Youngstown STATE UNIVERSITY

BOARD OF TRUSTEES
INVESTMENT SUBCOMMITTEE

Tuesday, December 9, 2014
1:00 p.m. or immediately following previous meeting

Tod Hall
Board Meeting Room

AGENDA

A. Disposition of Minutes for Meeting Held September 16, 2014

B. Old Business

C. Subcommittee Items

1. Discussion Item

a. Hartland & Co. December 9, 2014 Assets Update — **Tab 1**
Mike Shebak and Sarah Parker will report.

2. Action Items

a. Resolution to Approve Change in Investment Fund Manager — **Tab 2**
Mike Shebak and Sarah Parker will report.

b. Resolution to Modify Investment of the University's Non-Endowment and Endowment Funds Policy, 3007.01 — **Tab 3**
Neal McNally, Interim Vice President for Finance and Administration, will report.

D. New Business

E. Adjournment

AGENDA ITEM: C.1.a.

AGENDA TOPIC: Hartland & Co. December 9, 2014 Assets Update

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

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

SUMMARY AND ANALYSIS:

I. Market Update
  - U.S. stocks returned +1.1% in the quarter, U.S. bonds returned +0.20%

II. Performance and Asset Allocation
Non-Endowment Performance, Market Values, and Asset Allocation as of 9/30/2014
  - Operating & Short-Term Pool: $33.132 million
    - Asset Allocation: 97% cash/3% fixed income
    - 3Q14 return = 0.0%; 1-year return = 0.1%
  - Long-Term Pool: $51.631 million
    - Asset Allocation: 37% equities/63% fixed income
    - 3Q14 return = -0.5%; 1-year return = 5.7%
  - Total: $84.763 million
    - Asset Allocation: 38% cash/23% equities/40% fixed income
    - 3Q14 return = -0.4%; 1-year return = 3.7%

Endowment Performance and Market Values as of 9/30/2014
  - YSU Endowment: $8.864 million
    - 3Q14 return = 0.5%; 1-year return = 12.6%
  - Kilcawley Center: $96K
    - 3Q14 return = 1.7%; 1-year return = 16.4%
  - Alumni License Plate: $393K
    - 3Q14 return = -3.2%; 1-year return = 8.2%

III. PIMCO Low Duration Review Replacement
  - Hartland recommends removing PIMCO Low Duration and allocating assets to the existing Vanguard Short-Term Bond Index

IV. 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

RESOLUTION: N/A – DISCUSSION ITEM ONLY

REVIEWED AS TO FORM AND CONTENT:

James P. Tressel

James P. Tressel, President

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December 9, 2014

YOUNGSTOWN STATE UNIVERSITY

NON-ENDOWMENT & ENDOWMENT ASSETS

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HISTORICAL ASSET CLASS PERFORMANCE

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Q1 2014	Q2 2014	Q3 2014	YTD
Em Mkt 56.3%	REITs 30.4%	Em Mkt 34.5%	REITs 34.3%	Em Mkt 39.8%	Glb Bond 9.4%	Em Mkt 79.0%	REITs 27.6%	US Bonds 7.8%	REITs 20.1%	Sm/Mid 36.8%	REITs 8.6%	REITs 7.0%	Large Cap 1.1%	REITs 13.1%
Sm/Mid 45.5%	Em Mkt 26.0%	Dev Intl 14.0%	Em Mkt 32.6%	Dev Intl 11.6%	US Bonds 5.2%	Hi Yld 57.5%	Sm/Mid 26.7%	REITs 7.3%	Em Mkt 18.6%	Large Cap 32.4%	Glb Bond 3.1%	Em Mkt 6.7%	Hdg Fnds 0.5%	Large Cap 8.3%
Dev Intl 39.2%	Dev Intl 20.7%	REITs 8.3%	Dev Intl 26.9%	Glb Bond 10.9%	Cash 2.1%	Sm/Mid 34.4%	Em Mkt 19.2%	Glb Bond 5.2%	Dev Intl 17.9%	Dev Intl 23.3%	Hi Yld 3.0%	Large Cap 5.2%	US Bonds 0.2%	US Bonds 4.1%
REITs 38.5%	Sm/Mid 18.3%	Sm/Mid 8.1%	Sm/Mid 16.2%	Hdg Fnds 9.7%	Hdg Fnds -20.8%	Dev Intl 32.5%	Hi Yld 15.2%	Hi Yld 4.4%	Sm/Mid 17.9%	Hdg Fnds 9.0%	Sm/Mid 2.3%	Dev Intl 4.3%	Cash 0.0%	Hi Yld 3.6%
Large Cap 28.7%	Glb Bond 12.1%	Hdg Fnds 7.5%	Large Cap 15.8%	US Bonds 7.0%	Hi Yld -26.4%	REITs 27.5%	Large Cap 15.1%	Large Cap 2.1%	Large Cap 16.0%	Hi Yld 7.4%	US Bonds 1.8%	Sm/Mid 3.6%	Hi Yld -1.9%	Em Mkt 2.8%
Hi Yld 28.2%	Large Cap 10.9%	Large Cap 4.9%	Hi Yld 11.8%	Large Cap 5.5%	Sm/Mid -36.8%	Large Cap 26.5%	Hdg Fnds 10.6%	Cash 0.1%	Hi Yld 15.6%	REITs 3.2%	Large Cap 1.8%	Glb Bond 2.8%	REITs -2.6%	Hdg Fnds 2.5%
Glb Bond 18.2%	Hi Yld 10.9%	Cash 3.1%	Hdg Fnds 10.2%	Cash 5.0%	Large Cap -37.0%	Hdg Fnds 11.5%	Dev Intl 8.2%	Sm/Mid -2.5%	Hdg Fnds 5.4%	Cash 0.1%	Dev Intl 0.8%	Hi Yld 2.6%	Em Mkt -3.4%	Glb Bond 0.3%
Hdg Fnds 11.4%	Hdg Fnds 7.2%	Hi Yld 2.7%	Glb Bond 7.3%	Hi Yld 2.2%	REITs -37.3%	US Bonds 5.9%	US Bonds 6.6%	Hdg Fnds -4.9%	US Bonds 4.2%	US Bonds -2.0%	Hdg Fnds 0.1%	US Bonds 2.0%	Glb Bond -5.3%	Sm/Mid 0.3%
US Bonds 4.1%	US Bonds 4.3%	US Bonds 2.4%	Cash 4.9%	Sm/Mid 1.4%	Dev Intl -43.1%	Glb Bond 4.4%	Glb Bond 6.1%	Dev Intl -11.7%	Glb Bond 1.8%	Em Mkt -2.3%	Cash 0.0%	Hdg Fnds 1.5%	Sm/Mid -5.4%	Cash 0.0%
Cash 1.2%	Cash 1.3%	Glb Bond -8.8%	US Bonds 4.3%	REITs -17.8%	Em Mkt -53.2%	Cash 0.2%	Cash 0.1%	Em Mkt -18.2%	Cash 0.1%	Glb Bond -4.9%	Em Mkt -0.4%	Cash 0.0%	Dev Intl -5.8%	Dev Intl -1.0%

Past performance is no guarantee of future results. Asset classes represented by: Large Cap – S&P 500 Index; Sm/Mid – Russell 2500 Index; Dev Intl – MSCI EAFE Index; Em Mkt – MSCI Emerging Markets Index; Hi Yld – Bank of America Merrill Lynch U.S. High Yield Master II; US Bonds – Barclays Capital U.S. Aggregate; Glb Bond – Barclays Capital Global Treasury ex US; REITs – NAREIT ALL REITs; Hdg Fnds – HFRI FOF: Diversified Index; Cash – Merrill Lynch 91-day Tbill . Data as of 9/30/2014 Source: Zephyr Associates.

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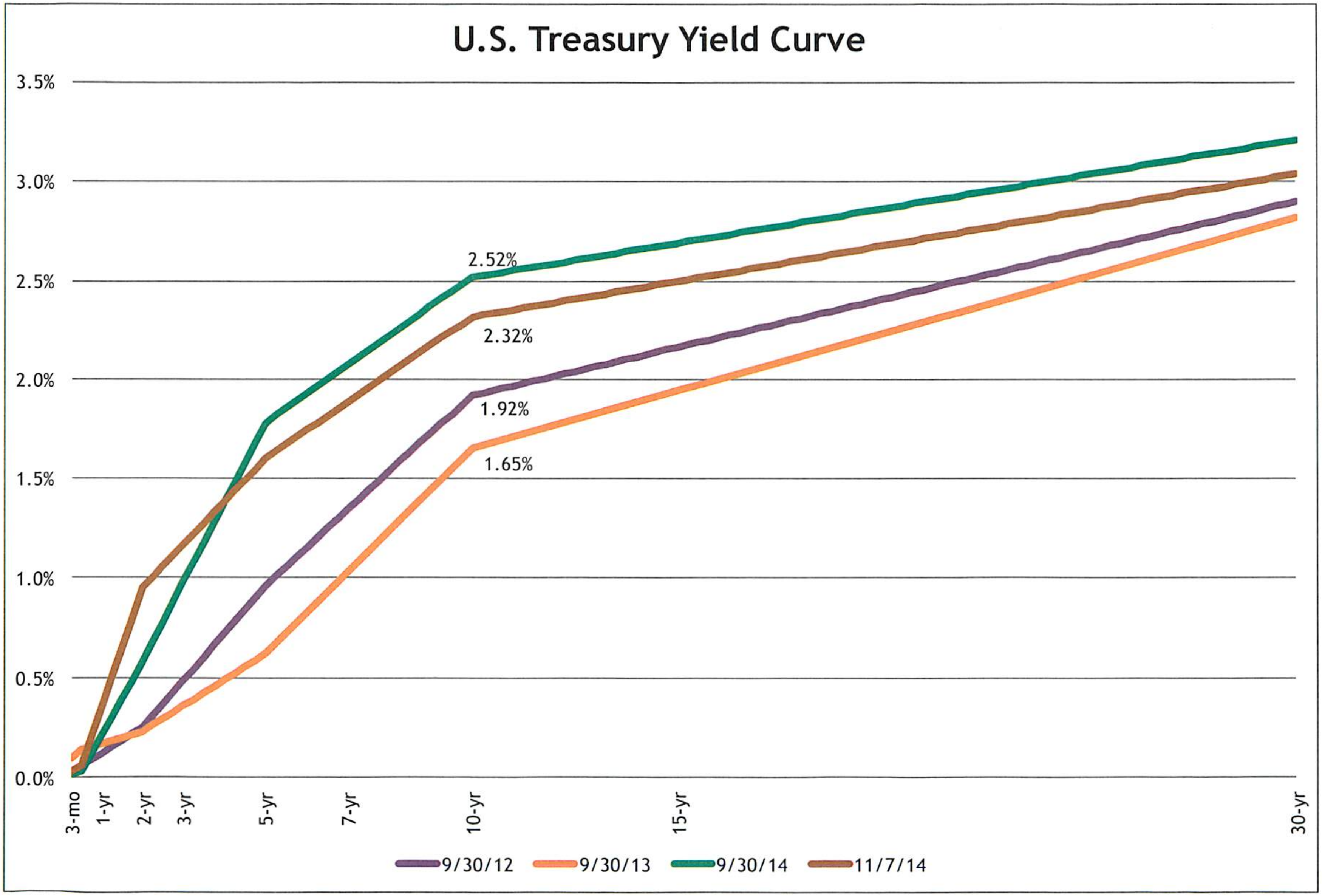

