

### Stanislaus County Employees' Retirement Association

832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

#### AGENDA

### BOARD OF RETIREMENT 832 12<sup>th</sup> Street Ste. 600, **Wesley W. Hall Board Room**

#### May 24, 2016 1:30 p.m.

#### Modesto, CA 95354

The Board of Retirement welcomes you to its meetings, which are regularly held on the third Wednesday of each month. Your interest is encouraged and appreciated.

CONSENT ITEMS: These matters include routine administrative actions and are identified under the Consent Items heading.

**PUBLIC COMMENT:** Matters under jurisdiction of the Board, may be addressed by the general public before or during the regular agenda. However, California law prohibits the Board from taking action on any matter which is not on the posted agenda unless it is determined an emergency by the Board of Retirement. Any member of the public wishing to address the Board during the "Public Comment," period shall be permitted to be heard once up to three minutes. Please complete a Public Comment Form and give it to the Chair of the Board. Any person wishing to make a presentation to the Board must submit the presentation in written form, with copies furnished to all Board members. Presentations are limited to three minutes.

**BOARD AGENDAS & MINUTES:** Board agendas, minutes and copies of items to be considered by the Board of Retirement are customarily posted on the Internet by Friday afternoon preceding a meeting at the following website: www.stancera.org.

Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available for public inspection at StanCERA, 832 12th Street, Suite 600, Modesto, CA 95354, during normal business hours.

AUDIO: All Board of Retirement regular meetings are audio recorded. Audio recordings of the meetings are available after the meetings at <a href="http://www.stancera.org/agenda">http://www.stancera.org/agenda</a>.

**NOTICE REGARDING NON-ENGLISH SPEAKERS**: Board of Retirement meetings are conducted in English and translation to other languages is not provided. Please make arrangements for an interpreter if necessary.

**REASONABLE ACCOMMODATIONS:** In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary at (209) 525-6393. Notification 72 hours prior to the meeting will enable StanCERA to make reasonable arrangements to ensure accessibility to this meeting.

- 1. Call Meeting to Order
- 2. Roll Call
- 3. Announcements
- 4. Public Comment
- 5. Consent Items
  - a. Approval of the April 20, 2016 Meeting Minutes View
  - b. Monthly Staff Report View
  - c. Approval of Service Retirement(s) Sections 31499.14, 31670, 31662.2 & 31810
    - 1. Blades, Luke Public Works Effective 05-11-2016
    - 2. Campbell, Carrie DCSS Effective 01-16-2016
    - 3. Mincey, Roslyn CSA- Effective 04-30-2016
    - 4. Pierce, Steven Probation Effective 04-22-2016 \*
    - 5. Roman, Rebecca– DCSS Effective 05-03-2016
    - 6. Shook, Scott GSA Effective 05-03-2016
    - 7. Zaragoza, Raul CSA Effective 03-25-2016

\* Indicates Safety Personnel

- d. Approval of Deferred Retirement(s) Section 31700
  - 1. Brandon, Jeff Probation Effective 04-16-2016 \*
  - 2. Campbell, Kinisha HSA Effective 04-21-2016
  - 3. Carrasco, Yesenia CSA Effective 05-03-2016
  - 4. Fukui, Tomonori BHRS Effective 04-03-2016
  - 5. Garcia, Juan Gerardo ER Effective 04-06-2016
  - 6. Hancock, Irene CSA Effective 03-05-2016
  - 7. Kitcher, Keith City of Ceres Effective 04-03-2016 \*
  - 8. Wu, Christina Lu-Yi HSA– Effective 04-16-2016

\* Indicates Safety Personnel

- 6. Investment Manager Annual Presentation
  - a. Jackson Square Partners Presentation View
    - I. Value Added Report View

### 7. <u>Executive Director – Investment</u>

- a. 2016 Quarter 1 Auxiliary Investment Report View
- b. Additional Investment Administration Resources View
- 8. <u>Verus Investment Consultant</u>
  - a. April 30, 2016 Flash Report View
  - b. Investment Performance Review View
  - c. Risk Dashboard Review View
  - d. Discussion and Action Regarding the Asset Allocation View
- 9. Executive Director Administrative
  - a. Information Technology Solutions (ITS) Project Update
  - b. Discussion and Action Regarding Legal Counsel To Assist with Procurement Contracts for the Information Technology Solutions Project (ITS) <u>View</u>
  - c. Discussion and Action Regarding the Completion of Vacant Space at 832 12th Street, Suite 600 View
  - d. Discussion and Action Regarding Fiscal Year 2016-2017 Proposed Administrative Budget View

### 10. <u>Closed Session</u>

- a. Conference with Legal Counsel Pending Litigation One Case: O'Neal et al v. Stanislaus County Employees' Retirement Association Stanislaus County Superior Court Case No. 648469 Government Code Section 54956.9(d)(1)
- b. Conference with Legal Counsel Pending Litigation One Case: Stanislaus County Employees' Retirement Association v. Buck Consultants, LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152 Government Code Section 54956.9(d)(4)
- 11. <u>Members' Forum (Information and Future Agenda Requests Only)</u>
- 12. Adjournment

### Stanislaus County Employees' Retirement Association



832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

### BOARD OF RETIREMENT MINUTES April 20, 2016

Trustees Present:	Jim DeMartini, Michael O'Neal, Jeff Grover, Donna Riley, Mandip Dhillon Mike Lynch, Jason Gordo and Gordon Ford
Alternate Trustee	Joan Clendenin, Alternate Retiree Representative
Trustees Absent:	Sam Sharpe
Staff Present:	Rick Santos, Executive Director Kathy Herman, Fiscal Services Manager Dawn Lea, Member and Employer Services Manager Kellie Gomes, Executive Board Assistant
Others Present:	Fred Silva, General Legal Counsel Ed Hoffman, Investment Consultant

#### 1. Meeting Called to Order

Meeting called to order 1:05 p.m. by Trustee Riley, Chair

- 2. Roll Call
- 3. Announcements

Dawn Lea introduced Teresa Clayton, StanCERA's new Members and Employers' Benefit Technician

Donna Riley announced that the auto open upon exiting the 12<sup>th</sup> street garage will not need a key pass to exit at the end of April.

4. Public Comment

None

5. Consent Items

Trustee DeMartini requested item 5e be removed from consent to discuss.

- a. Approval of the March 16, 2016 Meeting Minutes
- b. Monthly Staff Report
- c. StanCERA Quarter 1 2016 Complaint Log
- d. Executive Director Goals Update Quarter 1 2016
- e. Correspondence Received

Board of Retirement Minutes April 20, 2016 Page 2

- f. Approval of Service Retirement(s) Sections 31499.14, 31670, 31662.2 & 31810
  - 1. Bawanan, Ramon DA Effective 04-03-2016
  - 2. DeWerk, Art Ceres- Effective 03-01-2015 \*
  - 3. Long, Durena Alliance Worknet Effective 04-23-2016
  - 4. Reece, Lisa- Probation Effective 04-08-16 \*
  - 5. Shaw, Cynthia Alliance Worknet Effective 03-31-2016
  - 6. Varni, Linda DCSS Effective 04-02-2016
  - 7. Fredeking, Tobias, BHRS Effective 04-27-16 \* Indicates Safety Personnel

Reiff, Laura – Sheriff – Effective 03-31-2016 previously on the 03-16-16 agenda effective date is changed to 03-28-16.

