

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: November 21, 2017

SUBJ: Finance & Facilities Committee Meeting on December 1, 2017

The Finance and Facilities Committee of the Board of Trustees will meet from 9:30 a.m. to 12:00 noon at Castleton University, in the 1787 Room in Campus Center.

The meeting will include a number of discussion and approval items, including carryover fund spending requests from CCV and Vermont Tech, along with Castleton University's request to reallocate its Stafford Fund, and the State "money bill" requests including the FY2018 Budget Adjustment Act, and FY2019 Appropriations Bill and Capital Bill.

The next agenda items are a discussion of a proposed amendment to Policy 301, Determination of Residency for In-State Tuition, and both discussion and requested approval of a new Policy 504, Campus Safety Policy. The proposed amendment to Policy 301 would offer in-state tuition to all students who graduated from a Vermont high school, regardless of where they live currently. Policy 504 requires the adoption of policies and procedures "to ensure that college buildings, grounds, facilities, and equipment are safe for students, employees, and visitors."

The meeting will also include a review of a simple four-year enrollment projection, and a three-year budget projection, both initially at the System level. A key take-away from this discussion is that, owing to the sharp drop in admissions (i.e., entering classes) this year, level admissions next

year are likely to result in continued enrollment declines, which in turn would have material implications for FY2019 and later years' budget development.

The meeting will also include a review of cash, investments and the System's endowment. As part of this review, we will continue the discussion of the System's four "GASB" funds – unrestricted, plant, restricted expendable, and restricted non-expendable – and will attempt to correlate these at a high level with the System's three primary cash and investments vehicles: the concentration account at TD Bank, the intermediated fixed-income investments with TD Wealth, and the endowment invested with Morgan Stanley.

Finally, the meeting will conclude with a discussion of Fossil Free VSC's petition from last May, for which purpose I have included a memorandum reviewing each of the four specific requests.

Should you have any questions regarding the upcoming meeting or any other matter, or any requested additions to the agenda, please contact me at stephen.wisloski@vsc.edu or (802) 224-3022. Thank you.

Attachments:

1. Agenda
2. Meeting Materials

cc: VSC Board of Trustees, Council of Presidents and Business Affairs Council
Lisa Cline, President, VSC Faculty Federation
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
December 1, 2017**

AGENDA

1. Call to order
2. Consent agenda and approvals:
 - a. Minutes of October 25, 2017 meeting
3. CCV and VTC FY2017 carryover, and Castleton Stafford Fund reallocation requests
4. FY2018 Budget Adjustment, FY2019 State Appropriations and Capital requests
5. Discuss proposed amendment to VSC Policy 301, Determination of In-State Residency for Tuition
6. Discuss and approve new VSC Policy 504, Campus Safety Policy
7. Discussion of FY2019-2021 enrollment and three-year budget projections
8. Cash, investments and endowment update
9. Update regarding Fossil Free VSC requests
10. Other business
11. Public comment
12. Adjourn

MEETING MATERIALS

1. Consent agenda
2. Carryover and fund repurpose requests
3. State appropriations requests
4. Proposed Amended Policy 301, Determination of Residency for In-State Tuition
5. Proposed New Policy 504, Campus Safety Policy
6. Three-year System-level enrollment and budget projections
7. Reformatted cash and investments summary
8. Endowment report as of September 30, 2017
9. Fossil Fuel VSC discussion materials
10. FY2018 Finance & Facilities Committee meetings schedule

**Item 1:
Consent Agenda Items**

UNAPPROVED Minutes of the VSC Board of Trustees Finance and Facilities Committee held Wednesday, October 25, 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 Wednesday, October 25, at the Office of the Chancellor, Montpelier, VT.

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

Other Trustees present: Karen Luneau, Lynn Dickinson

Absent: Chris Macfarlane

Presidents: Elaine Collins, Joyce Judy, Pat Moulton

Chancellor's Office Staff: Jeb Spaulding, Chancellor
Steve Wisloski, Chief Financial Officer
Tricia Coates, Director of External & Governmental Affairs
Sheilah Evans, System Controller & Senior Director of Financial Operations
Sophie Zdatny, Legal Counsel
Todd Daloz, Associate Legal Counsel
Yasmine Ziesler, Chief Academic Officer
Harriet Johnson, Executive Assistant

From the Colleges: Scott Dikeman, Dean of Administration, Castleton University
Laura Jakubowski, Chief Budget & Finance Officer, Castleton University
Barbara Martin, Dean of Administration, Community College of Vermont
Sharron Scott, Dean of Administration, Johnson State College
Lit Tyler, Dean of Administration, Vermont Technical College
Lisa Cline, President, VSC Faculty Federation
Maurice Ouimet, Dean of Enrollment, Castleton University
Toby Stewart, Controller, Johnson State and Lyndon State College

Other: Lucas Seelig, Director, Business Development, Apogee

1. Chair Hindes called the meeting to order at 9:00 a.m.

2. Consent agenda

- a. Approve minutes of August 23, 2017 meeting
- b. Approve *The Marie Augustin '58 Fund* for Lyndon State College

President Collins provided a brief summary of the Marie Augustin story. Trustee Hindes moved and Trustee Jerman seconded the approval of the minutes and of the Marie Augustin Fund. The consent agenda was approved unanimously.

3. Review final Fall 2017 enrollments

4. Review 1st quarter FY2018 financial reports, projections and action plans

5. Review 1st quarter FY2018 financial reports, projections and action plans

Chief Financial Officer Steve Wisloski combined Agenda items 3, 4, and 5 and provided a systems level overview of enrollments with an executive summary review of financial results through the 1st quarter of unrestricted funds.

Trustee Lippert asked CFO Wisloski to provide a detailed description of “Other – Designated” unrestricted funds at a future meeting.

Chair Hindes asked CFO Wisloski to provide a summary of other GASB funds in addition to unrestricted funds, and also how those funds tie to the System’s cash, investments and endowment.

CFO Wisloski answered questions from Committee members on the FY2017 reserves as a percentage of budgeted expenses, and system loans outstanding as of June 30, 2017.

The Committee then heard follow up discussion from each President or Dean who gave a more detailed overview of their institution’s financial projections and steps they are taking to reduce deficits and strategies for revenue growth.

CFO Wisloski advised the Committee that Colleges would be presenting preliminary three-year enrollment and budget projections at the December 1 meeting, which will serve as a starting point for FY2019 budget development and FY2020 tuition during the Committee’s spring 2018 meetings.

6. Discuss FY2019 State Appropriation and Capital Projects proposals

This agenda item was not discussed at the meeting due to time constraints.

7. Other business

Associate General Counsel Todd Daloz distributed a draft Safety Policy for discussion at the December Board of Trustees meeting.

8. Public comment

There were no comments from the public.

9. Adjourn

Chair Hinderes moved to adjourn. Chair Hinderes adjourned the meeting at 11:10 a.m.

Item 2:
Carryover and Fund Repurpose Requests



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www.ccv.edu

TO: Jeb Spaulding

FROM: Joyce Judy

DATE: October 18, 2017

SUBJECT: FY 2017 Carry Forward

CCV ended Fiscal Year 2017 with \$28k available unrestricted net assets. I therefore request approval to carry the following funds forward into Fiscal Year 2018 to be used for the following purpose:

Strategic plan – CCV will complete our strategic planning process in the next couple of months. We request permission to use our carry forward funds to support initiatives outlined in the strategic plan.

TO: Jeb Spaulding
FROM: Pat Moulton
DATE: November 20, 2017
SUBJECT: Vermont Tech FY2017 Carryover Request

Vermont Tech ended Fiscal Year 2017 with \$1,220,246 of available unrestricted net assets. I therefore request approval to carry these funds forward into Fiscal Year 2018 to be used for the below stated purposes:

 \$ 820,246 Strategic Reserves

 Capital Projects:

 125,000 Williston Planning

 125,000 Master Planning & Deferred Maintenance

150,000 Farm Planning & Capital Costs

 \$1,220,246 Total



Castleton University

Stafford Fund Reallocation

In 2002, we received a \$1,000,000 congressional earmark sponsored by Senator James Jeffords in honor of Senator Robert Stafford. The funds were intended for the support, study and advancement of the community. The funding required that the funds be endowed for only one year and were self-endowed by the college upon receipt. They were eligible to be spent one year from the date of the grant.

According to the grant documents, the Stafford grant was specifically intended to provide opportunities for students and the college alike to develop and practice their individual and corporate citizenship. Its programs are to be rooted in service learning, community service, internships and community partnerships.

On April 9th, the Board unanimously approved our use of the Stafford funds for the construction of the Spartan Dome. The Board Resolution states “That the Vermont State College Board of Trustees hereby approves the distribution of the Stafford Community Grant to fund the installation of the Spartan Dome at the Spartan Arena Complex.” The resolution explains that the grant was intended for the support, study and advancement of the community and the Spartan Dome will be used by both CU and the region’s population.

To date, we have spent \$131.3K of the Stafford funds in our efforts to develop the dome. Of that, \$64.8K was related to the permitting process. The balance has paid for storage. There is an available balance remaining in the endowment of \$1.41M.

At this point, our intent would be to forego the dome project. Alternatively, the funds would be used to cover costs in those areas that meet the funding criteria and have a beneficial effect to the community at large. These areas are:

- Spartan Arena
- Castleton Polling Institute
- Center for Civic Engagement
- Center for Entrepreneurship
- Mentoring Program
- S.H.A.P.E. Pool

It is anticipated that the funding could be used to fund these programs over a two-year period (FY’18 and FY’19). We would seek the approval for this proposal from the Chancellor and the Board.

Item 3:
State Appropriation Requests

CASTLETON UNIVERSITY
COMMUNITY COLLEGE OF VERMONT
JOHNSON STATE COLLEGE
LYNDON STATE COLLEGE
VERMONT TECHNICAL COLLEGE



OFFICE OF THE CHANCELLOR
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October 16, 2017

Susanne R. Young
Secretary of Administration
State of Vermont
Pavilion Bldg., 109 State St., 5th Floor
Montpelier, VT 05609-0201

Re: Vermont State Colleges System FY2019 Budget Proposal

Dear Secretary Young,

On behalf of the Vermont State Colleges System (the “System”), comprising the Community College of Vermont, Castleton University, the new Northern Vermont University, and Vermont Technical College, I look forward to our meeting on October 23. We understand from David Beatty that your instructions dated September 21 were intended for State agencies only, to get a sense of pressures on personnel expenses, however we wanted to provide a brief description of our FY2019 budget proposal in advance of our meeting.

Given the challenges facing institutions of higher education across the region, the critical importance of our Colleges’ mission to the state of Vermont, and our urgent need to move proactively to improve our own financial position, I recommend a continued push by the Governor to strengthen the System’s budget.

As part of this continued effort, the System proposes a FY2019 budget increase totaling an estimated **\$1,840,014**, that I am confident will continue to strengthen our Colleges and System and help us deliver on our mission. This increase has two components:

- **\$1,000,000** increase to the System’s base budget appropriation, from \$28,000,464 to \$29,000,464. In FY2018, the Governor proposed a \$4,000,000 increase to the System’s base appropriation, of which the General Assembly provided \$3,000,000. This amount represents the final \$1,000,000 of VSCS’ FY2018 budget request, and helps to close the System’s structural deficit that arose as a result of essentially level State funding from the FY2008-2009 Great Financial Crisis through FY2017.
- An annual cost-of-living increase to the System’s base appropriation; assuming a 3% increase to the System’s \$28,000,464 FY2018 appropriation, this would be an additional **\$840,014**. Approximately two-thirds of the System’s expenses are personnel-related, and almost three-quarters of the System’s full-time employees belong to one of our five (5) collective bargaining units and thus contractually receive annual pay increases. As such,

Secretary Susanne Young
Vermont State Colleges System FY2019 Budget Proposal
October 16, 2017
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an annual inflationary increase will help to ensure that the State appropriation does not resume shrinking as a percentage of the System's overall revenue, further pressuring our Colleges' tuition and fees and increasing our costs to Vermonters.

The System also plans to request **\$350,000** in one-time funds, representing the third of three installments totaling \$2,000,000 to help launch Northern Vermont University. The General Assembly provided \$770,000 in Act 3 of 2017 (FY2017 Budget Adjustment), and an additional \$880,000 in Act 85 of 2017 (FY2018 Big Bill), Sec. C.100(i); this latter amount was "to pay the second of three installments to support the unification of Johnson and Lyndon State Colleges into the new Northern Vermont University." This is the System's most important strategic initiative to both enhance the quality of our educational mission, and to permanently reduce structural expenses, and the State's one-time support has been critical toward creating a new brand and aggressively marketing to incoming students.

Taken together, these funding requests will provide critical additional support to augment the aggressive steps that the Colleges and System have completed and are pursuing to create permanent structural savings. Key initiatives include:

- 1. Creation of Northern Vermont University.** Planned unification of Johnson State and Lyndon State realized almost \$1 million in annual savings in senior personnel costs in FY2018; projected to realize an additional \$1 million of permanent operating savings.
- 2. High Deductible Health Plan.** Optional for current employees, mandatory for new employees as of January 1, 2017. Targeted savings of \$1 million annually by FY2022 (full time faculty expected to be added in FY2019).
- 3. Reduced Employer Contribution to 403(b) Plan.** Contribution lowered from 12% to an average of 9% as of July 1, 2017. Targeted savings of almost \$900,000 annually in FY2018, and \$1.3 million in FY2019 with inclusion of full-time faculty.
- 4. Debt Restructuring.** New AA/Aa1 (S&P/Moody's) rated, State-appropriation backed bond program through Municipal Bond Bank refinanced private loans and interest rate swaps, and provides \$8 million of total debt service relief from FY2018-2021.
- 5. System Consolidations.** Consolidated accounts payable and accounting functions in the System office, and are working with external consultant to consolidate payroll, benefits and human resources functions. Total target savings of \$1 million annually by FY2019.
- 6. Overall reduction in personnel, salaries and benefits.** Total reduction of \$3.6 million annually from FY2014 to FY2016, and reduction in headcount by 216 employees from FY2013 to FY2016.

Secretary Susanne Young
Vermont State Colleges System FY2019 Budget Proposal
October 16, 2017
Page 3

Because of the State's timely assistance last year, the System's Board of Trustees was able to approve a balanced budget in FY2018 for the first time in over five years. Unfortunately, unfavorable demographics in Vermont and the northeastern U.S., coupled with New York State's "Excelsior Scholarship" free college program, have conspired to reduce enrollments for fall 2017, and the System now projects a \$3 million deficit. A further unfortunate development is that these negative consequences have disproportionately affected Castleton University, owing to its geographic proximity to New York and its large share of New York students – approximately 10% of the student body – relative to our other colleges.

However, because of structural changes the System has pursued over the past year, we are confident that we can bring our System-level budget back into balance. The State's assistance in funding our FY2019 budget proposal would greatly increase the likelihood of that outcome.

As we work to confront challenges, we keep our Colleges' and our System's mission foremost in mind: to provide access to quality post-secondary education for Vermonters across the state. We appreciate the Governor's strong support, and we look forward to working with you as you develop and promote your FY2019 budget proposal.

Sincerely,

A handwritten signature in black ink that reads "Jeb Spaulding". The signature is written in a cursive style with a long horizontal flourish at the end.

Jeb Spaulding
Chancellor

cc: Adam Greshin, Commissioner of Finance & Management

CASTLETON UNIVERSITY
COMMUNITY COLLEGE OF VERMONT
JOHNSON STATE COLLEGE
LYNDON STATE COLLEGE
VERMONT TECHNICAL COLLEGE



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October 27, 2017

Susanne R. Young
Secretary of Administration
State of Vermont
Pavilion Bldg., 109 State St., 5th Floor
Montpelier, VT 05609-0201

Re: Capital Budget Adjustment Response for FY2019

Dear Secretary Young,

On behalf of the Vermont State Colleges System (the "System"), comprising the Community College of Vermont, Castleton University, the new Northern Vermont University, and Vermont Technical College, we would like to express our gratitude for the Administration's and the General Assembly's support in increasing the System's base appropriation from \$1.4 million to \$2 million in each of the two years of the FY2018-19 capital bill, for a total increase of \$1.2 million during the biennium.

Per your instructions dated September 27, we do not propose any adjustments to the System's \$2 million appropriation for FY2019, nor do we plan to introduce new projects or to request additional funds at this time, and as such have not completed Form A or Form B accompanying those instructions.

We have included a list of the System's planned capital projects for FY2019, by college and with dollar amounts and descriptions for your information. Please contact Steve Wisloski, CFO at stephen.wisloski@vsc.edu or 224-3022 with any questions.

Sincerely,

A handwritten signature in black ink that reads "Jeb Spaulding". The signature is written in a cursive style with a long, sweeping underline.

Jeb Spaulding
Chancellor

Attachment

cc: Brad Ferland, David Beatty and Nick Foss

**VERMONT STATE COLLEGES
FY 2019 CAPITAL APPROPRIATION REQUEST
- STATE FUNDED PROJECTS -**

Community College of Vermont

Academic Facility Site Improvements: \$250,000 CCV owns or leases twelve academic facilities. Therefore, the burden for interior maintenance and improvement falls within CCV's responsibilities, either through lease agreements or ownership. Significant increases for contract work necessitate an increase in requested funds. Examples of candidate projects for FY19 site improvement funds are:

- Adaptation of facilities for new and revised programmatic offerings.
- Adaptation and expansion of facilities, and equipment for changes in enrollment.
- Addressing workplace safety and accessibility issues.
- Continued fit-out of site-based science and art rooms, computer labs, libraries, and other non-standard classroom facilities.
- Replacement/upgrade of building support systems (HVAC, EMS, etc.)

Castleton University

Coolidge Library Lighting and Circulation Upgrade Project: \$90,000 The Library lighting system utilizes over 900 fluorescent bulbs. A number of years ago the lighting fixtures were upgraded to T-8 tubes and electronic ballast. Since the last upgrade, lighting systems have evolved and we now have LED lighting technology. In the never-ending quest for energy savings, it makes sense to convert to a LED lighting system, which will yield significant energy savings. In addition to the lighting upgrade, we would like to make improvements such as creating more study spaces throughout the library and make improvements to the service desk area.

Science Window Replacement Project: \$75,000 The Science Building was constructed in 1969 and still has the original windows. These window units are aluminum frames with single pane glass that are not thermally broken and are difficult to operate. These single pane non-thermally broken units allow the cold and heat to infiltrate the building during the winter and summer months. New energy efficient replacement windows would reduce heating and cooling costs by eliminating air infiltration.

Roofing Replacement Projects \$80,000 There are four small buildings on campus in need of roof replacements. The four include the Reinfurt Yellow House, Wooldridge House, the Public Safety Porch and the Superior Boiler plant. Reinfurt, Wooldridge and Public Safety's porch are all asphalt shingle roofs, 20+ years old and very close to the end of their design life. In a number of areas the shingles are starting to show signs of disintegration. The Superior Boiler Plant has a membrane roof that was installed in 1991 and has recently developed many leaks therefore needs replacement.

Admissions & Reinfurt House Exterior Repaint Project \$35,000 Both building are prominent properties on campus and are in need of exterior repairs. Both of the building exteriors have peeling paint and exposed wood, which is leading to deterioration of the siding and trim. This project would allow for the repair of the deteriorated trim and repainting of the structure.

Fine Arts Foundation Repairs Project \$45,000 The building foundation near the South elevator has developed a significant crack and has also seen some inward movement thus causing interference with the elevator. This foundation movement has caused the elevator to be unusable until the situation is resolved. This project would provide funding for the excavation and repairs to the foundation.

Stafford A/C Project Phase I: \$225,000 When Stafford was remodeled in 1998, air conditioning was removed from the project, with exception of the computer labs and Herrick Auditorium. Stafford Academic Center houses the Nursing program and the Center for Schools and is extensively used during the summer months. It is proposed that cooling coils be added to the HVAC roof top unit to provide the necessary cooling for the classrooms and offices.

Public safety Renovations Project \$45,000 The Public Safety building is one of our Historical buildings on campus. It serves as Public Safety, campus information, dispatch, campus switchboard, processes student ID's and Parking registration. The interior is in its original configuration and needs to be remodeled to better accommodate the many uses.

Fine Arts Roof Replacement Project \$175,000 In 2015 the north half of the rubber membrane roof on the lower level was replaced. At that time, funding was not available to complete the south section of roof so it was repaired as needed. As part of the FY19 funding cycle, we would like to replace the balance of the lower roof that was installed in 1981.

Boiler Replacement Engineering Design Project: \$42,500 The campus boilers are approximately 50 years of age and although in relatively good condition, there are increasing signs of aging and maintenance required. Yearly, a significant amount of work is done to maintain these units. Replacing the boilers with newer energy efficient units in conjunction with possible alternative fuel boilers would reduce our energy use. We are proposing to fund a project to evaluate the condition of existing boiler plants, estimate remainder of useful life, explore replacement options including alternative fuels and generate with cost estimates.

Northern Vermont University – Johnson Campus

Dewey Window Replacement Project: \$150,000 Dewey Hall was constructed in 1964 and still has the original windows. These window units are single pane glass with aluminum frames that are not thermally broken, thus allowing the cold and heat to infiltrate the building during the winter and summer months. Funding of this project would allow us to release the construction documents create in the A&E project to install energy efficient windows units that would eliminate air infiltration thus reduce draft and conserve energy and reduce heating and cooling costs.

