

OFFICE OF THE CHANCELLOR PO BOX 7 MONTPELIER, VT 05601 P (802) 224-3000 F (802) 224-3035

#### **MEMORANDUM**

TO: VSC Finance & Facilities Committee

M. Jerome Diamond

J. Churchill Hindes, Chair

Tim Jerman Bill Lippert

Christopher Macfarlane, Vice Chair

Linda Milne

Martha O'Connor Michael Pieciak

FROM: Steve Wisloski

DATE: August 16, 2017

SUBJ: Finance & Facilities Committee Meeting on August 23, 2017

The Finance and Facilities Committee of the Board of Trustees will meet from 2:30 p.m. to 5:00 p.m. in Room 101 of the Chancellor's Office.

The agenda includes an update regarding the State appropriation, a review of final FY2017 operating results (which will be provided separately via e-mail early next week), a quarterly investment update, review of a revised draft investment policy, a capital projects update and, time permitting, a continued discussion of the questions and follow-up items from the list compiled at the May 31 meeting.

Should you have any questions regarding the upcoming meeting or any other matter, or any requested additions to the agenda, please contact me at <a href="mailto:stephen.wisloski@vsc.edu">stephen.wisloski@vsc.edu</a> or (802) 224-3022. Thank you.

#### Attachments:

- 1. Agenda
- 2. Meeting Materials

cc: VSC Board of Trustees, Council of Presidents and Business Affairs Council David Beatty, Vermont Department of Finance & Management The Honorable Douglas Hoffer, Vermont State Auditor

## Vermont State Colleges Board of Trustees Finance and Facilities Committee Meeting August 23, 2017

#### **AGENDA**

- 1. Call to order
- 2. Consent agenda
  - a. Approve minutes of June 20, 2017 meeting
- 3. Update on FY2018 Budget Adjustment and FY2019 Appropriation Requests
- 4. Review FY2017 final results (unaudited)
- 5. Quarterly update on cash, investments and endowment
- 6. Review of revised draft investment policy
- 7. Capital projects update
- 8. Questions and follow-up items from May 31 meeting, continued
- 9. Other business
- 10. Public comment
- 11. Adjourn

#### **MEETING MATERIALS**

- 1. Consent agenda items
- 2. FY2017 year-end results
- 3. Quarterly update on cash, investments and endowment
- 4. Revised draft investment policy
- 5. Capital projects updates
- 6. Questions and follow-up items from May 31 meeting
- 7. FY2018 Finance & Facilities Committee meetings schedule

Item 1: Consent Agenda Items

# UNAPPROVED Minutes of the VSC Board of Trustees Finance and Facilities Committee held Tuesday, June 20, 2017 at the Office of the Chancellor, Montpelier, VT

Note: These are unapproved minutes, subject to amendment and/or approval at the subsequent meeting.

The Vermont State Colleges Board of Trustees Finance and Facilities Committee met on Tuesday, June 20, 2017 at the Office of the Chancellor, Montpelier, VT.

Committee members present: Jerry Diamond, Church Hindes (Chair), Tim Jerman, Bill Lippert, Chris Macfarlane, Mike Pieciak

Additional Trustees: Martha O'Connor, Shavonna Bent and Aly Richards participated via conference call

Presidents: Nolan Atkins, Elaine Collins, Joyce Judy, Pat Moulton, Dave Wolk

Chancellor's Office Staff: Tricia Coates, Director of External & Governmental Affairs

Kevin Conroy, Chief Information Officer Todd Daloz, Associate General Counsel

Sheilah Evans, System Controller & Senior Director of Financial

**Operations** 

Harriet Johnson, Executive Assistant to the Chancellor's Office

Jeb Spaulding, Chancellor

Steve Wisloski, Chief Financial Officer

Sophie Zdatny, General Counsel

Yasmine Ziesler, Chief Academic Officer

From the Colleges: Scott Dikeman, Dean of Administration, Castleton University

Laura Jakubowski, Director of Finance, Castleton University Lisa Cline, Johnson State College, Faculty Federation President

Barbara Flathers, Dean of Students, Johnson State College

Barbara Martin, Dean of Administration, Community College of Vermont

Toby Stewart, Controller, Johnson State College

Lit Tyler, Dean of Administration, Vermont Technical College

1. Chair Hindes called the meeting to order at 10:40 a.m.

Chair Hindes addressed the Trustees and gave a brief overview of the agenda.

2. Approve minutes of May 31, 2017 meeting

Trustee Jerman moved and Trustee Pieciak seconded the approval of the minutes. The minutes were approved unanimously.

#### 3. Discuss FY2019 tuition request using multi-year budgeting model

Chair Hindes made brief comments on the topic of tuitions and the complexity of it. Chancellor Spaulding reported on the proposed FY 19 maximum tuition rate increase of 2.9% versus the Chancellor's previous recommendation of 3%. The Chancellor indicated that presenting this increase now allows VSC to help with awarding financial aid. Chancellor Spaulding also indicated that he'd spoken with the Governor, who indicated that the 2.9% maximum tuition increase is acceptable.

CFO Steve Wisloski reviewed a list of 15 questions that he had compiled from the meeting of May 31, 2017, and invited the Trustees to amend these and add others if they wished. He then updated the Trustees on several of the questions that related to tuition and multi-year budgeting, and said he would address the remaining questions at upcoming Committee meetings.

Trustee Diamond asked, does "maximum" in the resolution apply only to the tuition or does it also apply to the fees? Mr. Wisloski responded that it applies to all.

- 4. Review and approve FY2019 maximum tuition, fees, room and board
- 5. Review follow-up items from May 31 meeting
- 6. Discuss additional topics for FY2018 Committee meetings

Mr. Wisloski combined the above agenda items and presented his tables for FY19 tuition, fees, room and board and showed the Trustees variations of what the figures would look like with a 2.9% tuition increase.

Chancellor Spaulding noted that even with a 2.9% increase, the colleges will still need to push on operational efficiencies at the system level and at the institutional level. The 2.9% increase and the appropriation from the legislature does not take the pressure off.

Trustee Diamond suggested talking to the investment managers, Morgan Stanley to be prepared in the event VSC needs to pull \$1 M from their portfolio in the next year, and to learn how this would affect their portfolio. Mr. Wisloski stated he would add this as an additional item to his list of questions.

Mr. Wisloski continued his presentation on net tuition price and in and out of state burden using a web data base called "Scorecard" which provides data from the US Department of Education. At the end of the presentation Chair Hindes asked Mr. Wisloski to send the "Scorecard" web link to the Trustees, along with the tables he was discussing.

Trustee Diamond moved and Trustee Jerman seconded the resolution for the 2.9% tuition increase found on page 50 of the material along with the tables attached. The resolution was approved unanimously. Trustee Macfarlane abstained.

## 7. Other business

Mr. Wisloski reviewed upcoming meetings and offered to take comments from anyone to compile for the next meeting.

Chair Hindes thanked the committee members for their dedicated work and expressed thanks for the Education, Personnel & Student Life Committee, the continuation of the Long Range Planning Committee, and how beneficial it is that these committees overlap with the Finance and Facilities Committee.

Trustee Dickinson requested listing Board members who are present at meetings regardless if they are on the committee or not.

## 8. Public comment

There was no public comment.

#### 9. Adjourn

Trustee Jerman moved to adjourn. Chair Hindes adjourned the meeting at 11:50 a.m.

Item 2: FY2017 Final Results (Unaudited) [To Be Provided Under Separate Cover]

# Item 3: Cash, Investments and Endowment FY2017 Q4 Update

CASH & INVESTMENT REPORT: As of 6/30/2017

(Excludes non-operating/non-endowment investments made by VSC capital bond trustees)

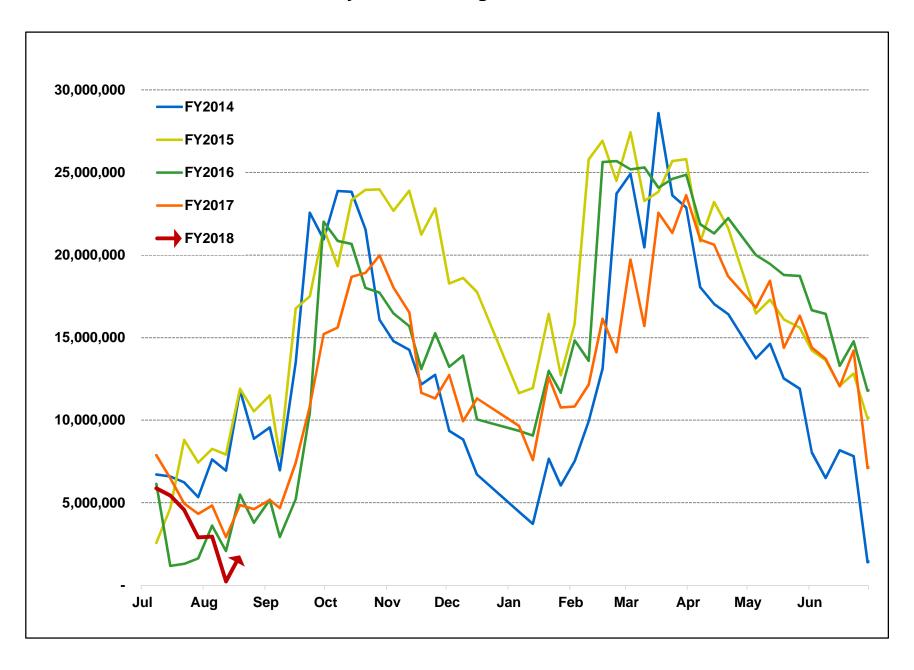
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		FY2015			FY2016			FY2017	
	CASH	INV'MT	CASH & INV'MT	CASH	INV'MT	CASH & INV'MT	CASH	INV'MT	CASH & INV'MT
	Avg Daily <u>Balance</u>								
JULY	5,693,454	49,867,648	55,561,102	3,355,541	46,380,924	49,736,465	5,802,598	48,252,972	54,055,570
AUGUST	10,617,091	50,457,909	61,075,000	4,592,608	46,127,004	50,719,612	4,771,979	48,240,933	53,012,912
SEPTEMBER	15,870,921	49,854,030	65,724,951	11,165,432	45,681,768	56,847,200	10,524,995	48,953,239	59,478,234
OCTOBER	23,455,481	50,257,327	73,712,808	20,198,716	46,848,645	67,047,361	19,921,855	48,422,041	68,343,896
NOVEMBER	22,488,791	50,662,244	73,151,035	15,282,537	46,770,232	62,052,769	14,272,286	48,583,595	62,855,881
DECEMBER	16,582,373	50,599,560	67,181,933	11,965,241	46,325,445	58,290,686	11,656,241	48,920,191	60,576,432
JANUARY	13,982,318	50,470,073	64,452,391	12,107,286	45,698,086	57,805,372	10,474,838	49,436,478	59,911,316
FEBRUARY	25,288,139	51,191,635	76,479,774	22,520,132	45,771,201	68,291,333	15,537,918	50,060,833	65,598,751
MARCH	25,813,245	51,040,377	76,853,622	25,540,713	47,312,657	72,853,370	21,394,047	50,181,763	71,575,810
APRIL	33,001,582	51,196,107	84,197,689	22,137,233	47,488,459	69,625,692	19,400,018	50,499,834	69,899,852
MAY	16,613,579	50,630,767	67,244,346	18,899,541	47,627,944	66,527,485	16,577,913	50,877,230	67,455,143
JUNE	12,181,645	50,099,272	62,280,917	14,118,440	47,984,522	62,102,962	11,517,369	50,956,847	62,474,216
Cash & Inv Avg thru 12 months	\$18,465,718	\$50,527,246	\$68,992,964	\$15,156,952	\$46,668,074	\$61,825,026	\$13,487,671	\$49,448,830	\$62,936,501

#### Summary of June Average Daily Balances

TD Bank Concentration Account	10,860,242
TD Wealth Medical	126,338
TD Bank Enterprise Money Market	4,731,994
TD Wealth Investments	19,676,682
Morgan Stanley (Endowment)	26,548,171
Total Investment	\$61,943,427
Remainder of money at local college banks	\$530,789
	\$62,474,216

# Weekly Concentration Account Balance July 1, 2013 to August 14, 2017



# Morgan Stanley

# 2nd Quarter 2017

Prepared on July 31, 2017

Prepared For: VSC Advised Accounts

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VSC Managed Accounts

Prepared on July 31, 2017 Reporting Currency: USD

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Please review the disclosures and definitions throughout this Document. Various sub-sections of this Document may not contain information on all accounts/positions covered in this Document

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August 23, 2017 Morgan Stanley

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# **ACCOUNT(S) INCLUDED IN THIS REPORT**

VSC Managed Accounts

Reporting Currency: USD

ACCOUNT(S) DETAIL					
Account Name and Address	Account Type/Manager Name	Advisory/ Brokerage	Account Number	Date Opened	Date Closed
IRONWOOD PO BOX 7 MONTPELIER	Alternative Investments Advisory	Advisory	383-020918	09/17/14	
SKYBRIDGE PO BOX 7	Alternative Investments Advisory	Advisory	383-020919	09/17/14	
VERMONT STATE COLLEGES	Consulting Group Advisor	Advisory	383-108872	12/20/02	
ATTN STEPHEN WISLOSKI PO BOX 7 MONTPELIER	Delaware Intl ADR -London	Advisory	383-108874	12/20/02	
	Anchor Mid Cap Value	Advisory	383-108918	02/06/03	
	AAA	Advisory	383-108920	02/06/03	01/25/17
	ClearBridge Multi Growth	Advisory	383-110533	04/19/06	
	AAA	Advisory	383-110534	04/19/06	
	ThomasPartners	Advisory	383-122584	03/07/12	

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All content within this Document applies to the accounts listed above or a subset thereof, unless otherwise indicated. Closed Accounts listed above are included for historical performance.

Introduction
As of 2Q 2017

- Risk markets globally continued to gain in the second quarter of 2017. Led by international markets it appears we are in the midst of the most synchronous global economic upturn since 2009. Our bullish global equity outlook assumes earnings estimates will continue to move higher as the global economic recovery persists, and that valuations can expand further as market participants become more comfortable with the self-sustainability of this recovery. We are watching the Federal Open Market Committee, which hiked rates for the third meeting in a row this quarter and signaled 1 further hike in 2017 along with plans to begin the unwinding of their balance sheet later this year.
- For the quarter, US equities posted strong performance, especially the Health Care sector of the S&P 500, which returned 7.1%. Energy (-6.4%) and Telecom (-7.1%) were clear laggards as low oil prices and delayed tax reform weighed on returns for the respective sectors. While the US had solid performance (3.1%), the largest returns for the quarter actually came from abroad with Europe registering 7.7% total return and emerging markets 6.4%, with China's 10.7% return a clear standout. For the one-year period ending June 30, 2017, global equities rallied with double-digit returns exceeding 20% in most regions. Commodities and managed futures lagged for the one-year period.
- The Dow Jones Industrial Average increased 4.0% in the second quarter. The NASDAQ Composite Index was up 4.2% for the quarter. The S&P 500 Index increased 3.1% for the quarter.
- Nine of the 11 sectors within the S&P 500 generated positive returns in 2Q17. The top-performing sector was Health Care, which was up 7.1%. Industrials and Financials rose 4.7% and 4.3%, respectively, and were also among the top-performing sectors. The biggest laggards were Energy, which decreased 6.4%, and Telecom, which fell 7.0%.
- The bond market registered slightly positive returns during the second quarter. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, increased 1.4% for the quarter.
- Morgan Stanley & Co. economists expect US real GDP will be 2.2% in 2017. They forecast global GDP growth to be 3.6% in 2017.
- Commodities continued negative returns into the second quarter; the Bloomberg Commodity Index decreased 3.2%.