- g. Approval of Deferred Retirement(s) Section 31700
  - 1. Bear, Joyanna Stan Regional 911 Effective 02-29-2016
  - 2. Blankenridge, Nicole DCSS Effective 03-11-2016
  - 3. Bozsik, Carly Animal Services Effective 12-19-2015
  - 4. Cunningham, Marcia SBT– Effective 04-02-2016
  - 5. Dillon-Theisen, Michele CSA– Effective 03-05-2016
  - 6. Esenwein, Daniel Public Works Effective 04-02-2016
  - 7. Gachugu Gichuru, Njoki CSA– Effective 09-10-2015
  - 8. Garcia, Paulina CSA Effective 09-26-2015
  - 9. Keller, Jennifer Superior Court Effective 01-05-2016
  - 10. Levie, Nicole Probation Effective 03-06-2016 \*
  - 11. Raj, Elisha CSA Effective 07-04-2015
  - 12. Sill, Nathan Stan Regional 911 Effective 03-29-2016

\* Indicates Safety Personnel

Motion was made by Trustee Grover and seconded by Trustee Dhillon to accept the consent items as presented with the exception to item 5e which was pulled for discussion.

Motion carried unanimously

Motion was made by Trustee Grover and seconded by Trustee O'Neal to accept the consent item 5e d after discussion the Board directed staff to analyze what manual work arounds would be necessary to be able to pay multiple health care providers each month. Staff will agendize this for a meeting in the future.

#### 6. Investment Manager Annual Presentation

- a. Morgan Stanley Presentation
  - I. North Haven
  - II. Prime

Robert Harkins and a Morgan Stanley team presented information on both the North Haven Infrastructure Fund and the Prime Property Fund

### 7. <u>Verus – Investment Consultant</u>

a. February 29, 2016 Flash Report Was provided at the meeting

February Portfolio Return: -.5% February U.S. Equity: -.9% February International Equity: -.8% February Fixed Income: .2% February Real Estate: -.1%

b. March 31, 2016 Flash Report - Was provided at the meeting

March Portfolio Return: 4.6% March U.S. Equity: 6.0% March International Equity: 7.8% March Fixed Income: 1.8% March Real Estate: 1.6%

c. Asset Allocation Status Update

Ed Hoffman gave an update on the status of the asset allocation. The Board discussed several aspects of a potential allocation to emerging markets. In the coming months, staff will attempt to visualize for the Board, what the allocations mean to the fund in terms of potential returns, risk and the impact on contribution rates and funded status. Staff also intends to bring back information on additional resources needed to manage an increasingly complex portfolio.

- 8. Executive Director Administrative
  - a. Discussion and Action regarding the presentation and acceptance of the June 30, 2015 Final Actuarial Valuation and the 2012-2015 Final Actuarial Experience Study Cheiron Actuaries

Motion was made by Trustee Gordo and seconded by Trustee Grover to accept the June 302015 Final Actuarial Valuation and the 2012-2015 Final Actuarial Experience Study and presented.

3:00 Break 3:10 Return

Item 8e. Heard out of order

e. Discussion and Action Regarding StanCERA Monthly Meeting Schedule

Motion was made by Trustee Lynch and seconded by Trustee DeMartini to approve a move in the monthly meeting schedule to the 4<sup>th</sup> Tuesday of each month, beginning at 1:30 p.m.

Motion carried unanimously

b. Information Technology Solutions (ITS) Project Update

Dawn Lea gave an update on the status of the project and noted a change in the vendor selection date

c. Legal/Legislation Update

Nothing to report

d. Discussion and Action for Voting Proxy of State Association of County Retirement Systems (SACRS) 2016 Business Meeting

Kellie Gomes asked for 2 volunteers to attend the SACRS 2016 Business meeting as voting proxies. Trustee O'Neal volunteered to be the primary proxy and Trustee Clendenin the alternate proxy.

Motion was made by Trustee Grover and seconded by Trustee O'Neal to accept item 6.a regarding AB 1853 and directed proxies to vote in support of SACRS desire to sponsor this bill as presented.

Motion was made by Trustee Lynch and seconded by Trustee Dhillon to accept item 6.b regarding AB 2376 and directed proxies to vote in support of SACRS desire to sponsor this bill as presented.

Motion was made by Trustee Lynch and seconded by Trustee Dhillon to accept item 7 regarding SACRS bylaws and directed proxies to vote in support of item as presented.

Motion was made by Trustee Lynch and seconded by Trustee Grover to accept item 8 regarding SACRS BOD 2016-2017 Ballot and directed proxies to vote in support of item as presented.

All motion carried unanimously

9. Committee Reports and Recommendations for Action

#### STANDING COMMITTEES

Due Diligence Committee

a. Discussion and Action Regarding the Annual Due Diligence Trips

Rick briefed the board that the Due Diligence Committees met and discussed and did not recommend any changes other than we would not be taking our Investment Consultant Verus with us due to cost vs value in doing so. The Board will continue to be updated by the committee regarding the findings of this trip planned for late June of 2016.

10. Closed Session

Moved in to closed session at 3:39 p.m.

- a. Conference with Legal Counsel Pending Litigation One Case: O'Neal et al v. Stanislaus County Employees' Retirement Association Stanislaus County Superior Court Case No. 648469 Government Code Section 54956.9(d)(1)
- b. Conference with Legal Counsel Pending Litigation One Case: Stanislaus County Employees' Retirement Association v. Buck Consultants, LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152 Government Code Section 54956.9(d)(4)
- c. Actuarial Audit and Services RPF Process Government Code Section 54957 (b)

Board of Retirement Minutes April 20, 2016 Page 5 Motion was made by Trustee O'Neal and seconded by Trustee Lynch to move in to open session at 3:52 p.m.

Motion carried unanimously.

Nothing to report out from closed session at this time.

- 11. <u>Members' Forum (Information and Future Agenda Requests Only)</u>
- 13. Adjournment

Meeting adjourned at 3:55 p.m.

Respectfully submitted,

Rick Santos, Executive Director

APPROVED AS TO FORM: Fred Silva, GENERAL LEGAL COUNSEL

By:

Fred Silva, General Legal Counsel



832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

### May 24, 2016

Retirement Board Agenda Item

- TO: Retirement Board
- FROM: Rick Santos, Executive Director
  - I. SUBJECT: Monthly Staff Report
  - II. ITEM NUMBER: 5.b.
- III. ITEM TYPE: Information Only
- IV. STAFF RECOMMENDATION: None
- V. ANALYSIS:
  - a) Fiscal Services Employer and employee contributions totaling \$6,358,103 were received through 17 different payroll batches. In addition, 23 terminations, 10 contribution refunds and 7 death benefits were processed. Audited member files continue to identify service, salary and contribution issues that are then further analyzed and corrected. The correction may include changes that result in refunds and/or collection of additional contributions by employee or employer. Members with multiple employers and multiple employment periods present the biggest challenges.

The mandatory Tyler system upgrade to the retiree payroll module provided a few extra challenges for the May 1 payroll; however staff worked with the vendor to fix the problems and processed the payroll of \$9,288,360 as scheduled. This is the payroll that has the COLA and the largest influx of retirees for the year. It is also the first time in StanCERA history that the retiree payroll surpassed \$9 million.

Accounting staff is rebuilding the General Ledger chart of accounts. This has been a well thought out long overdue project. Staff will cut over on July 1, 2016. No data will be lost. However, this will add some additional work to reconciliation processes this year. The current general ledger chart of accounts was not set up for the flexibility needed to grow with the system. This internal improvement will make it much easier to track information for generations to come.