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3Q14 PERFORMANCE & ASSET ALLOCATION REVIEW

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NON-ENDOWMENT & ENDOWMENT STRUCTURE

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

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

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EXECUTIVE SUMMARY (AS OF 9/30/14)

Non-Endowment Assets	Market Value	%	3Q2014	1 Yr	2 Yrs	3 Yrs	Since Inception****
Non-Endowment: Operating &Short-Term Pool	$33.132 Million	97% cash/ 3% short-term fixed income	0.0%	0.1%	0.0%	0.0%	0.1%
		*Benchmark**	*0.0%*	*0.1%*	*0.1%*	*0.1%*	*0.1%*
Non-Endowment: Long-Term Pool	$51.631 Million	37% equities/ 63% fixed income	-0.5%	5.7%	6.0%	6.9%	5.6%
		*Benchmark***	*-0.4%*	*4.9%*	*5.1%*	*6.1%*	*4.7%*
Total Non-Endowment Assets	**$84.763 Million**	**38% cash/23% equities/40% fixed income**	**-0.4%**	**3.7%**	**3.9%**	**4.4%**	**3.9%**
		Benchmark**	***-0.2%***	***2.6%***	***2.6%***	***3.1%***	***3.2%***

1-year net-investment change: $2.75 Million

Endowment Assets	Market Value	3Q2014	1-Yr
YSU Endowment	$8.864 Million	0.5%	12.6%
	60 S&P 500 Index/40% Barclays Index	*0.8%*	*13.3%*
Kilcawley Center	$96K	1.7%	16.4%
	60 S&P 500 Index/40% Barclays Index	*0.8%*	*13.3%*
Alumni License Plate	$393K	-3.2%	8.2%
	60 S&P 500 Index/40% Barclays Index	*0.8%*	*13.3%*

*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

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NON-ENDOWMENT ASSETS

	Asset Class	Market Value 6/30/14 ($)	Market Value 9/30/14 ($)	% of Total Plan	% of Pool
Total University Assets		**64,343,362**	**84,763,509**	**100.0**	**100**
Total Operating & Short Term		**12,457,136**	**33,132,094**	**39.1**	**39.1**
JPMorgan 100% U.S. Tr Sec MM Inst	Cash	3,825,665	23,001,722	27.1	69.4
JPMorgan Sweep Account	Cash	2,586,357	4,087,749	4.8	12.3
Star Plus	Cash	5,003,888	5,001,538	5.9	15.1
Vanguard Short-Term Federal Adm	US Fixed Income Short Term	1,041,226	1,041,085	1.2	3.1
Total Long Term/ Reserves Pool		**51,886,226**	**51,631,415**	**60.9**	**60.9**
Total Domestic Equity		**14,636,695**	**14,538,280**	**17.2**	**28.2**
TRP Instl US Structured Rsch	US Stock Large Cap Core	4,844,737	4,870,409	5.7	9.4
Vanguard 500 Index Signal	US Stock Large Cap Core	4,872,746	4,927,403	5.8	9.5
Vanguard Mid Cap Index Signal	US Stock Mid Cap Core	2,486,969	2,458,544	2.9	4.8
Loomis Sayles Sm Growth Instl	US Stock Small Cap Growth	1,223,892	1,158,045	1.4	2.2
Munder Veracity Sm-Cap Value Y	US Stock Small Cap Value	1,208,351	1,123,879	1.3	2.2
Total International Equity		**4,739,830**	**4,575,408**	**5.4**	**8.9**
William Blair Int'l Gr I	International	2,276,477	2,178,890	2.6	4.2
Dodge & Cox Internat'l Stock	International	2,463,353	2,396,518	2.8	4.6
Total Fixed Income		**32,509,701**	**32,517,728**	**38.4**	**63.0**
JPMorgan Core Bond Ultra	US Fixed Income Core	6,007,541	6,022,900	7.1	11.7
YSU Intermediate Term Bond	US Fixed Income Core	5,500,603	5,500,438	6.5	10.7
PIMCO Low Duration Instl	US Fixed Income Short Term	3,343,742	3,331,229	3.9	6.5
YSU Short Term Bond	US Fixed Income Short Term	14,262,274	14,270,222	16.8	27.6
Vanguard Short-Term Bond Instl	US Fixed Income Short Term	1,867,167	1,865,955	2.2	3.6
DFA Five-Yr Global Fxd-Inc I	Global Fixed Income	1,528,375	1,526,984	1.8	3.0

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NON-ENDOWMENT ASSETS

	Ending September 30, 2014								Calendar Years			Inception	
	2014 Q3 (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
Total University Assets	**-0.4**	1.8	3.7	3.9	4.4	3.7	4.0	4.1	5.6	4.1	1.2	3.9	**Mar-04**
YSU Policy Benchmark	*-0.2*	*1.5*	*2.6*	*2.6*	*3.1*	*2.5*	*2.9*	*3.3*	*3.6*	*2.8*	*1.1*	*3.2*	*Mar-04*
Total Operating & Short Term	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	--	--	--	**0.0**	**0.0**	**0.2**	**0.1**	**Jun-10**
YSU Total Operating & Short Term Benchmark	*0.0*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.6*	*1.6*	*0.1*	*0.1*	*0.2*	*0.1*	*Jun-10*
Total Long Term/ Reserves Pool	**-0.5**	2.8	5.7	6.0	6.9	--	--	--	8.7	6.4	**1.9**	5.6	**Jun-10**
YSU Total Long Term/ Reserves Fund Benchmark	*-0.4*	*2.6*	*4.9*	*5.1*	*6.1*	*4.7*	*4.7*	*4.5*	*7.1*	*5.5*	*1.9*	*4.7*	*Jun-10*
Total Domestic Equity	**-0.7**	**5.5**	**15.6**	19.8	**22.8**	--	--	--	35.2	**15.3**	**0.8**	**18.7**	**Jun-10**
Russell 3000	*0.0*	*7.0*	*17.8*	*19.7*	*23.1*	*15.8*	*6.2*	*8.4*	*33.6*	*16.4*	*1.0*	*19.0*	*Jun-10*
Total International Equity	-3.5	1.9	9.7	16.6	15.8	--	--	--	23.4	20.1	**-18.9**	**7.1**	**Sep-10**
MSCI EAFE Gross	*-5.8*	*-1.0*	*4.7*	*14.1*	*14.2*	*7.0*	*0.3*	*6.8*	*23.3*	*17.9*	*-11.7*	*7.9*	*Sep-10*
MSCI ACWI ex USA Gross	*-5.2*	*0.4*	*5.2*	*10.9*	*12.3*	*6.5*	*0.3*	*7.5*	*15.8*	*17.4*	*-13.3*	*6.1*	*Sep-10*
Total Fixed Income	**0.0**	1.6	1.8	**0.8**	1.8	--	--	--	**-0.1**	3.2	3.8	2.4	**Jun-10**
YSU Fixed Income Benchmark	*0.0*	*1.3*	*1.4*	*0.8*	*1.4*	*2.3*	*3.3*	*3.3*	*0.1*	*2.4*	*3.2*	*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.
- Vanguard Mid Cap Index Benchmark = 100% CRSP US Mid Cap TR USD
- YSU Fixed Income Benchmark = BofA Merrill Lynch US Corp & Gov 1-3 Yrs 60% / Barclays Int Govt/Credit 40%

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PIMCO LOW DURATION REVIEW AND REPLACEMENT

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PIMCO UPDATE AND RECOMMENDATIONS

Personnel and Firm Update

- Co-CIO Mohamed El-Erian stepped down in Q1-2014
- PIMCO rehired Paul McCulley to serve as their Chief Economist
- Hartland views McCulley's rehiring as a positive development as it should help the Investment Committee from a "top-down" perspective and add another senior voice; however, it is now rumored that Mr. McCulley may depart PIMCO at year-end
- The SEC is investigating PIMCO regarding pricing of securities in the PIMCO Bond ETF (9/22/14)
- Bill Gross, PIMCO co-founder and manager of Total Return, Low Duration, and Unconstrained Bond, leaves PIMCO to join Janus (9/26/14)
- Daniel Ivascyn announced as Group CIO; five other individuals named as CIOs (9/29/14)

Asset Flows

- PIMCO Low Duration declined by $2.6 billion in September and $2.1 billion in October (21.1% of assets)

Hartland's Recommendation

- Bill Gross' departure creates uncertainty with portfolio management, asset out-flows, and additional employee turnover
- The near-term concerns outweigh the potential benefit of remaining invested
- **Remove PIMCO Low Duration; allocate assets to the existing Vanguard Short-Term Bond Index**

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RESOLUTION FOR ACTION: LONG-TERM POOL BOND MANAGER CHANGE

Bond Portfolio as of 9/30/14		Proposed	
JPMorgan Core Bond (11.7%)	Intermediate-Term	JPMorgan Core Bond (11.7%)	Intermediate-Term
PNC Intermediate-Term (10.7%)	Intermediate-Term	PNC Intermediate-Term (10.7%)	Intermediate-Term
PIMCO Low Duration **(6.5%)**	Short-Term Fixed Income	PIMCO Low Duration **(0.0%)**	Short-Term Fixed Income
PNC Short-Term Bond **(27.6%)**	Short-Term Fixed Income	PNC Short-Term Bond **(27.6%)**	Short-Term Fixed Income
Vanguard Short-Term Bond Index **(3.6%)**	Short-Term Fixed Income	Vanguard Short-Term Bond Index **(10.1%)**	Short-Term Fixed Income
DFA Five-Year Global (3.0%)	Short-Term Fixed Income	DFA Five-Year Global (3.0%)	Short-Term Fixed Income

Terminate PIMCO Low-Duration and invest proceeds in the Vanguard Short-Term Bond Fund which is an existing YSU investment