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management GIC

#### **US Equity Markets**

As of 2Q 2017

The Dow Jones Industrial Average increased 4.0% in the first quarter. The NASDAQ Composite Index was up 4.2% for the quarter. The S&P 500 Index increased 3.1% for the quarter.

Nine of the 11 sectors within the S&P 500 generated positive returns in 2Q17. The top-performing sector was Health Care, which was up 7.1%. Industrials and Financials rose 4.7% and 4.3%, respectively, and were also among the top-performing sectors. The biggest laggards were Energy, which decreased 6.4%, and Telecom, which fell 7.0%.

The Russell 1000 Index, a large-cap index, increased 3.1% for the quarter, with large-cap growth (4.7%) outperforming large-cap value (1.3%).

The Russell Midcap Index increased 2.7% for the quarter, with mid-cap growth (4.2%) outperforming mid-cap value (1.4%).

The Russell 2000 Index, a small-cap index, increased 2.5% for the quarter, with small-cap growth (4.4%) outperforming small-cap value (0.7%).

Key US Stock Market Index Returns (%) for th	e Period End	ling 6/30/2017		
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized
S&P 500	3.1%	17.9%	14.6%	15.4%
Dow Jones	4.0%	22.1%	13.4%	14.7%
Russell 2000	2.5%	24.6%	13.7%	14.3%
Russell Midcap	2.7%	16.5%	14.7%	15.3%
Russell 1000	3.1%	18.0%	14.7%	15.4%

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC

## **Global Equity Markets**

As of 2Q 2017

In the second quarter, emerging markets (EM) and international developed regions both delivered positive returns (in USD). The MSCI EAFE Index (a benchmark for international developed markets) increased 6.4% for US-currency investors and increased 2.9% for local-currency investors, as the US dollar significantly depreciated in relation to the currencies of many nations in the index.

For the second quarter, the MSCI Emerging Markets Index increased 6.4% for US-currency investors and 6.7% for local-currency investors. The MSCI Europe Index increased 7.6% for US-currency investors and increased 6.2% for local-currency investors during 2Q17.

The S&P 500 Index increased 3.1% for the quarter.

Emerging economy equity market indices were up in the second quarter. The MSCI BRIC (Brazil, Russia, India and China) Index rose 4.8% for the quarter in US dollar terms and 5.8% in terms of local currencies. For the first quarter, the MSCI EM Asia Index was up 8.7% in US dollar terms and 9.2% in local terms.

Key Global Equity Market Index Returns (%) f	or the Perioc	l Ending 6/30/20	017	
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
MSCI EAFE	6.4%	20.8%	9.2%	8.4%
MSCI EAFE Growth	7.7%	16.1%	9.6%	9.0%
MSCI EAFE Value	5.1%	25.7%	8.7%	7.7%
MSCI Europe	7.7%	21.8%	9.4%	8.8%
MSCI Japan	5.2%	19.6%	9.8%	7.7%
S&P 500	3.1%	17.9%	14.6%	15.4%
MSCI Emerging Markets	6.4%	24.2%	4.3%	4.2%

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC

#### The US Bond Market

As of 2Q 2017

The bond market registered positive returns during the second quarter. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, increased 1.4% for the quarter as the curve continued to flatten.

Interest rates decreased during the second quarter, as the yield on the 10-year US Treasury note declined to a quarter-end 2.30% from 2.38% at the end of 1Q17. This came out to a 3.5% decrease in rates for the quarter.

Riskier parts of the bond market such as US high yield debt also increased in the second quarter. The Bloomberg Barclays Capital High Yield Index, a measure of lower-rated corporate bonds, rose 2.2%.

Mortgage-backed securities posted slightly positive returns during the second quarter. The Bloomberg Barclays Capital Mortgage Backed Index increased 0.9% for the quarter. During the second quarter, the municipal bond market also increased. As a result, the Bloomberg Barclays Capital Muni Index generated a 2.0% return for the quarter.

Key US Bond Market Index Returns (%) for t	he Period End	ling 6/30/2017		
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
Bloomberg Barclays Capital US Aggregate	1.4%	-0.3%	2.2%	3.2%
Bloomberg Barclays Capital High Yield	2.2%	12.7%	6.9%	8.1%
Bloomberg Barclays Capital Government/Credit	1.7%	-0.4%	2.3%	3.4%
Bloomberg Barclays Capital Government	1.2%	-2.3%	1.3%	2.5%
Bloomberg Barclays Capital Intermediate Govt/Credit	0.9%	-0.2%	1.8%	2.6%
Bloomberg Barclays Capital Long Govt/Credit	4.4%	-1.1%	4.3%	6.8%
Bloomberg Barclays Capital Mortgage Backed Securities	0.9%	-0.1%	2.0%	2.7%
Bloomberg Barclays Capital Muni	2.0%	-0.5%	3.3%	4.2%

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management GIC

# Asset Class Returns: Diversified Portfolios Can Help Mitigate Risk

As of June 30, 2017

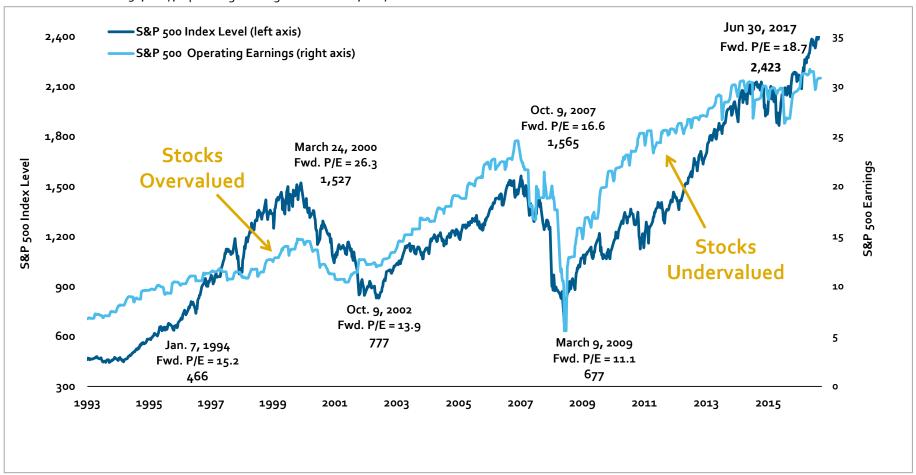
2007         2008         2009         2010         2011         2012         2013         2014         2015         2016         2017 YTE           EM Equities         Managed Futures         EM Equities         MLPs¹         REITs         US Equities         REITs         EMD         MLPs²         EM Equities           40.2%         13.6%         82.9%         35.9%         13.9%         29.8%         32.4%         14.7%         1.8%         18.3%         18.3%           Commod.         DM Int'l Debt         MLPs²         EM Equities         Inflation-Linked         High Yield         MLPs²         US Equities         US Equities         High Yield         DM Int'l Equities           MLPs²         US Debt         High Yield         REITs         EMD         EM Equities         DM Int'l Equities         DM Int'l Equities         DM Int'l Equities         US Equities         US Equities         US Equities	10-Yrs ('07-'16) Ann. Return  MLPs <sup>1</sup> 8.0%  High Yield 7-3%  US Equities 6.9%	10-Yrs ('07-'16) Volatility  MLPs <sup>2</sup> 19.0%  REITs 18.4%  Commod.
EM Equities         Managed Futures         EM Equities         MLPs¹         MLPs¹         REITs         US Equities         REITs         EMD         MLPs¹         EM Equities           40.2%         13.6%         82.9%         35.9%         13.9%         29.8%         32.4%         14.7%         1.8%         18.3%         18.3%           Commod.         DM Int'l Debt         MLPs¹         EM Equities         Inflation-Linked         High Yield         MLPs¹         US Equities         US Equities         High Yield         DM Int'l Equit           16.2%         11.7%         76.4%         20.2%         13.6%         19.6%         27.6%         13.7%         1.4%         14.3%         14.6%	8.0% High Yield 7.3% US Equities	MLPs <sup>2</sup> 19.0% REITs 18.4%
40.2%       13.6%       82.9%       35.9%       13.9%       29.8%       32.4%       14.7%       1.8%       18.3%         Commod.       DM Int'l Debt       MLPs³       EM Equities       Inflation-Linked       High Yield       MLPs³       US Equities       US Equities       High Yield       DM Int'l Equit         16.2%       11.7%       76.4%       20.2%       13.6%       19.6%       27.6%       13.7%       1.4%       14.3%       14.6%	8.0% High Yield 7.3% US Equities	19.0% REITs 18.4%
Commod.         DM Int'l Debt         MLPs²         EM Equities         Inflation-Linked         High Yield         MLPs²         US Equities         US Equities         High Yield         DM Int'l Equit           16.2%         11.7%         76.4%         20.2%         13.6%         19.6%         27.6%         13.7%         1.4%         14.3%         14.6%	High Yield 7-3% US Equities	REITs 18.4%
16.2% 11.7% 76.4% 20.2% 13.6% 19.6% 27.6% 13.7% 1.4% 14.3% 14.6%	7.3% US Equities	18.4%
	US Equities	Commod.
12.7% 5.2% 59.4% 20.0% 9.2% 19.1% 24.0% 12.3% 0.9% 12.0% 9.3%		17.9%
Inflation-Linked Inflation-Linked REITs Commod US Debt DM Int'l Equities Diversified FMD US Debt Commod REITs	EMD	EM Equities
11.6% -2.4% 41.3% 16.8% 7.8% 18.2% 15.1% 6.2% 0.5% 11.8% 7.2%	6.6%	17.5%
DM Int'l Debt EMD DM Int'l Equities US Equities DM Int'l Debt EMD Hedged Strategies US Debt REITs EM Equities Diversified Portfolio	US Debt	US Equities
11.2% -9.7% 33.9% 15.1% 6.0% 18.0% 8.8% 6.0% -0.4% 10.3% 6.8%	4.8%	15.2%
DM Int'l Equities Hedged Strategies US Equities High Yield High Yield US Equities High Yield MLPs <sup>2</sup> Inflation-Linked EMD High Yield	Diversified Portfolio	DM Int'l Equities
10.8% -21.4% 26.5% 14.8% 3.1% 16.0% 7.3% 4.8% -1.4% 9.6% 6.5%	4.5%	15.0%
Hedged Diversified Diversified Diversified Portfolio Por	Inflation-Linked	High Yield
10.3% -25.7% 25.9% 12.7% 2.1% 12.0% 2.2% 4.7% -1.9% 7.5% 6.3%	4.4%	11.4%
Diversified Portfolio Port	DM Int'l Debt	Diversified Portfolio
7.9% -26.9% 23.6% 11.8% -2.1% 7.0% 0.7% 3.6% -2.0% 4.7% 5.2%	2.8%	9.9%
Managed Futures Commod. Commod. DM Int'l Equities Managed Futures MLPs <sup>2</sup> EM Equities Hedged Strategies High Yield REITs Strategies	EM Equities	EMD
7.6% -35.6% 18.9% 9.8% -4.3% 4.8% -1.9% 3.4% -2.7% 4.6% 2.6%	2.4%	9.0%
US Debt MLPs <sup>2</sup> Hedged Strategies DM Int'l Debt Hedged Strategies US Debt High Yield Hedged Strategies US Debt	REITs	DM Int'l Debt
7.0% -36.9% 11.5% 7.0% -5.7% 4.8% -2.0% 0.0% -3.6% 2.6% 2.3%	1.9%	8.4%
EMD US Equities Inflation-Linked US Debt REITs US Debt DM Int'l Debt EM Equities DM Int'l Debt Strategies Inflation-Link	DM Int'l Equities	Managed Futures
6.5% -37.0% 11.4% 6.5% -8.1% 4.2% -5.6% -1.4% -4.4% 2.5% 0.9%	1.5%	6.9%
US Equities DM Int'l Equities US Debt Managed Futures DM Int'l Equities DM Int'l Debt EMD DM Int'l Debt EM Equities DM Int'l Debt Managed Future	es Hedged Strategies	Inflation-Linked
5.5% -43.4% 5.9% 6.4% -12.2% 0.5% -8.3% -3.0% -13.5% 2.1% 0.0%	-0.6%	6.3%
High Yield REITs DM Int'l Debt Inflation-Linked Commod. Commod. Inflation-Linked DM Int'l Equities Commod. DM Int'l Equities MLPs <sup>1</sup>	Managed Futures	Hedged Strategies
3.2% -48.9% 3.7% 6.3% -13.3% -1.1% -8.6% -4.5% -24.7% 1.6% -2.7%	-1.0%	5.9%
REITS EM Equities Managed Futures Hedged Strategies EM Equities Managed Futures Commod. Commod. MLPs <sup>2</sup> Managed Futures Commod.	Commod.	US Debt
-4.7% -53.6% -4.8% 4.2% -19.2% -1.8% -9.5% -17.0% -32.6% -3.1% -5.3%	-5.6%	3.3%

Source: FactSet, Morgan Stanley Wealth Management GIC; Indices used: Bloomberg Barclays Capital US Aggregate for US Bonds. Citi 3M Treasury Bill for cash, Bloomberg Barclays US Aggregate for US Bonds, Bloomberg Barclays Global Majors ex US for DM Int'l Bonds, Bloomberg Barclays US TIPS for Inflation-linked securities, Bloomberg Barclays Global High Yield for global high yield, JP Morgan EMBI for EM Bonds, S&P 500 for US Stocks, MSCI EAFE IMI for Int'l Stocks, MSCI EM IMI for Emerging Market Stocks, FTSE EPRA/NAREIT Global for REITs, Bloomberg Commodity Index for commodities, HFRX Macro/CTA Index for Managed Futures, Alerian MLP Index for MLPs, and HFRX Global hedge Funds for hedged strategies. Diversified portfolio is comprised of 25% S&P 500, 10% Russell 2000, 15% MSCI EAFE, 5% MSCI EME, 25% Bloomberg Barclays US Aggregate, 5% 3 mo. T-Bills, 5% HFRX Global Hedge Funds, 5% Bloomberg Commodity Index, and 5% FTSE EPRA/NAREIT Global Index. MLP data begins on January 1, 2007. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

# Earnings Remain Supportive of US Equities

#### S&P 500 Index Level Vs. S&P 500 Operating Earnings

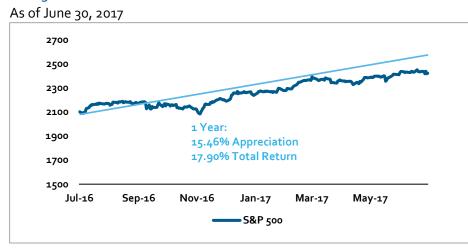
Index Level as of June 30, 2017; Operating Earnings as of June 16, 2017



Source: Bloomberg. Stocks Overvalued = equity performance outpaces earnings performance. Stocks Undervalued = earnings performance outpaces equity performance. Fairly Valued = stock performance and earnings performance are in line with one another.