Staff also began the process of notifying employers and employees of the Fiscal Year 2016-2017 contribution rate changes.

 b) Member & Employer Services – During the month of April 2016, Member and Employer Services Staff processed 47 new hires (15 Safety and 32 General), 10 buy backs and 17 estimates. There were 70 individual counseling sessions.
 Staff completed 2 meetings with the Linea Consultants that were necessary to establish the final business requirements.

The New Employee Orientation registration began on May 2, 2016 and reached its capacity of 155 attendees in the first week. We currently have 62 on the waiting list. Staff continued to work on the preparation for this event to be held on June 2, 2016.

Staff also attended a meeting with the Risk Management regarding a member's participation in Voya (disability income insurance offered by the County for management positions).

Retirement Board – May 24, 2016 Monthly Staff Report Page 2

- c) Investment Governance and Compliance Staff has been working to document and estimate costs to administer the investment governance process. Additionally, we have been working in tandem with our investment consultant to finalize the information needed for the Board to make the asset allocation decision. Staff also recently attended a roundtable discussion with one of our investment managers and several trustees and CEO's of other 1937 act systems regarding current investment trends and ideas that are being considered at other systems.
- VI. RISK: None
- VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently\*
- VIII. ADMINISTRATIVE BODGET IMPACT: NONE

ntos. Executive Director

Kathy Herman, Fiscal Services Manager

Dawn Lea, Member and Employer Services Manager

## JACKSON SQUARE PARTNERS SAN FRANCISCO

Stanislaus County Employee Retirement Account

VIII KIN A

Client Review

03.31.16



First Quarter 2016

**AGENDA:** 

Firm Overview Philosophy, People and Process Portfolio, Performance and Characteristics Biographies



### Firm Overview

TEAM HISTORY		ASSETS UNDER MANAGEMEN	NT	
		As of March 31, 2016		
1980s - 1990s	Transamerica: managed general account and captive retail vehicles	Large-Cap Growth	\$18.4 Billion	
Management, LLC and devel	Formed Transamerica Investment Management, LLC and developed	SMID-Cap Growth	\$3.4 Billion	
	an outside book of institutional accounts	Focus Global Growth	\$3.1 Billion	
<b>2005 - 2014</b> Joined Delaware Investments, operated autonomously within	All-Cap Growth	\$1.1 Billion		
	their "firm of boutiques" structure	Select 20 Growth	\$1.0 Billion	
May 2014	Investment team and other key employees founded and formed Jackson Square Partners, LLC	Total AUM*	\$26.9 Billion	

### **FIRM CHARACTERISTICS**

- Majority employee owned and controlled boutique investment management firm
- Tenured team with consistent and proven philosophy and process across two previous ownership structures
- Differentiated team structure and investment strategy: collaborative, generalist, PM/analyst approach to concentrated, long-term oriented investment philosophy
- \* AUM is as of 3/31/2016 and includes approximately \$2.6 billion of non-discretionary assets under management by JSP.

This presentation is provided for general information purposes only and may not be copied or redistributed without Jackson Square Partners' prior consent. There are no guarantees that the historical performance of an investment, portfolio, or asset class will have a direct correlation with its future performance. The information in this presentation, including statements concerning financial markets is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. Return information presented is supplemental to the GIPS compliant presentation for the composite. For institutional use only and for one-on-one use only. 3

### JSP Team Structure

### JEFF VAN HARTE Chairman & CIO 36 years experience and with team

### **INVESTMENTS**

TRADING

DEBBIE SABO Head of Trading (22 yr. exp./11 Yr. team)

**TOM DUFFY** Trader (20/2)

### **BUSINESS & OPERATIONS**

KEVIN BROWN Managing Partner Investor Relations (21 yr. exp./10 Yr. team)

VAN TRAN Chief Financial Officer (20/16)

JEFF REXFORD Head of Business Development (24/3)

SHARON HAYMAN Head of Relationship Management (22/2)

SEAN KREIGER Chief Compliance Officer (16/1)

24 Total Employees

- Seven employees in mid-level and support roles
- Middle / back office functions supported through outsourced model

CHRIS BONAVICO PM / Analyst (28 Yr. exp./23 Yr. team)

KEN BROAD PM / Analyst (28/16)

CHRIS ERICKSEN PM / Analyst (22/12)

IAN FERRY PM / Analyst (12/5)

PATRICK FORTIER PM / Analyst (21/16)

GREG HEYWOOD PM / Analyst (22/12)

DAN PRISLIN PM / Analyst (22/18)

**GREG CHORY** Analyst (8/2)

BILLY MONTANA Analyst (7/2)



### Product Structure

### **ONE TEAM, ONE PHILOSOPHY**

STRATEGY	3 YR. AVG. NUMBER OF HOLDINGS	PORTFOLIO P	MANAGER	BENCHMARK	MARKET CAP	INCEPTION OF COMPOSITE*	AUM (03/31/16)
Large-Cap Growth	31	Chris Bonavico Chris Ericksen Dan Prislin Jeff Van Harte		Russell 1000 Growth	>\$3B	4/30/2005	\$18.4B
Focus Global Growth	38	Chris Bonavico Patrick Fortier Greg Heywood		MSCI ACWI	>\$1B	12/31/2008	\$3.1B
SMID-Cap Growth	28	Chris Bonavico Ken Broad		Russell 2500 Growth	<\$5B At purchase to \$10-12B	4/30/2005	\$3.4B
Select 20 Growth	20	Chris Bonavico Ken Broad Dan Prislin Jeff Van Harte		Russell 3000 Growth	>\$1B	4/30/2005	\$1.0B
All-Cap Growth	69	Chris Bonavico Ken Broad Chris Ericksen Ian Ferry	Patrick Fortier Greg Heywood Dan Prislin Jeff Van Harte	Russell 3000 Growth	All Cap	5/31/2005	\$1.1B

Total AUM\* \$26.9B

\* AUM is as of 3/31/2016 and includes approximately \$2.6 billion of non-discretionary assets under management by JSP.



We are growth investors. We believe that superior returns can be realized by maintaining a <u>concentrated portfolio</u> of companies that we believe have advantaged business models, strong cash flow generation characteristics, and the opportunity to generate consistent, <u>long-term growth</u> of <u>intrinsic business value</u>.

INVESTM	пларна
	LOSSIIII

Concentrated portfolio approach

Long term horizon

JACKSON

PARTNERS

Emphasis on intrinsic business value

### **IDEA GENERATION / DILIGENCE**

Fundamental, qualitative approach

Generalist analyst structure

Low turnover leads to high threshold rates for new ideas

Preferred company characteristics:

- Fundamental change
- Superior business model
- Significant free cash flow generation
- High returns on invested capital

Collaborative group vetting informs portfolio manager decisions

### PORTFOLIO CONSTRUCTION

Benchmark agnostic

Conviction based weights balancing the risk and reward

Majority of the portfolio consists of all-weather stocks

# Investment Process: Philosophy

INVESTMENT PHILOSOPHY		
Concentration	Long-Term Horizon	Differentiated Definition of Growth
<ul> <li>Lower number of portfolio companies relative to peers</li> <li>Portfolio construction is benchmark agnostic</li> <li>Conviction weighted with focus on both risk and reward</li> </ul>	<ul> <li>3-5+ yr. time horizon</li> <li>25-35% average turnover annually</li> <li>Invest in durable businesses that are well positioned for the long-term, with less economic sensitivity</li> </ul>	<ul> <li>Growth in intrinsic business value</li> <li>Returns greater than weighted average cost of capital</li> <li>Revenue and earnings growth do not always result in intrinsic business value growth</li> </ul>