Campus Security Surveillance System project: \$145,000 Over the years JSC has installed 3 completely different video surveillance systems that do not communicate with each other. As a result of the non-communication issue, it is very cumbersome for Campus Security to review and follow up on incidences. It is proposed that a new centralized system be installed, one that will integrate as much of the existing hardware as possible including expanded coverage. This will allow Public Safety to retrieve data and monitor the campus more efficiently.

LLC Window Replacement project: \$75,000 The LLC building was built in 1996 and we now have a situation where the windows have been losing their thermal seals thus decreasing their energy efficiency. A number of units have been replaced over the years but at this time we have approximately 70 windows that require replacing. Replacement of these failed windows will help JSC's efforts to reduce campus energy costs.

South Lawn Improvement Project \$135,000 The south lawn on the Johnson campus is used as a venue area to host events such as graduation, and other large gatherings. Because of the contour of the lawn and the soil, this area has a tendency to very wet thus causing issues during these events. A solution to this problem is to remove a couple feet of soil, install subsurface drainage built up the area with gravel, sand and topsoil. This would allow moisture to drain for the subsurface and create a stable surface to setup functions. It would also be the opportune time to install permeant utilities such as power and communications.

Visual Arts Building Siding Replacement Project: \$25,000 The Visual Arts building has marine plywood on its exterior in a number of locations. This plywood siding has turned out to be very maintenance intensive and expensive to maintain. Approximately every 18 months it has to be scraped and sealed with a new polyurethane finish. It is proposed that the sections of siding be replaced with a product that is more durable and able to withstand the elements.

McClelland Fascia Repair project: \$25,000 The McClelland Fascia is in need of repairs due to its exposure to the elements. This Fascia is not protected by the roof, it is attached directly to the building exterior and is totally exposed to the elements. This project would fund the repair or replacement of the fascia as needed.

Campus Electrical Energy Upgrades Project: \$85,000 Many of the campus building systems are original and by today's standards do not operate efficiently. This project would enable us to start updating these systems by installing energy efficient equipment that work reduce energy consumption, improve reliability and reduce maintenance repair costs.

Bentley Parking Lot / Drive Repave Phase I Project: \$172,500 The main drive and the Bentley parking lot have deteriorated to the point where cracks, pot holes, and heaved portions can no longer be effectively "spot" repaired. We are proposing to reclaim the existing asphalt, repair the base and repave with 3½ inches of asphalt.

Northern Vermont University – Lyndon Campus

Stonehenge Steam Tunnel Repair Project: \$45,000 The Stonehenge steam tunnels were constructed in 1985 and at this time are in need of minor repairs. This project would allow us to replace some damaged piping between Arnold and Whitelaw, repair damaged piping insulation, allow for an upgrade of the sump pump system and the installation of new access covers.

Wheelock Parking Lot Reconstruction Project: \$220,000 This parking lot has deteriorated to the point where cracks, pot holes, and heaved portions can no longer be effectively "spot" repaired. We are proposing to reclaim the existing asphalt and reconstruct the base with 3" of additional gravel, and repave with 3 ½ inches of asphalt. All storm drains will be repaired and manhole covers will be adjusted accordingly, parking spaces, crosswalks, and HC markings will be repainted.

Vail Lower Parking Lot Repair and Repave Project: \$65,000 The lower parking lot has developed pot holes and cracks which are allowing moisture to penetrate the base material thus causing frost heaving. These areas would be repaired, the balance of the parking lot shimmed and repaved to prevent further deterioration.

Vail Hall Restroom Upgrade Project: \$210,000 a number of the restrooms in Vail Hall have worn-out fixtures and finishes as well as infrastructure problems. This project would allow us to significantly improve the appearance and functionality of all of the restrooms in Vail Hall. The infrastructure issues would be addressed, the wall, floor, ceiling surfaces and fixtures will be replaced, giving the bathrooms a much-needed upgrade.

Campus Walkway Improvement project: \$40,000 Sections of the Campus Walkways are deteriorating and are in need of repair or replacement. This project would allow us to repair or repave sections of walkways and implement landscaping improvements that were identified in the campus landscape master plan.

Campus Boiler Assessment & Upgrade Project: \$60,000 The Campus boilers are 50 + years of age, and are in good condition given their age. Our boiler inspector is suggesting that we perform a non-destructive test to identify any possible defects in the boiler. This test will give us insight as to their actual condition and life expediency. Upon completion of the testing, we would like to upgrade the burners with the latest technology in fuel metering and combustion controllers, which will reduce fuel consumption and improve boiler efficiency.

Veterans Park and Pond Repair Project: \$85,000 The pond which contains the fountain located in the center of campus has developed a leak and requires periodic addition of water to maintain its water level. This is a manmade pond that has been part of the campus culture for decades. This project would provide the funding to reduce the size of the pond, and the installation of a new membrane liner, fountain and seating.

Alumni House Roof Replacement Project: \$38,000 The asphalt roofing shingles on the Alumni House are 19 years old, very close to the end of their design life. In a number of areas, the shingles are starting to show signs of disintegration. This project would allow us to replace the existing roof with new architectural fiberglass shingles. In addition to the roof replacement, there are a number of areas where the exterior trim will require repaired or replacement.

Activities Water Heater Replacement & Upgrades Phase I Project: \$49,500 The Activities Building domestic hot water needs are supplied by a 1000 gallon water heater. This heater is oversized and needs replacement. This project would fund the replacement of the existing water heater with a much smaller energy efficient model. Also as part of this project, we would also like to upgrade the boiler condensate return tank as part of this project; the existing is in very poor condition.

Vermont Technical College

Site Lighting Improvements, Final Phase: \$80,000 The site lighting system on the Randolph Center campus is approximately 20+ years old. The funding received from prior Capital requests has enabled us to replace the existing lighting system in phases. At this time, we are requesting funding to complete the final phase of this project. This phase would allow for the replacement of approximately 35 of the high-pressure sodium lights with LED fixtures, new poles and underground electrical.

Nutting Parking Lot Repave Project: \$55,000 The Nutting parking lot is developing potholes and cracks, which allow moisture to penetrate the base material thus causing frost heaving. This parking in need of resurfacing to prevent further deterioration. It is proposed that this parking lot be shimmed to fill low areas and promote drainage, existing cracks filled, then repaved with 2 inches of asphalt.

Roadway & Concrete Walkway Repair Project: \$90,000 The Campus roadways and walkways are showing many signs of deterioration (large cracks, missing asphalt). The damaged areas can be repaired by installing new asphalt in addition to employing an infrared asphalt repair technology that blends the new asphalt with the existing to allow for a seamless repair. This technology allows for seamless crack repairing to occur, thus inhibiting water from entering (and then freezing) cracked areas, and thus creating further damage. We also have sections of concrete walkways that have deteriorated due to salt damage and the harsh winter conditions, these areas will be evaluated and be replaced or repaired as needed.

Conant Classroom Upgrade Project: \$45,000 The finishes in the Conant classrooms are dated and are in need of being upgraded. This project would fund the replacement of the ceiling tile, the installation of new flooring, new energy efficient lighting and the repainting of these spaces.

Central Boiler Plant Upgrades Project: \$180,000 The Central Heating Plant's stone lined condensate return tank and associated piping is 32 years old. This tank was relined approximately 15 years ago, and now needs major repair or replacement. It is proposed that we replace this tank, including all associated piping to the boilers, with a deaerator condensate tank that would allow us to deaerate the boiler feed water without the use of chemicals. This would save on chemical operations costs, as well as eliminating one chemical from the feed system.

Williston Building 200 Roof Replacement Project: \$155,000 The EDPM membrane roof on this building is 29 years old. When the building underwent an interior renovation approximately 9 years ago, the roofing was not replaced. Leaks have become more commonplace and, as this building houses a newly renovated interior, it is recommended that the roof be replaced with a .060 EDPM membrane system.

Conant / Morrill Window Replacement Project: \$207,500

Conant: We would like to replace the existing original (1964) single pane hopper windows in this building. There are 36 total windows in this building, and we would like to replace these windows with energy efficient Dual Pane/Low E model units. The storefront windows and entry doors have been replaced and are in good condition; hence, they are not included in this project.

Morrill/Morrill Annex: We would like to replace the existing original (1964) single pane hopper windows in this building, as well as several original wood doors. There are 26 windows in Morrill, 18 windows in Morrill Annex, as well as two storefronts and 6 exterior doors that we would like to replace. All windows will be replaced with a double pane Low E models and the doors would be replaced with energy efficient units.

Vermont State Colleges System

Emergency Maintenance: \$200,000 As in previous years, this is annual funding to provide the college system with a contingency that will be used to fund unplanned needs that inevitably arise across VSC's more than 100 buildings (approximately 1,700,000 sq ft) and over 1,400 acres of property, which combined have a replacement value approaching \$250,000,000.

Roof Repair and Replacement: \$300,000 To address the most serious roofing concerns as assessed from annual review of all structures throughout the college system.

**Item 4:
Draft Amended Policy 301,
Determination of In-State Residency for Tuition Purposes**



Manual of Policy and Procedures

Title <p style="text-align: center;">POLICY ON DETERMINATION OF IN-STATE RESIDENCY FOR TUITION PURPOSES</p>	Number <p style="text-align: center;">301</p>	Page <p style="text-align: center;">1 of 3</p>
		Date <p style="text-align: center;">March 25, 2017</p>

PURPOSE

The Vermont State Colleges charges different tuition rates to in- and out-of-state students. Therefore, criteria and procedures to determine in-state residency for tuition purposes are required.

STATEMENT OF POLICY

The following requirements must be met by a student prior to being granted resident status for the purpose of tuition and other VSC charges:

- 1) The student shall be domiciled in Vermont, said domicile having been continuous for one year immediately prior to the date of enrollment. Domicile shall mean a person’s true, fixed and permanent home, to which he/she intends to return when absent. Domicile shall not be dependent upon a person’s marital status. Although domicile may have been established, a student is presumed to be an out-of-state resident for tuition purposes if he or she moved to Vermont or continues residence in Vermont for the purpose of attending a Vermont institution of higher learning or qualifying for resident status for tuition purposes. Such presumption is rebuttable.
- 2) The student must demonstrate such attachment to the community as would be typical of a permanent resident of his/her age and education. The College’s chief admissions officer shall consider in the determination of residency for tuition purposes, among other factors: voter registration, property ownership, payment of income and property taxes, automobile registration and driver’s license.
- 3) Receipt of significant financial support from the student’s family will create a rebuttable presumption that the student’s residence is with his/her family. A student who has not reached the age of eighteen shall be presumed to hold the residence of his or her parents or legal guardian. The presumption shall be rebuttable.
- 4) A student who moves into Vermont within one year of enrollment shall be presumed to have moved to Vermont for the purposes of attending a Vermont institution of higher

learning and qualifying for resident status for tuition purposes. This presumption shall be rebuttable.

- 5) A student who is eligible for tuition purposes to enroll as a resident student in another state shall not be enrolled as a "Vermont Resident." The inability to enroll as a resident student in another state does not by itself establish residency in Vermont for tuition purposes. Additionally, a domicile or residency classification assigned by a public or private authority neither qualifies nor disqualifies a student for in-state residency status at a member College. However, such classification may be taken into consideration by the chief admissions officer.
- 6) Notwithstanding paragraphs 1-5, a student shall be considered a resident for in-state tuition purposes at the start of the next semester or academic period where:
 - a. The student, in accordance with 16 V.S.A. § 2185, is a member of the Armed Forces of the United States on active duty who is transferred to Vermont for duty other than for the purpose of education; or
 - b. The student is eligible for in-state tuition and fees, as of July 1, 2017,¹ because the student:
 - i. is a veteran who lives in Vermont (regardless of the student's formal state of residence) and enrolls in a member College within three years of discharge from a period of active duty service of ninety days or more;
 - ii. is anyone using a veteran's transferred benefits, who lives in Vermont (regardless of the student's formal state of residence) and enrolls in a member College within three years of the transferor veteran's discharge from a period of active duty service of ninety days or more;
 - iii. is anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship, who lives in Vermont (regardless of the student's formal state of residence); or
 - iv. is anyone using a veteran's transferred benefits, who lives in Vermont (regardless of the student's formal state of residence) while the transferor is a member of the uniformed services serving on active duty.

After the expiration of the three year period following discharge or death, as described in 38 U.S.C. § 3679(c), a student who initially qualifies under subsection (i) and (ii) will continue to be eligible for in-state tuition and fees as long as the student remains continuously enrolled (other than during regularly scheduled breaks between

¹ The students described in sub-sections (i) and (ii), as well as some of those described in sub-section (iii), are eligible for in-state tuition and fees, prior to July 1, 2017, in accordance with Section 702 of the Veterans Access, Choice and Accountability Act of 2014.

courses, semesters, or terms) at a member College, even if the student enrolls in multiple programs.

7) Notwithstanding paragraphs 1-5, effective July 1, 2018, a student shall be considered a resident for in-state tuition purposes if:

a. The student previously earned:

- i. a high school diploma from a Vermont public school or a Vermont approved or recognized independent school, as defined in Title 16 of the Vermont Statutes Annotated, including a public or independent school in another state that is designated as the public school for the student's district of residence at the time the diploma was earned, or from the Community High School of Vermont; or
- ii. a high school equivalency certificate from the Vermont State Board of Education; or
- iii. a secondary school equivalency certificate based on successful completion of General Education Development tests;

and

b. At the time the student earned a diploma or certificate under subsection (a), the primary legal residence of the student, or the student's parent(s) or guardian(s) if the student was under age 18, was in Vermont; and

c. The student is and remains domiciled in Vermont at the time the student enrolls at the Vermont State Colleges. Domicile shall mean a person's true, fixed and permanent home, to which he/she intends to return when absent. Domicile shall not be dependent upon a person's marital status.

Eligibility for in-state tuition under this paragraph shall not necessarily constitute in-state residency for any other purpose within or outside the VSC system.

~~7)8)~~ _____ A student enrolling at the Vermont State Colleges shall be classified by the College's chief admissions officer as a resident or non-resident for tuition purposes. The decision by the officer shall be based upon information furnished by the student and other relevant information. The officer is authorized to require such written documents, affidavits, verifications or other evidence as he/she deems necessary.

~~8)9)~~ _____ The burden of proof shall, in all cases, rest upon the student claiming to be a Vermont resident for tuition purposes by clear and convincing evidence.

~~9)10)~~ _____ Changes in residency status for tuition purposes shall become effective for the semester following the date of reclassification.

~~10)11)~~ _____ A student with resident status for tuition purposes will lose that status if he/she, at any time, fails to meet the above requirements.

~~11)12)~~ _____ The decision of the College's chief admissions officer on the classification of a student as a resident or non-resident for tuition purposes may be appealed in writing to the College's Dean of Administration. Further appeal of a classification of a student's

residency for tuition purposes may be made in writing to the Office of the Chancellor.
The decision of the Office of the Chancellor shall be final.

~~12)~~13) An applicant for admission or enrollment may obtain a determination of residency status for tuition purposes in accordance with the above criteria and procedures in advance of admission or enrollment.

Signed by:

Chancellor

Item 5:
Draft Policy 504,
Campus Safety Policy



Title Campus Safety Policy	Number 504	Page 1 of 2
	Date 12/1/2017	

PURPOSE

It is the purpose of this Policy that each member institution of the Vermont State Colleges (VSC) adopt and maintain sufficient policies and procedures to ensure that college buildings, grounds, facilities, and equipment are safe for students, employees, and visitors.

SCOPE

This policy applies to all VSC member institutions. Public Safety Directors, Deans of Students, Facilities Managers and Deans of Administration are all responsible for implementing this policy.

STATEMENT OF POLICY

The mission of the VSC is to provide affordable, high-quality, student centered, accessible education for the benefit of Vermont. In order to accomplish this mission, the member institutions of the VSC must be reasonably safe and secure and free from crime, violence, and hazardous conditions. While no policy can ensure absolute campus safety, each member institution shall establish procedures for identifying, assessing and remedying safety concerns, and for providing regular and ongoing trainings.

POLICIES AND PROCEDURES

A. Each VSC member institution and the Office of the Chancellor shall adopt and implement policies and procedures to ensure that the buildings, grounds, facilities, and equipment are reasonably safe and secure. Further, each member institution shall provide table-top and on-the-ground training at least annually as may be necessary for the effective implementation of these policies and procedures.

B. The policies and procedures shall address, at minimum:

1. Student, employee, and visitor safety including electronic access control, security cameras, campus lighting, panic alarms, and emergency phones;
2. Security of property, facilities, and equipment;

3. Hazardous conditions;
4. Emergency procedures including emergency notification systems and formal agreements with local and state law enforcement authorities;
5. Training and/or drilling of employees and students; and
6. Recordkeeping.

CHANCELLOR’S MODEL POLICIES AND PROCEDURES

The Chancellor shall develop and, with input from the member institutions, update from time to time model policies and procedures for use by the member institutions.

REPORTING

In addition to the annual reporting required under the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, each VSC member institution shall prepare an annual report detailing for the previous calendar year the number of Clery-reportable offenses, employment- and student-related accidents, VOSHA citations, and any other regulatory agency’s safety citations. The report shall be prepared on a form developed by the Chancellor and shall be presented to the VSC Board of Trustees or to a specific committee of the Board, at the Chair of the Board’s discretion.

Relevant Legal Authorities

- 20 U.S.C. §1092(f); Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act
- 34 C.F.R. §668.46; Clery Act regulations

Signed by: _____ Jeb Spaulding, Chancellor
--

Date	Version	Revision	Approved By
12/1/17	1.0	Adopted	VSC Board of Trustees

Item 6:
Simple Enrollment and Budget Projection Scenarios
(to be reviewed at Meeting)

Item 7:
Cash and Investments Summary

**VERMONT STATE COLLEGES
 CASH & INVESTMENT REPORT: As of 10/31/2017**

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

	<u>FY2016</u>			<u>FY2017</u>			<u>FY2018</u>			
	<u>CASH Avg Daily Balance</u>	<u>INV'MT Avg Daily Balance</u>	<u>CASH&INV'MT Avg Daily Balance</u>	<u>CASH Avg Daily Balance</u>	<u>INV'MT Avg Daily Balance</u>	<u>CASH&INV'MT Avg Daily Balance</u>	<u>CASH & MMKT FUND Balance</u>	<u>TD WEALTH Balance</u>	<u>MORGAN STANLEY Balance</u>	<u>TOTAL CASH & INVESTMENTS Balance</u>
JULY	3,355,541	46,380,924	49,736,465	5,802,598	48,252,972	54,055,570	9,925,153	19,746,418	27,045,158	56,716,729
AUGUST	4,592,608	46,127,004	50,719,612	4,771,979	48,240,933	53,012,912	8,135,046	19,831,367	27,109,575	55,075,988
SEPTEMBER	11,165,432	45,681,768	56,847,200	10,524,995	48,953,239	59,478,234	12,006,402	19,770,063	27,478,524	59,254,988
OCTOBER	20,198,716	46,848,645	67,047,361	19,921,855	48,422,041	68,343,896	23,397,501	19,773,797	27,865,448	71,036,746
NOVEMBER	15,282,537	46,770,232	62,052,769	14,272,286	48,583,595	62,855,881				
DECEMBER	11,965,241	46,325,445	58,290,686	11,656,241	48,920,191	60,576,432				
JANUARY	12,107,286	45,698,086	57,805,372	10,474,838	49,436,478	59,911,316				
FEBRUARY	22,520,132	45,771,201	68,291,333	15,537,918	50,060,833	65,598,751				
MARCH	25,540,713	47,312,657	72,853,370	21,394,047	50,181,763	71,575,810				
APRIL	22,137,233	47,488,459	69,625,692	19,400,018	50,499,834	69,899,852				
MAY	18,899,541	47,627,944	66,527,485	16,577,913	50,877,230	67,455,143				
JUNE	14,118,440	47,984,522	62,102,962	11,517,369	50,956,847	62,474,216				
Cash & Inv Avg thru 4 months	9,828,074	46,259,585	56,087,660	10,255,357	48,467,296	58,722,653	13,366,025	19,780,411	27,374,676	60,521,113

Summary of October Average Daily Balances

Cash & Money Market Funds

TD Bank Concentration Account	17,312,782
TD Wealth Medical	255,262
TD Bank Enterprise Money Market	4,752,667
Remainder of money at local college banks	1,076,789
Subtotal:	<u>23,397,501</u>