# US Large-Cap Equity Market Performance and Fundamentals

#### S&P 500 Last 12 Months1



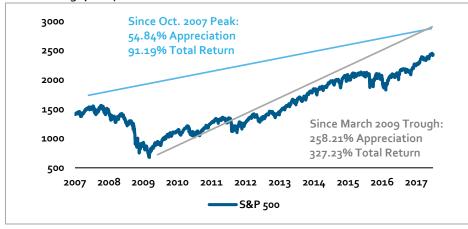
#### S&P 500 EPS Estimates

As of June 30, 2017



## S&P 500 Since Financial Crisis<sup>1</sup>

As of June 30, 2017



## Implied S&P 500 Index Levels

As of June 30, 2017

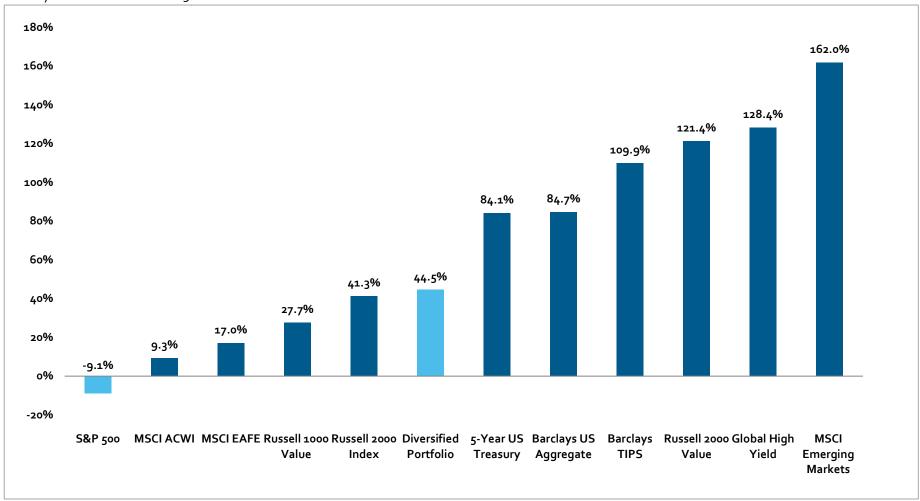
					Hypothe	tical P/E			
a)		13	14	15	16	17	18	19	20
Per Share	<b>\$</b> 8o	1040	1120	1200	1280	1360	1440	1520	1600
	\$90	1170	1260	1350	1440	1530	1620	1710	1800
Earnings	\$100	1300	1400	1500	1600	1700	1800	1900	2000
ing Ea	\$110	1430	1540	1650	1760	1870	1980	2090	2200
Hypothetical Operating	\$120	1560	1680	1800	1920	2040	2160	2280	2400
ical 0	\$130	1690	1820	1950	2080	2210	2340	2470	2600
othet	\$140	1820	1960	2100	2240	2380	2520	2660	2800
Нур	\$150	1950	2100	2250	2400	2550	2700	2850	3000

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. (1) Represents index level change. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material.

# "Lost Decade" (2000-2010) Demonstrates the Importance of Global Diversification and Asset Allocation

#### **Total Returns**

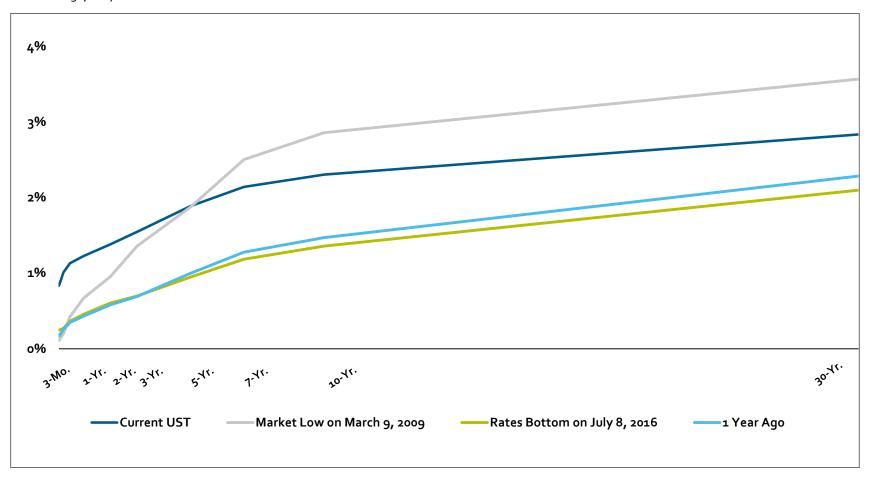
January 2000 - December 2009



Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC, The Yield Book® Software and Services. © 2017 Citigroup Index LLC. All rights reserved. Note: Diversified Portfolio is comprised of 50% MSCI All Country World Index/45% Bloomberg Barclays US Aggregate Bond Index/5% Citigroup 3-Month T-Bill Index.

# **US Treasury Yield Curve**

#### As of June 30, 2017

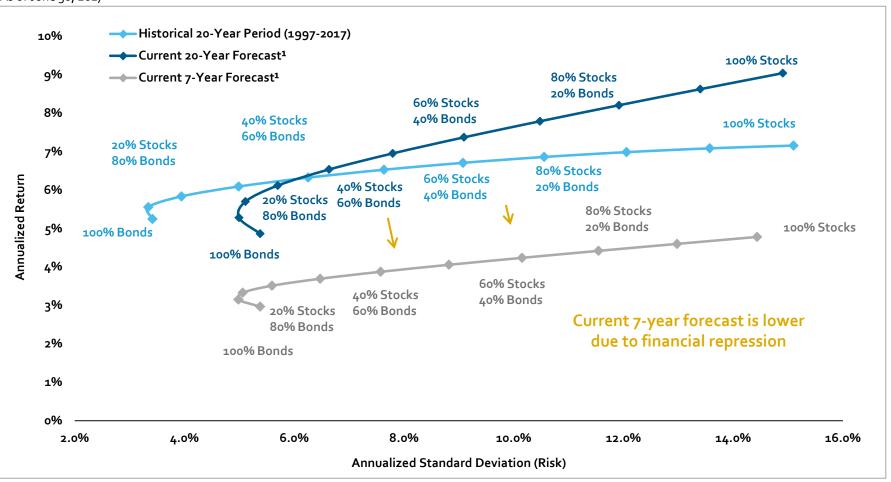


Source: Bloomberg, US Department of the Treasury.

# Diversification Benefits Have Waned: Forecasted Efficient Frontiers

#### Stock and Bond Blends

As of June 30, 2017



Source: FactSet, Morgan Stanley Wealth Management GIC. For illustrative purposes only. Stocks are represented by the S&P 500 and bonds are represented by the Bloomberg Barclays US Aggregate Index. (1) Forecasts are based on capital market assumptions as published in the GIC's Strategic Asset Allocation Capital Markets Update, March 31, 2017. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

VSC Board of Trustees
Finance & Facilities 25

# Morgan Stanley

#### VERMONT STATE COLLEGES

PORTFOLIO SUMMARY - ASSET ALLOCATION
June 30, 2017

	ı	arge Cap Growth	Lar	ge Cap Value		nall / Mid Growth	Sma	II / Mid Value	lr	nternational		ternational Emerging		Domestic and gh Yield Fixed	Inte	ernational Fixed	Α	Iternatives		Cash	Total	% of Total Portfolio
CG Advisor																						
I shares Russell 1000 Growth	\$	3,302,210																			\$ 3,302,210	12.5%
I shares Russell 1000 Value			\$	2,775,575																	\$ 2,775,575	10.5%
I shares Trust S&P Mid Cap 400					\$	32,639															\$ 32,639	0.1%
iShares Russell 2000					\$	215,537	\$	215,537													\$ 431,074	1.6%
William Blair Int Growth									\$	1,470,245											\$ 1,470,245	5.6%
Vanguard FTSE Developed Mkts									\$	1,121,136											\$ 1,121,136	4.2%
Oppenheimer Developing Mkts											\$	633,484									\$ 633,484	2.4%
I shares MSCI EAFE									\$	334,348											\$ 334,348	1.3%
Dreyfus Standish GLB Fix Inc I															\$	787,226					\$ 787,226	3.0%
Loomis Bond Fund													\$	1,129,836							\$ 1,129,836	4.3%
Vanguard Sh Tm Invt Gr Inv													\$	1,219,894							\$ 1,219,894	4.6%
Vanguard Total Bd Mkt Indx Inv													\$	1,179,108							\$ 1,179,108	4.5%
Blackrock Hi Yield Bond													1	1,541,090							\$ 1,541,090	5.8%
Guggenheim Total Return Bond														1,174,809							\$ 1,174,809	4.4%
Lazard Emerging Markets											\$	625,725									\$ 625,725	2.4%
Money Funds																			\$	131,957	\$ 131,957	0.5%
Ishares Dj US Real Estate																	\$	264,757			\$ 264,757	1.0%
Vanguard REIT ETF																	\$	275,075			\$ 275,075	1.0%
Ironwood HF																	\$	528,906			\$ 528,906	2.0%
Skybridge HF																	\$	488,644			\$ 488,644	1.8%
Anchor							\$	638,646													\$ 638,646	2.4%
Delaware								·	\$	1,226,888											\$ 1,226,888	4.6%
Clearbridge	\$	983,820	\$	549,406	\$	459,968	\$	562,183		,,,									\$	45,305	 2,600,682	9.8%
Thomas Partners	\$	381,852		1,447,017		75,365		306,486	\$	261,267									\$	40,195	2,512,182	9.5%
Total Fund	\$	4,667,882		4,771,998		783,509		1,722,852		•	\$	1,259,209	\$	6,244,738	\$	787,226	\$	1,557,381	Ť	217,457	26,426,136	100.00%
Allocation		17.66%		18.06%		2.96%		6.52%		16.70%		4.77%		23.63%	•	2.98%		5.89%		0.82%	100.00%	
Strategic Target Allocation a/o 6.30.11 By Percent By Dollar	\$	12.00% 3,171,136	\$	12.00% 3,171,136	\$	6.00% 1,585,568	\$	6.00% 1,585,568	\$	17.00% 4,492,443	\$	7.00% 1,849,830	\$	28.00% 7,399,318	\$	4.00% 1,057,045	\$	8.00% 2,114,091	\$	0.00% -	\$ 100.00% 26,426,136	
Current Tactical Allocation		18%		18%		4%		4%		12%		4%		28%		4%		8%		0%	100%	
Revised Tactical a/o 3.30.2017		18%		18%		4%		6%		15%		6%		24%		3%		6%		0%	100%	
Operations Account			\$	105,941	(con	nmon stock	k)		\$	16,092	(m	oney funds)									\$ 122,033	

Total All Accounts \$ 26,548,169

 Basic Asset Allocation:
 Stocks
 67%

 Alternatives
 6%

 Fixed Income/Cash
 27%

The above summary/prices/quote/statistics have been obtained from sources we believe to be reliable, but we cannot guarantee its accuracy or completeness. Past performance is no guarantee of future results. The information provided in this summary is for illustrative purposes only and does not represent an official statement by the firm. You must refer to your monthly statements for an accurate and complete record of your transactions, holdings & balances. Best efforts have been made to reflect the true values of the figures, but we can not guarantee the accuracy or completeness due not be element for an accurate and complete record of your transactions, holdings & balances. Best efforts have been made to reflect the true values of the figures, but we can not guarantee the accuracy or completeness due not be element for an accurate and complete record of your transactions, holdings & balances. Best efforts have been made to reflect the true values of the figures, but we can not guarantee in the summary is for illustrative purposes only and does not represent an official statement by the firm. You must refer to your monthly statements for an accurate and complete record of your transactions, holdings & balances. Best efforts have been made to reflect the true values of the figures, but we can not guarantee in formation provided in this summary is for illustrative purposes only and does not represent an official statement by the firm. You must refer to your monthly statements for an accurate and complete record of your transactions, holdings & balances. Best efforts have been made to reflect the true values of the figures, but we can not guarantee in formation is not guarantee in formation in f

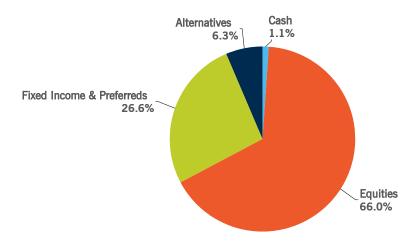
August 23, 2017

# **ASSET ALLOCATION**

VSC Managed Accounts

As of June 30, 2017 | Reporting Currency: USD

## **ASSET ALLOCATION - ASSET CLASS**



ASSET ALLOCATION		
	Total Value 06/30/17	% of Portfolio 06/30/17
Cash	\$288,819.09	1.1%
Equities	17,439,724.04	66.0
Fixed Income & Preferreds	7,031,963.81	26.6
Alternatives	1,677,503.87	6.3
Total Portfolio	\$26,438,010.81	100.0%

Total Value and % of Portfolio are based on US Dollar values.

## **EQUITIES ASSET AND SECTOR ALLOCATION**

VSC Managed Accounts

As of July 28, 2017 | Reporting Currency: USD

#### **EQUITIES ASSET ALLOCATION Total Value** % of Equities 07/28/17 07/28/17 US Large Cap Growth \$4,737,348.90 26.5% US Large Cap Value 4,430,231.19 24.8 US Mid Cap Growth 708,530.77 4.0 US Mid Cap Value 780,684.90 4.4 US Small Cap Growth 283,512.27 1.6 US Small Cap Value 332,121.19 1.9 Canadian Equities 70,513.06 0.4 **European Equities** 1,662,823.70 9.3 Japan Equities 181,280.69 1.0 Asia Pac ex Jpn Equities 246,872.72 1.4 15.0 Intl Equities Other 2,683,298.45 Asia Equities 40,342.50 0.2 Latin America Equities 8,491.50 0.0 Emerging Mkt Equities Oth 9.4 1,680,746.73

10

20

30

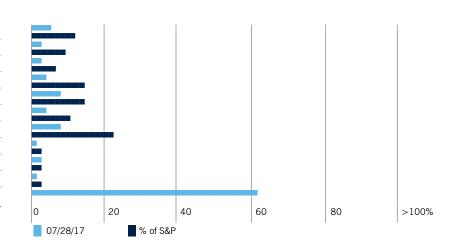
#### **EQUITIES SECTOR DISTRIBUTION**

**Total Equities** 

	Total Value	% of Equities	% of S&P
	07/28/17	07/28/17	07/28/17
Consumer Discretionary	\$884,256.60	5.0%	12.3 %
Consumer Staples	467,216.41	2.6	8.7
Energy	549,226.44	3.1	6.0
Financials	683,779.80	3.8	14.4
Health Care	1,338,642.03	7.5	14.4
Industrials	726,617.05	4.1	10.1
Information Technology	1,369,127.18	7.7	22.9
Materials	234,188.06	1.3	2.9
Telecommunication Services	353,556.89	2.0	2.2
Utilities	231,931.92	1.3	3.2
Others	11,008,256.19	61.7	-
Total Equities	\$17,846,798.57	100.0%	