## Investment Process: Idea Generation / Diligence

### **IDEA GENERATION / DILIGENCE**

- Fundamental, qualitative approach backed by rigorous and thoughtful financial modeling.
- 25-35% Average turnover annually requires only a limited number of high-quality new ideas per year
- Overlap in companies across strategies allows for synergies in research and portfolio construction

Preferred Business Characteristics	Sources of Ideas
<ul> <li>Substantial fundamental change</li> </ul>	News flow
<ul> <li>Industry</li> <li>Product</li> <li>Management</li> <li>Clear, sustainable competitive advantage</li> </ul>	<ul> <li>Broker and trade conferences</li> <li>Existing holdings and their peers, competitors, suppliers and customers</li> </ul>
<ul> <li>Managements that "speak our language" on capital allocation and shareholder value creation</li> <li>Ability to generate attractive cash flow and returns</li> </ul>	<ul> <li>Industry experts</li> <li>Quantitative screening has limited value to us</li> </ul>

## Investment Process: Portfolio Construction

### **PORTFOLIO CONSTRUCTION**

- Positions are conviction weighted, balancing both risk and reward
- Majority of the portfolio consists of all-weather stocks
- Benchmark Agnostic
- Entire team is invited to participate in each diligence step
- Collaborative group vetting informs portfolio manager decisions
- Portfolio Parameters:
  - Security weights:
    - high-return/low-risk positions
    - moderate-return/low-risk positions
    - high-return/high-risk positions
    - maximum weigh
  - Typically 15% or less Non U.S. (with exception of Focus Global Growth)
  - Sector allocation is a byproduct of bottom-up stock selection
  - Cash typically below 4%

### **SELL DISCIPLINE**

- Valuation becomes stretched
- Better idea emerges from research "Farm List"
- Unexpected, negative fundamental change
- Portfolio construction consideration (e.g. Sector / Geographical Diversification etc.)

# A Fundamental Approach to Risk Management

_		
		<ul> <li>Low Volatility of Cash Flows- due to stable end markets, variable cost business model, geographic or segment diversification and/or ability to take market share</li> </ul>
	COMPANY	<ul> <li>Strong Financial Position- high returns on capital tend to generate excess cash, resulting in a strong balance sheet and little dependency on access to the capital markets for growth</li> </ul>
		<ul> <li>Minimal Agency Conflict- clear economic alignment of interest between shareholders and management</li> </ul>
		<ul> <li>Typically Own the Best Business Model- in each industry (typically no duplicative or highly correlated holdings)</li> </ul>
	PORTFOLIO	<ul> <li>Barbell Strategy – majority of the portfolio holds high-quality, established growth names, while a smaller portion of the portfolio is allocated to earlier stage and special situations</li> </ul>
		<ul> <li>Behavioral Influence- avoid succumbing to common behavioral biases such as over-optimism/pessimism and extrapolation of near-term news</li> </ul>
		<ul> <li>Typically Underweight Commodity Industries- except where we can find unique competitive advantages and we avoid those in secular decline and those unlikely to ever achieve their cost of capital (ex. steel, airlines)</li> </ul>
	INDUSTRY	<ul> <li>Positive Long-Term Secular Trends- select industries with favorable tailwinds and high barriers to entry (ex. wireless, transaction processing, global logistics)</li> </ul>
		<ul> <li>Time Arbitrage</li> </ul>
/ТН		<ul> <li>Currency risk management         <ul> <li>Conduct Analysis and Sensitivities of currency movement on underlying cost structures and cash flows</li> <li>Discounted Cash Flow Valuation in Local Currency; and convert using prevailing spot rates (if necessary)</li> </ul> </li> </ul>
GROWTH	CURRENCY	No top-down investment decisions based on a macro view of under / over valued currencies
		<ul> <li>We do not hedge our currency exposure</li> </ul>
GLOBAL		<ul> <li>Diversification of revenues and currency- Most of our holdings operate in several geographies and earn revenues in numerous currencies, resulting in broad geographic and currency diversification</li> </ul>
		<ul> <li>Risk-Free Rate – Long-term government bond rate is used as a starting point for the risk-free portion of the cost of capital</li> </ul>
FOCUS	COUNTRY	<ul> <li>Country Risk Premium – Added to the overall equity risk premium (if necessary)</li> </ul>
		<ul> <li>No top-down Investment decisions based on a macro view of country</li> </ul>

# **Client Review**

### Relationship Summary

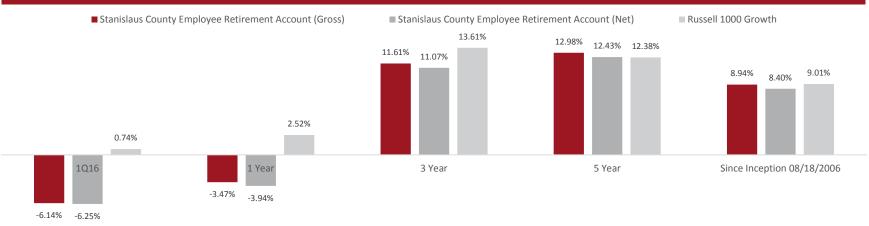
Stanislaus County Employee Retirement Account	03.31.16
Relationship inception	August 18, 2006
Investment style	Large-Cap Growth
Benchmark	Russell 1000 Growth

FINANCIALS	
Initial Investment	\$104,130,987.26
Net Contributions/withdrawals	(51,068,790.19)
Net portfolio gain/loss	104,818,559.60
Current portfolio value	\$157,880,756.67



### Stanislaus County Employee Retirement Account Performance

### RETURNS 1Q16



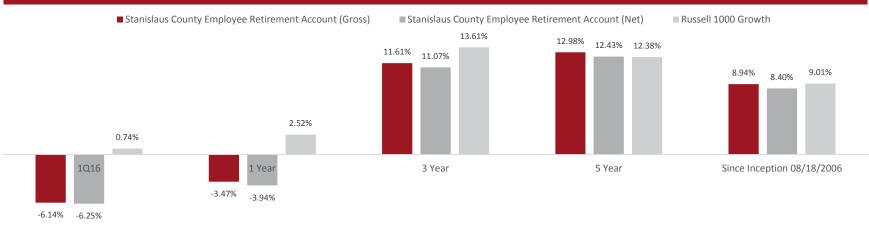
TOP FIVE 1Q16 CONTRIBUTORS TO RELATIVE PERFORMANCE		
Sector	Contribution %*	
Financials	0.32	
Industrials	0.23	
Information Technology	0.16	
Information Technology	0.14	
Information Technology	0.13	
	Financials Industrials Information Technology Information Technology	

TOP FIVE 1Q16 DETRACTORS TO RELATIVE PERFORMANCE		
Valeant Pharmaceuticals International, Inc.	Health Care	(2.66)
Celgene Corporation	Health Care	(0.80)
Allergan Plc	Health Care	(0.78)
Tripadvisor, Inc.	Consumer Discretionary	(0.65)
Biogen Inc.	Health Care	(0.49)
*FactSet total effect		



### Stanislaus County Employee Retirement Account Performance

RETURNS 1Q16



TOP FIVE CONTRIBUTORS TO RELATIVE PERFORMANCE LAST TWELVE MONTHS ENDING 1Q16		
Name	Sector	Contribution %*
Equinix, Inc.	Financials	1.55
Visa Inc. Class A	Information Technology	0.54
Microsoft Corporation	Information Technology	0.46
Alphabet Inc. Class A	Information Technology	0.33
Mastercard Incorporated Class A	Information Technology	0.29