TD Wealth Investments

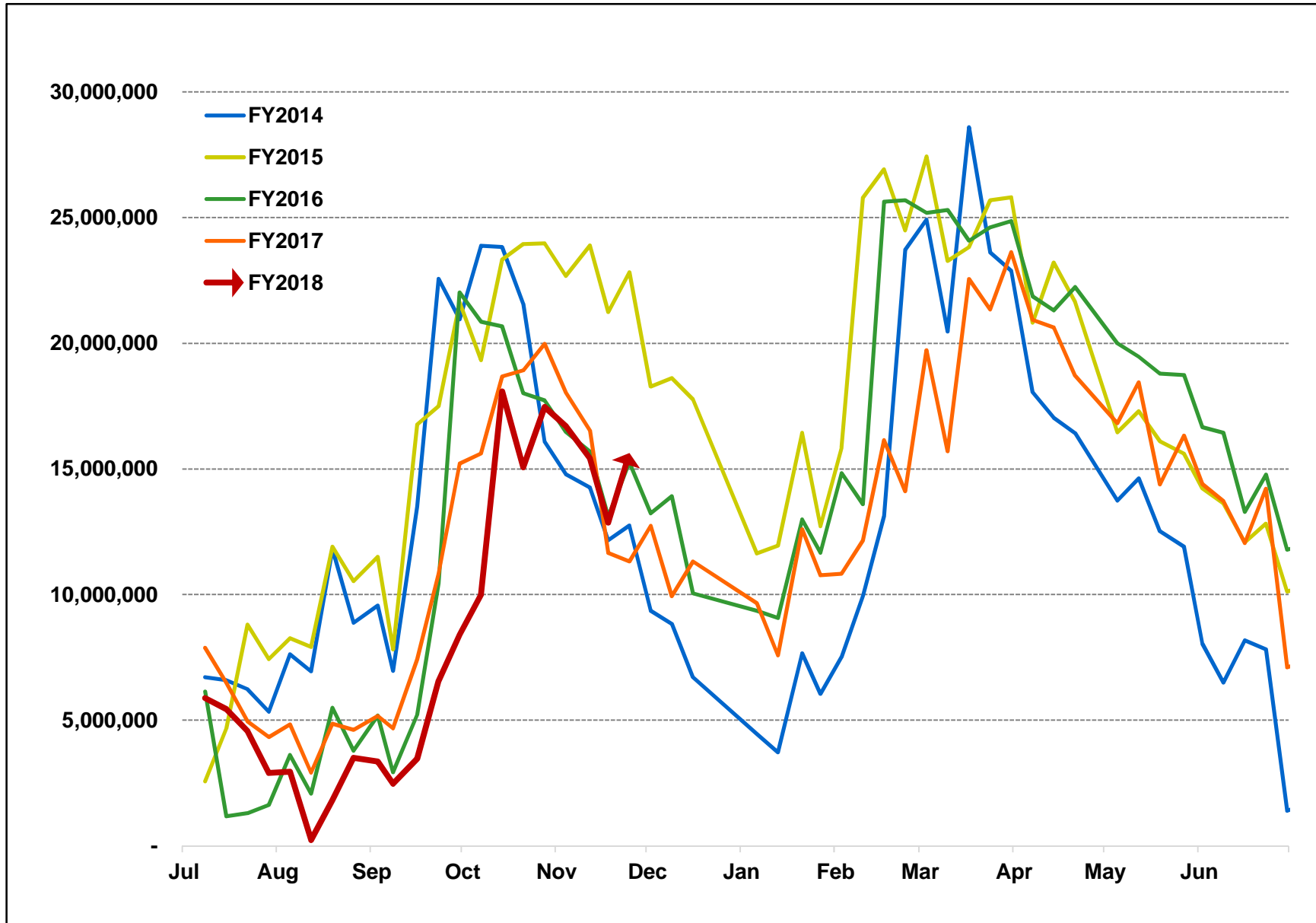
Intermediate	880,068
Long-Term	18,893,729
Subtotal:	<u>19,773,797</u>

Morgan Stanley (Endowment)

27,865,448

Total Cash & Investments: 71,036,746

Weekly Concentration Account Balance July 1, 2013 to November 20, 2017



Item 8:
Endowment Report as of September 30, 2017

3rd Quarter 2017

Prepared on October 31, 2017

Prepared For: **VSC Advised Accounts**

VERMONT STATE COLLEGES
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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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ACCOUNT(S) INCLUDED IN THIS REPORT

VSC Managed Accounts

Reporting Currency: USD

MORGAN STANLEY WEALTH MANAGEMENT

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

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.

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.

Capital Markets Overview: 3Q 2017

Introduction

As of 3Q 2017

- Risk markets globally continued to gain in the third 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. As monetary policy fades as the only driver of market outcomes, we see the re-emergence of volatility that's associated with real interest rates tracking real economic growth.
- For the quarter, US equities posted strong performance, especially the Information Technology sector of the S&P 500, which returned 8.65%. Consumer Staples (-1.35%) and Consumer Discretionary (0.84%) were clear laggards as markets discount more potential downside than upside ahead. While the US had solid performance (4.5%), the largest returns for the quarter actually came from abroad with Europe registering 6.5% total return and emerging markets 8.0%, with China's 14.8% return a clear standout. For the one-year period ending September 29, 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 5.6% in the third quarter. The NASDAQ Composite Index was up 6.1% for the quarter. The S&P 500 Index increased 4.5% for the quarter.
- Ten of the 11 sectors within the S&P 500 generated positive returns in 3Q17. The top-performing sector was Information Technology, which was up 8.7%. Energy and Telecom rose 6.8% and 6.8%, respectively, and were also among the top-performing sectors. The biggest laggards were Consumer Staples, which decreased -1.35%, and Consumer Discretionary, which rose 0.84%.
- The bond market registered slightly positive returns during the third quarter. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, increased 0.8% 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 rose into the third quarter; the Bloomberg Commodity Index increased 2.5%.

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

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Capital Markets Overview: 3Q 2017

US Equity Markets

As of 3Q 2017

The Dow Jones Industrial Average increased 5.6% in the third quarter. The NASDAQ Composite Index was up 6.1% for the quarter. The S&P 500 Index increased 4.5% for the quarter.

Ten of the 11 sectors within the S&P 500 generated positive returns in 3Q17. The top-performing sector was Information Technology, which was up 8.7%. Energy and Telecom rose 6.8% and 6.8%, respectively, and were also among the top-performing sectors. The biggest laggards were Consumer Staples, which decreased -1.35%, and Consumer Discretionary, which rose 0.84%.

The Russell 1000 Index, a large-cap index, increased 4.5% for the quarter, with large-cap growth (5.9%) outperforming large-cap value (3.1%).

The Russell Midcap Index increased 3.5% for the quarter, with mid-cap growth (5.3%) outperforming mid-cap value (2.1%).

The Russell 2000 Index, a small-cap index, increased 5.7% for the quarter, with small-cap growth (6.0%) outperforming small-cap value (4.6%).

Key US Stock Market Index Returns (%) for the Period Ending 9/29/2017				
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
S&P 500	4.5%	19.6%	14.2%	14.3%
Dow Jones	5.6%	26.6%	13.6%	13.8%
Russell 2000	5.7%	22.1%	13.8%	13.5%
Russell Midcap	3.5%	16.2%	14.2%	13.8%
Russell 1000	4.5%	19.5%	14.3%	14.3%

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC

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Capital Markets Overview: 3Q 2017

Global Equity Markets

As of 3Q 2017

In the third 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 5.5% for US-currency investors and increased 3.4% for local-currency investors, as the US dollar significantly depreciated in relation to the currencies of many nations in the index.

For the third quarter, the MSCI Emerging Markets Index increased 8.0% for US-currency investors and 7.7% for local-currency investors. The MSCI Europe Index increased 6.5% for US-currency investors and increased 3.5% for local-currency investors during 3Q17.

The S&P 500 Index increased 4.5% for the quarter.

Emerging economy equity market indices were up in the third quarter. The MSCI BRIC (Brazil, Russia, India and China) Index rose 13.9% for the quarter in US dollar terms and 13.2% in terms of local currencies. For the third quarter, the MSCI EM Asia Index was up 7.2% in US dollar terms and 7.2% in local terms.

Key Global Equity Market Index Returns (%) for the Period Ending 9/29/2017				
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
MSCI EAFE	5.5%	19.3%	8.9%	6.8%
MSCI EAFE Growth	5.0%	15.8%	9.3%	7.3%
MSCI EAFE Value	5.9%	22.8%	8.4%	6.2%
MSCI Europe	6.5%	23.2%	9.0%	7.0%
MSCI Japan	4.1%	13.2%	10.9%	7.2%
S&P 500	4.5%	19.6%	14.2%	14.3%
MSCI Emerging Markets	8.0%	21.6%	4.4%	3.0%

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC

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Capital Markets Overview: 3Q 2017

The US Bond Market

As of 3Q 2017

The bond market registered positive returns during the third quarter. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, increased 0.8% for the quarter as the curve continued to flatten.

Interest rates increased during the third quarter, as the yield on the 10-year US Treasury note increased to a quarter-end 2.33% from 2.30% at the end of 2Q17. This came out to a 1.3% increase in rates for the quarter.

Riskier parts of the bond market such as US high yield debt also increased in the third quarter. The Bloomberg Barclays Capital High Yield Index, a measure of lower-rated corporate bonds, rose 2.0%.

Mortgage-backed securities posted slightly positive returns during the third quarter. The Bloomberg Barclays Capital Mortgage Backed Index increased 1.0% for the quarter. During the third quarter, the municipal bond market also increased. As a result, the Bloomberg Barclays Capital Muni Index generated a 1.1% return for the quarter.

Key US Bond Market Index Returns (%) for the Period Ending 9/29/2017				
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
Bloomberg Barclays Capital US Aggregate	0.8%	-0.2%	2.1%	3.0%
Bloomberg Barclays Capital High Yield	2.0%	9.0%	6.4%	7.5%
Bloomberg Barclays Capital Government/Credit	0.8%	-0.4%	2.1%	3.0%
Bloomberg Barclays Capital Government	0.4%	-2.0%	1.2%	2.2%
Bloomberg Barclays Capital Intermediate Govt/Credit	0.6%	0.1%	1.6%	2.3%
Bloomberg Barclays Capital Long Govt/Credit	1.5%	-1.6%	3.9%	6.2%
Bloomberg Barclays Capital Mortgage Backed Securities	1.0%	0.2%	2.0%	2.7%
Bloomberg Barclays Capital Muni	1.1%	0.8%	3.0%	3.9%

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

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Asset Class Returns: Diversified Portfolios Can Help Mitigate Risk

As of September 29, 2017

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 YTD	10-Yrs ('07-'16) Ann. Return	10-Yrs ('07-'16) Volatility
EM Equities 40.2%	Managed Futures 13.6%	EM Equities 82.9%	MLPs ¹ 35.9%	MLPs ¹ 13.9%	REITs 29.8%	US Equities 32.4%	REITs 14.7%	EMD 1.8%	MLPs ¹ 18.3%	EM Equities 27.4%	MLPs ¹ 8.0%	MLPs ¹ 19.0%
Commod. 16.2%	DM Int'l Debt 11.7%	MLPs ¹ 76.4%	EM Equities 20.2%	Inflation-Linked 13.6%	High Yield 19.6%	MLPs ¹ 27.6%	US Equities 13.7%	US Equities 1.4%	High Yield 14.3%	DM Int'l Equities 21.2%	High Yield 7.3%	REITs 18.4%
MLPs ¹ 12.7%	US Debt 5.2%	High Yield 59.4%	REITs 20.0%	EMD 9.2%	EM Equities 19.1%	DM Int'l Equities 24.0%	Managed Futures 12.3%	DM Int'l Equities 0.9%	US Equities 12.0%	US Equities 14.2%	US Equities 6.9%	Commod. 17.9%
Inflation-Linked 11.6%	Inflation-Linked -2.4%	REITs 41.3%	Commod. 16.8%	US Debt 7.8%	DM Int'l Equities 18.2%	Diversified Portfolio 15.1%	EMD 6.2%	US Debt 0.5%	Commod. 11.8%	REITs 10.8%	EMD 6.6%	EM Equities 17.5%
DM Int'l Debt 11.2%	EMD -9.7%	DM Int'l Equities 33.9%	US Equities 15.1%	DM Int'l Debt 6.0%	EMD 18.0%	Hedged Strategies 8.8%	US Debt 6.0%	REITs -0.4%	EM Equities 10.3%	Diversified Portfolio 10.6%	US Debt 4.8%	US Equities 15.2%
DM Int'l Equities 10.8%	Hedged Strategies -21.4%	US Equities 26.5%	High Yield 14.8%	High Yield 3.1%	US Equities 16.0%	High Yield 7.3%	MLPs ¹ 4.8%	Inflation-Linked -1.4%	EMD 9.6%	High Yield 9.5%	Diversified Portfolio 4.5%	DM Int'l Equities 15.0%
Hedged Strategies 10.3%	Diversified Portfolio -25.7%	EMD 25.9%	Diversified Portfolio 12.7%	US Equities 2.1%	Diversified Portfolio 12.0%	REITs 2.2%	Diversified Portfolio 4.7%	Diversified Portfolio -1.9%	Diversified Portfolio 7.5%	EMD 8.6%	Inflation-Linked 4.4%	High Yield 11.4%
Diversified Portfolio 7.9%	High Yield -26.9%	Diversified Portfolio 23.6%	EMD 11.8%	Diversified Portfolio -2.1%	Inflation-Linked 7.0%	Managed Futures 0.7%	Inflation-Linked 3.6%	Managed Futures -2.0%	Inflation-Linked 4.7%	DM Int'l Debt 7.3%	DM Int'l Debt 2.8%	Diversified Portfolio 9.9%
Managed Futures 7.6%	Commod. -35.6%	Commod. 18.9%	DM Int'l Equities 9.8%	Managed Futures -4.3%	MLPs ² 4.8%	EM Equities -1.9%	Hedged Strategies 3.4%	High Yield -2.7%	REITs 4.6%	Hedged Strategies 4.3%	EM Equities 2.4%	EMD 9.0%
US Debt 7.0%	MLPs ¹ -36.9%	Hedged Strategies 11.5%	DM Int'l Debt 7.0%	Hedged Strategies -5.7%	Hedged Strategies 4.8%	US Debt -2.0%	High Yield 0.0%	Hedged Strategies -3.6%	US Debt 2.6%	US Debt 3.1%	REITs 1.9%	DM Int'l Debt 8.4%
EMD 6.5%	US Equities -37.0%	Inflation-Linked 11.4%	US Debt 6.5%	REITs -8.1%	US Debt 4.2%	DM Int'l Debt -5.6%	EM Equities -1.4%	DM Int'l Debt -4.4%	Hedged Strategies 2.5%	Inflation-Linked 1.7%	DM Int'l Equities 1.5%	Managed Futures 6.9%
US Equities 5.5%	DM Int'l Equities -43.4%	US Debt 5.9%	Managed Futures 6.4%	DM Int'l Equities -12.2%	DM Int'l Debt 0.5%	EMD -8.3%	DM Int'l Debt -3.0%	EM Equities -13.5%	DM Int'l Debt 2.1%	Managed Futures 0.0%	Hedged Strategies -0.6%	Inflation-Linked 6.3%
High Yield 3.2%	REITs -48.9%	DM Int'l Debt 3.7%	Inflation-Linked 6.3%	Commod. -13.3%	Commod. -1.1%	Inflation-Linked -8.6%	DM Int'l Equities -4.5%	Commod. -24.7%	DM Int'l Equities 1.6%	Commod. -2.9%	Managed Futures -1.0%	Hedged Strategies 5.9%
REITs -4.7%	EM Equities -53.6%	Managed Futures -4.8%	Hedged Strategies 4.2%	EM Equities -19.2%	Managed Futures -1.8%	Commod. -9.5%	Commod. -17.0%	MLPs ¹ -32.6%	Managed Futures -3.1%	MLPs ¹ -5.6%	Commod. -5.6%	US Debt 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.

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S&P 500 Sector Returns

As of September 29, 2017

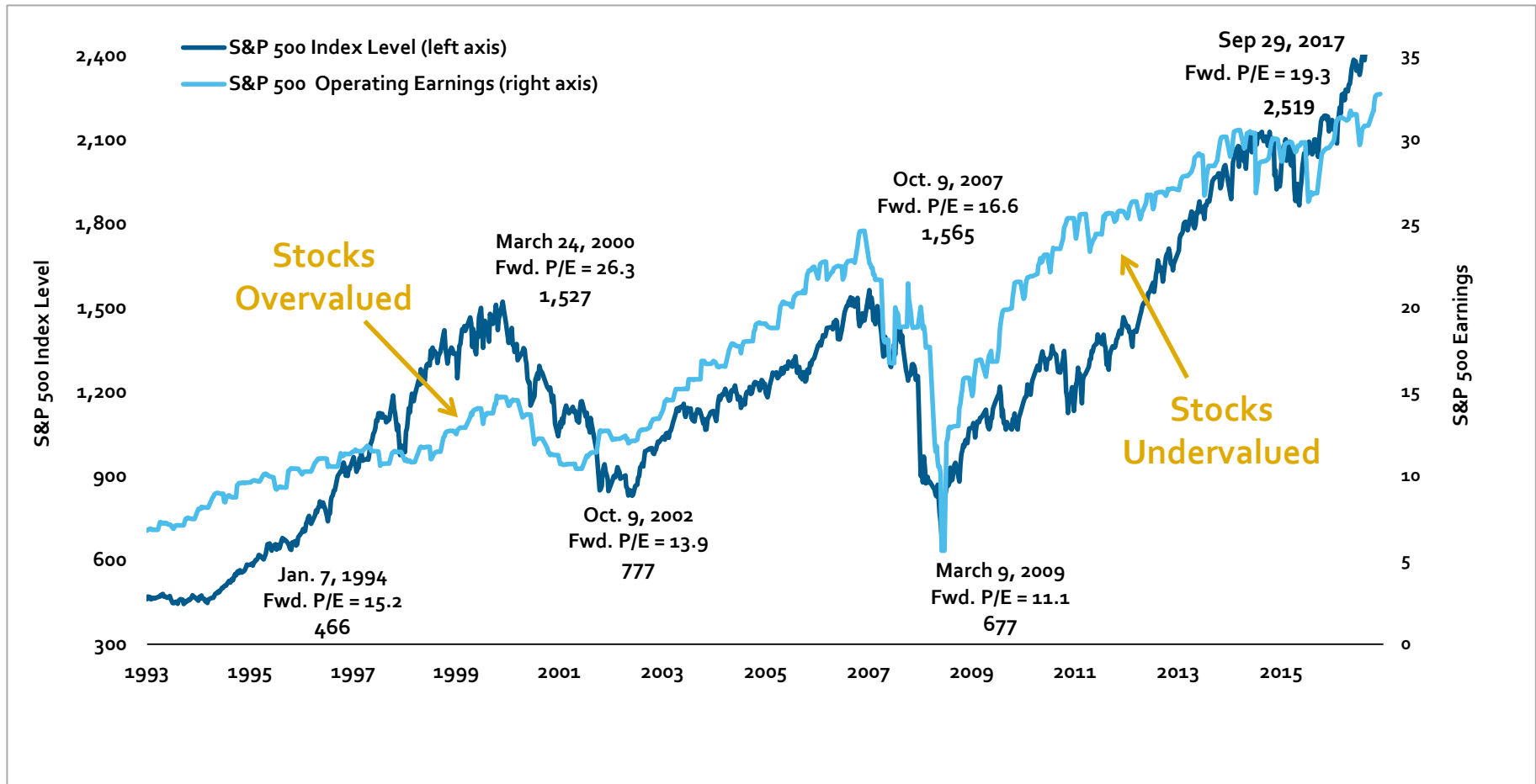
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 YTD	10-Years ('07-'16) Ann.
Energy 34.4%	Consumer Staples -15.4%	Info Tech 61.7%	Consumer Discretionary 27.7%	Utilities 19.9%	Financials 28.8%	Consumer Discretionary 43.1%	Utilities 29.0%	Consumer Discretionary 10.1%	Energy 27.4%	Info Tech 27.4%	Cons. Staples 10.1%
Materials 22.5%	Health Care -22.8%	Materials 48.6%	Industrials 26.7%	Consumer Staples 14.0%	Consumer Discretionary 23.9%	Health Care 41.5%	Health Care 25.3%	Health Care 6.9%	Telecom 23.5%	Health Care 20.3%	Info Tech 9.9%
Utilities 19.4%	Utilities -29.0%	Consumer Discretionary 41.3%	Materials 22.2%	Health Care 12.7%	Telecom 18.3%	Industrials 40.7%	Info Tech 20.1%	Cons. Staples 6.6%	Financials 22.8%	Materials 15.8%	Consumer Discretionary 9.6%
Info Tech 16.3%	Telecom -30.5%	Industrials 20.9%	Energy 20.5%	Telecom 6.3%	Health Care 17.9%	Financials 35.6%	Consumer Staples 16.0%	Info Tech 5.9%	Industrials 18.9%	Industrials 14.1%	Health Care 9.6%
Consumer Staples 14.2%	Consumer Discretionary -33.5%	Health Care 19.7%	Telecom 19.0%	Consumer Discretionary 6.1%	Industrials 15.3%	Info Tech 28.4%	Financials 15.2%	Telecom 3.4%	Materials 16.7%	Financials 12.5%	Industrials 7.8%
Industrials 12.0%	Energy -34.9%	Financials 17.2%	Consumer Staples 14.1%	Energy 4.7%	Materials 15.0%	Consumer Staples 26.1%	Industrials 9.8%	Financials -1.5%	Utilities 16.3%	Consumer Discretionary 11.9%	Utilities 7.0%
Telecom 11.9%	Industrials -39.9%	Consumer Staples 14.9%	Financials 12.1%	Info Tech 2.4%	Info Tech 14.8%	Materials 25.6%	Consumer Discretionary 9.7%	Industrials -2.5%	Info Tech 13.8%	Utilities 11.9%	Telecom 6.4%
Health Care 7.2%	Info Tech -43.1%	Energy 13.8%	Info Tech 10.2%	Industrials -0.6%	Consumer Staples 10.8%	Energy 25.1%	Materials 6.9%	Utilities -4.8%	Consumer Discretionary 6.0%	Cons. Staples 6.6%	Materials 6.1%
Consumer Discretionary -13.2%	Materials -45.7%	Utilities 11.9%	Utilities 5.5%	Materials -9.8%	Energy 4.6%	Utilities 13.2%	Telecom 3.0%	Materials -8.4%	Cons. Staples 5.4%	Telecom -4.7%	Energy 4.3%
Financials -18.6%	Financials -55.3%	Telecom 8.9%	Health Care 2.9%	Financials -17.1%	Utilities 1.3%	Telecom 11.5%	Energy -7.8%	Energy -21.1%	Health Care -2.7%	Energy -6.6%	Financials -0.4%

Source: FactSet, Morgan Stanley Wealth Management GIC. Performance based on S&P 500 sector indices; returns in USD. Not pictured: Real Estate Sector which was created as its own sector in 2016. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Earnings Remain Supportive of US Equities

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

Monthly Index Level as of September 29, 2017; Monthly Operating Earnings as of September 08, 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.