\$17,846,798.57

100.0%



40

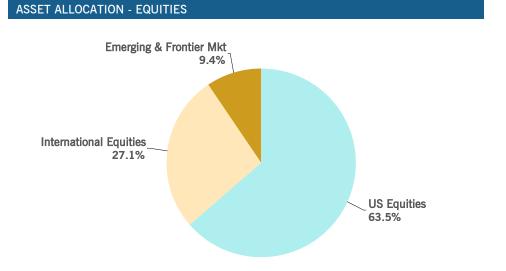
50%

# **EQUITIES ASSET ALLOCATION**

VSC Managed Accounts

As of June 30, 2017 | Reporting Currency: USD

TOP EQUITY POSITIONS BASED ON TOTAL VALUE		
ISHARES RUSSELL 1000 GRW ETF	Total Value 06/30/17 \$3,302,209.90	% of Equities 18.9%
ISHARES RUSSELL 1000 VALUE ETF	2,775,574.77	15.9
WILLIAM BLAIR INTL GROWTH I	1,470,245.41	8.4
VANGUARD FTSE DEVELOPED MKTS E	1,121,135.56	6.4
OPPENHEIMER DEVELOPING MKTS Y	633,484.49	3.6
LAZARD EMERGING MKTS EQ I	625,724.69	3.6
ISHARES RUSSELL 2000 ETF	431,074.28	2.5
ISHARES MSCI EMERGING MKTS ETF	334,348.42	1.9
UNITEDHEALTH GP INC	250,502.42	1.4
COMCAST CORP (NEW) CLASS A	205,078.72	1.2
Top Equity Positions	\$11,149,378.66	63.9%
Other Equity Positions	\$6,290,345.38	36.1%



## **ASSET ALLOCATION - EQUITIES**

**Total Equities** 

	Total Value 06/30/17	% of Equities 06/30/17	% of Portfolio 06/30/17
US Equities	\$11,078,096.10	63.5 <b>%</b>	41.9%
International Equities	4,719,698.44	27.1	17.9
Emerging & Frontier Mkt	1,641,929.49	9.4	6.2
Total Equities	\$17,439,724.04	100.0%	66.0%

\$17,439,724.04

100.0%

ASSET ALLOCATION Page 18 of 43

## FIXED INCOME & PREFERREDS ASSET ALLOCATION

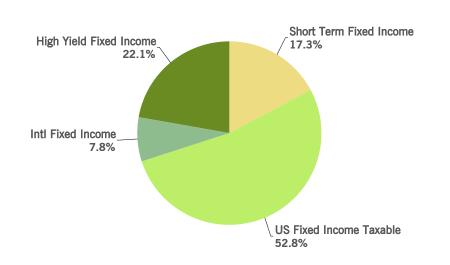
VSC Managed Accounts

As of July 28, 2017 | Reporting Currency: USD

#### TOP FIXED INCOME & PREFERRED POSITIONS BASED ON TOTAL VALUE

Total Fixed Income & Preferreds	\$7,084,924.60	100.0%
Other Fixed Income & Preferred Positions	-	-
Top Fixed Income & Preferred Positions	\$7,084,924.60	100.0%
DREYFUS STANDISH GLB FIX INC I	792,879.76	11.2
LOOMIS SAYLES BOND INST	1,142,584.69	16.1
GUGGENHEIM TOTAL RETURN BD I	1,177,249.74	16.6
VANGUARD TOTAL BD MKT INDX INV	1,183,660.41	16.7
VANGUARD SH TM INVT GR INV	1,224,317.59	17.3
BLACKROCK HI YIELD BD PTF INST	Total Value 07/28/17 \$1,564,232.41	Fixed Income & Preferreds 22.1%
		% of

#### ASSET ALLOCATION - FIXED INCOME & PREFERREDS



#### ASSET ALLOCATION - FIXED INCOME & PREFERREDS

Short Term Fixed Income	Total Value 07/28/17 \$1,224,317.59	% of Fixed Income & Preferreds 07/28/17 17.3%	% of Portfolio 07/28/17 4.5%
Short Term Govt/Corp	918,238.19	13.0	3.4
Short Term Securitized	306,079.40	4.3	1.1
US Fixed Income Taxable	3,741,358.77	52.8	13.9
Intermed Term Govt/Corp	1,183,660.41	16.7	4.4
US Taxable Core	2,557,698.36	36.1	9.5
Intl Fixed Income	555,015.83	7.8	2.1
Intl Core Fixed Income	555,015.83	7.8	2.1
High Yield Fixed Income	1,564,232.41	22.1	5.8
High Yield Fixed Income	1,564,232.41	22.1	5.8
Total Fixed Income & Preferreds	\$7.084.924.60	100.0%	26.3%

ASSET ALLOCATION Page 19 of 43

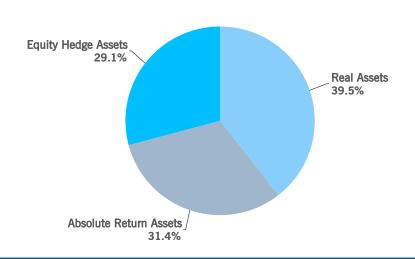
# **ALTERNATIVES ASSET ALLOCATION**

VSC Managed Accounts

As of July 28, 2017 | Reporting Currency: USD

Total Alternatives	\$1,685,835.21	100.0%
Other Alternative Positions	-	-
Top Alternative Positions	\$1,685,835.21	100.0%
WELLTOWER INC	9,279.89	0.6
CORECIVIC INC	10,020.64	0.6
SUN COMMUNITIES INC	13,622.24	0.8
ALERIAN MLP ETF	87,034.70	5.2
ISHARES US REAL ESTATE ETF	267,743.73	15.9
VANGUARD REIT ETF	278,115.75	16.5
SKYBRIDGE MUL-AD SER G ADV	490,779.78	29.1
IRONWOOD INSTIT MS LLC	Total Value 07/28/17 \$529,238.48	% of Alternatives 31.4%
TOP ALTERNATIVE POSITIONS BASED ON TOTAL VALUE		

# ASSET ALLOCATION - ALTERNATIVES



## **ASSET ALLOCATION - ALTERNATIVES**

Total Alternatives	\$1,685,835.21	100.0%	6.3%
Equity Hedge Assets	490,779.78	29.1	1.8
Absolute Return Assets	529,238.48	31.4	2.0
Real Assets	\$665,816.95	39.5%	2.5%
	Total Value 07/28/17	% of Alternatives 07/28/17	% of Portfolio 07/28/17

ASSET ALLOCATION Page 20 of 43

# **ASSET ALLOCATION OVER TIME**

VSC Managed Accounts

As of June 30, 2017 | Reporting Currency: USD

# HISTORICAL ALLOCATION **Previous Four Years** Current 06/30/17 12/31/16 12/31/15 12/31/14 12/31/13 100% 90% 80% 70% % Of Portfolio 60% 50% 40% 30% 20% 10% 0%

Total Value	\$26,438,010.67	\$24,609,243.49	\$22,673,944.12	\$24,006,896.87	\$22,380,243.42
Other	<u>-</u>	<u>-</u>	<u>-</u>	-	64,295.35
■ Alternatives	1,644,263.20	1,791,147.80	1,711,441.43	1,754,743.77	956,740.37
Fixed Income & Preferreds	7,031,963.81	6,723,896.53	6,442,297.37	7,153,477.63	6,500,836.58
■ Equities	17,589,530.51	15,816,288.51	14,265,615.90	14,992,590.65	14,551,953.38
Cash	\$172,253.15	\$277,910.66	\$254,589.42	\$106,084.82	\$306,417.74
TOTAL VALUE					
% of Portfolio	100.0%	100.0%	100.0%	100.0%	100.0%
Other	<u> </u>		-	<u> </u>	0.3
■ Alternatives	6.2	7.3	7.5	7.3	4.3
Fixed Income & Preferreds	26.6	27.3	28.4	29.8	29.0
■ Equities	66.5	64.3	62.9	62.5	65.0
■ Cash	0.7%	1.1%	1.1%	0.4%	1.4%
% OF PORTFOLIO					

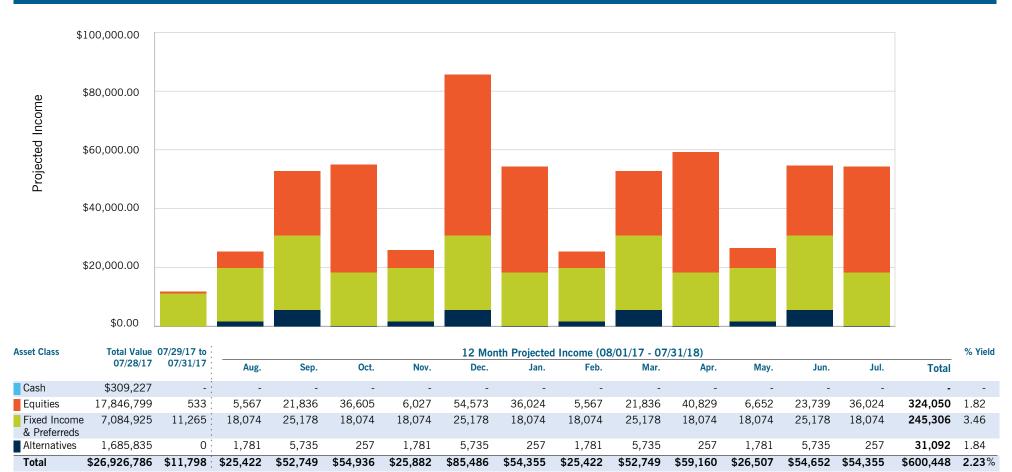
Change in Total Values does not denote performance and may be due to contributions/withdrawals, fees, market fluctuations and other causes Periods prior to Jan 2014 do not reflect interest and dividend accruals and may be different from Total Values for performance purposes.

## PROJECTED 12 MONTH INCOME SUMMARY

VSC Managed Accounts

As of July 28, 2017 | Reporting Currency: USD

#### PROJECTED 12 MONTH INCOME SUMMARY



INCOME Page 22 of 43

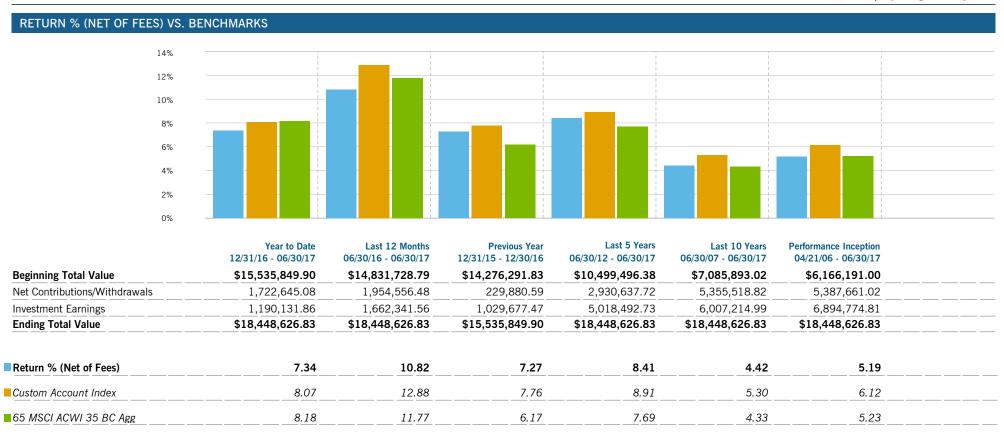
VSC Managed Accounts

As of June 30, 2017 | Reporting Currency: USD



VERMONT STATE COLLEGES 383-108872 - Consulting Group Advisor

As of June 30, 2017 | Reporting Currency: USD



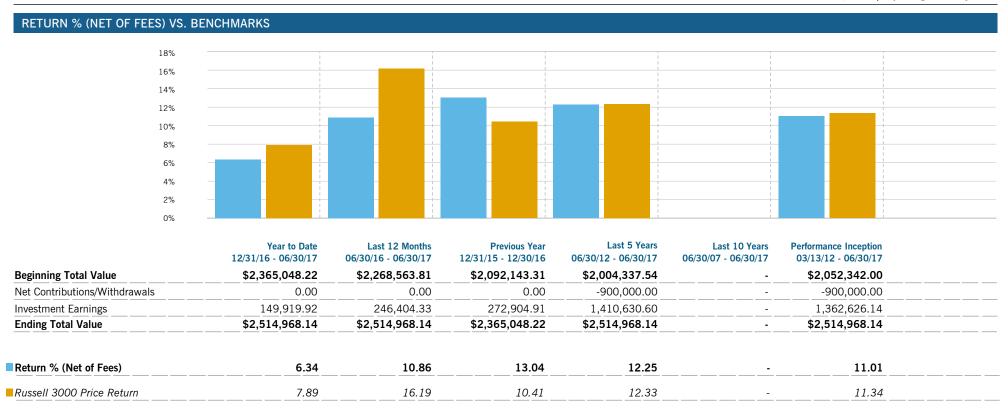
VERMONT STATE COLLEGES 383-110533 - ClearBridge Multi Growth

As of June 30, 2017 | Reporting Currency: USD

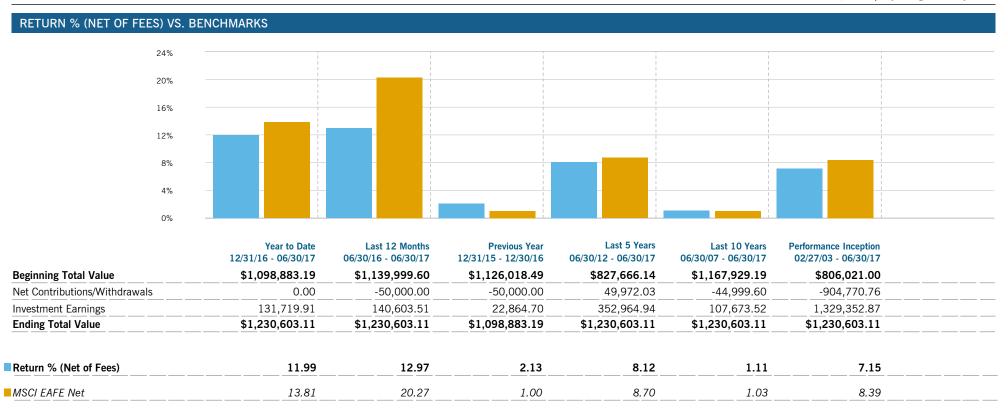


VERMONT STATE COLLEGES 383-122584 - ThomasPartners

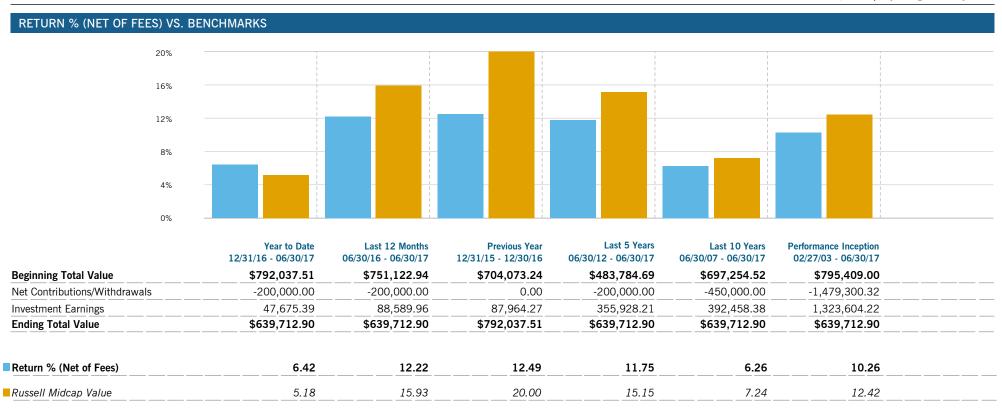
As of June 30, 2017 | Reporting Currency: USD