#### TOP FIVE DETRACTORS TO RELATIVE PERFORMANCE LAST TWELVE MONTHS ENDING 1Q16

Valeant Pharmaceuticals International, Inc.	Health Care	(4.65)
Qualcomm Incorporated	Information Technology	(1.42)
Biogen Inc.	Health Care	(0.98)
Celgene Corporation	Health Care	(0.72)
Liberty Interactive Corporation Qvc Group Class A	Consumer Discretionary	(0.71)
*FactSet total effect		



### Stanislaus County Employee Retirement Account Holdings March 31, 2016

#### TOP 10 HOLDINGS<sup>1</sup> 1Q16 PERCENT OF COMPANY **PORTFOLIO (%)** Visa Inc. Class A 5.72 Qualcomm Incorporated 5.60 Allergan Plc 5.10 **Celgene Corporation** 5.04 **Microsoft Corporation** 4.86 Walgreens Boots Alliance Inc 4.68 Crown Castle International Corp 4.59 Paypal Holdings Inc 4.52 Liberty Interactive Corporation 4.38 Qvc Group Class A Mastercard Incorporated Class A 4.36 Top 10 total 48.86

1. Holdings, weightings, and characteristics are current as of the day indicated, are subject to change, and may not reflect the current portfolio.

Consumer Discretionary	14.51
Russell 1000 Growth	21.34
Liberty Interactive Corporation Qvc Group Class A	4.38
L Brands, Inc.	2.92
Tripadvisor, Inc.	2.74
Liberty Global Plc Class C	1.65
Discovery Communications, Inc. Class C	1.33
Discovery Communications, Inc. Class A	0.79
Liberty Global Plc Class A	0.69

Consumer Staples	4.68
Russell 1000 Growth	11.73
Walgreens Boots Alliance Inc	4.68

Energy	0.00
Russell 1000 Growth	0.50

Financials	10.98	
Russell 1000 Growth	5.60	
Crown Castle International Corp	4.59	
Intercontinental Exchange, Inc.	3.22	
Equinix, Inc.	3.17	

Health Care	21.00
Russell 1000 Growth	15.52
Allergan Plc	5.10
Celgene Corporation	5.04
Biogen Inc.	3.71
Novo Nordisk A/S Sponsored Adr Class B	3.42
Dentsply Sirona, Inc.	2.40
Valeant Pharmaceuticals International, Inc.	1.33

1.07
2.61

Information Technology	45.40
Russell 1000 Growth	28.26
Visa Inc. Class A	5.72
Qualcomm Incorporated	5.60
Microsoft Corporation	4.86
Paypal Holdings Inc	4.52
Mastercard Incorporated Class A	4.36
Electronic Arts Inc.	4.11
Alphabet Inc. Class A	3.96
Facebook, Inc. Class A	3.92
Alphabet Inc. Class C	3.11
Ebay Inc.	3.04
Intuit Inc.	2.20

Materials	0.00
Russell 1000 Growth	3.52
Telecommunication Services	0.00
Russell 1000 Growth	2.38
Utilities	0.00
Russell 1000 Growth	0.08
C. J.	0.00

Cash	0.82
Russell 1000 Growth	0.00

Holdings are as of March 31, 2016 and are subject to change.

Sectors are based on the index classifications. Indices are unmanaged and not available for direct investment.

Jackson Square Partners is a registered investment advisor that was established on May 1, 2014. Composite performance and characteristics and portfolio information shown prior to May 1, 2014 represent results achieved by the Jackson Square team at Delaware Investments. The investment strategy remains the same. Past performance is not indicative of future results.

### Large-Cap Growth Performance and Risk Statistics

Lead managers:	Jeff Van Harte
	Chris Bonavico
	Dan Prislin
	Chris Ericksen
Inception:	4/30/2005
Benchmark:	Russell 1000 Growth
Holdings:	Approximately 31*

#### LARGE-CAP GROWTH STATS

4/30/2005 through 3/31/2016

Alpha*	0.62
Beta	0.99
Return*	9.40
Benchmark return*	8.98
Standard deviation*	15.64
Tracking error	4.90
Information ratio	0.08
Upside capture	99%
Downside capture	97%
Turnover LTM	37.67
Active Share	84.57

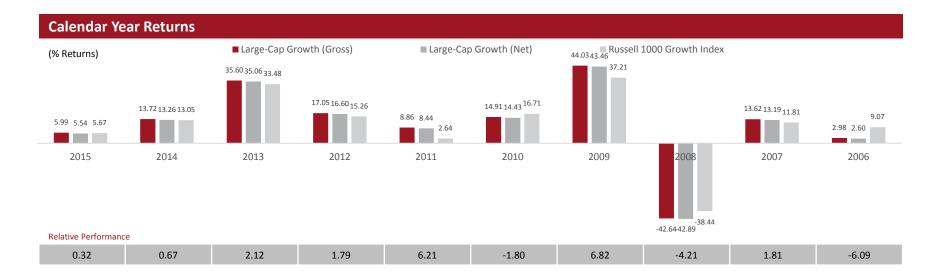
\*Annualized Source: eVestment data extracted on *3/31/2016* 

Information presented herein is supplemental performance. See composite performance. Jackson Square Partners is a registered investment advisor that was established on May 1, 2014. Composite performance and characteristics and portfolio information shown prior to May 1, 2014 represent results achieved by the Jackson Square team at Delaware Investments. The investment strategy remains the same. Past performance is not indicative of future results.





Returns ■ Large-Cap Growth (Net) ■ Large-Cap Growth (Gross) Russell 1000 Growth Index 13.61% 12.96% 12.51% 12.38% 11.57% 11.11% 9.40% 8.96% 8.98% 2.52% 0.74% 1Q16 1 Year 3 Year 5 Year Since Inception 04/30/2005 -3.44% -3.86% -6.16% -6.27% **Relative Performance** -6.90 -5.96 -2.04 0.58 0.42



Jackson Square Partners is a registered investment advisor that was established on May 1, 2014. Composite performance and characteristics and portfolio information shown prior to May 1, 2014 represent results achieved by the Jackson Square team at Delaware Investments . The investment strategy remains the same. Information presented herein is supplemental performance. See composite performance. Past performance is not indicative of future returns. Gross returns do not reflect the payment of advisory fees.

# Biographies



### JEFFREY S. VAN HARTE, CFA



Chairman, Chief Investment Officer INDUSTRY EXPERIENCE: 36 YEARS

Jeffrey S. Van Harte became a member of Jackson Square Partners (JSP), at its inception in May 2014 as chairman and chief investment officer. Jackson Square Partners manages Large-Cap Growth Equity, Smid-Cap growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was the chief investment officer of the Delaware Investments Focus Growth Equity team from April 2005 to April 2014. The Focus Growth Equity team managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to Delaware Investments, he was a principal and executive vice president at Transamerica Investment Management. Van Harte has been managing portfolios and separate accounts for 30 years. Before becoming a portfolio manager, Van Harte was a securities analyst and trader for Transamerica Investment Services, which he joined in 1980. Van Harte received his bachelor's degree in finance from California State University at Fullerton.

### **CHRISTOPHER J. BONAVICO**



**Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 28 YEARS **Christopher J. Bonavico** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth Equity team from April 2005 to April 2014. The Equity team managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth Portfolios. Prior to Delaware Investments, he was a principal and portfolio manager at Transamerica Investment Management, where he managed sub-advised funds and institutional separate accounts. Before joining Transamerica in 1993, he was a research analyst for Salomon Brothers. Bonavico received his bachelor's degree in economics from the University of Delaware.