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US Equity Index Performance, Volatility and Valuation

As of September 29, 2017 (performance and volatility in percent form)

Index in USD	Performance as of 9/29/2017						Volatility ¹			Valuation			
	MTD	3M	YTD	12M	Ann	Ann	12M	3YR	5YR	12M			
					3YR	5YR				P/E	P/B	Div Yld	
All Cap													
Russell 3000	2.4	4.6	13.9	18.7	10.7	14.2	5.8	10.1	9.6	21.8	2.7	2.1	
Russell 3000 Growth	1.6	5.9	20.4	21.9	12.6	15.2	5.8	10.6	10.0	24.8	5.5	1.5	
Russell 3000 Value	3.3	3.3	7.7	15.5	8.8	13.2	7.8	10.3	9.9	19.2	1.7	2.6	
Large Cap													
S&P 500	2.1	4.5	14.2	18.6	10.8	14.2	5.3	9.9	9.4	19.8	3.1	2.0	
Russell 1000	2.1	4.5	14.2	18.5	10.6	14.3	5.4	10.0	9.5	21.2	2.7	2.1	
Russell 1000 Growth	1.3	5.9	20.7	21.9	12.7	15.3	5.8	10.5	9.9	23.9	5.6	1.6	
Russell 1000 Value	3.0	3.1	7.9	15.1	8.5	13.2	7.3	10.2	9.8	18.9	1.8	2.7	
Mid Cap													
Russell Mid	2.8	3.5	11.7	15.3	9.5	14.3	7.2	10.4	10.2	25.2	2.6	1.8	
Russell Mid Growth	2.8	5.3	17.3	17.8	10.0	14.2	7.4	11.0	10.8	27.6	5.3	1.2	
Russell Mid Value	2.7	2.1	7.4	13.4	9.2	14.3	7.8	10.3	10.2	23.0	1.7	2.4	
Small Cap													
Russell 2000	6.2	5.7	10.9	20.7	12.2	13.8	13.3	14.3	13.8	33.5	2.1	1.5	
Russell 2000 Growth	5.4	6.2	16.8	21.0	12.2	14.3	12.2	15.3	14.8	48.2	4.0	0.7	
Russell 2000 Value	7.1	5.1	5.7	20.5	12.1	13.3	15.3	14.0	13.6	25.4	1.4	2.3	

Source: Bloomberg, S&P, Russell, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

US Equity Size and Style Performance

2017 YTD Performance
 As of September 29, 2017

	Value	Blend	Growth
Large	9.0%	14.8%	21.1%
Mid	10.5%	12.4%	14.0%
Small	7.8%	11.9%	16.1%

2016 Performance
 As of December 31, 2016

	Value	Blend	Growth
Large	16.3%	11.5%	6.5%
Mid	20.9%	12.4%	6.4%
Small	25.8%	19.8%	14.0%

Current Fwd. P/E Vs. 10-year Avg. P/E
 As of September 29, 2017

	Value	Blend	Growth
Large	15.6	18.1	21.4
	Avg.: 12.3	Avg.: 13.7	Avg.: 15.8
Mid	15.8	18.7	22.1
	Avg.: 14.1	Avg.: 16.2	Avg.: 17.8
Small	20.6	24.0	28.5
	Avg.: 18	Avg.: 19.3	Avg.: 21.3
Expensive: Above +1 Std. Dev.			
Neutral			
Cheap: Below -1 Std. Dev.			

Performance Since Market Peak (Oct. 2007)
 As of September 29, 2017

	Value	Blend	Growth
Large	68.9%	100.3%	138.0%
Mid	110.3%	104.1%	98.7%
Small	130.5%	128.8%	130.7%

Performance Since Market Low (March 2009)
 As of September 29, 2017

	Value	Blend	Growth
Large	306.2%	335.5%	369.4%
Mid	445.2%	401.7%	368.4%
Small	456.8%	449.3%	440.8%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: MSCI US Large Value, MSCI US Large Blend, MSCI US Large Growth, MSCI US Mid Value, MSCI Mid Blend, MSCI Mid Growth, MSCI Small Value, MSCI Small Blend, and MSCI Small Growth. "Blend" indices include both Value and Growth stocks. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

US Equity Valuation Metrics

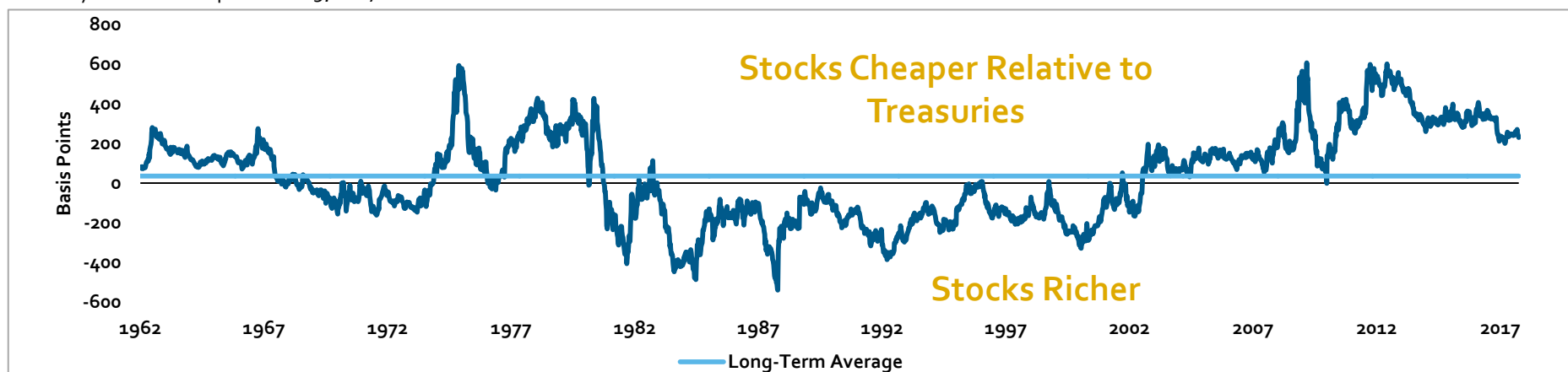
Valuation Measures

As of September 29, 2017, Market Cap as a Percent of GDP Data as of June 30, 2017; 1 Year Ago data as of September 30, 2016

Valuation Measure	As of Sep 29, 2017	1 Year Ago	Three-Yr. Average	Five-Yr. Average	10-Yr. Average	15-Yr. Average
Forward P/E ¹	17.8	16.6	16.5	15.5	14.1	14.5
Trailing P/E	19.3	17.7	17.7	16.7	15.4	15.9
Price-to-Book	3.1	2.8	2.8	2.7	2.4	2.6
ROE	16.0%	15.2%	15.7%	15.6%	15.2%	15.6%
Dividend Yield	1.8%	2.0%	2.0%	2.0%	2.1%	2.0%
Shiller P/E ²	30.7	26.7	27.0	25.6	23.1	24.0
NTM Equity Risk Premium (Bps)	328.2	442.5	392.0	423.1	450.5	370.2
Market Cap as a % of GDP	131.07%	117.12%	120.60%	113.57%	98.90%	95.72%

Equity Risk Premium: S&P 500 Trailing Earnings Yield Vs. 10-Yr. Treasury Yield

Monthly Data as of September 29, 2017

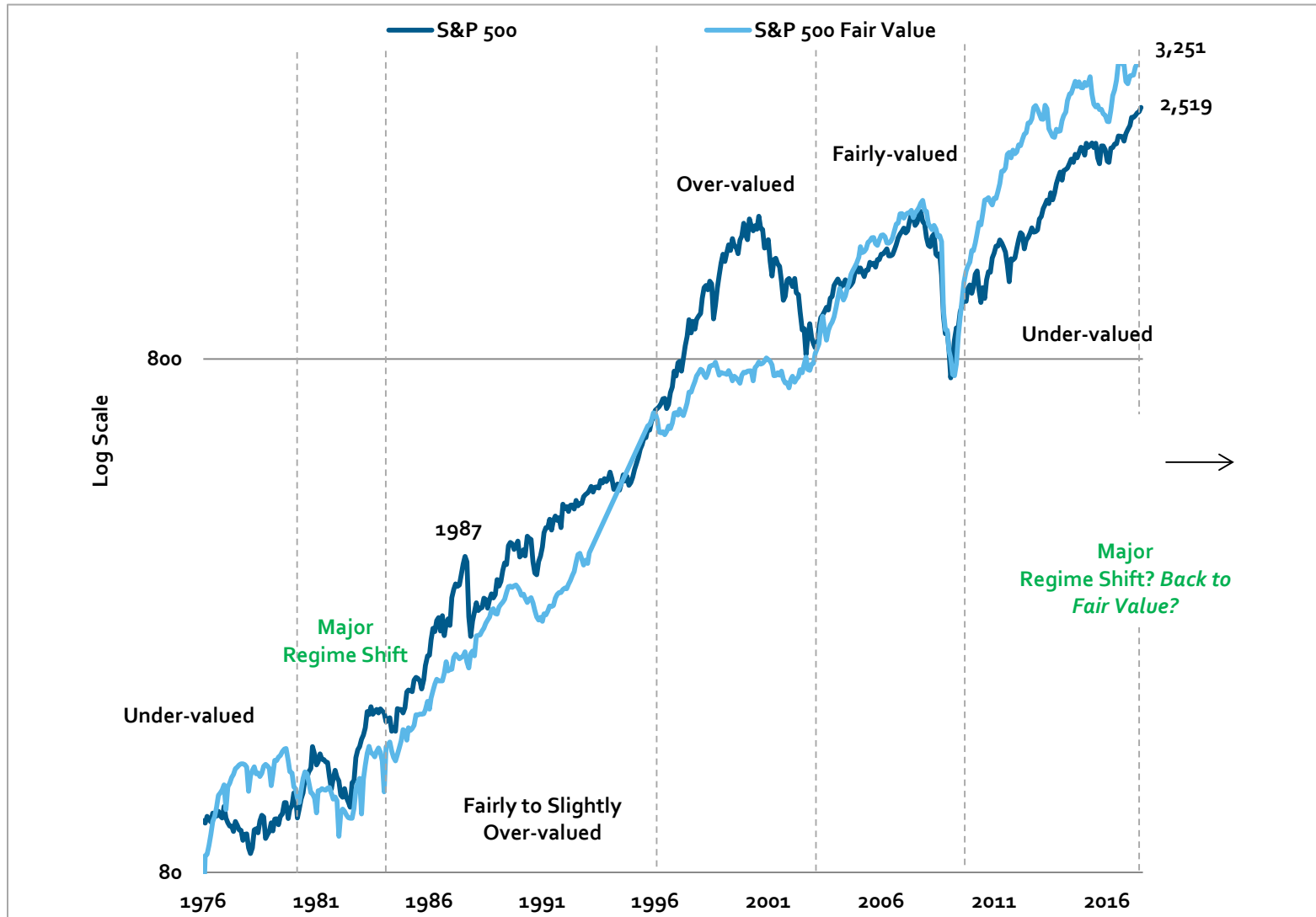


Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC. (1) Forward P/E = market price per share / estimated earnings per share (2) The Shiller P/E ratio, also known as the cyclically adjusted P/E ratio, uses a 10-year average of inflation-adjusted earnings to value the stock market. This Shiller P/E Ratio was calculated using the after-tax earnings in the National Income and Product Accounts (NIPA) report published by the Bureau of Economic Analysis. Equity risk premium is the excess return that an individual stock or the overall stock market provides over a risk-free rate. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time.

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Fair-Value Metric Shows Stocks to Be Undervalued

S&P 500 "Fair Value" (NTM or next 12 month EPS divided by BAA yield) Vs. S&P 500
 As of Sep 30, 2017

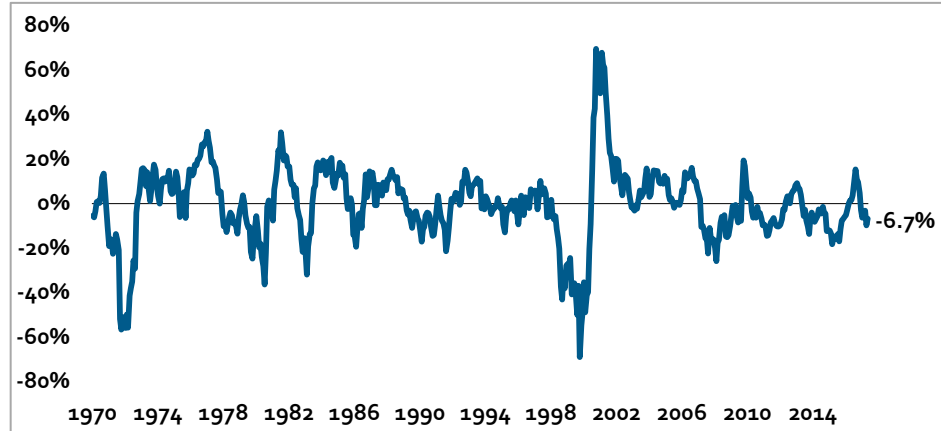


Source: Bloomberg, Morgan Stanley Wealth Management GIC. Fair value is 12-month forward consensus earnings estimate divided by the Moody's Baa corporate bond interest rate. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

US Equities: Growth Vs. Value

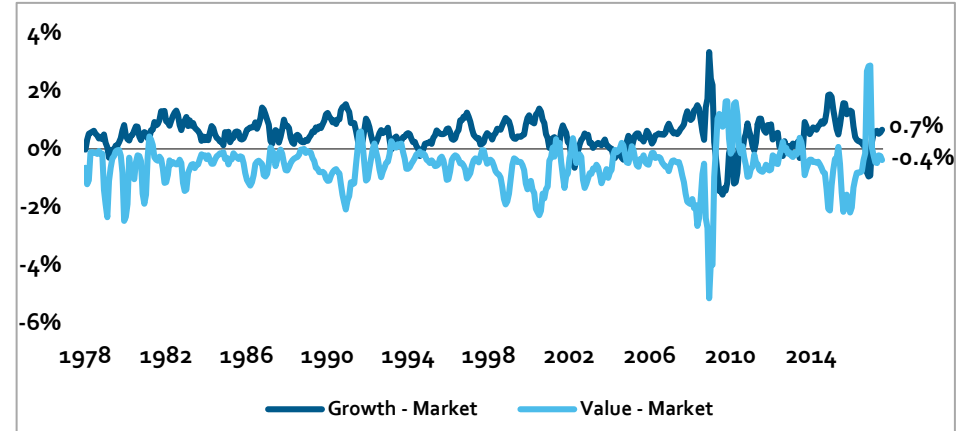
Value/Growth Performance

12-Month Relative Return as of September 30, 2017



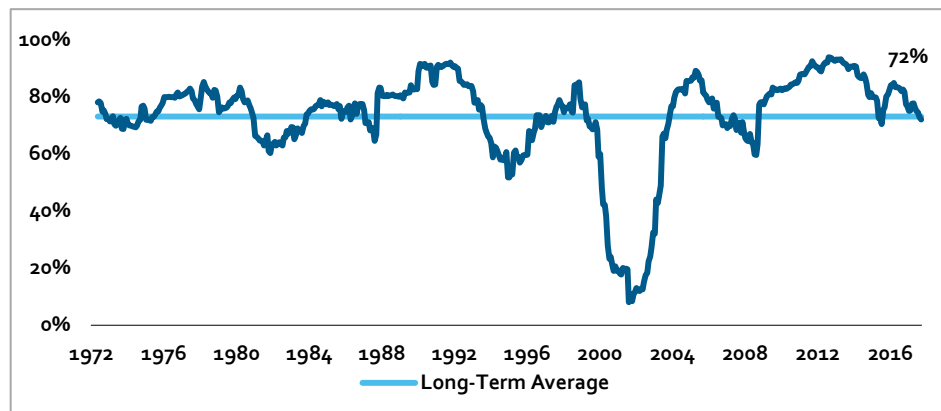
Growth/Value Earnings Revisions Relative to Market

Three-Month Moving Average as of September 30, 2017



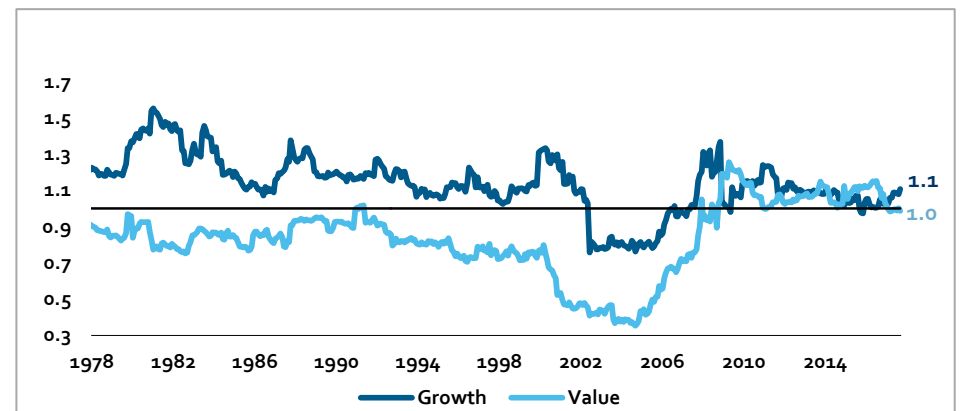
Growth/Value Correlation

36-Month Rolling Correlation of Returns as of September 30, 2017



Growth/Value Betas¹

Relative to the Market as of September 30, 2017



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research. (1) Beta: A measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole.