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PERFORMANCE OF LONG-TERM POOL BOND PORTFOLIO

	Ending September 30, 2014								Calendar Years			Inception	
	2014 Q3 (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
Total Fixed Income	**0.0**	**1.6**	**1.8**	**0.8**	**1.8**	**--**	**--**	**--**	**-0.1**	**3.2**	**3.8**	**2.4**	**Jun-10**
YSU Fixed Income Benchmark	*0.0*	*1.3*	*1.4*	*0.8*	*1.4*	*2.3*	*3.3*	*3.3*	*0.1*	*2.4*	*3.2*	*1.9*	*Jun-10*
JPMorgan Core Bond Ultra	0.3	3.8	3.7	1.2	2.8	4.6	5.6	5.1	-1.6	5.2	7.4	3.8	Apr-11
Barclays Aggregate	*0.2*	*4.1*	*4.0*	*1.1*	*2.4*	*4.1*	*4.9*	*4.6*	*-2.0*	*4.2*	*7.8*	*3.6*	*Apr-11*
YSU Intermediate Term Bond	-0.1	2.3	2.5	1.1	2.7	3.6	4.9	4.5	-0.5	5.2	4.6	4.3	Mar-04
Barclays Int Govt/Credit	*0.0*	*2.2*	*2.2*	*0.8*	*2.0*	*3.4*	*4.3*	*4.0*	*-0.9*	*3.9*	*5.8*	*3.9*	*Mar-04*
PIMCO Low Duration Instl	-0.4	0.9	1.5	0.8	2.7	3.0	4.0	3.9	0.1	6.2	1.7	0.5	Mar-13
BofA Merrill Lynch US Treasuries 1-3 Yrs	*0.0*	*0.4*	*0.5*	*0.4*	*0.5*	*1.0*	*2.1*	*2.5*	*0.4*	*0.4*	*1.5*	*0.4*	*Mar-13*
YSU Short Term Bond	0.1	0.6	0.8	0.6	1.2	1.6	2.8	3.0	0.6	1.8	1.5	3.0	Mar-04
BofA Merrill Lynch US Corp & Gov 1-3 Yrs	*0.0*	*0.6*	*0.8*	*0.8*	*1.0*	*1.5*	*2.6*	*2.9*	*0.7*	*1.5*	*1.6*	*2.7*	*Mar-04*
Vanguard Short-Term Bond Instl	-0.1	0.9	1.1	0.6	1.2	--	--	--	0.2	2.1	--	1.2	Dec-11
Barclays 1-5 Yr. Govt/Credit	*0.0*	*1.0*	*1.2*	*0.7*	*1.3*	*2.2*	*3.3*	*3.3*	*0.3*	*2.2*	*3.1*	*1.3*	*Dec-11*
DFA Five-Yr Global Fxd-Inc I	-0.1	1.9	1.8	0.9	1.9	3.2	3.6	3.5	-0.4	4.8	4.5	2.2	Jun-13
Citi WGBI 1-5 Yr Hdg USD	*0.3*	*1.4*	*1.6*	*1.2*	*1.5*	*1.7*	*2.7*	*3.2*	*0.6*	*2.1*	*2.3*	*1.7*	*Jun-13*

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

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LONG-TERM POOL ALLOCATION AND ALTERNATIVES DISCUSSION

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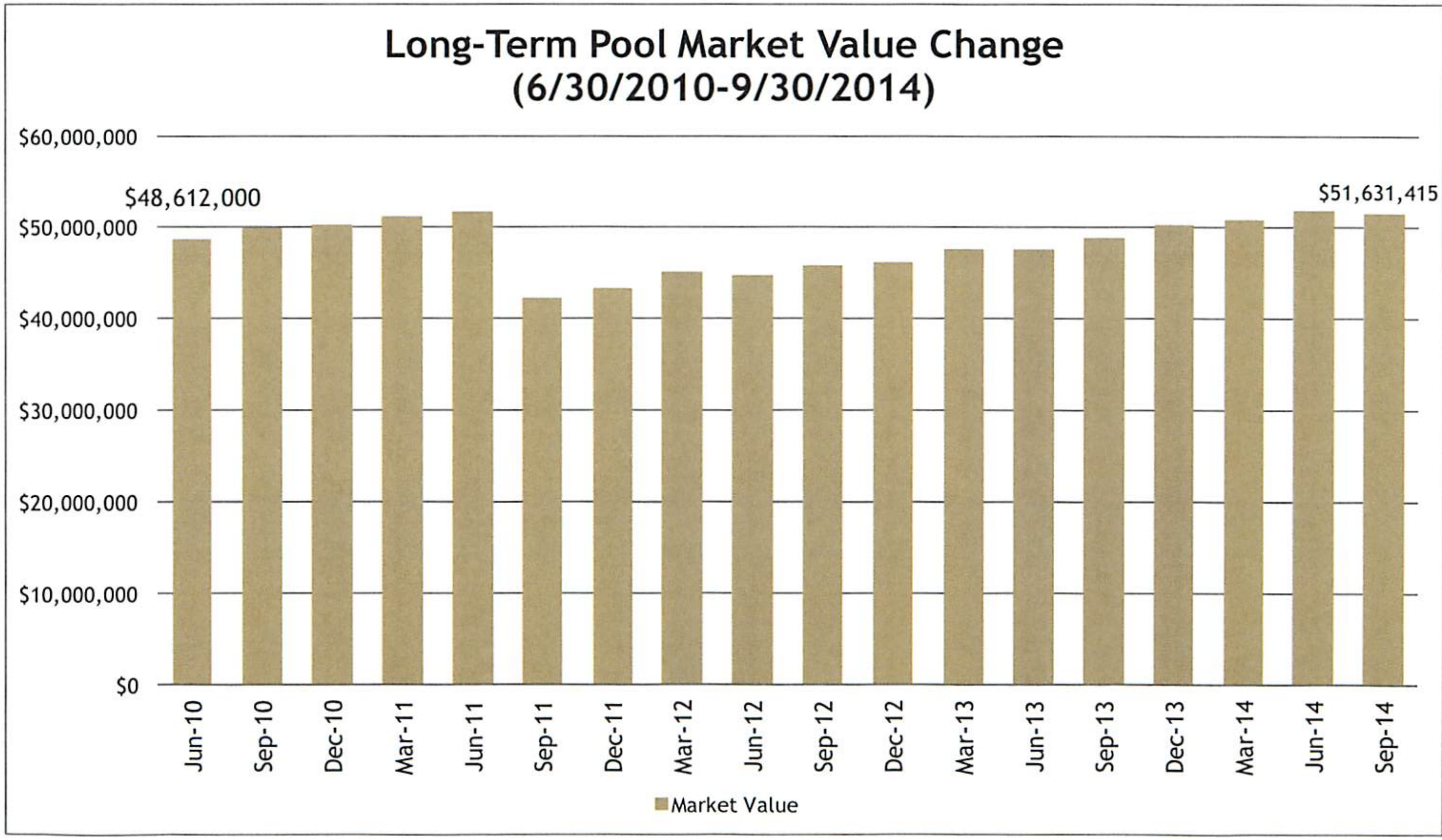
ASSESSMENT OF LONG-TERM POOL ALLOCATION

1. **Spending/Cash Flow**

   - Since June of 2010, YSU has needed additional resources from the Long-Term Pool to support operations on **one occasion** ($8 million was raised in June and July 2011)

2. **Organizational Needs**

   - YSU may require $2-$3 million of cash next year to support operations



Investment earnings of approx. $11.9 million.

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ASSESSMENT OF LONG-TERM POOL ALLOCATION

3. Organization Risk Tolerances

- Projected and historical spending needs may allow for additional investment risk in the Long-Term Pool
- YSU could assume additional investment risk by increasing its allocation to **Equities** or through the addition of **Alternative Investments**

Asset Class	10-Year Return (as of 9/30/14)	10-Year Risk (Standard deviation)	Maximum Drawdown	Projected Return*	Projected Risk*
Stocks (S&P 500 Index)	8.1%	14.7%	-51.0%	11.9%	15.7%
Intermediate-Term Bonds (Barclays Aggregate Index)	4.6%	3.2%	-3.8%	2.6%	3.5%
Short-Term Bonds (Barclays Aggregate Index	3.4%	1.9%	-1.9%	2.7%	2.1%
Alternative Investments (HFRI Fund of Funds Index)	3.4%	5.6%	-22.2%	4.7%	5.2%

*Source: Zephyr; historical risk/return data of major market indices in each asset class; the common period begins 3/1997-9/2014; past performance is not a guarantee of future results. Source of the projected risk/return analysis is the Black-Litterman Model (risk free rate = 2.42%; equity risk premium = 50-year US Balanced of 4.61%).

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ASSESSMENT OF LONG-TERM POOL ALLOCATION

4. Asset Allocation Assessment/Scenarios

Asset Class	Long-Term Pool Today	Proposed Changes	Scenario 1	Change	Scenario 2	Change	Scenario 3
Stocks	**35%**		**35%**		**35%**	**+10%**	**45%**
Intermediate-Term Bonds	**25%**	**-5%**	**20%**	**-5%**	**20%**	**-10%**	**15%**
Short-Term Bonds	**40%**	**-5%**	**35%**	**-10%**	**30%**	**-15%**	**25%**
Alternative Investments	**0%**	**+10%**	**10%**	**+15%**	**15%**	**+15%**	**15%**
Expected Return	**6.0%**		**6.2%**		**6.3%**		**7.2%**
Expected Risk (Standard Deviation)	**5.3%**		**5.6%**		**5.7%**		**7.1%**
One Year Worst Case Return	**-4.0%**		**-4.3%**		**-4.5%**		**-6.0%**

*Source: Zephyr; historical risk/return data of major market indices in each asset class; the common period begins 3/1997-9/2014; past performance is not a guarantee of future results. Source of the projected risk/return analysis is the Black-Litterman Model (risk free rate = 2.42%; equity risk premium = 50-year US Balanced of 4.61%).