### **KENNETH F. BROAD**



**Kenneth F. Broad** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth Equity, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth Equity team from April 2005 to April 2014. The Focus Growth team managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to Delaware Investments, he was a principal and portfolio manager at Transamerica Investment Management, where he managed sub-advised funds and institutional separate accounts. Before joining Transamerica in 2000, he was a portfolio manager with The Franklin Templeton Group and was a consultant in the business valuation and merger and acquisition group at KPMG Peat Marwick. He received an MBA from the University of California at Los Angeles and his bachelor's degree in economics from Colgate University.

### **Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 28 YEARS

### **CHRISTOPHER M. ERICKSEN**



**Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 22 YEARS **Christopher M. Ericksen** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth Equity, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth team from April 2005 to April 2014. The team, formerly referred to as the Focus Growth Team, managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining Delaware Investments, he was a portfolio manager at Transamerica Investment Management, where he also managed institutional separate accounts. Before joining Transamerica in 2004, he was a vice president at Goldman Sachs. During his 10 years there, he worked in investment banking as well as investment management. Ericksen received his bachelor's degree from Carnegie Mellon University, with majors in industrial management, economics, and political science.



### IAN D. FERRY



**Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 12 YEARS

### PATRICK G. FORTIER, CFA

**Ian D. Ferry** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth Equity team from November 2011 to April 2014. The team, formerly referred to as the Focus Growth Team, managed Large-Cap Growth Equity, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining Delaware Investments, he was an equity research analyst with Fidelity from August 2010 to October 2011. Before that, he completed an internship as an analyst with Carlson Capital in summer 2009. Previously, he worked with HarbourVest Partners from 2005 to 2008 in its private equity group, where he analyzed and completed growth equity investments and leveraged buyouts for the firm. Ferry began his career with Houlihan Lokey in 2004 as a financial analyst. He earned a bachelor's degree in finance from Tulane University. Ferry also earned an MBA, with a concentration in management, from The Wharton School of the University of Pennsylvania in 2010.



**Patrick G. Fortier** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth Equity, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth Equity team from April 2005 to April 2014. The team, formerly referred to as the Focus Growth Team, managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining Delaware Investments, he was a portfolio manager at Transamerica Investment Management. Before joining Transamerica in 2000, he worked for OLDE Equity Research as an equity analyst. Fortier received his bachelor's degree in finance from the University of Kentucky.

**Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 21 YEARS



### **GREGORY M. HEYWOOD**



**Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 22 YEARS **Gregory M. Heywood** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth Equity team from April 2005 to April 2014. The team, formerly referred to as the Focus Growth Team, managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining Delaware Investments, he was a portfolio manager at Transamerica Investment Management. Before joining Transamerica in 2004, he worked as a senior analyst for Wells Capital Management from 2003 to 2004 and Montgomery Asset Management from 1996 to 2003, where he was responsible for emerging markets equity research. From 1993 to 1995, he was an analyst at Globalvest Management and Valuevest Management, where he researched emerging market and developed international market companies. Heywood received a bachelor's degree in economics and an MBA in finance from the University of California at Berkeley.

### **DANIEL J. PRISLIN**



**Daniel J. Prislin** became a member of Jackson Square Partners (JSP), at its inception in May 2014 as a portfolio manager and equity analyst. Jackson Square Partners manages Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining JSP, he was a portfolio manager and equity analyst on the Delaware Investments Focus Growth Equity team from April 2005 to April 2014. The team, formerly referred to as the Focus Growth Team, managed Large-Cap Growth, Smid-Cap Growth, All-Cap Growth, and Focus Global Growth portfolios. Prior to joining Delaware Investments, he was a principal and portfolio manager at Transamerica Investment Management, where he also managed sub-advised funds and institutional separate accounts. Prior to joining Transamerica in 1998, he was a portfolio manager with The Franklin Templeton Group. Prislin received an MBA and bachelor's degree in business administration from the University of California at Berkeley.

**Portfolio Manager, Equity Analyst** INDUSTRY EXPERIENCE: 22 YEARS



### **GREG CHORY**



**Gregory L. Chory** joined Jackson Square Partners (JSP) as a research analyst in September 2014. Prior to joining JSP, he was an associate from July 2011 to August 2014 at Technology Crossover Ventures, a venture capital firm, focusing on the software and services industries. Before that, Chory spent three years as an investment banking analyst for BMO Capital Markets in the business services and media group. He received a bachelor's degree from Emory University.

### Research Analyst INDUSTRY EXPERIENCE: 8 YEARS

### WILLIAM (BILLY) G. MONTANA



**Billy Montana** joined Jackson Square Partners (JSP) as a research analyst in September 2014. Prior to joining JSP, he was an associate at TPG Capital, a private equity firm, from August 2011 to August 2014, focusing on growth capital opportunities. Before that, Montana spent two years at Goldman Sachs as an investment banking analyst, focusing on financial institutions. He received a bachelor's degree from Georgetown University.

Research Analyst INDUSTRY EXPERIENCE: 7 YEARS

# GIPS Composite

### Large-Cap Growth: Composite Statistics and Performance

#### COMPOSITE STATISTICS AND PERFORMANCE

					3-Year Annualized Standard Deviation (%)		As of December 31st		
Period End	Composite return gross-of-fees (%)	Composite return net-of-fees (%)	Russell 1000 Growth Index (net) return (%)	Composite Internal dispersion (%)	Composite	Russell 1000 Growth Index (net)	Number of Portfolios	Composite Assets (\$mm)	Total Firm Assets (\$mm)
2015	6.0	5.5	5.7	0.2	11.7	10.7	61	16,759	26,196
2014	13.7	13.3	13.0	0.1	10.4	9.6	61.00	18,093	28,818
2013	35.6	35.1	33.5	0.1	12.1	12.2	47	15,270	n/a
2012	17.1	16.6	15.3	0.2	15.1	15.7	50	10,981	n/a
2011	8.9	8.4	2.6	0.1	16.9	17.8	50	9,160	n/a

#### PERFORMANCE DISCLOSURES: LARGE-CAP GROWTH COMPOSITE

Jackson Square Partners claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Jackson Square Partners has not been independently verified.

Jackson Square Partners is a registered investment advisor established on May 1, 2014. Registration does not imply a certain level of skill or training. Jackson Square Partners manages domestic and global growth equity strategies for institutional and retail clients. Performance shown prior to May 1, 2014 represents results achieved by the Jackson Square team at Delaware Investments prior to the establishment of Jackson Square Partners. Delaware Investments claims compliance with the GIPS standards and was previously verified.

The Large Cap Growth Composite ("Composite") invests primarily in mid- and large-cap common stocks of U.S. growth-oriented companies that the Firm believe have long-term capital appreciation potential and may grow faster than the U.S. economy. This composite was created in May 2014. The Composite includes all discretionary, fee paying accounts, including pooled funds, managed in this strategy. Performance results are shown as total returns, net of dividend withholding taxes, assume reinvestment of dividends and capital gains, are presented before and after the deduction of actual investment advisory fees, and are calculated in U.S. dollars. The returns of some accounts in the composite may include income from securities lending. Jackson Square Partners investment advisory fees are described in Part 2A of our Form ADV. The Large Cap Growth fee schedule is as follows: first \$25 million, 0.75%; next \$20 million, 0.55%; next \$200 million, 0.45%; amounts over \$300 million, 0.40%. Net returns are calculated using actual management fees, which includes performance fees. Some clients may utilize a performance-based fee, therefore actual fees paid may be higher or lower than the maximum fixed fee. Management fees, and any other expenses incurred in the management of the account, will reduce your return. The actual fee schedule may vary. Policies for valuing portfolios, calculating performance and preparing compliant presentations are available upon request. A list of composite description is available upon request. Past performance is not an indicator of future results. Internal dispersion is calculated using the asset-weighted standard deviation of the annual returns of all the portfolios that were included in the composite for the entire year. Internal dispersion is only shown if the composite has at least six accounts that were managed for the full calendar year.

