTERNATIVE INVESTMENT GUIDELINES

Alternative investments are investments that are not included in the traditional assets of cash, equities, and fixed income. Alternative investments include categories such as hedge funds, private equity, real estate, commodities, tactical asset allocation strategies, etc.

The objective of the alternative investments shall be to promote diversification and provide risk-limiting characteristics with the goal of long-term return potential and lower overall portfolio volatility.

With the assistance of its investment consultant, it is the responsibility of the Subcommittee to conduct acceptable levels of due diligence on any investment categorized as an alternative investment. The due diligence process will include obtaining proper education on the risks and rewards of the alternative asset class, as well as the underlying risks and characteristics of the alternative investment vehicle. This due diligence process must be properly documented and retained.

Investments in real estate, real assets, commodities, tactical asset allocation, equity long/shorts, and absolute return strategies are permissible to the extent that they are established within the asset allocation guidelines and are investments as part of the underlying investment strategy of a well-diversified, highly liquid mutual fund, whose shares are publicly traded on major U.S. exchanges.

Other alternative investment asset classes including but not limited to hedge funds and private strategies, such as private equity, venture capital and levered buyouts, are not permitted at this time.

## PROHIBITED INVESTMENTS

The following categories of securities and strategies are not considered appropriate at the present time:

- Private Placements
- Unregistered or Restricted Stock
- Margin Trading/Short Sales
- Commodities, Commodity Contracts, Precious Metals, or Gems (excluding liquid mutual funds)
- Real Estate Property (excluding REITs)
- Guaranteed Insurance Contracts
- Securities Lending; pledging or hypothecating securities

## VOTING OF PROXIES AND TRADE EXECUTION

The investment manager shall vote proxies for separately managed accounts on behalf of the University. The Investment Subcommittee will vote all mutual fund proxies.

The Subcommittee expects the purchase and sale of its securities to be made in a manner designed to receive the combination of best price and execution.

## RESPONSIBILITIES OF THE INVESTMENT MANAGERS FOR SEPARATELY MANAGED ACCOUNTS

The guidelines below are applicable to all investment managers that manage money for the University on a separate account basis, ~~including the YSUF~~. However, any mutual or commingled fund retained by the University will not be expected to adhere to these responsibilities.

### Adherence to Policy Guidelines

The Assets are to be managed in accordance with the Policy guidelines herein or expressed by separate written instructions when deviation is deemed prudent and desirable. Written instructions amending this Policy document must be authorized by the Subcommittee and will be communicated through the University's Vice President for Finance and Administration or the investment consultant.

### Discretionary Authority

The investment managers are expected to exercise complete investment discretion within the boundaries of the restrictions outlined in these guidelines. Such discretion includes



decisions to buy, hold, or sell equity or fixed-income securities (including cash equivalents) in amounts and proportions reflective of each manager's current investment strategy.

#### Communication

The Subcommittee encourages, and the investment managers are responsible for, frequent and open communication with the Subcommittee and the investment consultant on all significant matters pertaining to the investment of the Assets. These communications would generally be addressed to the University's Vice President for Finance and Administration or investment consultant. In this manner, the Subcommittee expects to be advised of any major changes in investment outlook, investment strategy, asset allocation, portfolio structure, market value of the Assets, and other substantive matters affecting the Assets. The Subcommittee also expects to be informed of any significant changes in ownership, organizational structure, financial condition, and/or senior personnel staffing of the investment management organizations.

All investment managers will be required to meet with the University's Investment Subcommittee at the discretion of the Subcommittee.

The Subcommittee recognizes that the Policy requires periodic re-examination and, perhaps, revision if it is to continue to serve as a working document to encourage effective investment management. Whenever an investment manager believes that the Policy should be altered, it is the responsibility of the manager to initiate written communication with the Subcommittee.

#### Reporting

The Subcommittee expects each investment manager to forward, on a timely basis, quarterly reports containing portfolio activity, valuations at market, and quarterly strategy updates.

#### Compliance with Prudence and Diversification Measures

As fiduciaries, the investment managers are expected to diversify the portfolio to minimize the risk of large losses. The managers are expected to invest the Assets with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with such aims. Furthermore, the investment managers are expected to acknowledge in writing their intentions to comply with the Policy as it currently exists or as modified by the Subcommittee from time to time.

#### RESPONSIBILITIES OF THE INVESTMENT CONSULTANT

The investment consultant is responsible for providing information and analysis to assist the University with the following:

- reviewing asset allocation and investment strategy on an annual basis to determine if the current strategy meets the cash flow needs of the University and is maximizing the long-term total return of the Assets;

- reviewing all separately managed accounts to ensure that each investment manager is adhering to the issued Policy guidelines;
- communicating with all investment management organizations on a quarterly basis to determine portfolio composition and to ascertain information concerning organizational change. (Each portfolio is to be reviewed for style drift through portfolio holdings and returns-based style analysis. Additionally, each portfolio is to be reviewed for prohibited investments on an ongoing basis);
- providing a quarterly performance evaluation report and assessment of the University's Assets;
- monitoring the equity holdings of the total portfolio to determine if any one holding represents a percentage weighting that exceeds 10% of the total portfolio and alerting the Subcommittee when the portfolio violates this Policy, ~~except with regard to University endowment funds managed by the YSUF;~~
- reviewing asset allocation on a quarterly basis to determine if the current levels are consistent with the asset allocation guidelines stated in this document;
- monitoring the performance of each investment manager retained by the University to determine if the investment product is out-performing the appropriate benchmark over rolling 3 and 5-year time periods; and
- monitoring the performance of the total portfolio to determine if the collective investment strategy is outperforming the appropriate benchmarks over rolling 3 and 5-year time periods.