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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

Before investing in alternatives, Hartland recommends that institutions follow a measured, disciplined process to fully understand the risks and benefits of such investments – this is often accomplished via 2-3 meetings

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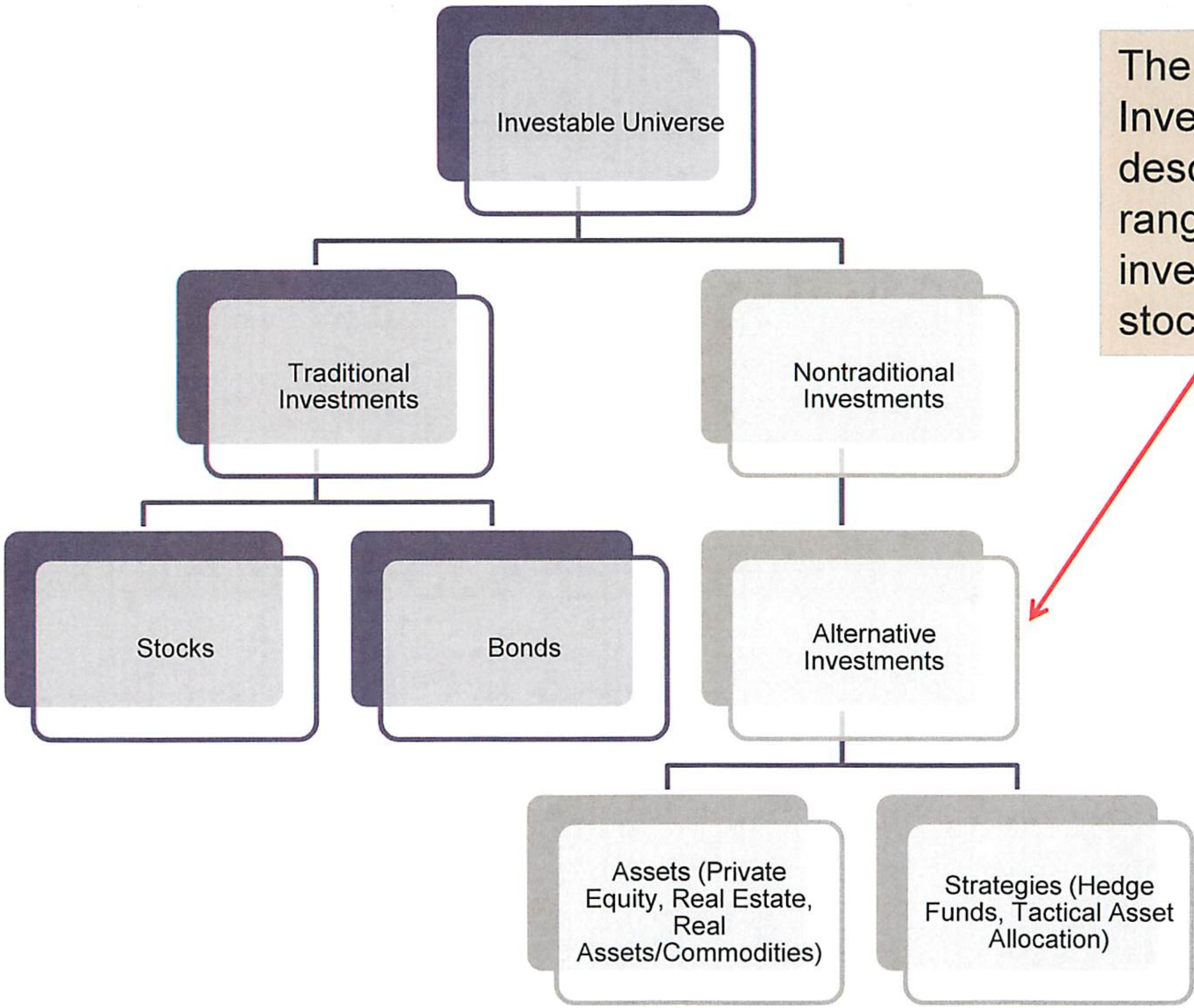
WHAT ARE ALTERNATIVE INVESTMENTS?



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

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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.

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APPROPRIATENESS FOR YSU

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

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LIQUID ALTERNATIVE INVESTMENTS: EXAMPLES

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
JPMorgan Strategic Income	Tactical Asset Allocation	Tactical allocations to fixed income; 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)

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INVESTMENT CHARACTERISTICS: EXAMPLES

Manager	Wells Fargo Absolute Return	JPMorgan Strategic Income	Diamond Hill Long-Short	ING (Voya) Global Real Estate
Ticker	WABIX	JSOSX	DHLSX	IGLIX
Inception Date	2003	2008	2000	2001
Fee	1.19%	0.65%	1.16%	0.97%
Assets	$9.7 Billion	$26.8 Billion	$3.6 Billion	$5.1 Billion
Managers	Jeremy Grantham/Ben Inker/Sam Wildman	Bill Eigen	Ric Dillon/Chris Bingaman/Chuck Bath	Steve Burton/Ritson Ferguson
Underlying Investments	GMO Mutual Funds	JPMorgan Mutual Funds	40–60 long positions and 10–30 short positions	100-120 REITs
Leverage Employed?*	No	No	No	No
Equity	51%	0%	100%	100%
Fixed Income	19%	100%	0%	0%
Alternatives & Other	30%	0%	0%	0%
Non-U.S.	36%	15%	0%	50%
Non-U.S. Emerging	7%	5%	0%	0%
Long	100%	100%	119%	100%
Short	0%	0%	19%	0%
Gross	100%	100%	138%	100%
Net	100%	100%	100%	100%
Yield	1.68%	1.84%	0.36%	2.19%
Average Credit Quality	AA	AA	N/A	N/A
Maturity/Duration	7-10 yrs	< 1 year	N/A	N/A

Source: Morningstar as of 6/30/2014.
*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.

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MANAGER RISK/RETURN: EXAMPLE (AS/OF 6/30/3014)

Alternative Investments	Annualized Returns			Annualized Risk			Max Drawdown (20-years)
Strategies	3-Yrs	5-Yrs	7-Yrs	3-Yrs	5-Yrs	7-Yrs	
Wells Fargo Absolute Return	**7.6%**	**8.5%**	**5.5%**	**5.4%**	**6.1%**	**7.0%**	**-19.5%**
CPI + 3%	4.6%	5.1%	4.9%	1.1%	1.1%	1.5%	-3.2%
JPMorgan Strategic Income	**3.3%**	**5.3%**	**-**	**2.9%**	**3.0%**	**-**	**-5.0%**
CPI + 3%	4.6%	5.1%	4.9%	1.1%	1.1%	1.5%	-3.2%
Diamond Hill Long-Short	**12.2%**	**11.0%**	**4.7%**	**9.4%**	**9.0%**	**11.8%**	**-36.6%**
HFRI Fund-of-Fund Index	3.3%	4.3%	0.6%	5.3%	5.3%	7.0%	-22.2%
AIG	*5.9%*	*6.9%*	*3.3%*	*4.6%*	*4.4%*	*6.5%*	*-20.7%*
Weatherlow	*6.8%*	*7.9%*	*4.8%*	*4.3%*	*4.4%*	*6.8%*	*-21.6%*
Real Assets							
ING (Voya) Global Real Estate	**7.5%**	**20.4%**	**0.3%**	**16.4%**	**18.9%**	**23.2%**	**-63.2%**
S&P Developed Property Index	11.0%	18.1%	2.3%	*16.1%*	*16.4%*	*24.0%*	-67.4%
SSgA Real Asset	*1.8%*	*9.8%*	*2.4%*	*12.3%*	*12.9%*	*18.1%*	*-51.2%*
S&P 500 Index	16.6%	18.8%	6.2%	12.3%	13.4%	16.9%	-50.6%
Barclays Aggregate Index	3.7%	4.9%	5.3%	2.8%	2.9%	3.4%	-5.2%

Past performance and no guarantee of future results.

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SUMMARY AND NEXT STEPS

Historically, YSU has preferred a conservative investment strategy due to:

- Cyclical cash-flow
- Uncertainty of cash-needs
- ORC compliance
- Low risk tolerance

Hartland will lead the following next-steps:

- Identify YSU cash needs from the Long-Term Pool over the next 3 years
- Identify financial covenants that are supported by the Non-Endowment funds and, if necessary, stress test the assets to identify the level of risk YSU can tolerate to maintain covenant compliance
- If YSU **can** accept greater investment risk in pursuit of potentially greater investment return, determine whether YSU **wants** to pursue such a strategy
- Continue Trustee education process by having Hartland present analysis, trade-offs and risks and rewards of alternative investments
- A change in strategy would require a change in Investment Policy and Guidelines
- Hartland will present specific recommendations to the Trustees at the next investment sub-committee meeting

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APPENDIX

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THOUGHTS ON THE CURRENT ENVIRONMENT

- **Capital Markets (Q3):** U.S. Large Cap +1.1%, U.S. Small Cap -7.4%, Developed International -5.8%, Emerging Markets -3.4%, Intermediate Bonds +0.2%.
- **Economy:** Second quarter GDP was revised to +4.6%, following a poor first quarter. Growth expectations for the second half of the year are ~3%; which would result in annual growth of 2.0%-2.5%.
- **Consumer:** Consumer confidence further strengthened during the quarter and retail sales grew faster. An area of concern is the housing market. New home sales have stagnated and overall home prices declined modestly.
- **Corporate:** Second quarter earnings were strong and reached all time highs in the U.S. Analysts have high expectations for earnings growth over the next 12 months. It's hard to handicap the impact that a struggling European economy and a strong U.S. Dollar will have on U.S. companies. Falling commodity prices have been painful to the energy sector but may be positive to other sectors.
- **Valuations:** Current valuations have reached or exceed longer term averages in the developed markets. The pullback in U.S. small cap stocks brought valuations down to more reasonable levels. Given market volatility in September and October, earnings and guidance will be watched closely.
- **Fixed Income:** The 10-year U.S. treasury ended the quarter at 2.5% and declined to 1.9% in mid-October. Despite the low absolute yield, the rate is above many other sovereigns. The Fed's large asset purchase plan will end shortly. Initial expectation that the Fed would be increasing the Fed Funds rate in the first half of 2015 may be delayed given the strong U.S. Dollar, low inflation, and weakening Eurozone.
- **Looking Forward:** Our return expectations for 2014 have been modest as few asset classes appeared undervalued. Low inflation and accommodative monetary policies across the globe helped dampen market volatility and boost risk asset prices through August. Global risks have been increasing despite the low volatility through mid-year. Evaluating allocations to risk assets given heightened volatility may be prudent if recent events lead to additional draw downs. High quality bonds may help provide downside protection despite low yields.

Past performance is no guarantee of future results. Asset classes represented by: Large Cap – S&P 500 Index; Small Cap – Russell 2000 Index; Dev Intl – MSCI EAFE Index; Em Mkt – MSCI Emerging Markets Index; Intermediate Bonds – Barclays Capital U.S. Aggregate. Data as of 9/30/2014 Source: Zephyr Associates.