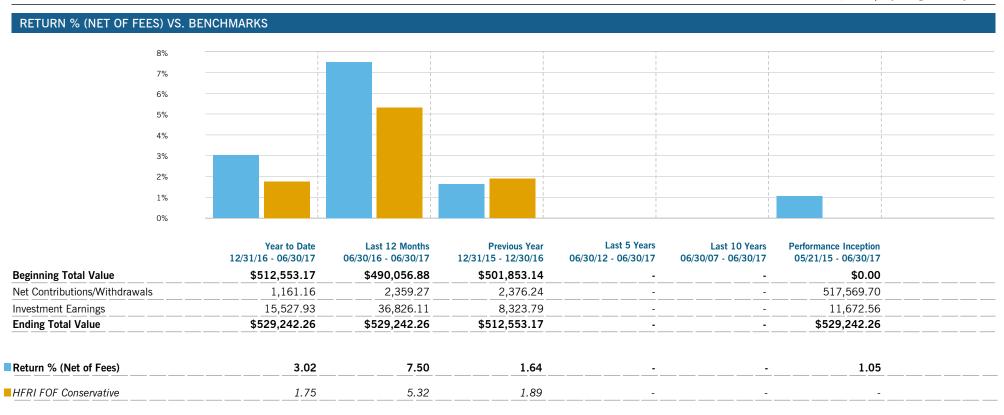
VERMONT STATE COLLEGES 383-108874 - Delaware Intl ADR -London



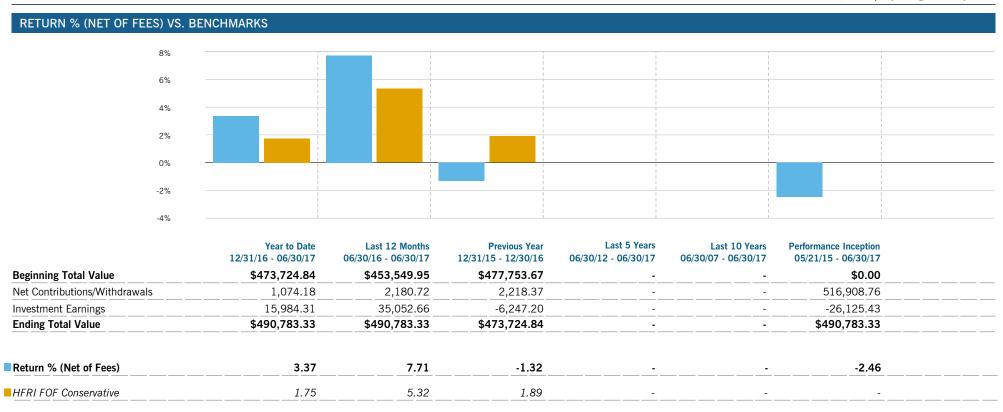
VERMONT STATE COLLEGES 383-108918 - Anchor Mid Cap Value



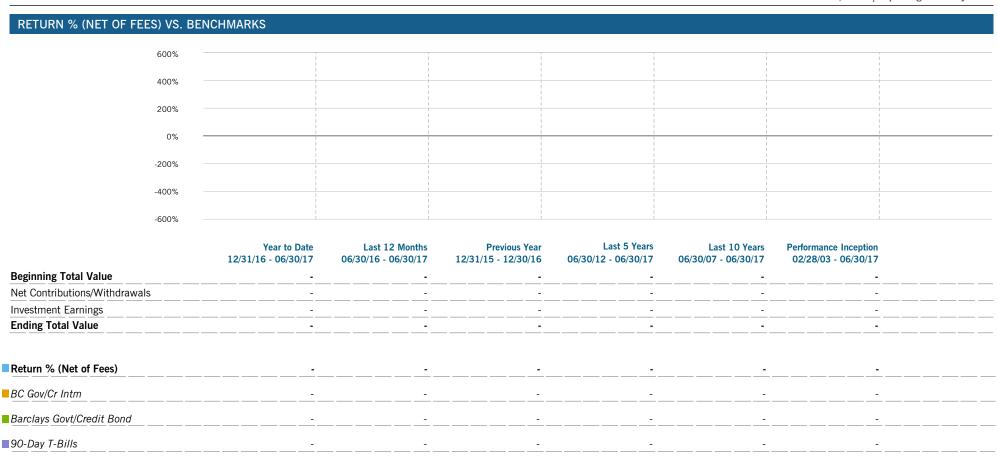
IRONWOOD 383-020918 - Alternative Investments Advisory



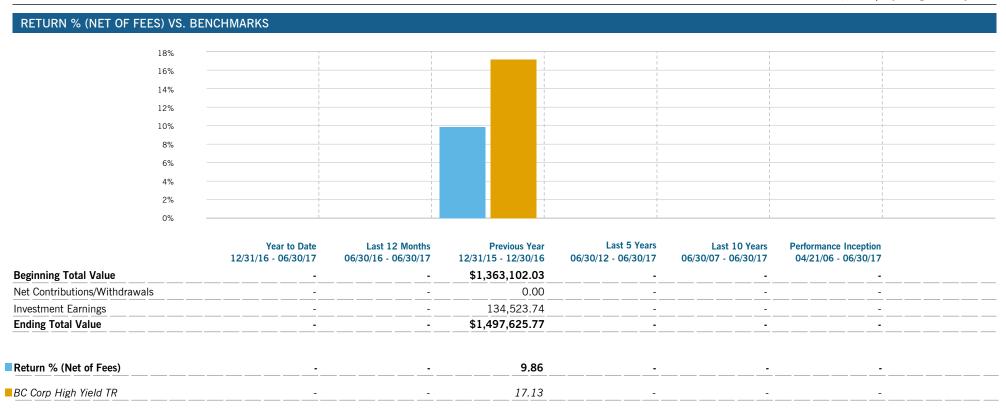
SKYBRIDGE 383-020919 - Alternative Investments Advisory



VERMONT STATE COLLEGES 383-108920 - AAA As of June 30, 2017 Reporting Currency: USD



**VERMONT STATE COLLEGES 383-110534 - AAA** 



#### **DISCLOSURES**

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Investment, insurance and annuity products offered through Morgan Stanley Smith Barney LLC are: NOT FDIC INSURED | MAY LOSE VALUE | NOT BANK GUARANTEED | NOT A BANK DEPOSIT | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY.

Additional information about your Floating Rate Notes: For floating rate securities, the estimated accrued interest and estimated annual income are based on the current floating coupon rate and may not reflect historic rates within the accrual period.

Important Information About Auction Rate Securities: For certain Auction Rate Securities there is no or limited liquidity. Therefore, the price(s) for these Auction Rate Securities are indicated as not available by a dash "-". There can be no assurance that a successful auction will occur or that a secondary market exists or will develop for a particular security.

Important Pricing Information: Prices of securities not actively traded may not be available, and are indicated by a dash "-".

Asset Classification: We classify assets based on general characteristics such as: income generation, underlying capital structure, or exposure to certain market sectors. As many assets contain characteristics of more than one asset class, allocations may be under or over inclusive. These classifications do not constitute a recommendation and may differ from the classification of instruments for regulatory or tax purposes. In addition, the Other asset class contains securities that are not included in the various asset class classifications. This can include, but is not limited to, non-traditional investments such as some Equity Unit Trusts, Index Options and Structured Investments issued outside of Morgan Stanley. Additionally, investments for which we are unable to procure market data to properly classify them will appear in the Other category.

**Performance:** Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Please contact your Financial Advisor for up to date performance information. Past performance is not a guarantee of future results.

Market values used for performance calculation do not include performance ineligible assets and thus may differ from asset allocation market values. Common examples of Performance Ineligible Assets include life insurance, Manually Added assets and some annuities and Externally Held accounts. Unless otherwise indicated, performance is a composite calculation on the entire portfolio and may include brokerage and investment advisory accounts, as well as assets for different accounts included in this report. The accounts included in the composite may have (or have had) different investment objectives and strategies, been subject to different restrictions, and incurred different types of fees, markups, commissions and other charges. Accordingly, performance results may blend

the performance of assets and strategies that may not have been available in all of the accounts at all times during the reporting period. In addition, accounts in the composite may have changed from brokerage to advisory or vice versa. Accounts may also have moved from one advisory program to another (including from a discretionary program to a non-discretionary program). For Morgan Stanley Smith Barney LLC accounts, Performance information may cover the full history of the account(s) or just the performance of an account(s) since the inception of the current program(s). Performance results on individual accounts will vary and may differ from the composite returns. Your Financial Advisor can provide you with individual account portfolio composition and performance information. For investment advisory accounts, please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 or applicable disclosure brochure and any applicable brokerage commission and/or fee schedule for a full disclosure of fees and expenses. Your Financial Advisor will provide those documents to you upon request. For brokerage accounts, please speak to your Financial Advisor for more information on commissions and other account fees and expenses.

Performance inception date does not necessarily correspond to the account opening date. Where multiple accounts are included in performance calculations, the inception date is the oldest performance inception. Performance data may not be available for all periods as some accounts included in performance may have more recent performance inception dates. Consequently, the actual performance for a group of accounts may differ from reported performance. Please ask your Financial Advisor for the performance inception date for each account.

Indices: Benchmark indices and blends included in this material are for informational purposes only, are provided solely as a comparison tool and may not reflect the underlying composition and/or investment objective(s) associated with the account(s). In some circumstances, the benchmark index may not be an appropriate benchmark for use with the specific composite portfolio. For instance, an index may not take into consideration certain changes that may have occurred in the portfolio since the inception of the account(s), (e.g., changes from a brokerage to an advisory account or from one advisory program to another, asset class changes, or index changes for individual managers). The volatility of the index used for comparison may be materially different from that of the performance shown. Indices are unmanaged and not available for direct investment. Index returns do not take into account fees or other charges. Such fees and charges would reduce performance. Please see the Benchmark Definitions section of this material for additional information on the indices used for comparison.

Projected 12 Month Income: Projected Next 12 Months income includes cash income such as interest and cash dividends, based on current yields and may include income from Morgan Stanley & Co. and Externally Held accounts where data is available. These are projections based on historical data and the actual income may be lower or higher than the projections. Projected income for Morgan Stanley & Co. and Externally Held accounts is calculated based upon data obtained from sources that we believe to be reliable, however, Morgan Stanley Wealth Management does not guarantee its accuracy or timeliness. As such, Morgan Stanley Wealth Management recommends confirming projected income information with the custodian institution prior to taking any action. Projections will not include income from Manually Added assets.

Additional information about your Alternative Investments: An alternative investment is any non-traditional asset beyond stocks, bonds, and cash, and may include derivatives such as options and futures, leveraged equity or bonds, private equity, currencies, commodities, less common types of stocks such as natural resources stocks, master limited partnerships (MLPs), and real estate investment trusts (REITs), or even collectibles such as paintings or other works of art, or luxury items such as wine and spirits. Many of these alternative investments typically have eligibility requirements that cannot be met by the average investor and are therefore not appropriate for all investors. Typical alternative investment vehicles are generally private offerings and can include hedge funds and funds of hedge funds, managed futures funds, and other vehicles. They utilize alternative strategies and investing techniques such as long/short, hedged equity and event driven, to name just a few. Often, alternative strategies seek to provide competitive returns relative to a given benchmark, while at the same time limiting downside risk in the event of a market downturn, although objectives vary widely depending on the type of strategy. In recent years, certain open-end mutual funds can now be classified as another type of alternative investment vehicle as they seek alternative-like exposure and these may be included in the Alternative Investments category. They are publicly offered and more accessible by a larger number of investors. Both types of alternative investment vehicles often seek investment returns that have lower correlation to traditional markets and increased diversification in an overall portfolio. However, unlike hedge funds, open-end mutual funds that seek alternative-like exposure do not require investor pre-qualifications, enable efficient tax reporting, are subject to lower investment minimums and lower fees, provide greater portfolio transparency, daily liquidity, and are required to provide daily NAV pricing.

Potential benefits to hedge funds include greater flexibility in terms of seeking enhanced returns through the use of leverage, exposure to less liquid investments, and the more flexible use of complex instruments such as derivatives. Because of the differences noted above, performance for a mutual fund that seeks alternative-like exposure and its portfolio characteristics may vary from a hedge fund that is seeking a similar investment objective. Historically, hedge funds in certain categories have enjoyed a performance advantage relative to their mutual fund counterparts.

It is important to note in this report that Morgan Stanley categorizes both types of alternative investment vehicles under the category "Alternatives" in the asset classification based view and under the category "Other" in a Product based view. This differs from your official Morgan Stanley account statement, which assigns alternative mutual funds under the category of "Mutual Funds" and typical alternative investment vehicles such as hedge funds, under the category "Alternatives".

Please note that no formal trading markets exist for private alternative investments. They are generally illiquid and may not be currently priced and values may not necessarily have been reduced to reflect prior distributions. If values and prices are assigned to the investments, they are estimates, based on information typically received from the funds' general partners, managing members,

sponsors, administrators, or advisors of the funds and/or underlying funds, are typically subject to change and are as-of a date prior to the date of this report. Where applicable, see the particular fund statement for the final prices. Values and prices may not be realized upon the sale or ultimate disposition of the securities. For investment in funds valued in non-US Dollar currencies, the valuations received have been converted to US Dollars using then prevailing foreign exchange rates. If index values are illustrated in the report, they may be more up to date than the data for the alternative investments illustrated. Private Alternative Investments listed in this report may not be not in our possession, and are included solely as a service to the client, are not covered by the Securities Investor Protection Corporation (SIPC), and information contained herein is derived from an external service for which we are not responsible. If you have any questions regarding these investments, please contact your Financial Advisor.

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The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be suitable for all clients. Any product discussed herein may be purchased only after a client has carefully reviewed the offering memorandum and executed the subscription documents. Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance. Morgan Stanley Smith Barney LLC offers investment program services through a variety of investment programs, which are opened pursuant to written client agreements. Each program offers investment managers, funds and features that are not available in other programs; conversely, some investment managers, funds or investment strategies may be available in more than one program.

Morgan Stanley's investment advisory programs may require a minimum asset level and, depending on your specific investment objectives and financial position, may not be suitable for you. Please see the Morgan Stanley Smith Barney LLC program disclosure brochure (the "Morgan Stanley ADV") for more information in the investment advisory programs available. The Morgan Stanley ADV is available at www.morganstanley.com/ADV. Sources of Data. Information in this material in this report has been obtained from sources that we believe to be reliable, but we do not quarantee its accuracy, completeness or timeliness. Third-party data providers make no warranties or representations relating to the accuracy, completeness or timeliness of the data they provide and are not liable for any damages relating to this data. All opinions included in this material constitute the Firm's judgment as of the date of this material and are subject to change without notice. This material was not prepared by the research departments of Morgan Stanley & Co. LLC or Morgan Stanley Smith Barney LLC. Some historical figures may be revised due to newly identified programs, firm restatements, etc. Global Investment Manager Analysis (GIMA) Focus List, Approved List and Tactical Opportunities List; Watch Policy. GIMA uses two methods to evaluate investment products in applicable advisory programs: Focus (and investment products meeting this standard are described as being on the Focus List) and Approved (and investment products meeting this standard are described as being on the Approved List). In general, Focus entails a more thorough evaluation of an investment product than Approved. Sometimes an investment product may be evaluated using the Focus List process but then placed on the Approved List instead of the Focus List. Investment products may move from the Focus List to the Approved List, or vice versa. GIMA may also determine that an investment product no longer meets the criteria under either process and will no longer be recommended in investment advisory programs (in which case the investment product is given a "Not Approved" status). GIMA has a 'Watch" policy and may describe a Focus List or Approved List investment product as being on "Watch" if GIMA identifies specific areas that (a) merit further evaluation by GIMA and (b) may, but are not certain to, result in the investment product becoming "Not Approved." The Watch period depends on the length of time needed for GIMA to conduct its evaluation and for the investment manager or fund to address any concerns. Certain investment products on either the Focus List or Approved List may also be recommended for the Tactical Opportunities List based in part on tactical opportunities existing at a given time. The investment products on the Tactical Opportunities List change over time. For more information on the Focus List, Approved List, Tactical Opportunities List and Watch processes, please see the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management. Your Financial Advisor or Private Wealth Advisor can also provide upon request a copy of a publication entitled "Manager Selection Process."