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US Equities Snapshot and Sector Breakdown

S&P 500 Sector Performance and Valuation¹

As of October 27, 2017

Index Name	Total Return			Div. Yield (%)	Beta	20-Year Avg.	
	WTD (%)	YTD (%)	1-Year (%)			NTM P/E	NTM P/E ²
S&P 500	0.23	17.16	23.50	1.83		16.0	18.0
Energy	-0.56	-7.94	0.12	2.84	0.91	17.5	27.6
Materials	0.69	20.56	29.27	1.65	1.10	13.9	18.6
Industrials	-1.24	15.68	27.62	1.95	1.08	16.3	18.9
Consumer Discretionary	1.13	14.79	20.17	1.36	0.97	18.0	20.0
Consumer Staples	-1.43	5.16	4.55	2.74	0.52	17.1	18.8
Health Care	-2.09	20.88	20.77	1.56	0.84	17.5	16.6
Financials	0.56	16.63	37.39	1.54	1.37	12.9	14.8
Information Technology	2.87	36.14	37.79	1.19	1.25	20.8	19.2
Telecommunication Services	-3.16	-10.99	-0.61	5.53	0.66	16.6	11.9
Utilities	0.30	16.12	17.91	3.27	0.26	14.1	18.3
Real Estate	-1.62	7.25	10.30	3.13	0.53	15.3	17.7

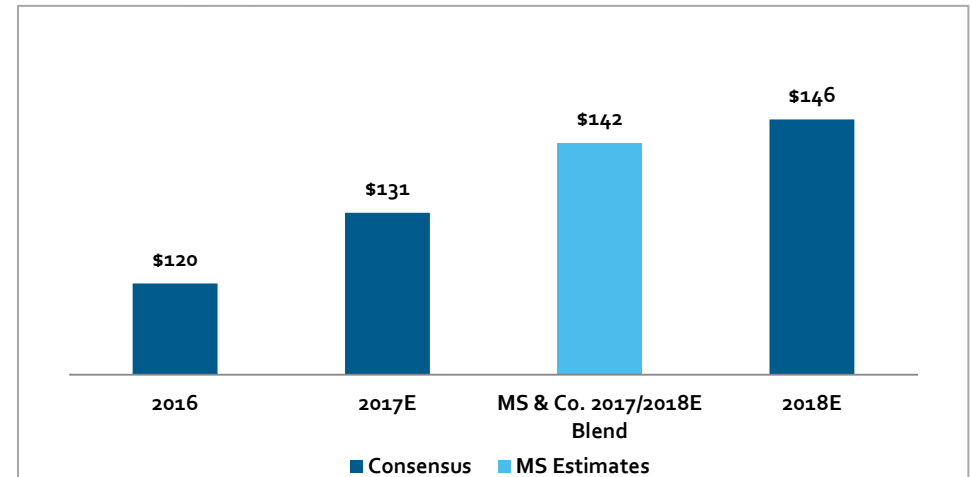
Morgan Stanley & Co. 12-Month S&P 500 Target

As of October 27, 2017

EPS Landscape	EPS	Multiple	Price Target	Upside / (Downside)
Bull Case	\$142.00	21.1X	3,000	16.2%
Base Case	\$142.00	19.0X	2,700	4.6%
Bear Case	\$126.50	16.6x	2,100	(18.6%)
Current S&P 500 Price			2581	

Morgan Stanley & Co. and Consensus S&P 500 Earnings Estimates

As of October 27, 2017



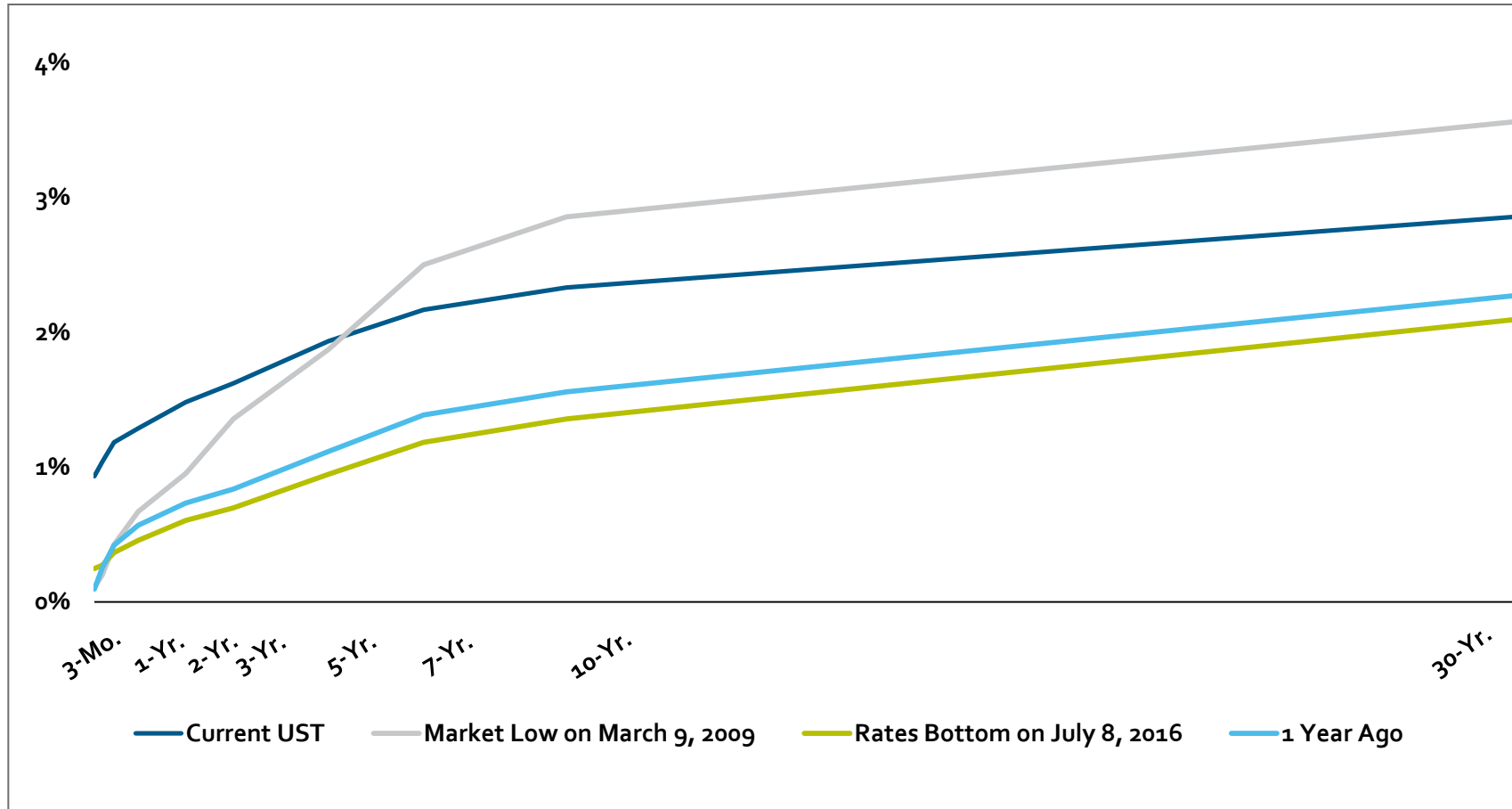
Source: Morgan Stanley & Co., FactSet, Thomson Reuters, Morgan Stanley Wealth Management GIC. (1) Green/red text denotes sector total return and dividend yield higher/lower than S&P 500.

(2) Dark blue/light blue/grey fill denotes whether current relative NTM P/E is low/neutral/high relative to history. Real Estate is from 10/31/2001 to present.

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US Treasury Yield Curve

As of September 29, 2017



Source: Bloomberg, US Department of the Treasury.

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US Fixed Income Overview

As of September 29, 2017 (performance and YTW in percent form)

Index in USD	Characteristics			Performance as of 9/29/2017					
	Weight	Duration ¹	YTW ²	MTD	3M	YTD	12M	Ann 3YR	Ann 5YR
Bloomberg Barclays U.S. Aggregate		6.0	2.6	-0.5	0.8	3.1	0.1	2.7	2.1
Broken down by Quality	100.00%								
Aaa	71.29%	5.4	2.3	-0.6	0.6	2.3	-0.7	2.2	1.6
Aa	4.13%	6.2	2.6	-0.5	1.0	3.6	0.4	3.2	2.4
A	10.71%	7.6	2.9	-0.3	1.3	4.8	1.4	4.1	3.3
Baa	13.87%	7.7	3.5	0.0	1.6	6.1	3.2	4.1	3.7
Broken down by Maturity	100.00%								
1-3 Yr.	20.48%	1.9	1.7	-0.1	0.3	1.1	0.7	1.1	0.9
3-5 Yr.	19.35%	3.7	2.1	-0.4	0.6	2.1	0.4	2.2	1.7
5-7 Yr.	20.88%	4.7	2.6	-0.4	0.9	2.7	0.0	2.5	1.9
7-10 Yr.	23.49%	6.1	2.9	-0.6	1.0	3.2	-1.3	3.0	2.2
10+ Yr.	15.80%	15.4	3.6	-1.0	1.5	7.4	-1.0	5.4	3.7
Broken down by Sector	100.00%								
U.S. Treasury	36.98%	6.2	2.0	-0.9	0.4	2.3	-1.7	2.0	1.2
1-3 Yr.	12.21%	1.9	1.5	-0.2	0.2	0.7	0.2	0.8	0.6
Other	24.77%								
Government-Related	6.96%	5.4	2.5	-0.5	1.1	3.9	0.6	2.6	2.0
Agencies	3.40%	4.4	2.3	-0.4	0.8	2.9	0.8	1.8	1.4
Local Authorities	0.97%	9.2	3.3	-0.8	2.2	6.5	0.8	5.0	4.3
Sovereign	1.00%	8.7	3.4	-0.3	2.3	8.2	1.6	4.3	2.9
Supranational	1.59%	3.5	1.9	-0.4	0.4	1.8	-0.2	1.5	1.2
Corporate	25.56%	7.6	3.2	-0.2	1.3	5.2	2.2	4.1	3.5
Industrial	15.80%	8.1	3.2	-0.1	1.3	5.3	2.1	4.0	3.2
Utility	1.76%	10.0	3.3	-0.8	1.6	5.6	1.2	4.5	3.7
Financials	8.00%	6.0	2.9	-0.2	1.3	4.8	2.8	4.0	3.9
Securitized	30.51%	4.5	2.8	-0.3	0.9	2.3	0.3	2.5	2.0
Bloomberg Barclays U.S. Corp. High Yield	100.00%	3.8	5.5	0.9	2.0	7.0	8.9	5.8	6.4
Industrial	88.22%	3.8	5.5	0.9	1.9	6.8	8.8	5.7	6.2
Utility	2.65%	3.8	5.5	1.2	3.6	9.1	8.3	6.1	6.3
Financials	9.13%	4.1	4.6	0.6	1.9	8.2	9.9	7.1	7.5
Bloomberg Barclays U.S. Municipal Bond	100.00%	6.3	2.2	-0.5	1.1	4.7	0.9	3.2	3.0

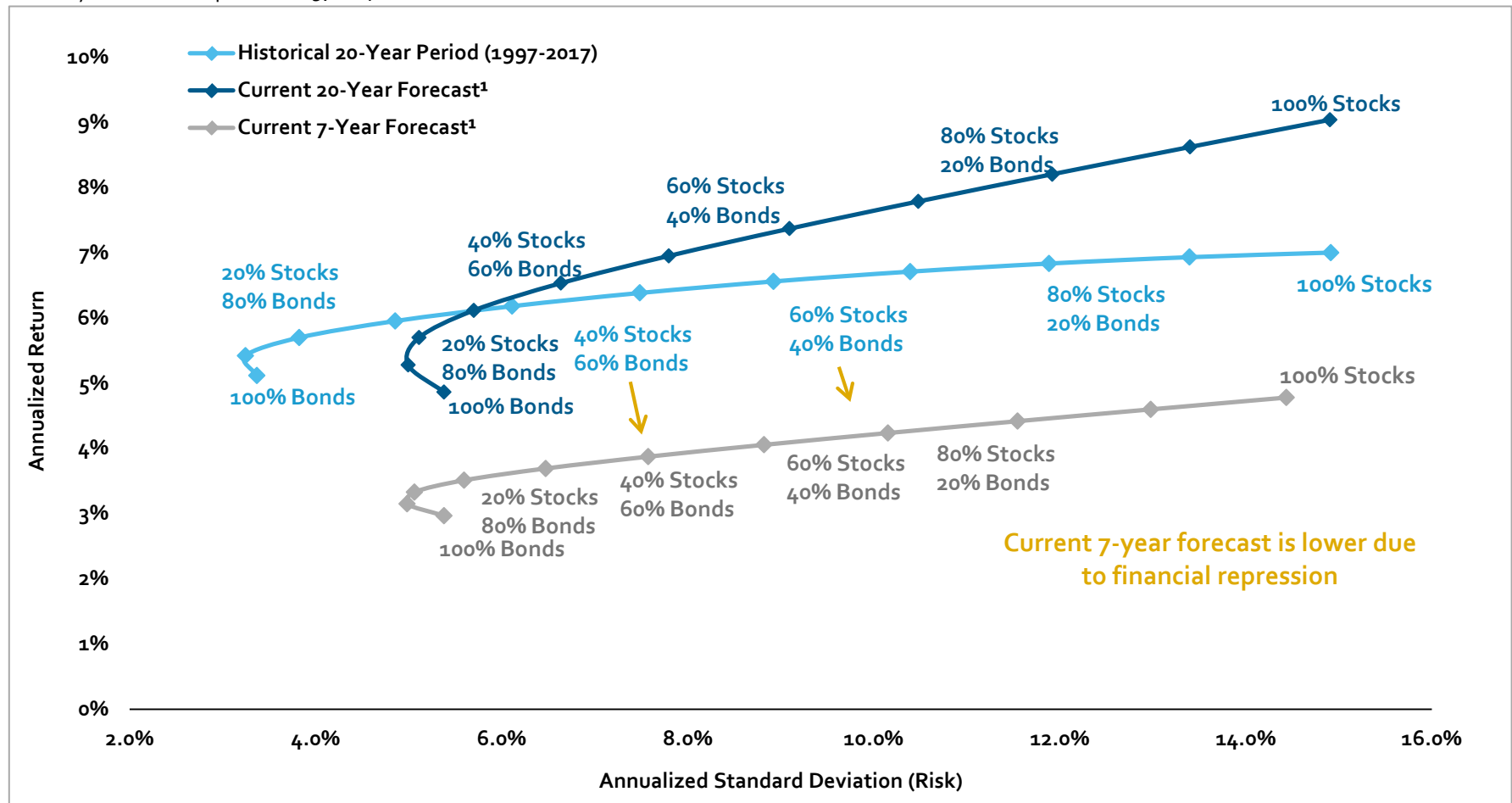
Source: Bloomberg Barclays Indices, FactSet. (1) For more information about the risks to Duration please refer to the Risk Considerations section at the end of this material.(2) Yield to worst is the lowest potential yield that can be received on a bond without the issuer actually defaulting.

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Diversification Benefits Have Waned: Forecasted Efficient Frontiers

Stock and Bond Blends

Monthly Data as of September 29, 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.

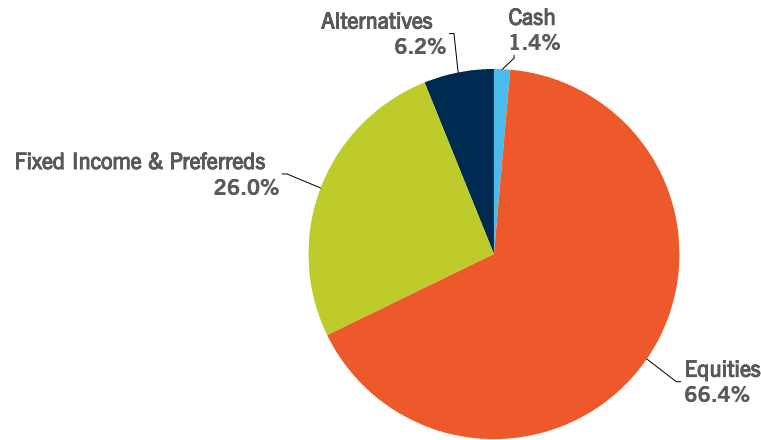
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ASSET ALLOCATION

VSC Managed Accounts

As of September 30, 2017 | Reporting Currency: USD

ASSET ALLOCATION - ASSET CLASS



ASSET ALLOCATION

	Total Value 09/30/17	% of Portfolio 09/30/17
Cash	\$384,694.34	1.4%
Equities	18,173,756.01	66.4
Fixed Income & Preferreds	7,117,268.11	26.0
Alternatives	1,695,038.95	6.2
Total Portfolio	\$27,370,757.41	100.0%

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

EQUITIES ASSET ALLOCATION

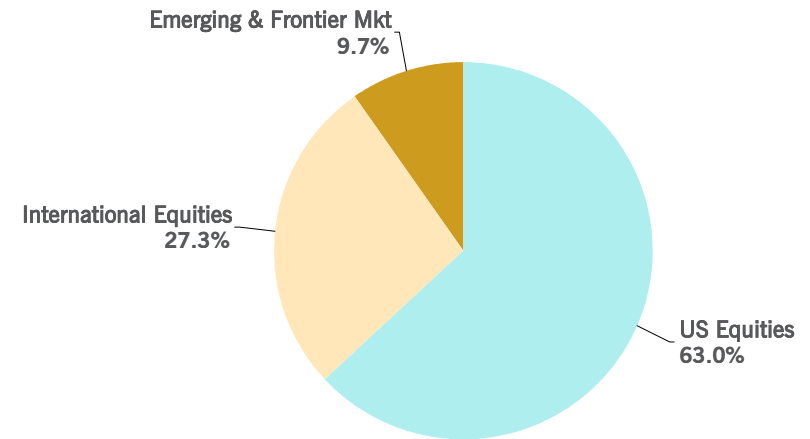
VSC Managed Accounts

As of September 30, 2017 | Reporting Currency: USD

TOP EQUITY POSITIONS BASED ON TOTAL VALUE

	Total Value 09/30/17	% of Equities
ISHARES RUSSELL 1000 GRW ETF	\$3,469,789.70	19.1%
ISHARES RUSSELL 1000 VALUE ETF	2,825,159.89	15.5
WILLIAM BLAIR INTL GROWTH I	1,590,179.56	8.8
VANGUARD FTSE DEVELOPED MKTS E	1,177,843.53	6.5
OPPENHEIMER DEVELOPING MKTS Y	685,885.47	3.8
LAZARD EMERGING MKTS EQ I	668,349.36	3.7
ISHARES RUSSELL 2000 ETF	453,282.62	2.5
ISHARES MSCI EMERGING MKTS ETF	361,975.18	2.0
UNITEDHEALTH GP INC	255,584.25	1.4
COMCAST CORP (NEW) CLASS A	201,943.04	1.1
Top Equity Positions	\$11,689,992.60	64.3%
Other Equity Positions	\$6,483,763.41	35.7%
Total Equities	\$18,173,756.01	100.0%

ASSET ALLOCATION - EQUITIES



ASSET ALLOCATION - EQUITIES

	Total Value 09/30/17	% of Equities 09/30/17	% of Portfolio 09/30/17
US Equities	\$11,451,907.83	63.0%	41.8%
International Equities	4,955,157.92	27.3	18.1
Emerging & Frontier Mkt	1,766,690.26	9.7	6.5
Total Equities	\$18,173,756.01	100.0%	66.4%

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

FIXED INCOME & PREFERRED ASSET ALLOCATION

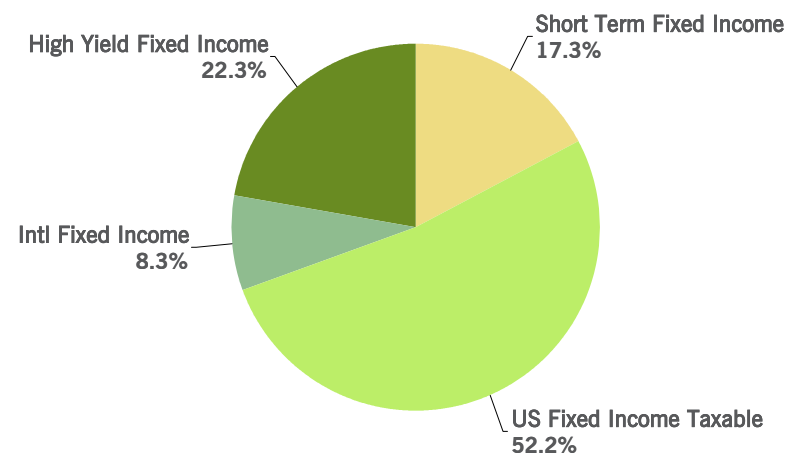
VSC Managed Accounts

As of October 30, 2017 | Reporting Currency: USD

TOP FIXED INCOME & PREFERRED POSITIONS BASED ON TOTAL VALUE

	Total Value 10/30/17	% of Fixed Income & Preferreds
BLACKROCK HI YIELD BD PTF INST	\$1,585,800.55	22.3%
VANGUARD SH TM INVT GR INV	1,228,936.98	17.3
GUGGENHEIM TOTAL RETURN BD I	1,191,816.55	16.7
VANGUARD TOTAL BD MKT INDX INV	1,188,630.60	16.7
LOOMIS SAYLES BOND INST	1,126,649.06	15.8
DREYFUS STANDISH GLB FIX INC I	800,289.85	11.2
Top Fixed Income & Preferred Positions	\$7,122,123.59	100.0%
Other Fixed Income & Preferred Positions	-	-
Total Fixed Income & Preferreds	\$7,122,123.59	100.0%

ASSET ALLOCATION - FIXED INCOME & PREFERREDS



ASSET ALLOCATION - FIXED INCOME & PREFERREDS

	Total Value 10/30/17	% of Fixed Income & Preferreds 10/30/17	% of Portfolio 10/30/17
Short Term Fixed Income	\$1,228,936.98	17.3%	4.4%
Short Term Govt/Corp	921,702.74	12.9	3.3
Short Term Securitized	307,234.25	4.3	1.1
US Fixed Income Taxable	3,715,171.57	52.2	13.4
Intermed Term Govt/Corp	1,188,630.60	16.7	4.3
US Taxable Core	2,526,540.97	35.5	9.1
Intl Fixed Income	592,214.49	8.3	2.1
Intl Core Fixed Income	592,214.49	8.3	2.1
High Yield Fixed Income	1,585,800.55	22.3	5.7
High Yield Fixed Income	1,585,800.55	22.3	5.7
Total Fixed Income & Preferreds	\$7,122,123.59	100.0%	25.7%

Total Value, % of Portfolio and % of Fixed Income and Preferreds are based on US Dollar values.