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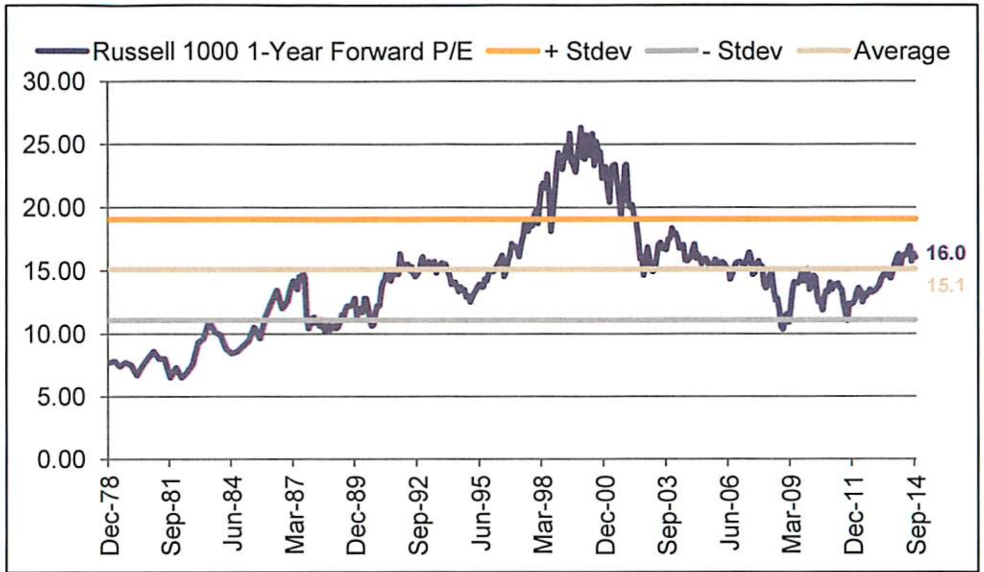
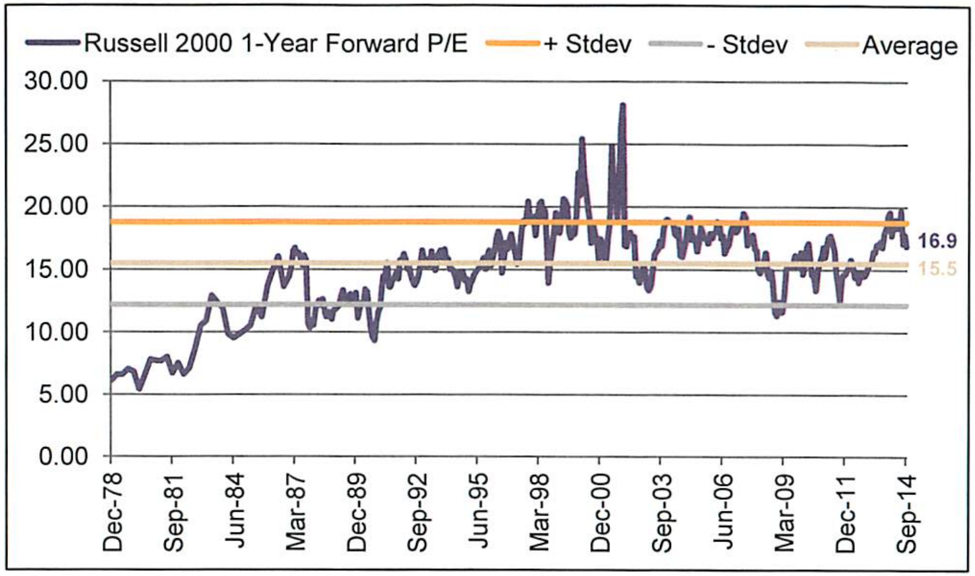
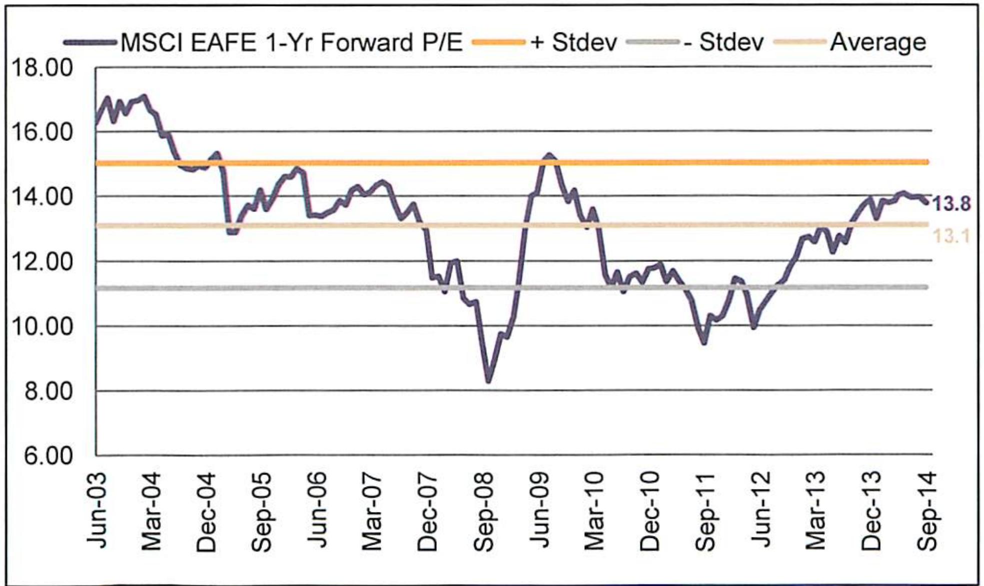
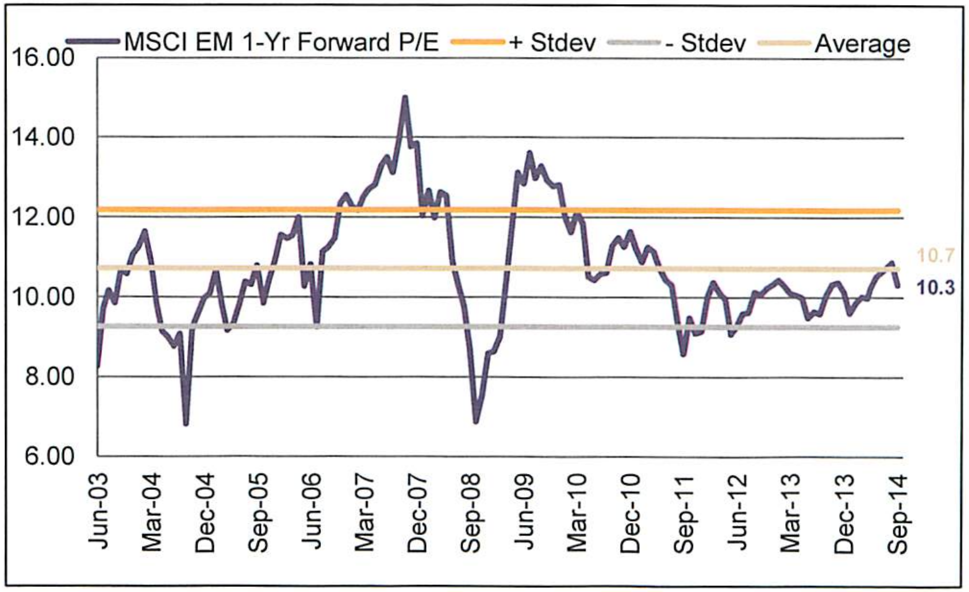
GLOBAL EQUITY VALUATION: 1-YEAR FORWARD PRICE/EARNINGS









Source: Russell Indexes and MSCI Inc.
As of 9/30/2014

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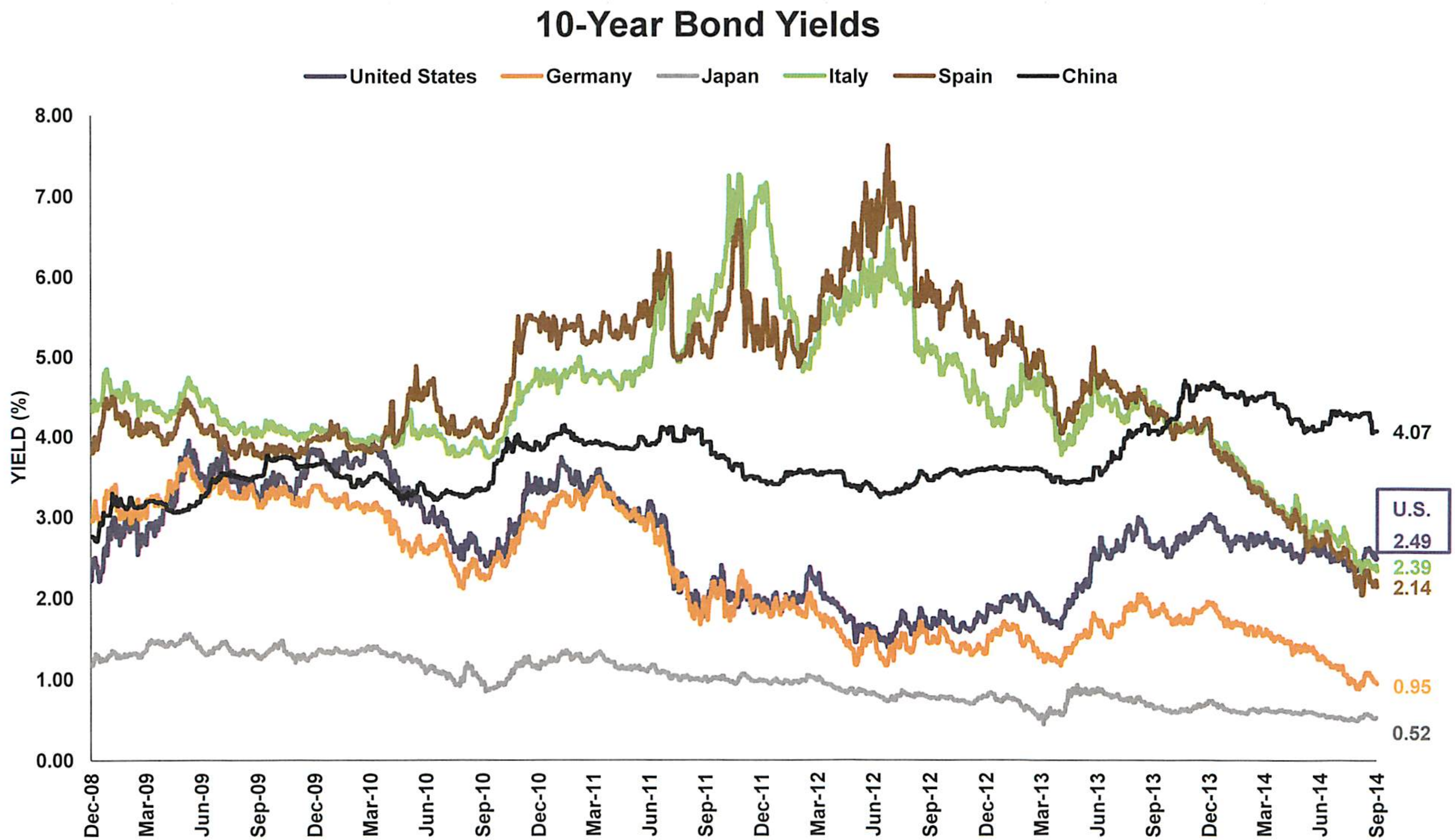
GLOBAL GOVERNMENT BOND YIELDS: 9/30/2014