The **Global Investment Committee** is a group of seasoned investment professionals who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend model portfolio weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

The Global Investment Manager Analysis (GIMA) Services Only Apply to Certain Investment Advisory Programs GIMA evaluates certain investment products for the purposes of some – but not all – of Morgan Stanley Smith Barney LLC's investment advisory programs (as described in more detail in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management). If you do not invest through one of these investment advisory programs, Morgan Stanley Wealth Management is not obligated to provide you notice of any GIMA Status changes even though it may give notice to clients in other programs.

Strategy May Be Available as a Separately Managed Account or Mutual Fund Strategies are sometimes available in Morgan Stanley Wealth Management investment advisory programs both in the form of a separately managed account ("SMA") and a mutual fund. These may have different expenses and investment minimums. Your Financial Advisor or Private Wealth Advisor can provide more information on whether any particular strategy is available in more than one form in a particular investment advisory program. In most Morgan Stanley Wealth Management investment advisory accounts, fees are deducted quarterly and have a compounding effect on performance. For example, on an advisory account with a 3% annual fee, if the gross annual performance is 6.00%, the compounding effect of the fees will result in a net performance of approximately 3.93% after one year, 1 after three years, and 21.23% after five years. Conflicts of Interest: GIMA's goal is to provide

professional, objective evaluations in support of the Morgan Stanley Wealth Management investment advisory programs. We have policies and procedures to help us meet this goal. However, our business is subject to various conflicts of interest. For example, ideas and suggestions for which investment products should be evaluated by GIMA come from a variety of sources, including our Morgan Stanley Wealth Management Financial Advisors and their direct or indirect managers, and other business persons within Morgan Stanley Wealth Management or its affiliates. Such persons may have an ongoing business relationship with certain investment managers or mutual fund companies whereby they, Morgan Stanley Wealth Management or its affiliates receive compensation from, or otherwise related to, those investment managers or mutual funds. For example, a Financial Advisor may suggest that GIMA evaluates an investment manager or fund in which a portion of his or her clients' assets are already invested. While such a recommendation is permissible, GIMA is responsible for the opinions expressed by GIMA. See the conflicts of interest section in the applicable Form ADV Disclosure Document for Morgan Stanley Wealth Management for a discussion of other types of conflicts that may be relevant to GIMA's evaluation of managers and funds. In addition, Morgan Stanley Wealth Management, MS & Co., managers and their affiliates provide a variety of services (including research, brokerage, asset management, trading, lending and investment banking services) for each other and for various clients, including issuers of securities that may be recommended for purchase or sale by clients or are otherwise held in client accounts, and managers in various advisory programs. Morgan Stanley Wealth Management, managers, MS & Co., and their affiliates receive compensation and fees in connection with these services. Morgan Stanley Wealth Management believes that the nature and range of clients to which such services are rendered is such that it would be inadvisable to exclude categorically all of these companies from an account. Consider Your Own Investment Needs: The model portfolios and strategies discussed in the material are formulated based on general client characteristics including risk tolerance. This material is not intended to be a client-specific suitability analysis or recommendation, or offer to participate in any investment. Therefore, clients should not use this profile as the sole basis for investment decisions. They should consider all relevant information, including their existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. Such a suitability determination may lead to asset allocation results that are materially different from the asset allocation shown in this profile. Talk to your Financial Advisor about what would be a suitable asset allocation for you, whether CGCM is a suitable program for you.

No obligation to notify – Morgan Stanley Wealth Management has no obligation to notify you when the model portfolios, strategies, or any other information, in this material changes. Please consider the investment objectives, risks, fees, and charges and expenses of mutual funds, ETFs, closed end funds, unit investment trusts, and variable insurance products carefully before investing. The prospectus contains this and other information about each fund. To obtain a prospectus, contact your Financial Advisor or Private Wealth Advisor or visit the Morgan Stanley website at www.morganstanley.com. Please read it carefully before investing.

An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund.

The type of mutual funds and ETFs discussed in this presentation utilizes nontraditional or complex investment strategies and/or derivatives. Examples of these types of funds include those that utilize one or more of the below noted investment strategies or categories or which seek exposure to the following markets: (1) commodities (e.g., agricultural, energy and metals), currency, precious metals; (2) managed futures; (3) leveraged, inverse or inverse leveraged; (4) bear market, hedging, long-short equity, market neutral; (5) real estate; (6) volatility (seeking exposure to the CBOE VIX Index). Investors should keep in mind that while mutual funds and ETFs may, at times, utilize nontraditional investment options and strategies, they should not be equated with unregistered privately offered alternative investments. Because of regulatory limitations, mutual funds and ETFs that seek alternative-like investment exposure must utilize a more limited investment universe. As a result, investment returns and portfolio characteristics of alternative mutual funds and ETFs may vary from traditional hedge funds pursuing similar investment objectives. Moreover, traditional hedge funds have limited liquidity with long "lock-up" periods allowing them to pursue investment strategies without having to factor in the need to meet client redemptions and ETFs trade on an exchange. On the other hand, mutual funds typically must meet daily client redemptions. This differing liquidity profile can have a material impact on the investment returns generated by a mutual or ETF pursuing an alternative investing strategy compared with a traditional hedge fund pursuing the same strategy.

Nontraditional investment options and strategies are often employed by a portfolio manager to further a fund's investment objective and to help offset market risks. However, these features may be complex, making it more difficult to understand the fund's essential characteristics and risks, and how it will perform in different market environments and over various periods of time. They may also expose the fund to increased volatility and unanticipated risks particularly when used in complex combinations and/or accompanied by the use of borrowing or "leverage."

#### KEY ASSET CLASS CONSIDERATIONS AND OTHER RISKS

Investing in the markets entails the risk of market volatility. The value of all types of investments, including stocks, mutual funds, exchange-traded funds ("ETFs"), closed-end funds, and unit investment trusts, may increase or decrease over varying time periods. To the extent the investments depicted herein represent international securities, you should be aware that there may be additional risks associated with international investing, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes, and differences in financial and accounting standards. These risks may be magnified in emerging markets and frontier markets. Small- and mid-capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. In addition, the securities of small- and mid-capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies. The value of fixed income securities will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Bonds are subject to interest rate risk, call risk, reinvestment risk, liquidity risk, and credit risk of the issuer. High yield bonds are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues. In the case of municipal bonds, income is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax. Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS

may significantly underperform versus conventional U.S. Treasuries in times of low inflation. There is no guarantee that investors will receive par if TIPS are sold prior to maturity. The returns on a portfolio consisting primarily of environmental, social, and governance-aware investments ("ESG") may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no quarantee that a client's account will be managed as described herein. Options and margin trading involve substantial risk and are not suitable for all investors. Besides the general investment risk of holding securities that may decline in value and the possible loss of principal invested, closed-end funds may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance and potential leverage. Closed-end funds, unlike open-end funds, are not continuously offered. There is a one-time public offering and once issued, shares of closed-end funds are sold in the open market through a stock exchange. NAV is total assets less total liabilities divided by the number of shares outstanding. At the time an investor purchases shares of a closed-end fund, shares may have a market price that is above or below NAV. Portfolios that invest a large percentage of assets in only one industry sector (or in only a few sectors) are more vulnerable to price fluctuation than those that diversify among a broad range of sectors. Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eliqible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by NASD Conduct Rule 2711 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. While the HFRI indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways. Composite index results are shown for illustrative purposes and do not represent the performance of a specific investment. Individual funds have specific tax risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not quaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank. 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Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not suitable for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment

management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

While the HFRI indices are frequently used, they have limitations (some of which are typical of other widely used indices). These limitations include survivorship bias (the returns of the indices may not be representative of all the hedge funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all hedge funds are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many hedge funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown. The HFRI indices are based on information self-reported by hedge fund managers that decide on their own, at any time, whether or not they want to provide, or continue to provide, information to HFR Asset Management, L.L.C. Results for funds that go out of business are included in the index until the date that they cease operations. Therefore, these indices may not be complete or accurate representations of the hedge fund universe, and may be biased in several ways.

It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper. Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns. Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, "blow ups," or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial "lift" or upwards bias. Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and delays in distributing important tax information. Categorically, hedge funds and funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns. An investment in an exchange-traded fund involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a target date portfolio is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio is geared to investors who will retire and/or require income at an approximate year. The portfolio is managed to meet the investor's goals by the pre-established year or "target date." A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. Managed futures investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are suitable only for the risk capital portion of an investor's portfolio. Managed futures investments do not replace equities or bonds but rather may act as a complement in a well diversified portfolio. Managed Futures are complex and not appropriate for all investors. Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. Past performance is no guarantee of future results. Actual results may vary.

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Insurance products are offered in conjunction with Morgan Stanley Smith Barney LLC's licensed insurance agency affiliates.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustration purposes only and do not show the performance of any specific investment. Reference to an index does not imply that the portfolio will achieve return, volatility or other results similar to the index. The composition of an index may not reflect the manner in which a portfolio is constructed in relation to expected or achieved returns, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error target, all of which are subject to change over time.

This material is not a financial plan and does not create an investment advisory relationship between you and your Morgan Stanley Financial Advisor. We are not your fiduciary either under the Employee Retirement Income Security Act of 1974 (ERISA) or the Internal Revenue Code of 1986, and any information in this report is not intended to form the primary basis for any investment decision by you, or an investment advice or recommendation for either ERISA or Internal Revenue Code purposes. Morgan Stanley Private Wealth Management will only prepare a financial plan at your specific request using Private Wealth Management approved financial planning signature.

We may act in the capacity of a broker or that of an advisor. As your broker, we are not your fiduciary and our interests may not always be identical to yours. Please consult with your Private Wealth Advisor to discuss our obligations to disclose to you any conflicts we may from time to time have and our duty to act in your best interest. We may be paid both by you and by others who compensate us based on what you buy. Our compensation, including that of your Private Wealth Advisor, may vary by product and over time.

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For index, indicator and survey definitions referenced in this report please visit the following: <a href="http://www.morganstanleyfa.com/public/projectfiles/id.pdf">http://www.morganstanleyfa.com/public/projectfiles/id.pdf</a>

Global Investment Committee (GIC) Asset Allocation Models: The Asset Allocation Models are created by Morgan Stanley Wealth Management's GIC. HYPOTHETICAL MODEL PERFORMANCE (GROSS): Hypothetical model performance results do not reflect the investment or performance of an actual portfolio following a GIC Strategy, but simply reflect actual historical performance of selected indices on a real-time basis over the specified period of time representing the GIC's strategic and tactical allocations as of the date of this report. The past performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation or trading strategy. Hypothetical performance results do not represent actual trading and are generally designed with the benefit of hindsight. Actual performance results of accounts vary due to, for example, market factors (such as liquidity) and client-specific factors (such as investment vehicle selection, timing of contributions and withdrawals, restrictions and rebalancing schedules). Clients would not necessarily have obtained the performance results shown here if they had invested in accordance with any GIC Asset Allocation Model for the periods indicated. Despite the limitations of hypothetical performance, these hypothetical performance results allow clients and Financial Advisors to obtain a sense of the risk /return trade-off of different asset allocation constructs. The hypothetical performance results in this report are calculated using the returns of benchmark indices for the asset classes, and not the returns of securities, fund or other investment products. Models may contain allocations to Hedge Funds, Private Equity and Private Real Estate. The benchmark indices for these asset classes are not issued on a daily basis. When calculating model performance on a day for which no benchmark index data is issued, we have assumed straight line growth between the index levels issued before and after that date. FEES REDUCE THE PERFORMANCE OF ACTUAL ACCOUNTS: None of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, fees) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models. The GIC Asset Allocation Models and any model performance included in this presentation are intended as educational materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley's standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio's annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients' returns. The impact of fees and/or expenses can be material. insurance products disclosures: Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract. If you are investing in a variable annuity through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection. Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value. Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk. Master Limited Partnerships (MLPs): Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary

distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of private real estate include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a mortgage-backed security. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Asset-backed securities generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments. Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision. Credit ratings are subject to change. The majority of \$25 and \$1000 par preferred securities are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price. The initial interest rate on a floating-rate security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk. The market value of convertible bonds and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield. Some \$25 or \$1000 par preferred securities are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning go days before the ex-dividend date. Companies paying dividends can reduce or cut payouts at any time. Nondiversification: For a portfolio that holds a concentrated or limited number of securities, a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than a less concentrated portfolio. The indices selected by Morgan Stanley Wealth Management to measure performance are representative indices at any time. Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies. Growth investing does not quarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected. Any type of continuous or periodic investment plan does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels. **Duration**, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. This material is disseminated in the United States of America by Morgan Stanley Smith Barney LLC. Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule. This material, or any portion thereof, may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Smith Barney LLC. © 2017 Morgan Stanley Smith Barney LLC. Member SIPC.

#### **GENERAL DEFINITIONS**

**Dollar-Weighted Return (Internal Rate of Return):** A return calculation that measures the actual performance of a portfolio over the reporting period. Since dollar weighted returns include the impact of client contributions and withdrawals, they should not be compared to market indices or used to evaluate the performance of a manager, but can be used to evaluate progress toward investment goals.

Investment Earnings: A combination of the income received and total portfolio value increase or decrease, excluding net contributions and withdrawals, over the reporting period.

**Net Contributions/Withdrawals:** The net value of cash and securities contributed to or withdrawn from the account(s) during the reporting period. Net contributions and withdrawals may include advisory fees for advisory accounts.

Net of Fees: Performance results depicted as "net" of fees shall mean that any wrap fee, investment management fees, trade commissions, and/or other account fees have been deducted. Any other fees or expenses associated with the account, such as third party custodian fees, may not have been deducted. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

**Time-Weighted Return:** A return calculation that measures the investment performance of a portfolio over the reporting period. Time weighted returns do not include the impact of client contributions and withdrawals and therefore, may not reflect the actual rate of return the client received. Time weighted returns isolate investment actions and can be compared to benchmarks and used to evaluate the performance of a manager.

**Total Value:** Total Value represents the Market Value of the portfolio or of a given Asset Class inclusive of interest and dividend accruals. Total Value for Asset Allocation before January 2014 does not include accruals. Total Value for Morgan Stanley & Co. and Externally Held accounts may not include accruals.