ALTERNATIVES ASSET ALLOCATION

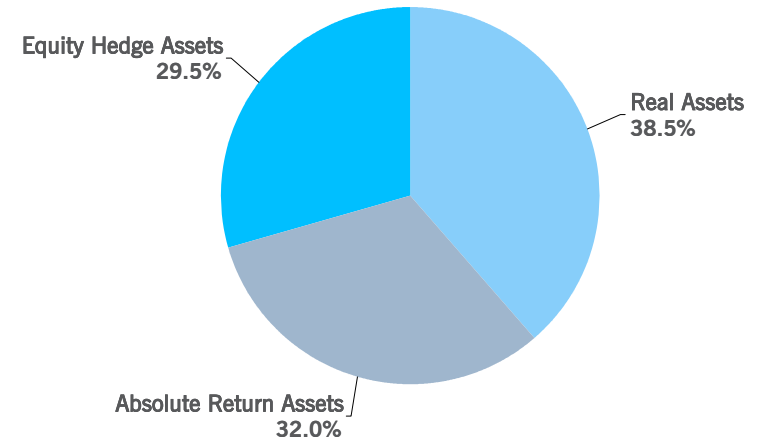
VSC Managed Accounts

As of October 30, 2017 | Reporting Currency: USD

TOP ALTERNATIVE POSITIONS BASED ON TOTAL VALUE

	Total Value 10/30/17	% of Alternatives
IRONWOOD INSTIT MS LLC	\$543,979.38	32.0%
SKYBRIDGE MUL-AD SER G ADV	501,136.33	29.5
VANGUARD REIT ETF	271,704.05	16.0
ISHARES US REAL ESTATE ETF	264,756.63	15.6
ALERIAN MLP ETF	78,026.10	4.6
SUN COMMUNITIES INC	13,680.00	0.8
SABRA HEALTH CARE REIT INC	9,113.60	0.5
CORECIVIC INC	8,997.60	0.5
WELLTOWER INC	8,535.67	0.5
Top Alternative Positions	\$1,699,929.36	100.0%
Other Alternative Positions	-	-
Total Alternatives	\$1,699,929.36	100.0%

ASSET ALLOCATION - ALTERNATIVES



ASSET ALLOCATION - ALTERNATIVES

	Total Value 10/30/17	% of Alternatives 10/30/17	% of Portfolio 10/30/17
Real Assets	\$654,813.65	38.5%	2.4%
Absolute Return Assets	543,979.38	32.0	2.0
Equity Hedge Assets	501,136.33	29.5	1.8
Total Alternatives	\$1,699,929.36	100.0%	6.1%

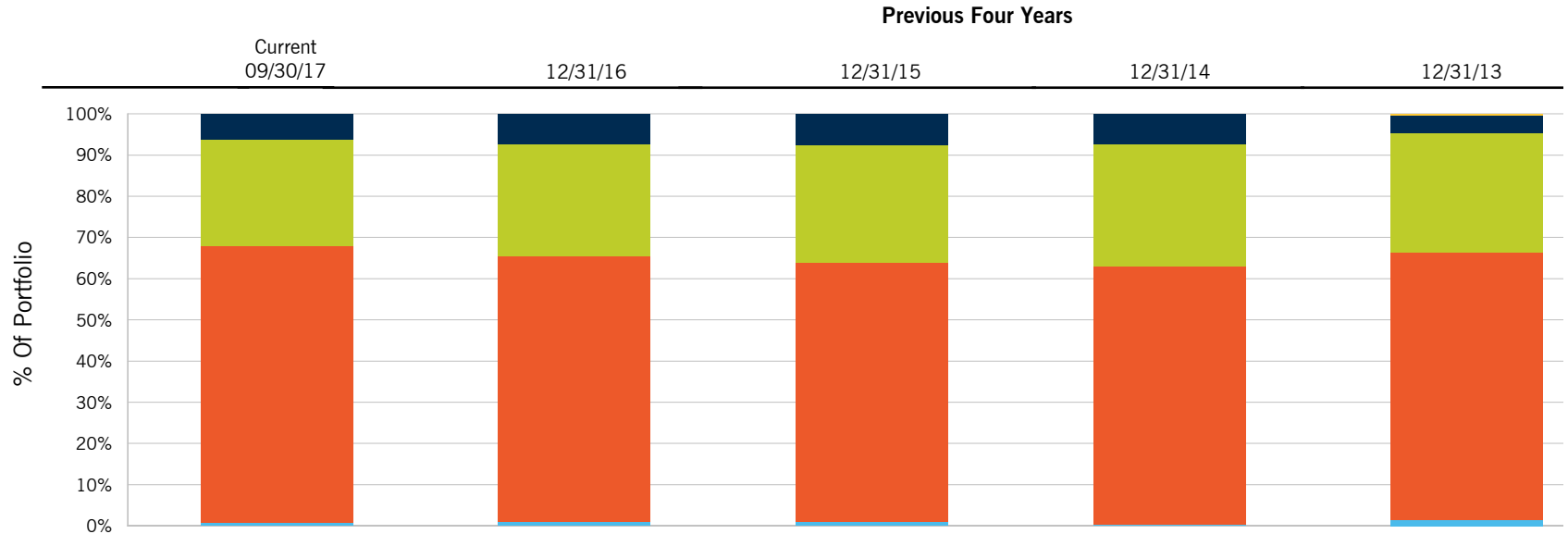
Total Value, % of Portfolio and % of Alternatives are based on US Dollar values.

ASSET ALLOCATION OVER TIME

VSC Managed Accounts

As of September 30, 2017 | Reporting Currency: USD

HISTORICAL ALLOCATION



% OF PORTFOLIO					
	Current 09/30/17	12/31/16	12/31/15	12/31/14	12/31/13
Cash	0.9%	1.1%	1.1%	0.4%	1.4%
Equities	67.0	64.3	62.9	62.5	65.0
Fixed Income & Preferreds	26.0	27.3	28.4	29.8	29.0
Alternatives	6.1	7.3	7.5	7.3	4.3
Other	-	-	-	-	0.3
% of Portfolio	100.0%	100.0%	100.0%	100.0%	100.0%
TOTAL VALUE					
Cash	\$243,710.86	\$277,910.66	\$254,589.42	\$106,084.82	\$306,417.74
Equities	18,351,513.20	15,816,288.51	14,265,615.90	14,992,590.65	14,551,953.38
Fixed Income & Preferreds	7,117,268.11	6,723,896.53	6,442,297.37	7,153,477.63	6,500,836.58
Alternatives	1,658,265.17	1,791,147.80	1,711,441.43	1,754,743.77	956,740.37
Other	-	-	-	-	64,295.35
Total Value	\$27,370,757.34	\$24,609,243.49	\$22,673,944.12	\$24,006,896.87	\$22,380,243.42

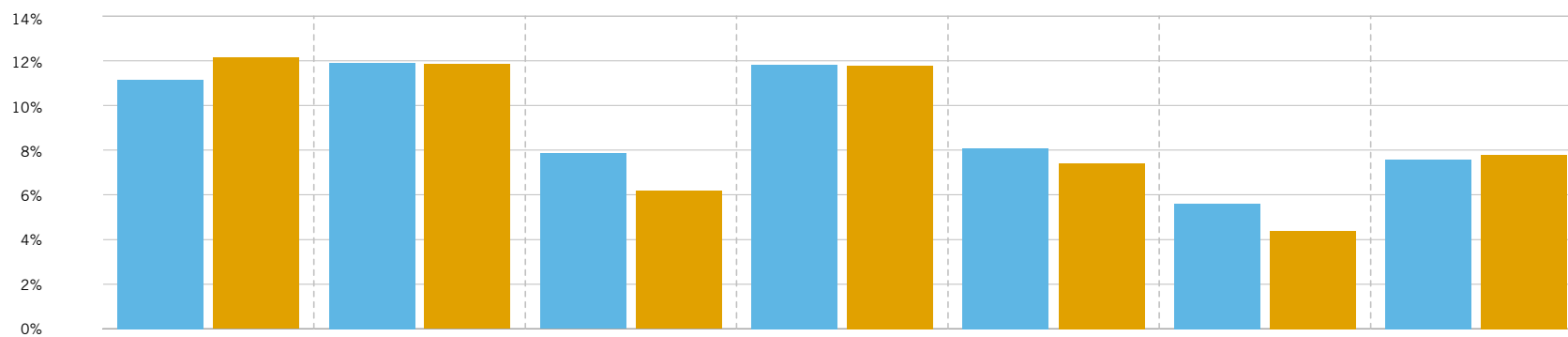
Change in Total Values does not denote performance and may be due to contributions/withdrawals, fees, market fluctuations and other causes. Periods prior to Jan 2014 do not reflect interest and dividend accruals and may be different from Total Values for performance purposes. Total Value and % of Equities are based on US Dollar values.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VSC Managed Accounts

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 02/27/03 - 09/30/17
Beginning Total Value	\$24,642,576.28	\$24,343,484.03	\$22,687,417.15	\$23,493,810.71	\$20,413,612.53	\$15,119,598.07	\$1,601,430.00
Net Contributions/Withdrawals	1,523.62	139,739.67	184,475.20	185,418.31	-1,861,077.31	496,818.85	10,070,072.19
Investment Earnings	2,748,835.98	2,909,712.18	1,770,683.93	2,779,696.21	8,840,400.66	11,776,518.96	15,721,433.69
Ending Total Value	\$27,392,935.87	\$27,392,935.87	\$24,642,576.28	\$26,458,925.22	\$27,392,935.87	\$27,392,935.87	\$27,392,935.87
Return % (Net of Fees)	11.15	11.89	7.85	11.83	8.09	5.60	7.58
65 MSCI ACWI 35 BC Agg	12.14	11.84	6.17	11.77	7.41	4.37	7.77

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

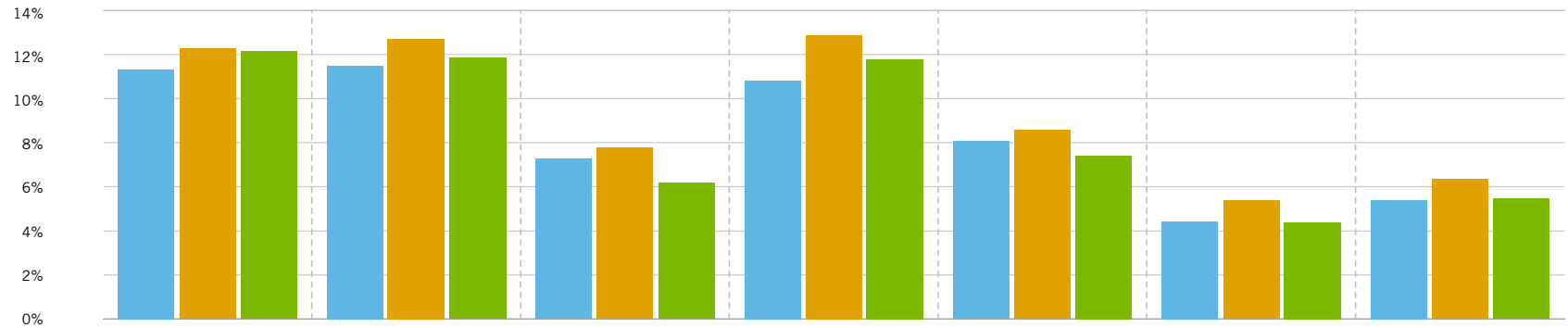
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VERMONT STATE COLLEGES 383-108872 - Consulting Group Advisor

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 04/21/06 - 09/30/17
Beginning Total Value	\$15,535,849.90	\$15,372,698.81	\$14,276,291.83	\$14,831,728.79	\$11,100,143.33	\$7,341,036.44	\$6,166,191.00
Net Contributions/Withdrawals	1,721,863.59	1,858,921.09	229,880.59	1,954,556.48	2,904,183.57	5,354,737.33	5,386,879.53
Investment Earnings	1,871,093.07	1,897,186.65	1,029,677.47	1,662,341.56	5,124,479.65	6,433,032.78	7,575,736.02
Ending Total Value	\$19,128,806.55	\$19,128,806.55	\$15,535,849.90	\$18,448,626.83	\$19,128,806.55	\$19,128,806.55	\$19,128,806.55
Return % (Net of Fees)	11.31	11.49	7.27	10.82	8.05	4.43	5.40
Custom Account Index	12.27	12.70	7.76	12.87	8.57	5.37	6.34
65 MSCI ACWI 35 BC Agg	12.14	11.84	6.17	11.77	7.41	4.37	5.45

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

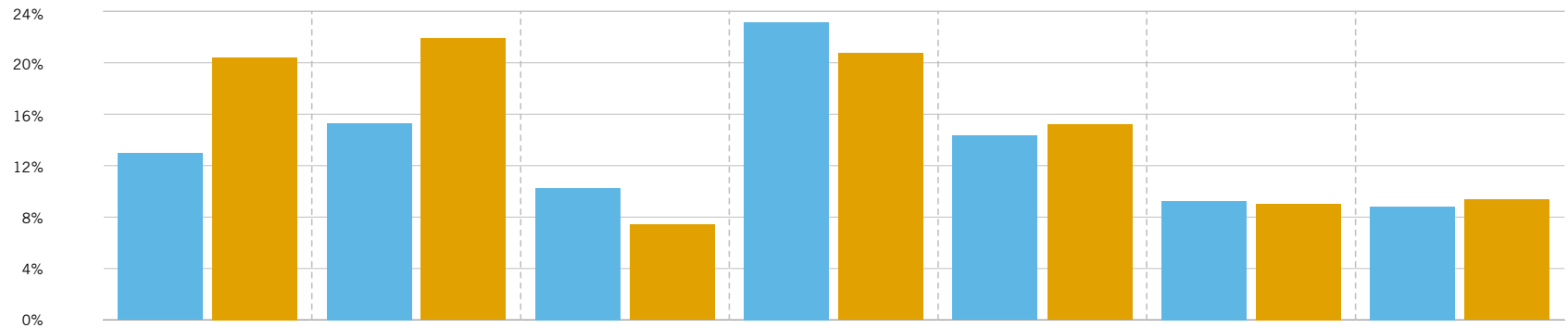
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VERMONT STATE COLLEGES 383-110533 - ClearBridge Multi Growth

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 04/21/06 - 09/30/17
Beginning Total Value	\$2,366,853.68	\$2,318,763.49	\$2,146,181.43	\$2,114,890.03	\$1,369,088.02	\$1,248,930.26	\$1,040,220.00
Net Contributions/Withdrawals	0.00	0.00	0.00	0.00	0.00	-310,000.00	-200,720.16
Investment Earnings	306,776.03	354,866.22	220,672.25	490,098.62	1,304,541.69	1,734,699.45	1,834,129.87
Ending Total Value	\$2,673,629.71	\$2,673,629.71	\$2,366,853.68	\$2,604,988.65	\$2,673,629.71	\$2,673,629.71	\$2,673,629.71
Return % (Net of Fees)	12.96	15.30	10.28	23.17	14.32	9.26	8.79
Russell 3000 Gr	20.43	21.87	7.39	20.72	15.19	9.04	9.36

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

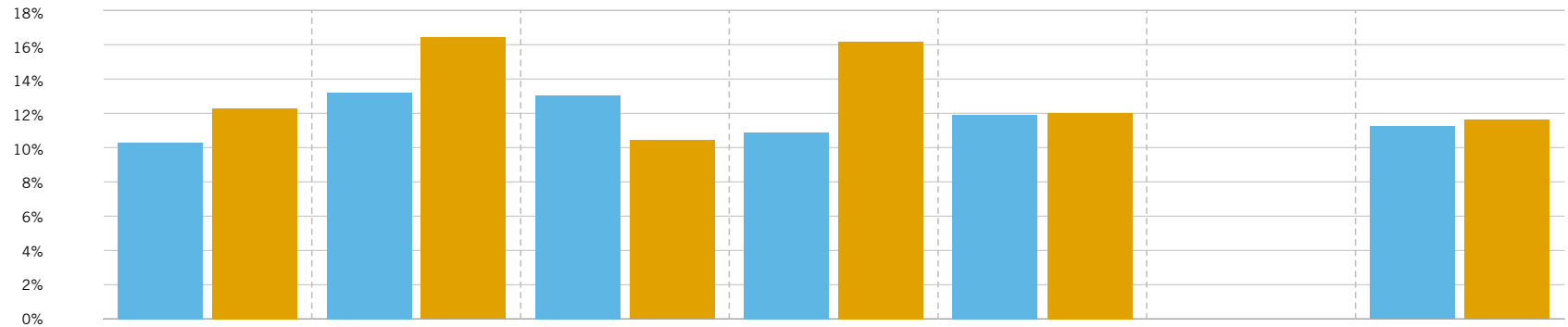
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VERMONT STATE COLLEGES 383-122584 - ThomasPartners

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 03/13/12 - 09/30/17
Beginning Total Value	\$2,365,048.22	\$2,304,773.13	\$2,092,143.31	\$2,268,563.81	\$2,110,837.31	-	\$2,052,342.00
Net Contributions/Withdrawals	0.00	0.00	0.00	0.00	-900,000.00	-	-900,000.00
Investment Earnings	243,465.28	303,740.37	272,904.91	246,404.33	1,397,676.19	-	1,456,171.50
Ending Total Value	\$2,608,513.50	\$2,608,513.50	\$2,365,048.22	\$2,514,968.14	\$2,608,513.50	-	\$2,608,513.50
Return % (Net of Fees)	10.29	13.18	13.04	10.86	11.90	-	11.22
Russell 3000 Price Return	12.29	16.41	10.41	16.19	11.99	-	11.60

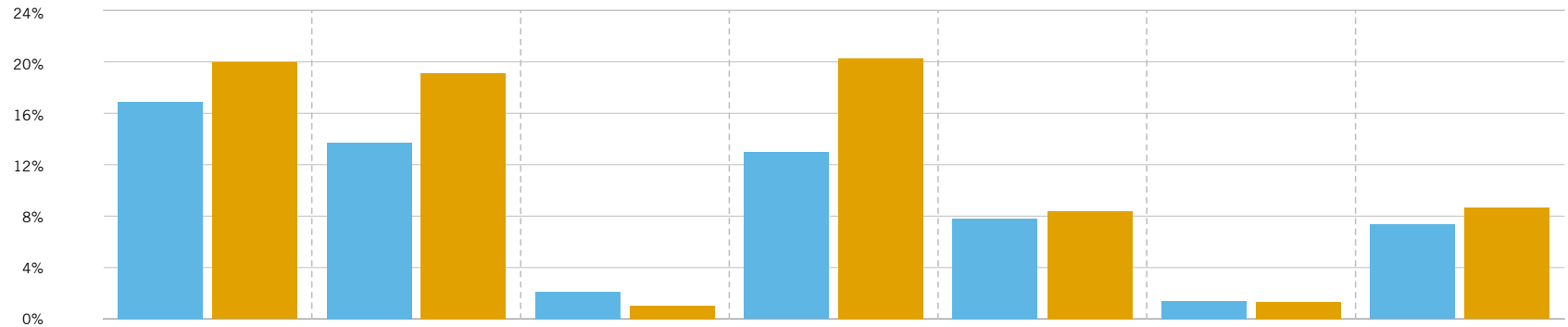
Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
 The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

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

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 02/27/03 - 09/30/17
Beginning Total Value	\$1,098,883.19	\$1,129,254.66	\$1,126,018.49	\$1,139,999.60	\$876,861.68	\$1,184,731.91	\$806,021.00
Net Contributions/Withdrawals	0.00	0.00	-50,000.00	-50,000.00	50,000.00	-44,999.60	-904,770.76
Investment Earnings	185,351.40	154,979.93	22,864.70	140,603.51	357,372.91	144,502.28	1,382,984.35
Ending Total Value	\$1,284,234.59	\$1,284,234.59	\$1,098,883.19	\$1,230,603.11	\$1,284,234.59	\$1,284,234.59	\$1,284,234.59
Return % (Net of Fees)	16.87	13.72	2.13	12.97	7.79	1.40	7.34
MSCI EAFE Net	19.96	19.10	1.00	20.27	8.38	1.34	8.63

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

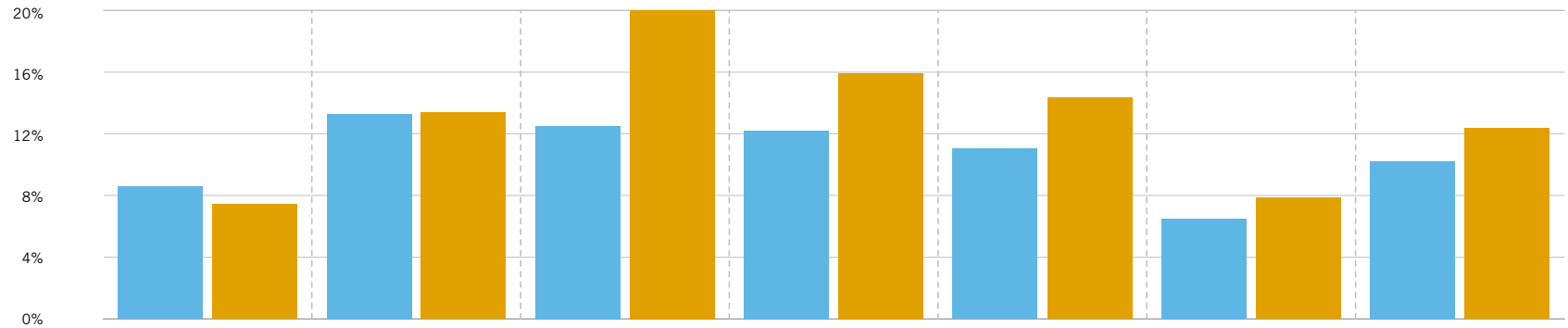
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VERMONT STATE COLLEGES 383-108918 - Anchor Mid Cap Value

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 02/27/03 - 09/30/17
Beginning Total Value	\$792,037.51	\$759,189.90	\$704,073.24	\$751,122.94	\$509,489.65	\$695,999.26	\$795,409.00
Net Contributions/Withdrawals	-200,000.00	-200,000.00	0.00	-200,000.00	-200,000.00	-450,000.00	-1,479,300.32
Investment Earnings	60,590.97	93,438.58	87,964.27	88,589.96	343,138.83	406,629.22	1,336,519.80
Ending Total Value	\$652,628.48	\$652,628.48	\$792,037.51	\$639,712.90	\$652,628.48	\$652,628.48	\$652,628.48
Return % (Net of Fees)	8.57	13.27	12.49	12.22	11.04	6.49	10.22
Russell Midcap Value	7.43	13.37	20.00	15.93	14.34	7.85	12.36