Source: Bloomberg as of 9/30/2014

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EXAMPLE ALTERNATIVE MANAGERS

Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

Manager vs Benchmark: Return

January 1979 - June 2014 (not annualized if less than 1 year)

	1 year	2 years	3 years	5 years	7 years	10 years
Wells Fargo Adv Absolute Return	10.79%	9.82%	7.61%	8.50%	5.54%	8.58%
JPMorgan Strategic Income Opps Sel	2.40%	4.00%	3.28%	5.26%	N/A	N/A
Diamond Hill Long-Short I	15.89%	17.42%	12.21%	10.98%	4.68%	8.10%
ING Global Real Estate I	15.09%	13.50%	9.04%	15.68%	2.45%	9.03%
CPI+5%	7.22%	6.82%	6.80%	7.25%	7.02%	7.42%
Barclays U.S. Aggregate	4.37%	1.81%	3.66%	4.85%	5.35%	4.93%
S&P 500	24.61%	22.59%	16.58%	18.83%	6.16%	7.78%

Manager vs Benchmark: Standard Deviation

January 1979 - June 2014 (not annualized if less than 1 year)

	1 year	2 years	3 years	5 years	7 years	10 years
Wells Fargo Adv Absolute Return	4.68%	4.13%	5.38%	6.12%	6.96%	6.75%
JPMorgan Strategic Income Opps Sel	0.77%	1.29%	2.94%	3.02%	N/A	N/A
Diamond Hill Long-Short I	5.49%	5.86%	9.38%	9.01%	11.79%	10.78%
ING Global Real Estate I	10.66%	11.76%	16.21%	16.59%	23.18%	20.60%
CPI+5%	0.90%	1.10%	1.08%	1.06%	1.51%	1.53%
Barclays U.S. Aggregate	2.39%	2.85%	2.77%	2.85%	3.41%	3.25%
S&P 500	9.47%	8.06%	12.26%	13.40%	16.92%	14.70%

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EXAMPLE ALTERNATIVE MANAGERS

Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

Manager vs Benchmark: Sharpe Ratio

January 1979 - June 2014 (not annualized if less than 1 year)

	1 year	2 years	3 years	5 years	7 years	10 years
Wells Fargo Adv Absolute Return	2.30	2.36	1.41	1.38	0.70	1.04
JPMorgan Strategic Income Opps Sel	3.06	3.06	1.10	1.71	N/A	N/A
Diamond Hill Long-Short I	2.89	2.96	1.30	1.21	0.34	0.61
ING Global Real Estate I	1.41	1.14	0.55	0.94	0.08	0.36
CPI+5%	7.97	6.12	6.26	6.74	4.22	3.85
Barclays U.S. Aggregate	1.81	0.61	1.30	1.67	1.38	1.04
S&P 500	2.59	2.80	1.35	1.40	0.33	0.42

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EXAMPLE ALTERNATIVE MANAGERS

Zephyr StyleADVISOR

Zephyr StyleADVISOR: Hartland and Company

Correlation Matrix: Returns vs. S&P 500

November 2008 - June 2014

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1) Wells Fargo Adv Absolute Return	1.00						
2) JPMorgan Strategic Income Opps Sel	0.59	1.00					
3) Diamond Hill Long-Short I	0.85	0.55	1.00				
4) ING Global Real Estate I	0.84	0.72	0.80	1.00			
5) CPI+5%	0.17	-0.13	0.14	0.16	1.00		
6) Barclays U.S. Aggregate	-0.01	0.13	-0.14	0.13	-0.21	1.00	
7) S&P 500	0.90	0.58	0.92	0.86	0.18	-0.13	1.00

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DEFINITIONS AND DISCLOSURES

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DEFINITIONS AND DISCLOSURES

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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 2,501st 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.

HARTLAND

independence
expertise
results

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 Change in Investment Fund Manager

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

BACKGROUND: Pursuant to the University's investment policy, the Board of Trustees Investment Subcommittee has the responsibility of selecting and monitoring investment managers. The Subcommittee has consulted with the University's investment advisors, Hartland & Co., and recommends a change in investment fund managers.

SUMMARY AND ANALYSIS: Hartland recommends removing PIMCO Low Duration (manager in the Non-Endowment Long-Term Pool) and allocating the approximate $3.3 million to the existing Vanguard Short-Term Bond Index Fund. The recommendation is based on concern over the recent departure of Bill Gross, the former CIO of PIMCO and Portfolio Manager of the PIMCO Low-Duration Fund, and the uncertainty this creates with portfolio management, asset out-flows, and additional employee turnover at PIMCO and with the Low-Duration Fund.

RESOLUTION:

RESOLUTION TO APPROVE
CHANGE IN INVESTMENT FUND MANAGER

WHEREAS, the Investment Subcommittee of the Board of Trustees of Youngstown State University is responsible for selecting and monitoring investment fund managers, pursuant to University Guidebook policy 3007.01; and

WHEREAS, the Investment Subcommittee has consulted with the University's investment advisors and recommends a change in investment fund managers.

NOW, THEREFORE, BE IT RESOLVED, that the Investment Subcommittee of the Board of Trustees of Youngstown State University does hereby approve the change in investment manager, shown as Exhibit __ attached hereto.

RECOMMEND APPROVAL:

James P. Tressel

James P. Tressel, President

Board of Trustees Meeting
December 16, 2014
YR 2015-

AGENDA ITEM: C.2.b.

AGENDA TOPIC: Resolution to Modify Investment of the University's Non-Endowment and Endowment Funds Policy, 3007.01

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

BACKGROUND: As written, Policy 3007.01 presumes that the YSU Foundation manages the University's endowment funds. And while that had previously been the case, the Foundation terminated the management agreement in December 2013, and management of the endowment was transitioned to the University in early 2014. The reason for this change was two-fold: (1) When the Foundation changed investment managers, segregation of the University's endowment from the Foundation's assets could no longer be ensured; and (2) the Foundation could not ensure that the endowment portfolio would be in compliance with the University's investment and asset allocation guidelines, as established by the University's Investment Subcommittee.

SUMMARY AND ANALYSIS: The proposed modifications to Policy 3007.01 remove all references to the YSU Foundation as the manager of the University's endowment funds. The modifications also align the endowment spending policy with best practices whereby spending is no longer based on earned income but rather on 5% of the 12-quarter average of the market value of the endowment. This change will mitigate volatility and facilitate better planning of fund utilization at the onset of the fiscal year.

RESOLUTION:

**RESOLUTION TO MODIFY
INVESTMENT OF THE UNIVERSITY'S NON-ENDOWMENT
AND ENDOWMENT FUNDS POLICY, 3007.01**

WHEREAS, the Institutional Policies are being reviewed and reconceptualized on an ongoing basis; and

WHEREAS, this process can result in the modification of existing policies, the creation of new policies, or the deletion of policies no longer needed; and

WHEREAS, action is required by the Board of Trustees prior to replacing and/or implementing modified or newly created policies, or to rescind existing policies;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees of Youngstown State University does hereby approve the modification of the Institutional Policy governing Investment of the University's Non-Endowment and Endowment Funds, policy number 3007.01 of the ***University Guidebook***, shown as Exhibit __ attached hereto. A copy of the policy indicating changes to be made is also attached.

RECOMMEND APPROVAL:

James P. Tressel

James P. Tressel, President

**Board of Trustees Meeting
December 16, 2014
YR 2015-**

UNIVERSITY GUIDEBOOK

Title of Policy:	**Investment of the University's Non-Endowment and Endowment Funds**
Responsible Division/Office:	Finance and Administration
Approving Officer:	President
Revision History:	September 1998; December 2004; June 2006; December 2008; June 2010; June 2012; December 2014
Resolution Number(s):	YR 1999-04; YR 2005-23; YR 2006-47; YR 2007-27; YR 2010-89; YR 2012-
Board Committee:	Finance and Facilities
EFFECTIVE DATE:	December 16, 2014
Next review:	~~2015~~ 2017

Policy: The President and the Vice President for Finance and Administration, or designee, is authorized to invest University funds in compliance with this Policy, provisions of the *Ohio Revised Code* and all other applicable laws and regulations, including H.B. 524, Sec. 3345.05 of the Ohio Revised Code.

For the purpose of this policy on the Investment of the University's Non-Endowment and Endowment Funds (the "Policy"), the non-endowment and endowment portfolios shall include:

- All tuition and mandatory fees, registration, non-resident tuition fees, academic fees for the support of on- and off-campus instruction, laboratory and course fees when so assessed and collected, all other fees, deposits, charges, receipts, and income from all or part of the students, all subsidy or other payments from state appropriations, and all other fees, deposits, charges, receipts, and income received. These funds shall be held and administered by the Board of Trustees.

- Notwithstanding any provision of the revised code to the contrary, the title to investments made by the Board of Trustees with funds derived from revenues described above shall not be vested in the state but shall be held in trust by the Board. Such investments shall be made pursuant to this investment policy adopted by the Board in public session. Such investments shall be made with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

- It is the intention of the Board of Trustees that actions taken pursuant to this Policy shall be in compliance with all applicable laws as they may be amended from time to time. No University representative, employee, or agent shall take any action prohibited by or fail to take any action required by all applicable laws in carrying out this Policy.

- Members of the Board of Trustees will annually provide to the Chair of the Board of Trustees a statement disclosing the nature, if at all, of any relationship with the financial institutions involved with the University's Non-Endowment and Endowment Funds. Any member having a relationship that creates a conflict prohibited by the ethics laws with any investment entity will withdraw from participating in the selection of, or authorizing the contracts of, those investment managers and/or consultants.

- External investment managers, consultants and advisors retained by the University shall immediately notify the Chair of the Investment Subcommittee and the Vice President for Finance and Administration, or designee of any potential conflicts of interest which may develop from time to time. In any such situation, the external investment manager, consultant and/or advisor shall identify the nature of the conflict of interest and its potential impact, if any, on the University.

- The University's non-endowment ~~fund~~ portfolio will remain sufficiently liquid to enable the University to meet all operating requirements. Portfolio liquidity is defined as the maturity or ability to sell a security on short notice near the purchase price of the security. To help retain the desired liquidity, no security shall be purchased that is likely to have few market makers or poor market bids. Additionally, liquidity shall be assured by keeping an adequate amount of short-term investments to accommodate the cash needs of the University.

- The University's non-endowment and endowment portfolios shall be structured with the objective of attaining the highest possible total return for the investment portfolio while adhering to a prudent level of risk.