#### **BENCHMARK DEFINITIONS**

Custom Account Index: The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

Custom Account Index: 383108872 Custom Account Index. The current allocation began as of 04/30/2017, and is comprised of 24.00% BC Global Agg Hed, 01.00% Citi 90-Day Treasury, 09.00% HFRI Fund Weighted Comp, 66.00% MSCI AC World IMI Net.

65 MSCI ACWI 35 BC Agg: The current allocation is comprised of 35.00% Barclays Aggregate, 65.00% MSCI AC World Net.

MSCI AC World Net: The MSCI ACWI Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of 46 country indexes comprising 23 developed and 23 emerging market country indexes. The developed market country indexes included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indexes included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates (as of June 2014). Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties. For historical return purposes the AC World gross returns are being used from 1/31/1988 to 12/31/1998 and the net returns begin as of 1/31/1999.

Citi go-Day Treasury: Equal dollar amounts of three-month Treasury bills are purchased at the beginning of each of three consecutive months. As each bill matures, all proceeds are rolled over or reinvested in a new three-month bill. The income used to calculate the monthly return is derived by subtracting the original amount invested from the maturity value. The yield curve average is the basis for calculating the return on the index. The index is rebalanced monthly by market capitalization. The go-Day Treasury Bill is a short-term obligation issued by the United States government. T-bills are purchased at a discount to the full face value, and the investor receives the full value when they mature. The difference of discount is the interest earned. T-bills are issued in denominations of \$10,000 auction and \$1,000 increments thereafter.

BC Global Agg Hed: The Barclays Global Aggregate Index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities. This is the Hedged return.

HFRI FOF Conservative: Fund Of Funds (FOF) classified as "Conservative" exhibit one or more of the following characteristics: seeks consistent returns by primarily investing in funds that generally engage in more "conservative" strategies such as Equity Market Neutral, Fixed Income Arbitrage, and Convertible Arbitrage; exhibits a lower historical annual standard deviation than the HFRI Fund of

Funds Composite Index. A fund in the HFRI FOF Conservative Index shows generally consistent performance regardless of market conditions. Returns for HFRI Indices are to be considered estimated returns for the previous stated quarter as HFRI may revise Index data from time to time, as necessary. Generally Final Index retruns are made available by HFRI 4 months after a particular month end. Please contact your Financial Advisor for more information.

BC Corp High Yield TR: The Barclays U.S. High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. The corporate sectors are Industrial, Utility, and Finance, which include both U.S. and non-U.S. corporations.

MSCI EAFE Net: The MSCI EAFE Index -Europe, Australasia, Far East - is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US and Canada. The MSCI EAFE Index consists of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom (as of June 2014). Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

**Goldman Sachs Commodity Tr:** The S&P GS Commodity Index (GSCI) is a composite index of commodity sector returns respresenting an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The returns are calculated on a fully collateralized basis with full reinvestment.

**Russell 3000 Gr:** The Russell 3000 Growth Index is representative of those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth values. The stocks in this index are also members of either the Russell 1000 Growth Index or the Russell 2000 Growth Index.

**Russell 2000 Gr:** The Russell 2000 Growth Index is representative of the U.S. market for smaller capitalization stocks containing those companies in the Russell 2000 Index with higher price-to-book ratios and higher forecasted growth.

Russell 2000 VL: The Russell 2000 Value Index is representative of the U.S. market for smaller capitalization stocks containing those companies in the Russell 2000 Index with lower price-to-book ratios and lower forecasted growth.

MSCI AC World IMI Net: The MSCI AC World IMI NT tracks the total return performance of the Investable Markets in the MS All Country World Index. The index is made up of 22 developed and 23 emerging markets as of 1/1/2015. This subset is calculated on a net dividend basis.

**BC Gov/Cr Intm:** The Barclays Government/Credit Bond Index contains bonds that are investment grade and that have at least one year to maturity. The Barclays Intermediate Government/Credit Bond Index is composed primarily of bonds covered by the Barclays Government/Credit Bond Index with maturities between one and 9.99 years.

MSCI EM Net: The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 23 emerging market country indexes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates (as of June 2014). Net total return indices reinvest dividends after the deduction of withholding taxes, using (for international indices) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

**S&P 500 Total Return:** The S&P 500 has been widely regarded as the best single gauge of the large cap U.S. equities market since the index was first published in 1957. The index has over \$5.58 trillion benchmarked, with index assets comprising approximately \$1.31 trillion of this total. The index includes 500 leading companies in leading industries of the U.S. economy, capturing 75% coverage of U.S. equities. This index includes dividend reinvestment.

go-Day T-Bills: Equal dollar amounts of three-month Treasury bills are purchased at the beginning of each of three consecutive months. As each bill matures, all proceeds are rolled over or reinvested in a new three-month bill. The income used to calculate the monthly return is derived by subtracting the original amount invested from the maturity value. The yield curve average is the basis for calculating the return on the index. The index is rebalanced monthly by market capitalization. The go-Day Treasury Bill is a short-term obligation issued by the United States government. T-bills are purchased at a discount to the full face value, and the investor receives the full value when they mature. The difference of discount is the interest earned. T-bills are issued in denominations of \$10,000

auction and \$1,000 increments thereafter.

**Russell 3000 Price Return:** The Russell 3000 Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market. This is the Price Return.

Russell Midcap Value: The Russell Mid Cap Value Index contains Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000 Value Index

**Russell Midcap Growth:** The Russell Mid Cap Growth Index contains Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth Index.

Russell 1000 Gr: The Russell 1000 Growth Index is representative of the U.S. market for large capitalization stocks containing those companies in the Russell 1000 Index with higher price -to-book ratios and higher forecasted growth.

Russell 1000 VL: The Russell 1000 Value Index is representative of the U.S. market for large capitalization stocks containing those companies in the Russell 1000 Index with lower price -to-book ratios and lower forecasted growth.

Citi Non-US WGBI Unhedged: The Citigroup World Government Bond Index Unhedged, excluding the U.S. bond market. The index includes all fixed-rate bonds with a remaining maturity of one year or longer and with amounts outstanding of at least the equivalent of \$25 million U.S. Dollars. Those government securities that are excluded from the indices typically fall into three categories: floating- or variable-rate bonds (including index-linked bonds); securities aimed principally at non-institutional investors such as savings bonds in the United States and Canada; and private placement-type securities, where liquidity may be poor and where accurate information on outstandings, market coupon, and maturity structure may be difficult or impossible to obtain. This index is designed to directly address the growing interest in and implementation of currency-hedged bond investments by global investors as a means of achieving low-risk interest rate diversification in their portfolios.

Barclays Govt/Credit Bond: The Barclays Government/Credit Bond Index contains bonds that are investment grade and that have at least one year to maturity.

HFRI Fund Weighted Composite Index: Hedge Fund Research (HFR) Fund Weighted Composite Index is an equally-weighted composite index including both domestic and offshore funds, with no Fund of Funds. The index includes over 2000 constituent funds. All funds report assets in USD and all funds report Net of All Fees returns on a monthly basis. Fund must have a least \$50 Million under management or have been actively trading for at least twelve(12) months.

Barclays Aggregate: The Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).

# Item 4: Revised Draft Investment Policy

# **INVESTMENT POLICY STATEMENT**

For

The Endowed Funds of the

**Vermont State Colleges** 

Amended September, 2014

DRAFT Amended and Restated March 31, 2017

In RED
DRAFT as of
March 31, 2017
With amendments April
4, 2017 Investment
Sub -Committee
Meeting and CFO.

#### **Purpose**

The purpose of this Investment Policy Statement (the "IPS") is to assist the Vermont State Colleges (VSC) in effectively supervising, monitoring and evaluating the investment of the Endowed Funds of the VSC system. This IPS supports VSC Endowment Investment and Spending Policy #430.

The IPS represents the prudent investment process that implements the investment goals set by the Board of Trustees. The IPS sets forth the investment structure for managing assets, including appropriate asset classes, asset allocation and acceptable ranges. Together, these investment principles are expected to produce a sufficient level of overall diversification and total investment return over the long-term to meet the investment goals of the VSC.

The IPS is intended to comply with all applicable fiduciary, ethical and due diligence requirements that experienced investment professionals would employ. It will also adhere to all applicable laws, rules and regulations from various local, state, federal and international political governmental entities that may impact the Plan's assets. It seeks to be in full compliance with all aspects of the Uniform Prudent Management of Institutional Funds Act as adopted in the State of Vermont.

#### **Background**

The VSC holds endowed funds to be managed for the benefit of VSC system. These assets are managed with a long-term time horizon of ten years or greater and are maintained and managed for perpetuity. Within this Investment Policy Statement these assets shall be referred to as the Fund.

#### **Duties and Responsibilities of Involved Parties**

#### The Vermont State Colleges Board of Trustees

The Board is responsible for setting overall Investment Policy and acting on advisory recommendations made by the Finance & Facilities Committee.

#### The Finance Committee of the Board of Trustees

#### The Finance & Facilities Committee of the Board of Trustees

The Finance & Facilities Committee shall be responsible for developing advisory recommendations to the Board. of Trustees in the following areas: The Finance & Facilities Committee may designate an Investment Subcommittee to assist in its responsibilities. These responsibilities include:

- Fiduciary oversight of the Fund.
- Investment objectives and policies of the Fund.
- Advising the Chancellor on the selection and retention of investment managers.

- Changes in investment policy, guidelines, and objectives.
- Responsibility to exercise all rights, including voting rights, as are acquired through the purchase of securities.

#### The Chancellor

The Chancellor shall be responsible for developing the IPS, day-to-day communications with the Advisor, day-to-day oversight of the Fund, and making decisions not otherwise vested in the Board of Trustees.

The Chancellor may employ either investment managers that actively select securities or utilize index funds that passively track an appropriate benchmark index.

The Chancellor, or the Chief Financial Officer on behalf of the Chancellor, shall be responsible for implementing and monitoring the IPS, day-to-day oversight of the Fund, authorizing the selection and retention of investments or investment managers, day-to-day communications with the Advisor, authorizing actions as directed by the Board and making decisions not otherwise vested in the Board of Trustees.

#### The Advisor

The Advisor is a Registered Investment Advisor and shall act as the investment advisor to the Board of Trustees, the Finance and Facilities Committee and the Chancellor until it is decided otherwise.

The Advisor, at the direction of the Chancellor or his designee, may employ either investment managers that actively select securities or utilize index funds or vehicles that passively track an appropriate benchmark index.

The Advisor shall be responsible for:

- Designing and implementing an appropriate asset allocation plan consistent with the investment objectives, time horizon, risk profile, guidelines and constraints outlined in this statement.
- Advising the Board of Trustees, Finance & Facilities Committee, and Chancellor about the selection of and the allocation of asset categories.
- Identifying specific assets and investment managers within each asset category.
- Providing "due diligence", or research, on the Investment Manager(s)
- Monitoring the performance of all selected assets the advisor consults to.
- Periodically reviewing the suitability of the investments for the Board of Trustees and/or Finance Committee.
- Being available to meet with the Board of Trustees and/or Finance & Facilities Committee at least four times each year.
- Being available at such other times within reason at the Board of Trustees and/or Finance Committee's request.
- Preparing and presenting appropriate reports.
- Assisting in the development and periodic review of investment policy.

The Advisor shall be responsible for:

- Designing and implementing an appropriate asset allocation plan consistent with the investment objectives, time horizon, risk profile, guidelines and constraints outlined in this statement.
- Advising the Board of Trustees, Finance & Facilities Committee, and Chancellor about the selection of and the allocation of asset categories.
- Identifying specific assets and investment managers within each asset category.
- Providing "due diligence", or research, on the investment manager(s)
- Monitoring the performance of all selected assets the advisor consults to.
- Periodically reviewing the suitability of the investments and report to the Board of Trustees and/or Finance & Facilities Committee thereon.
- Being available to meet with the Board of Trustees and/or Finance & Facilities Committee at least four times each year.
- Being available at such other times within reason at the Board of Trustees and/or Finance
   & Facilities Committee's request.
- Preparing and presenting appropriate reports.
- Assisting in the development and periodic review of investment policy.

#### The Advisor shall not:

- Have discretionary control of the portfolio.
- Have authority to withdraw funds from the Fund's accounts, except to cover payment of
  previously agreed to fees or to rebalance the portfolio or at the Board of Trustees or its designee's
  specific direction.
- Change the investment policy, including the targeted strategic asset allocation, of the Fund without the Board of Trustees prior approval.

#### The Investment Manager(s)

Each Investment Manager will have full discretion to make all investment decisions for assets placed under its jurisdiction, while observing and operating within all policies, guidelines, constraints, and philosophies as outlined in this statement. Managers shall maintain the general investment style and risk level as stated at time of hiring unless VSC is specifically notified in advance otherwise. Specific responsibilities of the Investment Manager(s) include:

- Implementing discretionary investment management including decisions to buy, sell, or hold individual securities, and to alter asset allocation within the guidelines established in this statement.
- Reporting, on a timely basis, periodic investment performance results.
- Communicating any major changes in investment strategy or any other factor which might affect implementation of investment process.
- Informing the Advisor regarding any qualitative change to investment management organization: Examples include changes in portfolio management personnel, ownership structure, investment policy, etc.
- Voting proxies, unless otherwise directed by the Board of Trustees or the Chancellor.

#### Selection of Investment Managers

The Chancellor or his designee, after the recommendation of the Advisor, will select appropriate investment managers to manage the fund assets. Managers must meet the following minimum criteria:

- Be a bank, insurance company, investment management company, or investment adviser as defined by the Registered Investment Advisers Act of 1940.
- Provide historical quarterly performance numbers calculated on a time-weighted basis, based on a composite of all fully discretionary accounts of comparable investments, and reported net and gross of fees.
- Provide performance evaluation reports prepared by an objective third party that illustrate the risk/return profile of the manager relative to other managers of like investment style.
- Provide detailed information on the history of the firm, key personnel, key clients, fee schedule, and support personnel. This information can be a copy of a recent Request for Proposal (RFP) completed by the manager.
- Clearly articulate the investment strategy that will be followed and document that the strategy has been successfully adhered to over time.
- Maintain minimum assets under management of \$250 million.

#### **Plan Objectives and Time Horizon**

#### Time Horizon

The investment time horizon of the Fund is ten years or greater, as the existence and obligations of the Plan are long term and ongoing. The Board of Trustees may alter this time horizon if factors change making shorter-term liquidity more important.

#### Risk Tolerances

In establishing the market risk tolerances of the Plan, the ability to withstand short and intermediate term variability was analyzed. The Board of Trustees and Finance Committee recognize that "moderate" risk and volatility, including periods of portfolio declines, must be assumed in order to achieve the long-term investment objective of prudent capital appreciation.

As a general guideline, the assumed risk on Fund assets is targeted to be less than the projected volatility of U.S. domestic equities as measured by the Standard & Poor's 500 Stock Index and greater than a portfolio comprised of 50% of the Standard & Poor's 500 Stock Index and 50% the Barclay's Aggregate Bond Index.

As a general guideline, the assumed risk on Fund assets is targeted to be less than the projected volatility of U.S. domestic equities as measured by the Standard & Poor's 500 Stock Index and greater than a portfolio comprising 50% of the Standard & Poor's 500 Stock Index and 50% the Barclay's Aggregate Bond Index.