The three-year annualized standard deviation measures the variability of the composite and the benchmark over the preceding 36-month period. This measure is not required to be presented for annual periods ended prior to 2011 or when 36 monthly composite returns are not yet available.

The benchmark for the composite is the Russell 1000<sup>®</sup> Growth Index. The Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000<sup>®</sup> companies with higher price-to-book ratios and higher forecasted growth values. For comparison purposes, the index is fully invested and includes the reinvestment of income. Index returns do not reflect management fees, transaction costs, or expenses. Indices are unmanaged, and one cannot invest directly in an index. Benchmark information contained herein has been obtained from third party sources believed to be reliable, but we cannot guarantee its accuracy or completeness. All third-party marks are the property of their respective owners.

Because the strategy expects to hold a concentrated portfolio of a limited number of securities, the strategy's risk is increased because each investment will have a greater effect on the strategy's overall performance. This is not an offer of any product or service in any jurisdiction where it would be unlawful to do so under the laws of that jurisdiction.

The information presented is available for institutional one-on-one presentations only. It is not intended and should not be construed to be a presentation of information concerning any U.S. mutual fund. The firm's registration as an investment adviser does not imply any level of skill or training.



The information contained in this presentation is CONFIDENTIAL and may not be redistributed under any circumstance. The information in this presentation is neither an offer to sell nor a solicitation of an offer to buy a mutual fund, security or service in any jurisdiction in which such offer, solicitation, purchase or sale would be unlawful. This presentation is not intended to serve as a risk disclosure document. The strategies offered by JSP are subject to various risks including potential loss of principal, general market risk, small and medium-sized company risk, foreign securities and emerging markets risk and default risk. For a complete discussion of the risks involved please consult the offering materials for the fund in which you are invested and JSP's Form ADV Part 2A Firm Brochure and refer to Item 8.

The views expressed are the views of JSP and are subject to change based on market and other conditions. Information contained in this presentation has been obtained from sources believed to be reliable, but no representation or warranty is made or can be given with respect to the accuracy or completeness of such information. Investors should keep in mind that markets are volatile and unpredictable.

Jackson Square Partners is a registered investment advisor that was established on May 1, 2014. Composite performance and characteristics and portfolio information shown prior to May 1, 2014 represent results achieved by the Jackson Square team at Delaware Investments. The investment strategy and persons managing the strategies remains the same. Moreover, the accounts managed by the Jackson Square team while at Delaware Investments are similar to the accounts currently under management and have been managed in a substantially similar manner. Past performance is not indicative of future results. There are no guarantees that the historical performance of an investment, portfolio, or asset class will have a direct correlation with its future performance.

JACKSON SQUARE

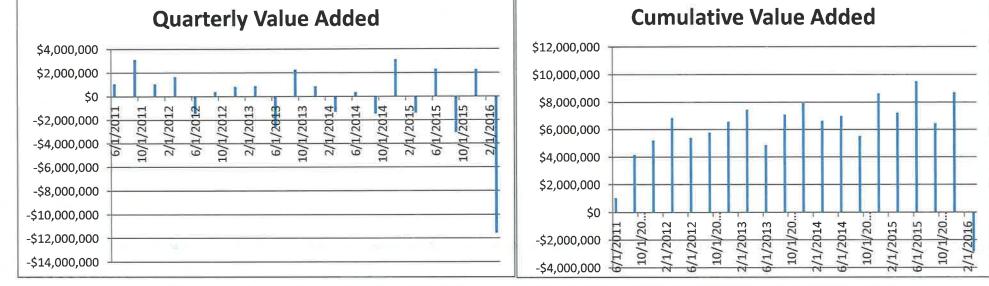
PARTNERS san francisco

#### **Jackson Square**

5.24/16 Item 6.a.I

Qua	rter		Fees		
Begin Date	End Date	Active Return	<u>Managerial</u>	<u>Custodial</u>	Value Added
4/1/2011	6/30/2011	\$1,170,665	\$129,638	\$938	\$1,040,089
7/1/2011	9/30/2011	\$3,241,561	\$123,443	\$1,098	\$3,117,020
10/1/2011	12/31/2011	\$1,180,312	\$127,986	\$1,178	\$1,051,148
1/1/2012	3/31/2012	\$1,778,217	\$141,840	\$1,694	\$1,634,683
4/1/2012	6/30/2012	-\$1,317,924	\$142,009	\$1,954	-\$1,461,887
7/1/2012	9/30/2012	\$528,838	\$145,968	\$1,824	\$381,046
10/1/2012	12/31/2012	\$957,854	\$147,904	\$2,026	\$807,924
1/1/2013	3/31/2013	\$1,030,783	\$159,111	\$4,988	\$866,684
4/1/2013	6/30/2013	-\$2,421,912	\$156,738	\$4,430	-\$2,583,080
7/1/2013	9/30/2013	\$2,406,424	\$160,682	\$4,282	\$2,241,460
10/1/2013	12/31/2013	\$1,015,086	\$173,996	\$4,333	\$836,758
1/1/2014	3/31/2014	-\$1,120,390	\$177,076	\$4,840	-\$1,302,306
4/1/2014	6/30/2014	\$543,382	\$182,171	\$6,204	\$355,007
7/1/2014	9/30/2014	-\$1,282,465	\$187,760	\$5,505	-\$1,475,730
10/1/2014	12/31/2014	\$3,316,966	\$198,409	\$3,686	\$3,114,870
1/1/2015	3/31/2015	-\$1,205,047	\$198,383	\$4,580	-\$1,408,009
4/1/2015	6/30/2015	\$2,494,095	\$200,473	\$2,657	\$2,290,964
7/1/2015	9/30/2015	-\$2,867,885	\$195,756	\$3,565	-\$3,067,206
10/1/2015	12/31/2015	\$2,471,360	\$201,142	\$3,218	\$2,266,999
1/1/2016	3/31/2016	-\$11,367,723	\$189,658	\$3,324	-\$11,560,706





This analysis does not include the effects of cash flow movements into and out of the portfolio during the evaluation period



832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

#### May 24, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

- I. SUBJECT: 2016 Quarter 1 Auxiliary Investment Report
- II. ITEM NUMBER: 7.a
- III. ITEM TYPE: Information Only
- IV. STAFF RECOMMENDATION: None
- V. ANALYSIS:

#### Value Added Summary

The Value Added Summary contains information from quarter 1, 2016 (Attachment 1, page 1) and for the past 12 months (page 2). Value added is defined as the dollar return earned by each active manager over the passive benchmark investment, less all fees paid to that manager.

Quarter 1 was a challenge for every active manager as the portfolio lost over \$23 million in relative value. Domestic equities and in particular, Jackson Square gave up approximately \$18.4 and \$11.8 million in value respectively, over this period. International equities and fixed income fared better giving up \$2.9 and \$2.2 million, respectively.

Over the past 12 months (page 2), the portfolio gave back approximately \$21.2 million in value, with the majority coming from the domestic equity side. Pyramis was the lone bright spot over the past year, adding just under \$1 million in value.

#### Investment Fee Summary

The investment fee summary (page 3) is presented on a rolling 12 month basis and displays investment fees by manager, asset class and total portfolio by both dollars and basis points. Since alternative fee information lags by more than 2 months, this information is based on the 12 month period ending December 31, 2015.