~~The University's endowment portfolio unless otherwise directed, shall be managed by the Youngstown State University Foundation (the "YSUF") and consist of equity, fixed income, and cash investments.~~

Specific responsibilities of the Investment Subcommittee of the Finance and Facilities Committee of the Board of Trustees (hereafter referred to as the "the Subcommittee") in the investment process include:

- the application of a total return philosophy of asset management;
- developing sound and consistent investment policy guidelines;
- setting forth an investment structure for managing the University's assets. This structure includes identification of asset classes, strategic asset allocation, and acceptable asset ranges above and below the strategic asset allocation;
- providing guidelines that control the level of overall risk and liquidity assumed for the investment portfolio so that all assets are managed in accordance with stated objectives;
- complying with all applicable fiduciary, prudence, due diligence requirements, and with all applicable laws, rules and regulations from various local, state, federal, and international political entities that may impact fund assets;
- selecting and monitoring investment managers;
- selecting an investment consulting organization;
- communicating clearly the major duties and responsibilities of those accountable for achieving investment results;
- monitoring and evaluating results to assure that the guidelines are being adhered to and the objectives are being met;
- to control costs of administering and managing the funds;
- taking appropriate action to discharge an investment manager for failure to perform as mutually expected at the time of selecting; and
- undertaking such work and studies as may be necessary to keep the Board of Trustees of the University adequately informed as to the status of the investment of the balance sheet assets (the "Assets").

This Policy shall be reviewed every ~~three~~ five years by the Subcommittee or upon the advisement of investment advisors or management. All material changes to the Policy will be approved by the Subcommittee and submitted to the University's Board of Trustees for final approval.

UPMIFA Considerations

In accordance with the State of Ohio's adoption of the Uniform Prudent Management of Institutional Funds Act (UPMIFA), effective June 1, 2009, the Subcommittee will take the following into consideration when making investment decisions:

- general economic conditions
- the possible effect of inflation or deflation
- expected tax consequences
- the role that each investment plays within the overall portfolio
- expected total return from income and appreciation
- other resources of the institution
- need of the institution to make distributions and preserve capital
- assets special relationship or special value to the charitable purpose

Purpose: Investments shall be managed for the use and benefit of the University in a diversified portfolio that focuses, over time, on the preservation of capital, minimization of cost and risk, maintenance of required levels of liquidity in the overall portfolio to meet cash flow requirements, and compliance with state statute. The non-endowment and endowment portfolios are intended to achieve a reasonable yield balanced with a component invested for longer-term appreciation.

The purpose of this Policy is to assist the University in more effectively supervising and monitoring the investment activities of its Assets. This Policy is designed to assist University staff and the Investment Subcommittee with regard to its fiduciary responsibility by:

- defining the responsibilities of University staff, its investment managers, and its investment consultant;

- stating in writing the University's attitudes, expectations, and goals for the investment of the Assets;

- providing a basis for reviewing investment management organizations in the selection process;

- encouraging effective communication between the investment managers, investment consultant, the Subcommittee, and Youngstown State University; and

- setting objectives against which the performance results of the investment managers, operating within the constraints imposed by the University's Policy guidelines, can be measured.

A primary expectation for University assets is to support the University by providing current income to the University from both non-endowed and endowed funds, managed on behalf of the University by outside investment professionals, ~~as well as the YSUF,~~ while concurrently growing principal. The asset base is dedicated to providing a reliable source of funds for current and future enhancements at the University.

Parameters:

Investment assets are to be held by a reputable custodian / trust company. Investment assets are to be held in safe-keeping, in the name of the University. Evaluation, selection and monitoring of the University's custodian will include, but not be limited to, the following factors:

- Size and scalability of the underlying financial institution
- Delivery of competitive safe-keeping and trust services as measured by attributes such as systems functionality, statement delivery, client service, audit controls and reporting capabilities
- Safe-keeping and trust service pricing and fees

The management of the non-endowment and endowment funds involves a tradeoff between two competing goals. On the one hand, the funds must preserve capital and maintain liquidity sufficient to distribute cash to fund immediate operating needs and prior spending commitments. To accommodate these objectives, the University will establish the Operating and Short-Term Pool. On the other hand, the funds must accumulate capital sufficient to support nominal growth in expenses for existing programs and to establish new quasi-endowment funds. To accommodate these objectives, the University will establish the Long-Term/Reserve Pool. The goal of the funds is to accommodate these competing needs by providing adequate short-term liquidity along with long-term capital appreciation.

The Subcommittee recognizes that risk and volatility are present to some degree with all types of investments. However, high levels of risk are to be avoided at the total asset level. This is to be accomplished through diversification by asset class, style of investment manager, and sector and industry limits.

The following statements and guidelines are set forth in an effort to provide direction to each of the investment managers that manage separate accounts for the University. Managers are retained to manage separate pools of assets; and funds are allocated to such managers in order to achieve an appropriate, diversified, and balanced asset mix. The Subcommittee, from time to time, may shift assets from one manager to another to maintain the appropriate mix. Additionally, the Subcommittee recognizes that mutual or commingled funds used by the University may not adhere to these guidelines. However, when selecting mutual or commingled fund products, the Subcommittee will refer to these guidelines as a basis to select new funds.

Evaluation, selection and monitoring of the University's individual investment managers, will include, but not be limited to, the following factors:

- Each investment manager should have clearly stated investment objectives.
- The performance (return) and volatility (risk) of each investment manager should be evaluated over time, evaluating performance in light of how closely the investment manager has adhered to its stated investment objectives.
- The depth and experience of the portfolio manager(s) should be evaluated (both with respect to the current investment portfolio he or she manages and any funds previously managed).
- The depth and financial stability of the relevant investment fund company should be considered.
- The fees and expenses charged with respect to such investment management services should be considered.

A written "Investment Guideline Statement" or prospectus clearly outlining objectives and responsibilities will be in place with each investment manager. For the non-endowment funds, the managers shall have discretion to invest assets in cash reserves as they deem appropriate but will be expected under normal circumstances to be fully invested in their assigned asset class. A manager's performance will be evaluated against their fully invested passive benchmark and against similar portfolio results. Passive benchmarks will be used for comparative purposes which most closely approximate the investment mandate's duration, credit quality, security composition, capitalization, style, asset class, etc.

To the extent bequests are made to the University via shares of marketable equity securities, the following provisions apply:

- The policy on bequests as defined by the University Guidebook number 5007.01 will supersede all provisions within this Policy.
- If the bequest is a non-endowed gift, the securities will be sold as soon as prudently possible.

- If the bequest is an endowed gift, the securities will be invested as ~~transferred to the YSUF to manage, unless otherwise~~ specified by the donor and agreed to by the Board of Trustees. ~~Assets held/invested by the YSUF or other institution on behalf of the University will be managed in accordance with pre-arranged investment advisory agreements as well as under the guidelines of this Policy.~~

Procedures:

1. The Vice President for Finance and Administration, or designee, shall be accountable to the Board of Trustees for implementing this Policy.

2. The Vice President for Finance and Administration, or designee, will report to the Investment Subcommittee at least quarterly on the status of the non-endowment and endowment portfolios.

3. It shall be permissible for the Vice President for Finance and Administration, or designee to realize gains and losses if such an action would be consistent with the University's investment goals. Losses and gains realized on the non-endowment portfolio shall be charged against current income unless otherwise approved by the Investment Subcommittee.

4. Between meetings of the Board of Trustees, if deemed advisable, other investments not specifically authorized by this Policy may be made if approved by the Investment Subcommittee. Any such actions shall be taken to the Board of Trustees for review at its next meeting.

Spending Policy

The Board has established a spending policy for certain funds. This Policy reflects the tradeoffs between short-term liquidity and long-term capital appreciation needs, as described in the "Purpose" and "Parameters" sections above.

Non Endowment Assets: Non-endowment assets are comprised of operating and non-operating funds, and include cash, cash equivalents and investment assets.

Operating funds, comprised of cash, cash equivalents, and certain investment assets, make up the University's General Funds. The use of cash, cash equivalents, and investment assets in these General Funds is not subject to any Board-approved spending policy as the University's annual operating budget establishes parameters for the use of these funds.

The University's remaining non-endowed investment assets are primarily in reserve for project-related funds. Spending within these funds is subject to University Guidebook Policy 3010.01 - Budget Transfers, project-specific spending plans, and various other University operating and financial policies and procedures. If deemed necessary for University operations, University management, working with the Investment Consultant, has authority to raise an appropriate level of cash from non-operating investments.

Income earned on non-endowed investment assets is primarily used to support University operations; thus, it is the policy of the Board not to limit annual distributions of realized investment income. The annual operating budget establishes parameters for the use of this income, and the disposition of total annual net operating inflows over outflows requires Board approval. Unrealized investment income from non-endowment assets shall always be non-spendable.

~~University Assets Managed by YSUF~~ Endowment Assets: ~~Although the YSU Foundation usually only serves as manager for endowments owned by YSU, on occasion certain other YSU funds are also managed by YSUF, generally related to specific capital fundraising projects of a more long-term nature. For endowed funds, it~~ It is the policy of the Board to set annual distributions each fiscal year to 5% of the twelve-quarter average of the market value for the preceding twelve calendar quarters. In calculating the twelve-quarter average, census dates of March 31, June 30, September 30 and December 31 for the previous three years shall be used. ~~limit annual distributions to no greater than accumulated income earned.~~ Any distribution greater than this would require written justification and Board of Trustees' approval. For all other managed funds, distributions are project specific, thus are limited only to the extent needed to sustain appropriate cash flow for the expenditure cycle of the corresponding project.

UNIVERSITY GUIDEBOOK

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Responsible Division/Office:	Finance and Administration
Approving Officer:	President
Revision History:	September 1998; December 2004; June 2006; December 2008; June 2010; June 2012; December 2014
Resolution Number(s):	YR 1999-04; YR 2005-23; YR 2006-47; YR 2007-27; YR 2010-89; YR 2012-
Board Committee:	Finance and Facilities
EFFECTIVE DATE:	December 16, 2014
Next review:	2017

Policy: The President and the Vice President for Finance and Administration, or designee, is authorized to invest University funds in compliance with this Policy, provisions of the *Ohio Revised Code* and all other applicable laws and regulations, including H.B. 524, Sec. 3345.05 of the Ohio Revised Code.

For the purpose of this policy on the Investment of the University's Non-Endowment and Endowment Funds (the "Policy"), the non-endowment and endowment portfolios shall include:

- All tuition and mandatory fees, registration, non-resident tuition fees, academic fees for the support of on- and off-campus instruction, laboratory and course fees when so assessed and collected, all other fees, deposits, charges, receipts, and income from all or part of the students, all subsidy or other payments from state appropriations, and all other fees, deposits, charges, receipts, and income received. These funds shall be held and administered by the Board of Trustees.