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

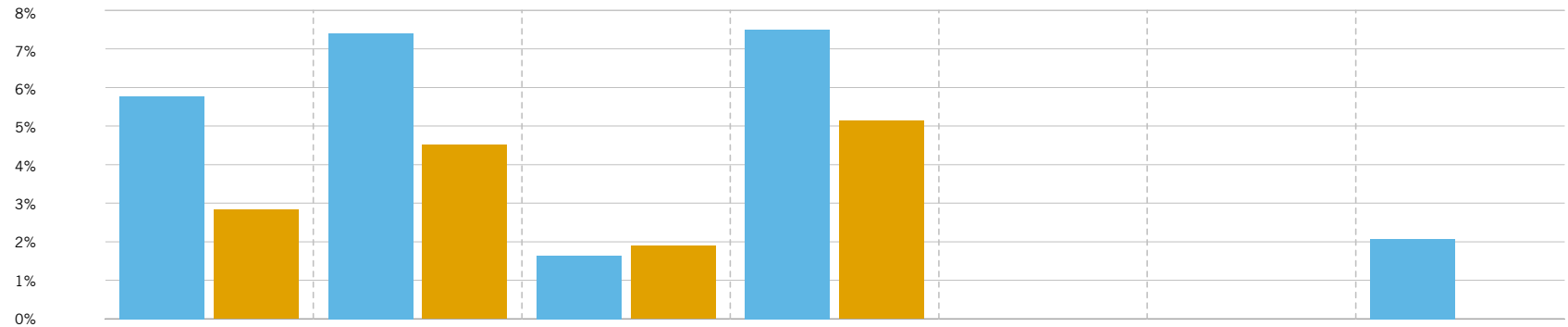
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

IRONWOOD 383-020918 - Alternative Investments Advisory

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 05/21/15 - 09/30/17
Beginning Total Value	\$512,553.17	\$504,153.69	\$501,853.14	\$490,056.88	-	-	\$0.00
Net Contributions/Withdrawals	1,734.40	2,337.39	2,376.24	2,359.27	-	-	518,142.94
Investment Earnings	29,695.59	37,492.08	8,323.79	36,826.11	-	-	25,840.22
Ending Total Value	\$543,983.16	\$543,983.16	\$512,553.17	\$529,242.26	-	-	\$543,983.16
Return % (Net of Fees)	5.78	7.41	1.64	7.50	-	-	2.07
HFRI FOF Conservative	2.83	4.51	1.89	5.13	-	-	-

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

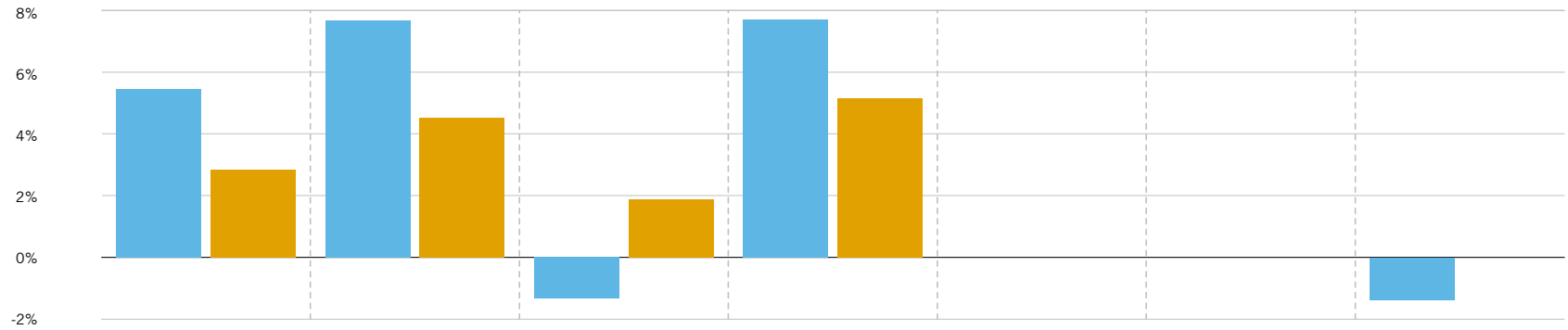
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

SKYBRIDGE 383-020919 - Alternative Investments Advisory

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 05/21/15 - 09/30/17
Beginning Total Value	\$473,724.84	\$463,347.88	\$477,753.67	\$453,549.95	-	-	\$0.00
Net Contributions/Withdrawals	1,603.79	2,159.35	2,218.37	2,180.72	-	-	517,438.37
Investment Earnings	25,811.26	35,632.65	-6,247.20	35,052.66	-	-	-16,298.49
Ending Total Value	\$501,139.88	\$501,139.88	\$473,724.84	\$490,783.33	-	-	\$501,139.88
Return % (Net of Fees)	5.44	7.67	-1.32	7.71	-	-	-1.38
HFRI FOF Conservative	2.83	4.51	1.89	5.13	-	-	-

Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.

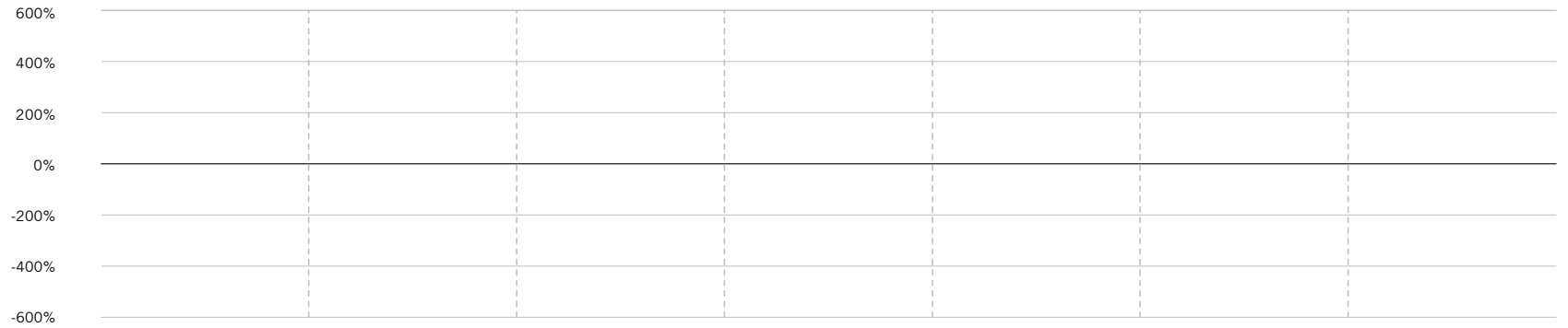
The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VERMONT STATE COLLEGES 383-108920 - AAA

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 02/28/03 - 09/30/17
Beginning Total Value	-	-	-	-	-	-	-
Net Contributions/Withdrawals	-	-	-	-	-	-	-
Investment Earnings	-	-	-	-	-	-	-
Ending Total Value	-	-	-	-	-	-	-
Return % (Net of Fees)	-	-	-	-	-	-	-
BC Gov/Cr Intm	-	-	-	-	-	-	-
Barclays Govt/Credit Bond	-	-	-	-	-	-	-
90-Day T-Bills	-	-	-	-	-	-	-

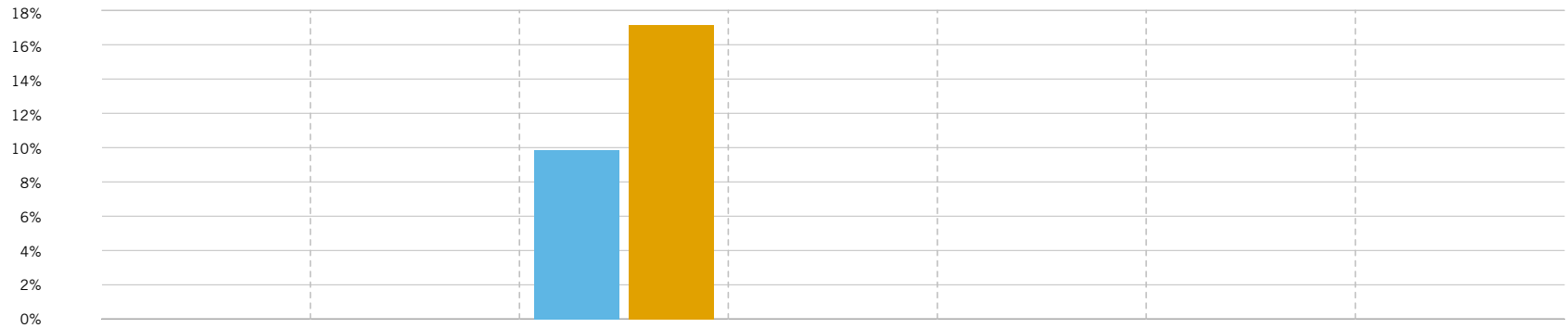
Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
 The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

TIME WEIGHTED PERFORMANCE SUMMARY - ADVISORY ASSETS ONLY

VERMONT STATE COLLEGES 383-110534 - AAA

As of September 30, 2017 | Reporting Currency: USD

RETURN % (NET OF FEES) VS. BENCHMARKS



	Year to Date 12/31/16 - 09/30/17	Last 12 Months 09/30/16 - 09/30/17	Previous Year 12/31/15 - 12/30/16	Custom Period 06/30/16 - 06/30/17	Last 5 Years 09/30/12 - 09/30/17	Last 10 Years 09/30/07 - 09/30/17	Performance Inception 04/21/06 - 09/30/17
Beginning Total Value	-	-	\$1,363,102.03	-	-	-	-
Net Contributions/Withdrawals	-	-	0.00	-	-	-	-
Investment Earnings	-	-	134,523.74	-	-	-	-
Ending Total Value	-	-	\$1,497,625.77	-	-	-	-
Return % (Net of Fees)	-	-	9.86	-	-	-	-
BC Corp High Yield TR	-	-	17.13	-	-	-	-

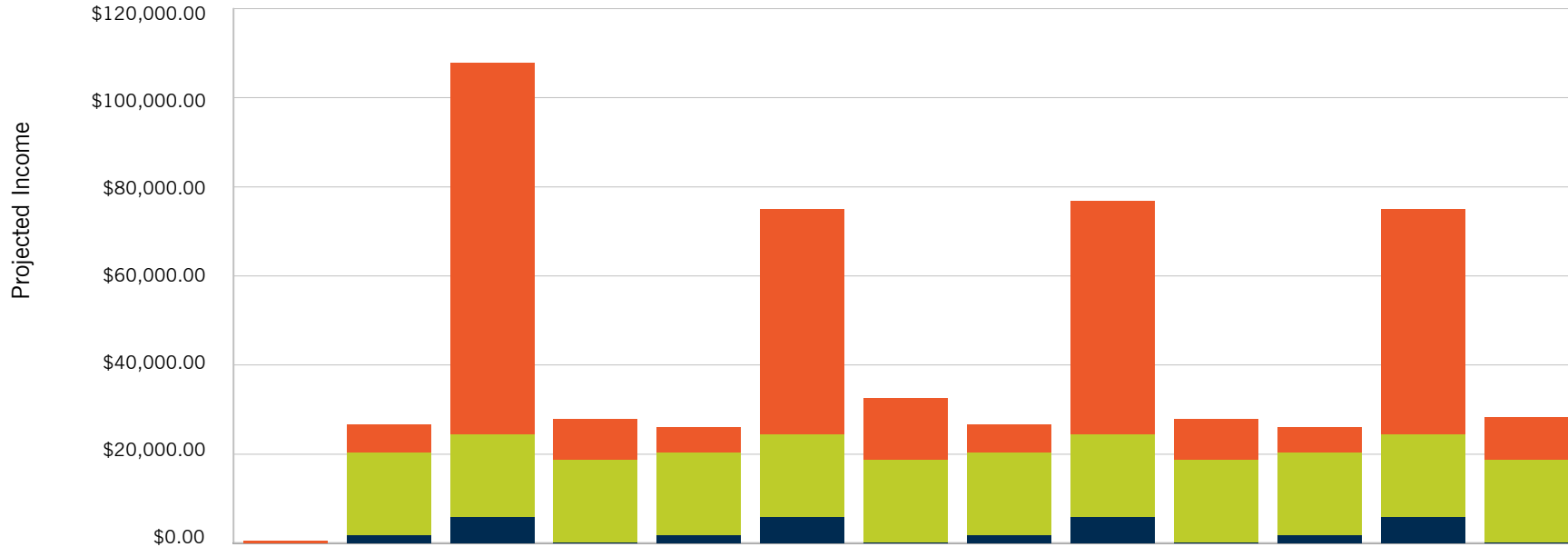
Inception dates for advisory account(s) reflect the most recent advisory program or discretion change.
 The investment returns shown on this page are time-weighted measurements which exclude the effect of the timing and amount of your contributions and withdrawals.

PROJECTED 12 MONTH INCOME SUMMARY

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PROJECTED 12 MONTH INCOME SUMMARY



Asset Class	Total Value 10/30/17	10/31/17 to 10/31/17	12 Month Projected Income (11/01/17 - 10/31/18)												% Yield		
			Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.		Total	
Cash	\$373,438	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equities	18,498,315	601	6,161	83,161	8,965	5,513	50,403	13,771	6,161	52,302	8,965	5,513	50,403	9,577	330,590	1.79	
Fixed Income & Preferreds	7,122,124	0	18,555	18,555	18,555	18,555	18,555	18,555	18,555	18,555	18,555	18,555	18,555	18,555	243,964	3.43	
Alternatives	1,699,929	0	1,896	5,936	257	1,896	5,936	257	1,896	5,936	257	1,896	5,936	257	32,356	1.90	
Total	\$27,693,806	\$601	\$26,612	\$107,652	\$27,777	\$25,964	\$74,894	\$32,583	\$26,612	\$76,793	\$27,777	\$25,964	\$74,894	\$28,389	\$606,910	2.19%	

Projected Income is calculated only for securities where data is available. In instances whereby payment frequency and/or last payment date is not available, income is based on the current dividend or coupon rate, and will be displayed in the Total column only.

DISCLOSURES

Explanatory Notes and Disclosure: This document is designed to assist you and your Financial Advisor in understanding portfolio positions, composition and subsets thereof. It is designed solely for your individual use, is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security. Do not take action relying on this information without confirming its accuracy and completeness. Please read carefully all accompanying notes and disclosures provided in this Document.

For convenience purposes, your Financial Advisor may have assigned a designated name for this Document. The list of the accounts covered in this document is noted herein and may not include all of your accounts with us or external custodians. Furthermore, the information included in this document may not include all asset classes/securities/liabilities held by you at the firm or external custodians. Please review this document carefully and discuss any questions you may have with your Financial Advisor. If you do not understand an entry, suspect an error, or want more details on current values or other information, contact your Financial Advisor. This document is based upon your Morgan Stanley account holdings and may include other holdings/information that you or a third party provided about assets custodied elsewhere. Morgan Stanley will not verify any other holdings/information. If any information reflects assets held away from Morgan Stanley that will be indicated. The information contained in this document is subject to, and does not supersede the confirmations and account statements you receive from us. Values shown in your official account statement may differ from the values shown in this document due to, among other things, different reporting methods, delays, market conditions and interruptions. If there are discrepancies between your official account statement and this document, rely on your official account statement.

The information in this document is approximate and subject to updating, correction and other changes. We are not obligated to notify you if information changes. Although the statements of fact and data in this document have been obtained from, and are based upon sources that we believe to be reliable, we do not guarantee their accuracy, or timeliness, and any such information may be incomplete or condensed. Percentage values shown in this document are subject to rounding, which may impact total values. The values of securities and other investments not actively traded may be estimated or may not be available.

This information is provided for informational purposes only and should not be used for tax preparation. The information reported on your Form(s) 1099 supersedes the information provided in this report and should be exclusively relied upon for tax preparation. Morgan Stanley, its affiliates and its employees are not in the business of providing tax or legal advice. Clients should seek advice based on their particular circumstances from an independent tax and legal advisor. Morgan Stanley Smith Barney LLC is a registered Broker/Dealer, Member SIPC, and not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

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 "-".

Timing of Feeds - FX Market: The FX market rate used to convert non-US Dollar values to US Dollars is as of the previous business day's close. For the current FX rates, please contact your Financial Advisor.

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, 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

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Assets include life insurance and annuities as well as Manually Added and External accounts, assets and liabilities.

Unless otherwise indicated, performance is a composite calculation of 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: Projected 12 Month Income is based upon cash income from interest, cash dividends, and partnership distributions. It is a hypothetical projection calculated using current yields. The projected income referenced is based upon certain market projections effective as at today's date only and can change at any time. Such projected income is hypothetical, do not reflect actual investment results, and is not a guarantee of future results. The projected income is referenced for illustrative purposes only. Morgan Stanley does not represent or guarantee that the projected income referenced will or can be attained. The actual income may be lower or higher than the projections based upon a variety of factors and assumptions. The projected income shown may under or over compensate for the impact of actual market conditions and other factors. We make no representation or warranty as to the reasonableness of the assumptions made, or that all assumptions used to construct this projected income information have been stated or fully considered. To the extent that the assumptions made do not reflect actual conditions, the illustrative value of the hypothetical projected income will decrease.

The projected income referenced may include income from Morgan Stanley & Co. and External Accounts, where data is available. Such information was obtained from third party sources which Morgan Stanley believes to be reliable. However, we make no representation or guarantee that the information is accurate or complete. You should not rely upon this information to make any investment decision. Please refer to the official account statements and performance reports you received from your custodian and/or financial institution for information about projected income in your External Accounts. The projected income referenced does not include income from assets in Manually Added External Accounts.

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. While alternative mutual funds offer some advantages, generally they must utilize a more limited investment universe and,

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therefore, will have relatively higher correlation with traditional market returns. Additionally, open-end mutual funds are statutorily limited in their use of leverage, short sales, and the use of derivative instruments as compared to hedge funds.

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 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.

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States.

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 guarantee 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

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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

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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 guarantee 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 eligible, 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. 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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 guaranteed by

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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**

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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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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.

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

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

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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)** are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. 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. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV, and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

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 90 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 of broad asset classes. Morgan Stanley Wealth Management retains the right to change 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 guarantee 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

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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 Asset Class referenced and includes the accrual of interest and dividends. Total Value in the Asset Allocation view prior to January 2014 does not reflect the accrual of interest and dividends. Total Value for Morgan Stanley & Co. and External accounts also does not include accrued interest and dividends.

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, 1.00% Citi 90-Day Treasury, 9.00% 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,

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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 90-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 90-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.

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.

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 returns are made available by HFRI 4 months after a particular month end. Please contact your Financial Advisor for more information.

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 representing 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.

VSC Managed Accounts

Prepared on October 31, 2017 | Reporting Currency: USD

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.

90-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 90-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 Comp: 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.

VSC Managed Accounts

Prepared on October 31, 2017 | Reporting Currency: USD

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 9:
Discussion of Fossil Free VSC Requests

CASTLETON UNIVERSITY
COMMUNITY COLLEGE OF VERMONT
JOHNSON STATE COLLEGE
LYNDON STATE COLLEGE
VERMONT TECHNICAL COLLEGE



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

TO: Chancellor Jeb Spaulding
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

A handwritten signature in blue ink, appearing to read "Steve Wisloski", with a long horizontal flourish extending to the right.

DATE: November 21, 2017

SUBJ: Discussion of Fossil Free VSC Requests

At the Finance and Facilities Committee's meeting on May 9, 2017, Fossil Free VSC presented a petition to the Board of Trustees and Chancellor "calling upon the Vermont State Colleges System to take concrete steps to align its banking/investing with environmental and racial justice," and requesting several specific actions related to the System's finances. This memorandum provides my understanding of each of these requested actions, a discussion of related considerations, and estimated potential costs related to implementation.

Both the System and its Institutions – Castleton University, the Community College of Vermont, the new Northern Vermont University and Vermont Technical College – broadly share Fossil Free VSC's objectives, having completed and continuing to pursue a wide range of projects and initiatives both to reduce their consumption of fossil fuels, and to be responsible stewards of our environment and our planet. These efforts range from constructing large-scale solar arrays and entering into long-term renewable energy purchase agreements, to obtaining LEED certifications for campus facilities, to installing highly efficient LED lighting and insulation. A more detailed list of System-wide projects and initiatives is included in the Attachment 1 hereto.

In addition, in September the System became one of the inaugural members of the Vermont Climate Pledge Coalition to reduce fossil fuel use by 26% from 2005 to 2025, vowing that:

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Evaluation of Fossil Free VSC Requests
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The Vermont State Colleges System stands firmly with Governor Scott, Mayor Weinberger, and the countless other community leaders who are committed to doing all we can to abide by our commitment to the Paris Agreement. At Vermont State Colleges System, we're training tomorrow's leaders in sustainability, and growing the clean energy workforce to tackle climate change.

The System is actively participating with the Coalition, with a team comprised of representatives from each of the Institutions and the Chancellor's Office.

Fossil Free VSC's Requests

Fossil Free VSC's petition included a transmittal letter listing four specific requests as follows:

- (1) publicly divesting the fossil fuel investments from the ~\$25M endowment;
- (2) selecting and publicly moving to a green investment company to replace Morgan Stanley;
- (3) searching out and publicly moving to a bank that can both handle the VSC's size and has a green/justice-friendly commitment; and
- (4) assessing the institutions that hold our debt, and publicly initiating a transition plan insofar as necessary.

A discussion of each of the above requests follows. In general, the requests range along a spectrum from having technical considerations and moderate costs (in the case of divestment), to having more complex considerations and potential negative consequences (terminating Morgan Stanley or TD Bank), to being potentially extremely costly and possibly impracticable (in the case of transitioning the System's debt).

1. Divesting fossil fuel investments from the System's endowment

Divesting fossil fuel investments from the System's endowment is possible to implement, at moderate annual cost and/or greater variability of expected returns.