## EVALUATION AND REVIEW

The objective of the evaluation and review process is to monitor the progress of the Assets in achieving the overall investment objectives. Performance will be measured and reviewed periodically by the Subcommittee and their consultants. Particular attention will be directed toward:

- determining whether the total funds are achieving their stated objectives;
- determining whether the investment managers are performing satisfactorily in relation to both the objectives set forth in this Policy, as a primary consideration, and to other investment organizations managing similar pools of capital and the recognized market indices;
- determining whether the investment managers are adhering to the guidelines set forth herein;

- the relative total portfolio return and volatility versus established benchmarks and peers;
- any issue involving the management of the investment assets;
- asset allocation structure in light of evolving markets, strategies, and fund requirements;
- reviewing benchmarks at least annually to determine appropriateness;
- determining whether the investment managers are adhering to their stated philosophy and style; and
- determining whether the overall policies and objectives continue to be appropriate, reasonable, and achievable.

#### REVIEW OF INVESTMENT RESULTS

On a regular basis, but not less than once annually, the Subcommittee will review actual progress of the funds versus the investment environment. The regular review will include:

- absolute market and total portfolio returns;
- relative total portfolio return and volatility versus established benchmarks and peers;
- asset allocation structure in light of evolving markets, strategies, and fund requirements;
- adherence to guidelines;
- individual manager performance versus established benchmarks and peers;
- the continuing appropriateness of this Policy; and
- any issue involving the management of the funds' assets.

The performance of each individual investment manager will be reviewed on a quarterly basis with appropriate benchmarks as agreed upon from time to time by the Investment Subcommittee.

Total Fund, Pool level, and asset class returns will be measured as follows:

Total Fund: Weighted average benchmark based on the asset allocation targets identified with these guidelines using the below referenced market indices.

Pool level: Weighted average benchmark based on the asset allocation targets identified with these guidelines using the below referenced market indices.

| <u>Asset Class</u>                 | <u>Benchmark</u>  |
|------------------------------------|---|
| <b>Operating / Short Term Pool</b> |   |
| Cash                               | 91 Day T-Bill   |
| Short Term Fixed Income            | Barclay's Capital 1-3 Year Government Index   |
| <b>Long Term / Reserves Pool</b>   |   |
| Domestic Equity                    | Russell 3000 Index  |
| International Equity               | MSCI EAFE Index   |
| Intermediate Fixed Income          | Barclay's Capital Intermediate Govt. / Credit Index   |
| Short Term Fixed Income            | Barclay's Capital 1-5 Year Govt. / Credit Index and<br>Merrill Lynch 1-3 Year Govt./ Credit Index |
| <u>Alternative Investments</u>     | <u>CPI + 3%</u>   |
|                                    | <u>HFRI Fund-of-Funds Index</u>   |
|                                    | <u>HFRI Equity Hedge Index</u>  |
|                                    | <u>FTSE NAREIT Developed Index</u>  |

**AGENDA ITEM: C.2.b.**

**AGENDA TOPIC:** Resolution to Approve Hartland's Recommendation to Rebalance the Non-Endowment Long-Term Investment Pool

**STAFF CONTACT(S):** Neal McNally, Interim Vice President for Finance & Administration

**BACKGROUND:** Pursuant to the University's investment policy, the Board of Trustees Investment Subcommittee has the responsibility for identification of asset classes, strategic asset allocation, acceptable asset ranges above and below the strategic asset allocation, and selecting investment managers. The Subcommittee has consulted with the University's investment advisors, Hartland, and recommends rebalancing the Non-Endowment Long-Term Investment Pool.

**SUMMARY AND ANALYSIS:** Hartland recommends a Non-Endowment Long-Term Pool Rebalance which includes the addition of three investment managers: 1) Wells Fargo Absolute Return I, 2) Diamond Hill Equity Long/Short I, and 3) Voya Global Real Estate I.

**RESOLUTION:**

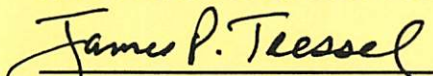
**RESOLUTION TO APPROVE  
HARTLAND'S RECOMMENDATION TO REBALANCE THE  
NON-ENDOWMENT LONG-TERM INVESTMENT POOL**

**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 Guidebook* policy 3356:03-10 (Previous Policy Number 3007.01); 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 23 of the February 24, 2015 Investment Subcommittee Agenda item C.1.a (Hartland February 24, 2015 Assets Update).

**RECOMMEND APPROVAL:**

  
James P. Tressel, President

**Board of Trustees Meeting  
March 11, 2015  
YR 2015-**