- Notwithstanding any provision of the revised code to the contrary, the title to investments made by the Board of Trustees with funds derived from revenues described above shall not be vested in the state but shall be held in trust by the Board. Such investments shall be made pursuant to this investment policy adopted by the Board in public session. Such investments shall be made with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

- It is the intention of the Board of Trustees that actions taken pursuant to this Policy shall be in compliance with all applicable laws as they may be amended from time to time. No University representative, employee, or agent shall take any action prohibited by or fail to take any action required by all applicable laws in carrying out this Policy.

- Members of the Board of Trustees will annually provide to the Chair of the Board of Trustees a statement disclosing the nature, if at all, of any relationship with the financial institutions involved with the University's Non-Endowment and Endowment Funds. Any member having a relationship that creates a conflict prohibited by the ethics laws with any investment entity will withdraw from participating in the selection of, or authorizing the contracts of, those investment managers and/or consultants.

- External investment managers, consultants and advisors retained by the University shall immediately notify the Chair of the Investment Subcommittee and the Vice President for Finance and Administration, or designee of any potential conflicts of interest which may develop from time to time. In any such situation, the external investment manager, consultant and/or advisor shall identify the nature of the conflict of interest and its potential impact, if any, on the University.

- The University's non-endowment portfolio will remain sufficiently liquid to enable the University to meet all operating requirements. Portfolio liquidity is defined as the maturity or ability to sell a security on short notice near the purchase price of the security. To help retain the desired liquidity, no security shall be purchased that is likely to have few market makers or poor market bids. Additionally, liquidity shall be assured by keeping an adequate amount of short-term investments to accommodate the cash needs of the University.

- The University's non-endowment and endowment portfolios shall be structured with the objective of attaining the highest possible total return for the investment portfolio while adhering to a prudent level of risk.

Specific responsibilities of the Investment Subcommittee of the Finance and Facilities Committee of the Board of Trustees (hereafter referred to as the "the Subcommittee") in the investment process include:

- the application of a total return philosophy of asset management;

- developing sound and consistent investment policy guidelines;
- setting forth an investment structure for managing the University's assets. This structure includes identification of asset classes, strategic asset allocation, and acceptable asset ranges above and below the strategic asset allocation;
- providing guidelines that control the level of overall risk and liquidity assumed for the investment portfolio so that all assets are managed in accordance with stated objectives;
- complying with all applicable fiduciary, prudence, due diligence requirements, and with all applicable laws, rules and regulations from various local, state, federal, and international political entities that may impact fund assets;
- selecting and monitoring investment managers;
- selecting an investment consulting organization;
- communicating clearly the major duties and responsibilities of those accountable for achieving investment results;
- monitoring and evaluating results to assure that the guidelines are being adhered to and the objectives are being met;
- to control costs of administering and managing the funds;
- taking appropriate action to discharge an investment manager for failure to perform as mutually expected at the time of selecting; and
- undertaking such work and studies as may be necessary to keep the Board of Trustees of the University adequately informed as to the status of the investment of the balance sheet assets (the "Assets").

This Policy shall be reviewed every five years by the Subcommittee or upon the advisement of investment advisors or management. All material changes to the Policy will be approved by the Subcommittee and submitted to the University's Board of Trustees for final approval.

UPMIFA Considerations

In accordance with the State of Ohio's adoption of the Uniform Prudent Management of Institutional Funds Act (UPMIFA), effective June 1, 2009, the Subcommittee will take the following into consideration when making investment decisions:

- general economic conditions
- the possible effect of inflation or deflation
- expected tax consequences
- the role that each investment plays within the overall portfolio
- expected total return from income and appreciation
- other resources of the institution
- need of the institution to make distributions and preserve capital
- assets special relationship or special value to the charitable purpose

Purpose: Investments shall be managed for the use and benefit of the University in a diversified portfolio that focuses, over time, on the preservation of capital, minimization of cost and risk, maintenance of required levels of liquidity in the overall portfolio to meet cash flow requirements, and compliance with state statute. The non-endowment and endowment portfolios are intended to achieve a reasonable yield balanced with a component invested for longer-term appreciation.

The purpose of this Policy is to assist the University in more effectively supervising and monitoring the investment activities of its Assets. This Policy is designed to assist University staff and the Investment Subcommittee with regard to its fiduciary responsibility by:

- defining the responsibilities of University staff, its investment managers, and its investment consultant;

- stating in writing the University's attitudes, expectations, and goals for the investment of the Assets;

- providing a basis for reviewing investment management organizations in the selection process;

- encouraging effective communication between the investment managers, investment consultant, the Subcommittee, and Youngstown State University; and

- setting objectives against which the performance results of the investment managers, operating within the constraints imposed by the University's Policy guidelines, can be measured.

A primary expectation for University assets is to support the University by providing current income to the University from both non-endowed and endowed funds, managed on behalf of the University by outside investment professionals, while concurrently growing principal. The asset base is dedicated to providing a reliable source of funds for current and future enhancements at the University.

Parameters:

Investment assets are to be held by a reputable custodian / trust company. Investment assets are to be held in safe-keeping, in the name of the University. Evaluation, selection and monitoring of the University's custodian will include, but not be limited to, the following factors:

- Size and scalability of the underlying financial institution
- Delivery of competitive safe-keeping and trust services as measured by attributes such as systems functionality, statement delivery, client service, audit controls and reporting capabilities
- Safe-keeping and trust service pricing and fees

The management of the non-endowment and endowment funds involves a tradeoff between two competing goals. On the one hand, the funds must preserve capital and maintain liquidity sufficient to distribute cash to fund immediate operating needs and prior spending commitments. To accommodate these objectives, the University will establish the Operating and Short-Term Pool. On the other hand, the funds must accumulate capital sufficient to support nominal growth in expenses for existing programs and to establish new quasi-endowment funds. To accommodate these objectives, the University will establish the Long-Term/Reserve Pool. The goal of the funds is to accommodate these competing needs by providing adequate short-term liquidity along with long-term capital appreciation.

The Subcommittee recognizes that risk and volatility are present to some degree with all types of investments. However, high levels of risk are to be avoided at the total asset level. This is to be accomplished through diversification by asset class, style of investment manager, and sector and industry limits.

The following statements and guidelines are set forth in an effort to provide direction to each of the investment managers that manage separate accounts for the University. Managers are retained to manage separate pools of assets; and funds are allocated to such managers in order to achieve an appropriate, diversified, and balanced asset mix. The Subcommittee, from time to time, may shift assets from one manager to another to maintain the appropriate mix. Additionally, the Subcommittee recognizes that mutual or commingled funds used by the University may not adhere to these guidelines. However, when selecting mutual or commingled fund products, the Subcommittee will refer to these guidelines as a basis to select new funds.

Evaluation, selection and monitoring of the University's individual investment managers, will include, but not be limited to, the following factors:

- Each investment manager should have clearly stated investment objectives.
- The performance (return) and volatility (risk) of each investment manager should be evaluated over time, evaluating performance in light of how closely the investment manager has adhered to its stated investment objectives.
- The depth and experience of the portfolio manager(s) should be evaluated (both with respect to the current investment portfolio he or she manages and any funds previously managed).
- The depth and financial stability of the relevant investment fund company should be considered.
- The fees and expenses charged with respect to such investment management services should be considered.

A written "Investment Guideline Statement" or prospectus clearly outlining objectives and responsibilities will be in place with each investment manager. For the non-endowment funds, the managers shall have discretion to invest assets in cash reserves as they deem appropriate but will be expected under normal circumstances to be fully invested in their assigned asset class. A manager's performance will be evaluated against their fully invested passive benchmark and against similar portfolio results. Passive benchmarks will be used for comparative purposes which most closely approximate the investment mandate's duration, credit quality, security composition, capitalization, style, asset class, etc.

To the extent bequests are made to the University via shares of marketable equity securities, the following provisions apply:

- The policy on bequests as defined by the University Guidebook number 5007.01 will supersede all provisions within this Policy.
- If the bequest is a non-endowed gift, the securities will be sold as soon as prudently possible.

- If the bequest is an endowed gift, the securities will be invested as specified by the donor and agreed to by the Board of Trustees.

Procedures:

1. The Vice President for Finance and Administration, or designee, shall be accountable to the Board of Trustees for implementing this Policy.

2. The Vice President for Finance and Administration, or designee, will report to the Investment Subcommittee at least quarterly on the status of the non-endowment and endowment portfolios.

3. It shall be permissible for the Vice President for Finance and Administration, or designee to realize gains and losses if such an action would be consistent with the University's investment goals. Losses and gains realized on the non-endowment portfolio shall be charged against current income unless otherwise approved by the Investment Subcommittee.

4. Between meetings of the Board of Trustees, if deemed advisable, other investments not specifically authorized by this Policy may be made if approved by the Investment Subcommittee. Any such actions shall be taken to the Board of Trustees for review at its next meeting.

Spending Policy

The Board has established a spending policy for certain funds. This Policy reflects the tradeoffs between short-term liquidity and long-term capital appreciation needs, as described in the "Purpose" and "Parameters" sections above.

Non Endowment Assets: Non-endowment assets are comprised of operating and non-operating funds, and include cash, cash equivalents and investment assets.

Operating funds, comprised of cash, cash equivalents, and certain investment assets, make up the University's General Funds. The use of cash, cash equivalents, and investment assets in these General Funds is not subject to any Board-approved spending policy as the University's annual operating budget establishes parameters for the use of these funds.

The University's remaining non-endowed investment assets are primarily in reserve for project-related funds. Spending within these funds is subject to University Guidebook Policy 3010.01 - Budget Transfers, project-specific spending plans, and various other University operating and financial policies and procedures. If deemed necessary for University operations, University management, working with the Investment Consultant, has authority to raise an appropriate level of cash from non-operating investments.

Income earned on non-endowed investment assets is primarily used to support University operations; thus, it is the policy of the Board not to limit annual distributions of realized investment income. The annual operating budget establishes parameters for the use of this income, and the disposition of total annual net operating inflows over outflows requires Board approval. Unrealized investment income from non-endowment assets shall always be non-spendable.

Endowment Assets: It is the policy of the Board to set annual distributions each fiscal year to 5% of the twelve-quarter average of the market value for the preceding twelve calendar quarters. In calculating the twelve-quarter average, census dates of March 31, June 30, September 30 and December 31 for the previous three years shall be used. Any distribution greater than this would require written justification and Board of Trustees' approval. For all other managed funds, distributions are project specific, thus are limited only to the extent needed to sustain appropriate cash flow for the expenditure cycle of the corresponding project.