Fossil fuel divestment means, in its purest form, eliminating all investable assets (stocks, bonds, commodities, etc.) in companies in the oil, natural gas, coal and related industries. As a practical matter, divestment includes a range of approaches with respect to types of assets and industries targeted, and timelines for implementation.

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Within Vermont, institutional response to divestment requests has ranged from declining to do so, such as the Vermont Pension Investment Committee (VPIC), with \$4.3 billion of assets under management, University of Vermont (\$468 million), and Middlebury (\$1 billion), to fully divesting, such as Sterling College (\$1.1 million), Green Mountain College (\$3 million), and Goddard College (\$1 million). Outside Vermont, a number of institutions have also selected a range of approaches, from not divesting (Harvard, \$37.6 billion), to fully divesting (Unity College, \$14 million), to partially divesting, often from coal (Stanford, \$22.4 billion; Georgetown, \$1.5 billion; University of Maine, \$180 million).

Attempting to quantify the impact of fossil fuel divestment is a matter of some debate. In general, according to Modern Portfolio Theory, to the extent an investor constrains the range of investments available, then the investor either lowers expected return, increases risk, or both. Both the Vermont State Treasurer's Office¹ and NEPC LLC², an investment consultant, attempted to quantify the impact of divesting all fossil fuel investments from the then approximately \$3.6 billion portfolio administered by VPIC. The Treasurer's Office concluded that full divestment would cost approximately \$10 million or about 0.28% per year in expected return. NEPC estimated a range of costs including higher management fees and lower return of between \$5.7 million and \$12 million, or 0.16% to 0.33%. Assuming roughly comparable asset allocations, applying these estimates to the System's considerably smaller \$27.5 million portfolio would imply potential lower returns of between \$44,500 and \$91,000 annually.

Morgan Stanley, the System's investment advisor, identified two additional considerations related to the structure of the System's portfolio that could further increase the cost of pursuing divestment. Of the System's fossil fuel exposure, approximately 63% arises from investments in very low cost, broad market index exchange-traded funds (ETFs), and the remaining 37% arises from individually held stocks that are part of externally managed portfolios. In the former case, switching to fossil-free screened indices could increase the System's management fees for those funds from 0.04% by as much as tenfold to 0.40%, and these funds tend to have slightly higher volatility within their respective investment categories. In the latter case, external managers may limit the number of companies they are willing to screen if they conclude they are no longer able to perform relative to their benchmarks; divesting would then entail changing external managers.

¹ Matthew Considine, "Analysis of fossil-fuel divestment legislation (H.271) on VPIC portfolio," http://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/Office%20of%20the%20State%20Treasurer.%20Nov_2014_13.pdf, (February 20, 2013).

² Doug Moseley, "Preliminary Analysis of Potential Impact of Energy Sector Divestment," http://www.vermonttreasurer.gov/sites/treasurer/files/VPIC/PDF/NEPC_Feb2013_VPIC%20Energy%20Divestment%20Analysis.pdf, (February 22, 2013).

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However, Morgan Stanley did believe that a “viable and competitive portfolio could be constructed.”

Morgan Stanley proposed four possible approaches along a continuum as follows:

- Continue to manage assets towards the mission to receive the highest return for a given level of risk (i.e., no changes)
- Maintain the current structure of the portfolio but remove a list of identifiable specific fossil fuel companies (for example, Exxon, Chevron, etc.)
- Convert a portion of the portfolio to sustainable and/or environmental, social and governance (ESG) objectives, and if performance is comparable, then consider growing this allocation over time
- Replace the entire portfolio with ESG investments, resulting in full divestment and entailing a complete restructuring of the portfolio

As a final note, pursuing divestment or other ESG-related investment objectives likely would necessitate corresponding changes both to Policy 430, Endowment Investment and Spending Policy, and to the accompanying Investment Policy Statement.

2. Selecting a green investment company to replace Morgan Stanley

Selecting an acceptable green investment company to replace Morgan Stanley might be accomplished through a standard request for proposals process, however it presents several considerations.

Fossil Free VSC notes that Morgan Stanley is one of 35 financial institutions identified by Food & Water Watch as “funding the Bakken pipeline³.” Specifically, Morgan Stanley is listed as providing \$225 million or 2.2% of the \$10.25 billion of total financing to the Energy Transfer Family of firms. The full list of firms, with their respective amounts of financing provided, is included as Attachment 2.

Morgan Stanley currently serves as investment advisor for the System’s endowment, and through the most recent quarter ending September 30, 2017 has out-performed its benchmark (65% global stocks, 35% global bonds) on a net-of-fees basis over both five-year and ten-year periods. More generally, during its engagement with the System Morgan Stanley has been responsive to the System’s client service needs, providing access to a broad range of low-cost investment

³ Jo Miles, Hugh MacMillan, “Who’s Banking on the Dakota Access Pipeline,” <https://www.foodandwaterwatch.org/news/who%27s-banking-dakota-access-pipeline>, (September 6, 2016)

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vehicles, oversight and due diligence on investment managers, investment policy development and review, detailed holdings and performance reporting, and regular in-person meetings with experienced, senior professional staff.

A proposal to terminate the System's relationship with Morgan Stanley, both in general and specifically related to green investing, raises several considerations:

- (1) it sets a precedent of terminating, with no apparent recourse, a long-standing and otherwise positive business relationship for newly-identified objectives;
- (2) it does not take into account the positive environmental initiatives that such firms undertake, including providing substantial investment capital for renewable energy, and designing investment products (e.g., green bonds) to promote environmental goals;
- (3) it likely constrains the available range of investment advisory firms, to the extent firms with any tie to fossil fuels are not considered green or otherwise are excluded; and
- (4) to the extent that a green investment company emphasizes "impact investing" or other concepts that do not prioritize maximizing return for a given level of risk, it is not clear that such a firm will be aligned sufficiently with the System's objectives, unless the System adjusts its objectives.

The Chancellor and I recently met with Morgan Stanley to discuss approaches to divestment, and Fossil Free VSC's concerns generally, and they have offered to meet with the Committee to provide their perspective on Morgan Stanley's positive environmental and social contributions.

3. Moving to a bank that has a green/justice-friendly commitment

Moving to a bank that has a green/justice-friendly commitment might be possible, but presents some additional considerations.

As was the case with Morgan Stanley, TD Securities is shown on the Food & Water Watch list as providing \$365 million or 3.6% of the \$10.25 billion of total financing to the Energy Transfer Family of firms. The System's banking services provider, TD Bank, N.A. and TD Securities are both subsidiaries of parent company Toronto-Dominion Bank.

The considerations related to this request are similar to those identified with replacing Morgan Stanley, with three additional concerns:

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- (1) Unlike investment advisory, which can be provided by a range of types of firms (banks, investment managers, financial advisors, consultants, etc.), banking services by definition are only provided by banks and credit unions; this further limits the universe of potential alternatives to TD Bank;
- (2) The System's size and number of transactions are such that it requires a relatively large bank to provide services (depository and payment accounts, checking, wiring funds, daylight overdraft, drop box, ancillary services, etc.); as a practical matter the System likely would be limited to only a few banks with a significant local presence, and again the extent of fossil fuel financing provided by these banks is not known; and
- (3) Conversion of the System's core banking services relationship would entail a large number of very time-intensive and specialized tasks that would need to be planned and staffed in advance.

The Chancellor and I recently convened a conference call with TD Bank to discuss Fossil Free VSC's concerns, and they have offered to meet with the Committee to provide their perspective on TD Bank's positive contributions, and offered to arrange a conference call with Toronto-Dominion Bank's Chief Environmental Officer.

4. Assessing the institutions that hold our debt, and publicly initiating a transition plan insofar as necessary

Of Fossil Free VSC's four requests, this one seems least likely to be practicable, or at least would be prohibitively costly to implement while increasing the System's risks.

I interpret this request to mean reviewing the System's lenders and debt holders to determine which ones also invest in fossil fuel related enterprises, and attempting to refinance (in effect, to "reverse divest") our debt away from these lenders, and prohibit such lenders from providing loans to the System or otherwise owning its debt going forward.

The System's outstanding debt, which stood at just over \$129 million as of June 30, 2017, is comprised entirely of long term, fixed rate and publicly traded tax-exempt municipal bonds. This is part of a deliberate strategy to achieve the lowest-risk cost of funds that will not fluctuate with interest rates, is not subject to the mark-to-market and counterparty risk associated with interest rate swaps, and otherwise is not subject to yearly compliance with onerous covenants that, for example, trigger higher interest rates or accelerate principal repayment. In spring 2017, the

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System developed a new, State appropriation-backed AA-rated credit that should protect the System's ability to access the capital markets at relatively low interest rates going forward. The System also used this new credit structure to refinance its existing privately placed debt with TD Bank.

The System's bonds are traded in denominations of \$5,000 and are broadly available for purchase by corporations, investment funds, and individual investors. In general, this enables the System to reach the widest possible range of investors, who must then compete with one another to own the System's bonds, and in doing so must accept lower interest rates. This market mechanism helps to lower the System's cost of borrowing, and each one-tenth of one percent (0.10%) reduction in interest rates that the System has received by the operation of the municipal market has saved the System \$129,000 per year in interest payments.

There is no mechanism to prohibit investors from holding the System's publicly traded debt, so effecting a "reverse divestment" would require funding from one or more qualified non-fossil-fuel investors. Finding such investors with sufficient capital might prove challenging; the 35 financial institutions identified in the Food & Water Watch list include the top seven⁴ municipal bond underwriting firms: Bank of America, Citi, J.P. Morgan Chase, Morgan Stanley, RBC Capital Markets, Wells Fargo and Goldman Sachs. The list also includes most banks, such as TD Bank, that are large enough to provide private placement (that is, not publicly traded) loan financing adequate to refinance the System's debt.

Assuming that one or more acceptable investors were able to loan the System sufficient funds to effect a refinancing, it is not clear what the terms of the financing would be, but it seems highly likely that they would be less favorable than the terms of the System's publicly traded bonds, which provide almost no recourse to investors. Most significantly, the interest rate associated with such a loan likely would be materially higher than the rate available in the public markets; a plausible estimate is 1.00% to 2.00% higher, resulting in additional debt service expense to the System of between \$1.3 million and \$2.6 million each year, or 0.75% to 1.5% of the System's annual operating budget.

⁴ Martin Z. Braun, "Goldman Leaps into the Ranks of Top Municipal Underwriters With Big Sales," <https://www.bloomberg.com/news/articles/2017-07-03/goldman-leaps-into-ranks-of-top-muni-underwriters-with-big-sales>, (July 3, 2017)

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Conclusion and Next Steps

Should the Committee require additional information or wish to pursue one or more of these requests, I propose to provide further analysis or to bring an implementation plan, as appropriate, to the Committee's next scheduled meeting on January 29.

I hope that this memorandum has been helpful to the Committee in describing Fossil Free VSC's requests, enumerating the various considerations and costs, and in facilitating the Committee's discussion of each. I also hope that it reasonably demonstrates to Fossil Free VSC and other environmentally engaged and dedicated members of the Vermont State Colleges System community both a thoughtful consideration of their requests, and an assurance of the dedication of the System and its Institutions, in both mission and their actions, toward being effective stewards of the climate and the environment.

Should you have any questions regarding this memorandum, please contact me at stephen.wisloski@vsc.edu or (802) 224-3022. Thank you.

Attachments:

1. Vermont State Colleges System fossil fuel reduction initiatives
2. "Who's Banking Against the Sioux?" list of financial institutions

cc: Professor Brendan Lalor, Fossil Free VSC

Attachment 1 – Vermont State Colleges System Fossil Fuel Reduction and Environmentally Responsible Initiatives (Partial List)

Entire System

- One of the inaugural members of the Vermont Climate Pledge Coalition, to Coalition to reduce fossil fuel use by 26% from 2015 to 2025
- Regularly partners with Efficiency Vermont to study and apply best practices for prioritizing capital projects
- Established Green Revolving Fund to self-finance a number of campus projects

Castleton University

- Established student-led Green Campus Work Group to oversee campus recycling efforts and to promote other sustainable efforts
- Established “No Idling” policy
- Established comfort policy, which mandates reasonable temperature settings in all campus facilities
- Added 22 water filling stations, which to date have saved over 600K water bottles from reaching a landfill
- Added 120 panel (29K kW) solar array on the roof of a residence hall
- Added four (4) micro wind turbines (1kW) atop a residence hall
- Added a solar powered electric car charging station with two terminals
- Campus Center and Hoff Hall both LEED Gold Certified
- Implemented “Vortex” technology at Spartan Arena allowing for cold water in ice making operations (20% utility savings)
- Replaced all windows in Woodruff Hall and Library with energy efficient units
- Working with Efficiency Vermont, have replaced lighting in many campus buildings with more efficient units

Community College of Vermont

- Constructed CCV-Winooski as a LEED certified building
- All construction projects completed with LEED principles
- Solar array being built which will realize electric credits from Winooski and Montpelier buildings when operational
- Partner with Efficiency Vermont for all of our new projects
- In the process of upgrading HVAC control systems to better control the energy usage in owned buildings

Northern Vermont University

- LED lighting - 1st in Vermont to change parking lot and road way lighting from conventional to LED technology. Changed 200 w/ mtl halide light to a 79w LED light – amounted to 60% reduction in wattage; had photo sensors installed to regulate, which reduced consumption.
- Lighting projects; biggest impacts include gymnasium, Theater lighting, Residence halls
- Occupancy sensors campus wide – cut use by controlling when needed
- HVAC air handling units replaced w/ energy efficient units (equipped w/ energy recovery) – Vail, Harvey, Activities, & Dining Hall
- Pool Cover saves about \$19,000 a year or 49,700 KWH
- Replacing circulator pumps w/ variable speed pumps as they fail; if it does not need to run we can shut off or ramp down
- Downsizing exhaust fans where applicable
- Dining cooking exhaust equipped w/ sensors so fans ramp up when sensing heat or smoke
- Heating controls in Wheelock as windows were open in mid-winter, in order to regulate temps; occupants happy and windows closed in the winter
- New windows in all the residence Hall has greatly increased the efficiency by tightening up the building envelope
- Insulation in all the heating alcoves under windows has greatly increased the efficiency along w/ exterior foam panels that also gave a nice aesthetic effect
- All new construction and renovations used standards provided by Vermont Guidelines for Energy Efficient Commercial Construction; newest building used LEED standards and awarded Gold.
- 2 solar projects: One 5KW pv system and the other is a solar hot water system used to heat the pool during the summer months and supplement heating during the winter
- New dehumidification units being installed for the pool. These units are estimated to save over \$20,000/year
- A new burner & controller will be installed to one of the Activities boilers, which will greatly increase the efficiency

Vermont Technical College

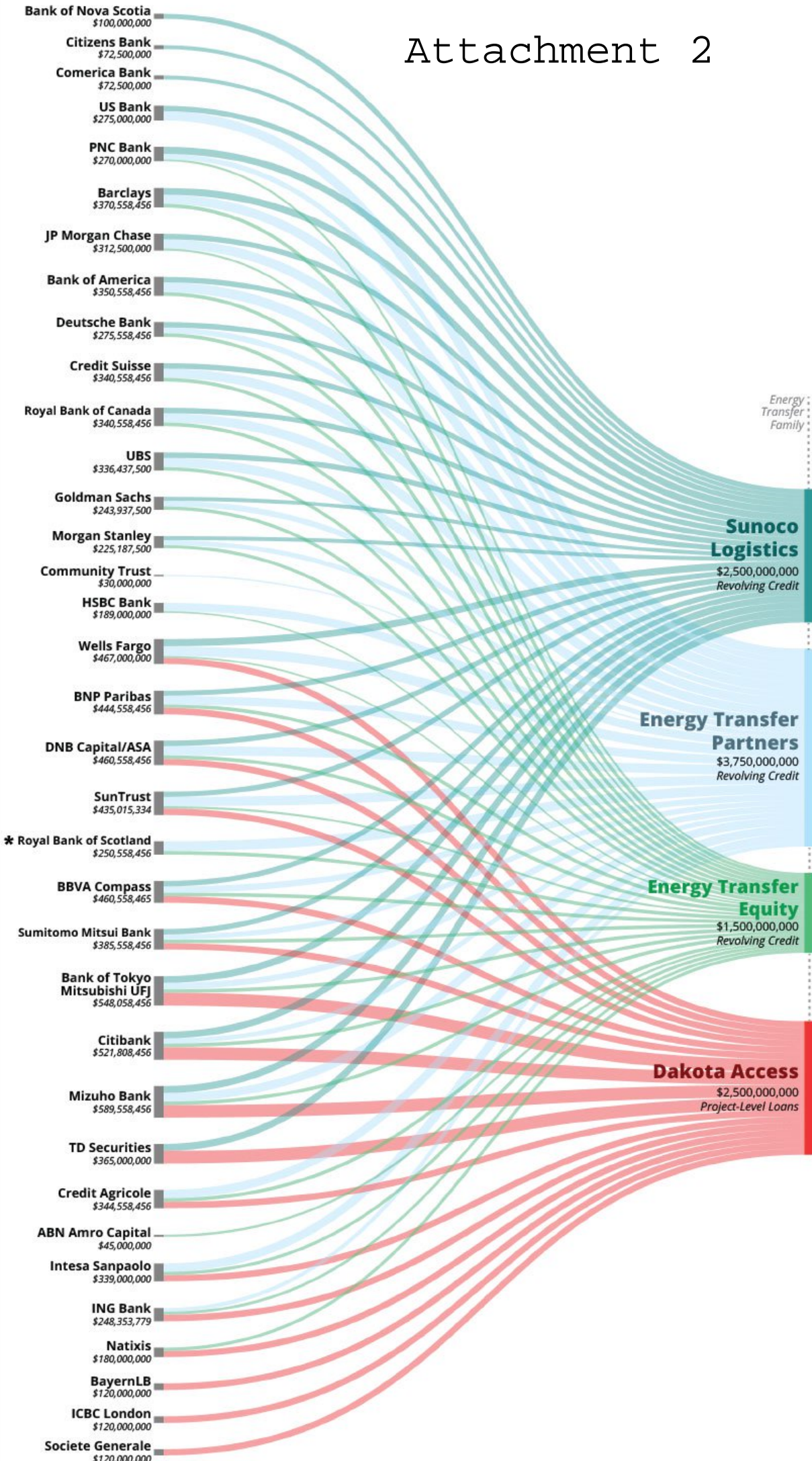
- Green power installations (on site facilities have electrical generating capacity in excess of campus usage)
 - 370 kW Anaerobic Digester
 - 500 kW Solar tracker array
 - Wind Turbine (not currently producing, but has in the past)
 - Biomass Boiler (heats the Red School House)
- Academic (“moves the line” training next generation of green professionals)
 - Renewable Energy B.S. program
 - Participated in the Green Jobs Initiative earmark through Leahy’s office
 - Offered Energy Efficiency and Renewable Energy certificates through the Vermont Green grant
- Participated in an IBM sponsored Energy Initiative (CY 2012) resulting in a 6.6% overall reduction in electricity consumption on our main campuses
- A number of smaller initiatives, such as the replacement of exterior lighting with LED

Who's Banking Against the Sioux?

Funding Behind the Bakken Pipeline



Attachment 2



UPDATED ON DECEMBER 5, 2016

If you believe any of this information is no longer accurate, please send documentation and your contact information to hmacmillan@fwwatch.org.

*RBS claims to have exited the funding relationships by November 2015 but declined to provide documentation substantiating that claim.

SOURCES: Bloomberg Terminal data on Dakota Access, LLC provided by Rainforest Action Network on November 8, 2016; Energy Transfer Equity, SEC Form 8-K filed February 17, 2015, accessed at <http://bit.ly/2cqZ07Y>; Energy Transfer Partners, SEC Form 8-K, filed February 17, 2015, accessed at <http://bit.ly/2bBVotA>; Sunoco Logistics Investor Presentation - July 2016, accessed at <http://bit.ly/2ceCg9X>.

Item 10:
FY2018 Committee Meeting Schedule

**Finance and Facilities Committee
Meeting Schedule for Fiscal Year 2018
as of December 1, 2017**

Mtg #	Date	Topic Count	Northern Vermont University	System Shared Services	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 due 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 Cancelled; Board of Trustees Meeting to include update on Northern Vermont University, and presentation on Admissions and Enrollment												
2	Wed, Oct 25, 2017	5			Initial discussion informed by Q1 FY18 results		Review final Fall 2017 Enrollment, Q1 FY18 Results, Reserves	Big Bill due 10/16, Capital Bill due 10/27, BAA TBD			Capital projects list review			Introduce Policy 504, Campus Safety Policy	
3	Thu, Dec 1, 2017 *	8			FY2019 and 3-year initial System outlook	Discuss amending Policy 301, Residency for In-State Tuition	Vote to approve carryover, System funds discussion	Vote to approve budget request, BAA proposal (if any)	Regular quarterly report (per Policy 404), response to FFVSC		Vote to approve capital projects list			Vote to approve Policy 504, Campus Safety Policy	VSC report (Act 85 Sec. E.101(c)) due to Legislature Jan 15
4	Mon, Jan 29, 2018	6			3-year enrollment and budget outlooks		Q2 FY18 Results			Annual surveillance from S&P, rating update		Deferred maintenance update		Policy 403 discussion	AGB Report update
5	Mon, Feb 19, 2018 *	5			Preliminary FY19 Budgets discussed				Regular quarterly report (per Policy 404)	Debt "201" discussion				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

* Last meeting before quarterly Board of Trustees Meeting