#### Performance Expectations and Investment Objectives

The rate of return on the Fund is expected to meet or exceed the rate of return for the composite of 65%MSCI ACWI and 35% Barclay's Aggregate Bond Index. Over the long run, the investment goal for the fund is an average annual rate of return of 7½%. (We do not believe this to be a reasonable goal, at least over the next full market cycle. Our projections for a balanced portfolio are closer to 5%. Let's discuss possible adjustment or elimination of this target.)

#### **Spending Policy**

The Board of Trustees has set the annual withdrawal and spending per college at 5% of the average annual portfolio value over the last three years. Actual spending will be limited by the amount of unspent earnings available at the time the spending allocation is made, unless the donor stipulates otherwise. Distributions from the Fund will be made as needed.

The Board of Trustees has set the annual maximum withdrawal and spending rate to be the lesser of 5% of the current market value or 5% of the average market value over the last three years. Actual spending will be limited by the amount of unspent earnings available at the time the spending allocation is made. Distributions from the Fund will be made as needed.

#### **Strategic Asset Allocation**

Asset allocation of the Fund will be determined based on the time horizon, moderate risk tolerances, performance expectations and investment objectives. The structure of the portfolio will follow modern portfolio theory and attempts to maximize return while limiting risk over time. The current allocation grid is set forth in Exhibit A. The asset allocation will be reviewed from time to time, but no less frequently than once per year. The Board of Trustees may adjust the Target Strategic Allocation in order to meet fund objectives.

#### **Rebalancing of Plan Assets**

The value of each asset class will change depending upon asset performance. When necessary and/or available, cash inflows/outflows will be deployed to rebalance the portfolio in a manner consistent with the Target Strategic Allocation of this IPS. Additionally, at the recommendation of the Advisor and with the approval of the Chancellor, the assets will be reviewed quarterly and rebalanced, in order to more closely align with the Target Strategic Allocation.

#### **Asset Managers**

The Chancellor may employ either asset managers that actively select securities or utilize index funds that passively track an appropriate benchmark index.

#### **Duties and Responsibilities of the Asset Managers**

The duties and responsibilities of each money manager or fund company retained by the Vermont State Colleges include the following:

- Managing the fund assets under its care, custody and/or control in accordance with the IPS objectives and guidelines set forth herein.
- Exercising investment discretion (including holding cash equivalents as an alternative) within the IPS objectives and guidelines set forth herein.
- Passively tracking an appropriate benchmark index.

#### **Investment Policies and Guidelines for the Investment Managers**

Every investment manager selected to manage fund assets must adhere to the following investment policy and guidelines. If mutual funds are employed, only those that meet the following relevant criteria shall be selected:

- Equity holdings in any one company should not exceed more than 10%-3% of the market value of the Plan's equity portfolio.
- The manager shall have the discretion to invest a portion of the assets in cash reserves when they
  deem appropriate. Cash is to be employed productively at all times by investment in short term
  cash equivalents to provide safety, liquidity and return. Nonetheless, the managers will be
  evaluated against their peers on the performance of the total funds under their direct
  management.

#### **Prohibited Assets**

Private Placements
Limited Partnerships
Venture Capital Investments

#### **Brokerage Policy**

All transactions effected for the Fund will be subject to the best price and execution.

#### **Monitoring of Investment Managers**

Quarterly performance will be evaluated to monitor progress toward the attainment of longer-term targets. It is understood that there are likely to be short-term periods during which performance deviates from market indices. During such times, greater emphasis shall be placed on performance comparisons with managers employing similar styles.

On a timely basis the Advisor will assess each asset manager relative to the following:

- Overall adherence to the IPS guidelines.
- Material changes in the managers' organization, investment philosophy and/or personnel.
- Comparisons of the managers' results to appropriate indices and peer groups.
- Comparison of Up/Down market capture ratios.
- Other comparisons as agreed to by the Chancellor and the Advisor.

#### **Review of this Investment Policy Statement**

The Finance and Facilities Committee will review these guidelines on an annual basis or in the interim whenever substantive changes to the guidelines are proposed by the Chancellor.

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August 23, 2017

#### **EXHIBIT A**

Asset Allocation	Lower <u>Limit</u>	Target Strategic <u>Allocation</u>	Upper <u>Limit</u>
Large Cap Equities	15%	24%	50%
Small/Mid Cap Growth Equities	3%	6%	10%
Small/Mid Cap Value Equities	3%	6%	10%
International Equities	10%	17%	25%
International Emerging Equities	0%	7%	15%
Domestic Fixed Income	10%	23%	45%
High Yield Fixed Income	0%	5%	8%
International Fixed Income	0%	4%	10%
Alternative Investments	0%	8%	15%
Cash	0%	0%	10%

With the individual asset class maximum and minimum thresholds notwithstanding, the following broad sector limits shall not be violated:

Maximums: Equities – 75%; Fixed Income/Cash – 55%; Alternative (Real Estate, Commodity) – 12%

Minimums: Equities – 40%; Fixed Income/Cash – 25%; Alternative (Real Estate, Commodity) – 0%

#### **Evaluation Benchmarks**

Individual investments with asset classes will be compared to the most appropriate benchmark including but not limited to:

> Standard & Poor's 500 Stock Index MSCI All Country World Index

Russell 1000 Large Capitalization Growth Index

Russell 1000 Large Capitalization Value Index

Russell 2000 Small Capitalization Equity Growth Index Russell 2000 Small Capitalization Value Index

MSCI EAFE Index

**MSCI Emerging Markets Index** 

Barclay's Aggregate Bond Index
Barclay's High Yield Bond Index
JPM Non-US Govt. Index
HFRI Fund of Funds Index – Conservative and/or Composite
Dow Jones Real Estate Index
S&P GSCI

The most appropriate benchmark will be used to evaluate individual manager performance.

Item 5: Questions and Follow-Up Items from May 31 Meeting

August 23, 2017

# Finance and Facilities Committee Questions and Follow-Up Items from May 31 Meeting

- 1. Provide an appraisal of Northern Vermont University unification-related expenses that are not otherwise reported the in budgets for Johnson State or Lyndon State.
- 2. Provide an appraisal of the cost increases in the Chancellor's Office vs. benefits from consolidations to the Institutions.
- 3. What are the return on investment (ROI) target and other objectives for the \$250,000 the Chancellor's Office withheld from the FY2018 increase to the System's State appropriation?
- 4. What is the status of investments funded with OPEB monies collected during FY2013-15 returned during FY2015?
- 5. What are the potential impacts to Federal Funds decreases to (a) VSC directly, (b) students, (c) pressure on State of Vermont, (d) other?
- 6. What are impacts from lower State funding generally (e.g., due to E-Board revenue decreases)?
- 7. In addition to inter-System loans, what were the total approved loans or credit lines?
- 8. What is average net tuition price/tuition discount by Institution and System-level?
- 9. What is in-state and out-of-state student debt burden by Institution and System-level?
- 10. What is effect of limiting tuition to Vermont Average Wage Growth?
- 11. Is AIG stock still in portfolio, and what is/was impact on historical performance?
- 12. With respect to Fossil Free VSC's four (4) requests of the Board of Trustees:
  - a. What initiatives have Institutions already undertaken/are undertaking?
  - b. Solicit information from Morgan Stanley on SRI/low carbon investments.
  - c. What positive investments have TD Bank made?
- 13. Itemize FY2018 "windfalls," identify which are one-time vs. recurring, and provide a multi-year projection of impacts.
- 14. Confirm the last year the System was "in the black."
- 15. Confirm the definitive accounting treatment of the proceeds of VTC's sale of 44 Water Street, and any subsequent property sales.

Item 6: Capital Projects Update

# August 2017 VSC Finance & Facilities Meeting Capital Projects Update

#### **CCV Projects:**

- a) The CCV site located in St Albans completed its HVAC system upgrade this past spring. This CCV site had been struggling with HVAC issues for the past few years. The old HVAC system was original equipment, installed in 1992 and had out lived its design life. The new HVAC system was installed by Alliance Mechanical and has the ability to either heat or cool individual spaces as needed.
- b) The HVAC control system at the CCV Montpelier site was upgraded in early summer. The original control system operated on a java platform, which had many operational and security issues. The system was upgraded to an html platform that has improved security and operational features.
- c) The exterior of the CCV Upper Valley site was repainted this past summer. The building exterior had areas where the paint was faded and peeling, so our painting contractor touched up, repainted and caulked the exterior to give the facility a fresh look.

#### **Castleton Projects:**

- a) In April, the Adams Hall sprinkler project was awarded to Quick Response Sprinkler for \$64,860. Construction began upon the completion of the spring semester and the sprinkler system was completely installed and operational by August 1<sup>st</sup>.
- b) Castleton also completed a couple other fire safety projects this summer. The fire alarm systems in the Fine Art Building and Stafford Hall were up-graded to meet the current fire safety code.
- c) Castleton repaved a number of areas on the east side of the campus this summer. A majority of the areas received a 2-inch asphalt overlay. The overlay areas were, Jeffords, Woodruff, and the Library parking lots. The existing pavement on the main drive was ground, graded and topped off with 3 inches of new asphalt. The Fine Arts parking lot pavement was also ground, repairs made to the gravel base, then regraded and paved with 3 inches of asphalt.
- d) A few additional projects were completed this summer on the Castleton campus. A number of areas received automatic door openers and a quit testing area was constructed. Also a number of areas received new carpeting, such as Leavenworth 1st floor, Jeffords classroom and corridors in Stafford Hall.

#### **Lyndon Projects:**

- a) The last four Wheelock residence hall restroom upgrades were completed this summer. This project is a continuation of a multi-phase project where the restrooms were reconfigured, received new plumbing, plumbing fixtures and electrical. They also received new partitions, counter tops, wall and floor finishes.
- b) The exterior windows in the Activities science corridor are scheduled to be replaced starting August 21<sup>st</sup>. The existing windows have lost their thermal seals and have collected moisture giving them a cloudy appearance.
- c) The replacement of the SHAPE pool dehumidifier project was bid in early June and was awarded to Sorrell's Plumbing in Concord Vt. for \$175,547 The replacement unit has been ordered and is expected to be delivered the end of August and at which time Sorrell will start the installation.
- d) The Stevens Dining Hall grease trap replacement project is on track to be completed this coming October vacation. Replacement units have been ordered and are expected to be delivered in mid-September.
- e) Misc LSC projects completed this summer included the spot repair of a few of the campus walkways and roadways. This work was done to correct safety issues and hazardous conditions. Also completed this summer LSC completed some brick repair on Vail Hall. These types of brick repairs to Vail Hall been on going due to the building movement and density of the original brick.
- f) The LSC President's house roof has been scheduled for replacement in late August. This asphalt shingle roof is 20 years old and showing signs of failure.

#### **Johnson Projects:**

- a) In early March, bids were requested for the installation of the Governors Sprinkler system. The project was awarded to Firetech Sprinkler Corp. of Colchester for \$163,000. Firetech mobilized and started work on the project immediately following commencement. Due to the construction of the building, Firetech was required to do an incredible amount of concrete core drilling to install the system. The system installation was completed, inspected and put in service on August 7.
- b) The Dibden Theater chiller replacement project is being designed and will be out to bid in early fall. It is anticipated that this project will be completed by December and the estimated cost of the project is \$100,000.
- c) In early March, J. Hutchins, Inc. of Richmond Vermont was awarded the JSC Walkway Reconstruction project for \$193,578. Hutchins started the reconstruction of the walkways immediately following commencement. The existing pavement was removed, repairs were done to the gravel base, drainage and manhole structures located in the walkways were repaired as needed, and finally the walkways were

repaved with 3 inches of asphalt. Despite the wet summer conditions, the project was completed in early July.

#### **Vermont Tech Projects:**

- a) In late spring a request for bids was issued for the replacement of the Nutting Hall student room and common space windows. The Glass Connection of Milton was awarded the bid for \$317,363. This bid also included the installation of Petrick panels on the exterior of the building to mask the removal of the old window system. The Glass Connection started the project immediately following commencement and was substantially completed by the July 29<sup>th</sup>. The replacement windows and the exterior panels significantly improve the appearance of the building.
- b) In mid-June the Judd Hall roofing project was released for bidding and Burrell Roofing of Williamstown was selected as our contractor. The cost of the re-roof and replacement of the insulation was \$206,000. Burrell started work on the roof in early July and was completed by the first of August.
- c) Another phase of the Randolph campus site lighting replacement project was completed this summer. This project replaced all the underground conduit, wire, light poles and fixtures on approximately 40 site lights. A number of storm water catch basins located adjacent to the walkways were also repaired or replaced. At this time, 35 of the original site lights remain and will be replaced in future phases. The cost for this project was approximately \$75,0000.
- d) A few flooring projects were also completed this summer. The SHAPE pool deck was repaired and retiled, the Clarke Hall computer labs received new carpets and the Green Hall Civil Lab entry was retiled this summer.
- e) The Morey Hall domestic hot water storage tanks are in the process of being replaced. At this time, the replacement tanks are on order and will be delivered in September. It is anticipated that the new tanks will installed during the October break.

# Item 7: FY2018 Committee Meeting Schedule

#### Finance and Facilities Committee Proposed Meeting Schedule for Fiscal Year 2018 as of August 23, 2017

Mtg #	Date	Topic Count	JSC-LSC Unification	System Consolidation / ERP	FY19 Budget Development	FY20 Tuition, Fees, Room & Board	Quarterly Results, Metrics	Appropriation Requests	Cash, Investments, Endowment	Debt Management	Capital Planning and Projects	Facilities Management	Grants and Gifts	Policies and Procedures	Special Topics
1	Wed, Aug 23, 2017	6			·		Q4 FY17 Results, reserves and system loans	Budget Adjustment and Appropriations Bills <u>due</u> mid- September	Regular quarterly report (per Policy 404)		·	Capital projects update		Review of draft revised Investment Policy	Review of Questions from May 31 (various topics)
	Wed, Sep 27, 2017 *				Meeting Cancelle	ed; Board of Trust	ees Meeting to in	clude update on N	Northern Vermont	University, and p	resentation on Ad	dmissions and En	rollments		
2	Wed, Oct 25, 2017	8		Update on A/P and Accounting	Initial discussion informed by Q1 FY18 results		Review of official Fall 2017 Enrollment, Q1 FY18 Results	Capital appropriation request <u>due</u> mid- October		Debt "201" discussion	Capital projects list review	Deferred maintenance update			AGB Report update
3	Wed, Dec 6, 2017 *	5						Responses to Budget Adjustment Act (if any)	Regular quarterly report (per Policy 404)	Annual surveillance from S&P, rating update	Vote to approve capital projects list				VSC report (Act 85 Sec. E.101(c)) due to Legislature Jan 15
4	Mon, Jan 29, 2018	1					Q2 FY18 Results								
5	Mon, Feb 19, 2018 *	4			Preliminary FY19 Budgets discussed				Regular quarterly report (per Policy 404)					Investment policy annual review	AGB Report update
6	Mon, Apr 2, 2018	0													
7	Mon, Apr 30, 2018	3			Preliminary FY19 Budgets presented	Initial FY20 Tuition discussion	Q3 FY18 Results								
8	Wed, May 30, 2018	3			Vote on FY19 Budgets	Preliminary FY20 Tuition request			Regular quarterly report, Annual Banking & Investment Resolution (per Policy 404)						
9	Wed, Jun 20, 2018 *	2				Vote on FY20 Tuition									AGB Report update

<sup>\*</sup> Last meeting before quarterly Board of Trustees Meeting