In 2015, StanCERA paid approximately \$7.5 million in fees to manage and administer the portfolio. This amount includes both custodial and managerial fees and also includes fees paid to the investment consultant. This amount does not include estimates of the cost of staff time dedicated to the administrative and governance process. \$7.5 million in fees translates to approximately 42 basis points of the total portfolio.

In 2015, the real estate asset class proved to be the most costly in terms of fees. StanCERA spent approximately \$563,000 in fees which translates to about 176 basis points. However, most of this cost is coming from the initial fees paid to enter these funds. Staff fully expects this amount to trend down over the coming year. Conversely, the direct lending asset class is more seasoned at this point and cost \$1.6 million in fees to manage in 2015.

#### Alternative Investment Report

The alternative investment report (pages 4 - 10) gives information related to distributions, expenses, capital calls, absolute cash flows and internal rates of returns (IRR) for StanCERA's alternative portfolio. Internal rates of return are shown for those investments that have at least one year of capital exposure as of December 31, 2015:

<u>Manager</u>	IRR
White Oak	8.68%
Medley	5.11
Raven I	3.65
Greenfield	14.01
American Realty	18.37

#### Cash Flow Report

This report (page 11) is self-explanatory.

- VI. RISK: None
- VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently.
- VIII. ADMINISTRATIVE BUDGET IMPACT: None

Rick Santós, Executive Director

an, Fiscal Services Manager

#### StanCERA Non Alternative Portfolio - Value Added Summary

			1/1/2016	through	3/31/2016					
		Av	erage	Ch	anges in Portfolio Valu	e			Value Add	ed
Total Non-Alternative Portf	blio <u>Beginning Value</u>	Uninvested Cash	Invested Assets	<u>Net Cash Flows</u>	Passive Return	<u>Active Return</u>	Ending Value	<u>Total Fees</u>	<u>Value Added</u>	<u>% of Portfolio</u>
	\$1,607,782,864	\$30,157,608	\$1,577,625,255	-\$10,175,005	\$18,649,436	-\$22,447,177	\$1,593,810,118	\$1,294,761	-\$23,527,439	-1.47%
Domestic Equities	\$813,448,894	\$13,893,988	\$799,554,906	-\$654,786	\$5,424,312	-\$17,806,101	\$800,412,319	\$612,320	-\$18,418,421	-2.28%
Large Cap Value	<b>\$296,122,514</b>	<b>\$7,821,402</b>	<b>\$288,301,112</b>	<b>-\$95,853</b>	<b>\$4,850,764</b>	- <b>\$3,995,099</b>	<b>\$296,882,326</b>	<b>\$92,511</b>	<b>-\$4,087,610</b>	-1.38%
Dodge & Cox Equity	\$176,374,743	\$7,821,402	\$168,553,341	-\$89,404	\$2,888,920	-\$4,006,976	\$175,167,284	\$86,158	-\$4,093,133	-2.33%
Blackrock Value Index I	Fund \$119,747,771	\$0	\$119,747,771	-\$6,450	\$1,961,844	\$11,877	\$121,715,043	\$6,354	\$5,523	0.00%
<b>Large Cap Growth</b>	<b>\$281,728,755</b>	<b>\$2,067,223</b>	<b>\$279,661,531</b>	- <b>\$215,491</b>	<b>\$2,089,314</b>	- <b>\$11,586,675</b>	<b>\$272,015,903</b>	<b>\$198,990</b>	- <b>\$11,785,665</b>	-4.26%
Jackson Square	\$168,432,318	\$2,067,223	\$166,365,095	-\$209,413	\$1,248,804	-\$11,590,367	\$157,881,342	\$192,983	-\$11,783,350	-7.22%
Blackrock Growth Inde	& Fund \$113,296,437	\$0	\$113,296,437	-\$6,078	\$840,510	\$3,692	\$114,134,561	\$6,007	-\$2,315	0.00%
Small Cap Value	<b>\$79,541,087</b>	<b>\$2,863,249</b>	<b>\$76,677,839</b>	- <b>\$166,109</b>	<b>\$1,352,981</b>	<b>-\$245,082</b>	<b>\$80,482,878</b>	<b>\$152,706</b>	- <b>\$397,788</b>	-0.50%
Capital Prospects	\$79,541,087	\$2,863,249	\$76,677,839	-\$166,109	\$1,352,981	-\$245,082	\$80,482,878	\$152,706	-\$397,788	-0.50%
Small Cap Growth	<b>\$82,515,069</b>	<b>\$1,142,113</b>	<b>\$81,372,956</b>	<b>-\$177,333</b>	<b>-\$3,859,962</b>	- <b>\$1,985,022</b>	<b>\$76,492,752</b>	<b>\$161,078</b>	- <b>\$2,146,100</b>	-2.70%
Legato Capital	\$82,515,069	\$1,142,113	\$81,372,956	-\$177,333	-\$3,859,962	-\$1,985,022	\$76,492,752	\$161,078	-\$2,146,100	-2.70%
Core	<b>\$73,541,469</b>	<b>\$0</b>	<b>\$73,541,469</b>	<b>\$0</b>	<b>\$991,215</b>	<b>\$5,776</b>	<b>\$74,538,460</b>	<b>\$7,034</b>	<b>-\$1,258</b>	0.00%
BNYM S&P Index Fund	\$73,541,469	\$0	\$73,541,469	\$0	\$991,215	\$5,776	\$74,538,460	\$7,034	-\$1,258	0.00%
International Equities	\$ <b>325,443,920</b>	<b>\$2,591,209</b>	<b>\$322,852,711</b>	- <b>\$723,182</b>	<b>-\$859,201</b>	<b>-\$2,672,035</b>	<b>\$321,189,501</b>	<b>\$267,256</b>	<b>-\$2,939,291</b>	- <b>0.91%</b>
LSV Asset Managemen	\$159,496,140	\$584,121	\$158,912,019	-\$111,365	-\$421,406	-\$22,232	\$158,941,137	\$120,040	-\$142,272	-0.09%
Pyramis Global	\$165,947,780	\$2,007,088	\$163,940,692	-\$611,817	-\$437,796	-\$2,649,803	\$162,248,364	\$147,216	-\$2,797,019	-1.70%
Fixed Income	\$468,890,050	<b>\$13,672,411</b>	<b>\$455,217,638</b>	<b>-\$8,797,036</b>	<b>\$14,084,325</b>	<b>-\$1,969,041</b>	<b>\$472,208,298</b>	<b>\$200,686</b>	<b>-\$2,169,727</b>	<b>-0.46%</b>
Dodge & Cox Fixed Inco	pme \$358,196,797	\$13,048,138	\$345,148,659	-\$8,704,554	\$10,729,510	-\$1,935,953	\$358,285,800	\$103,271	-\$2,039,224	-0.57%
PIMCO	\$110,693,253	\$624,274	\$110,068,979	-\$92,482	\$3,354,815	-\$33,088	\$113,922,498	\$97,415	-\$130,503	-0.12%

Net cash flows include the net effects of StanCERA directed cash flows, dividends and managers moving internal cash into and out of the investment pool Passive return assumes all portfolio assets are fully invested



1

#### StanCERA Non Alternative Portfolio - Value Added Summary

			4/1/2015	through	3/31/2016					
		Av	erage	Ch	anges in Portfolio Valu	e			Value Add	led
	Beginning Value	Uninvested Cash	Invested Assets	Net Cash Flows	Passive Return	Active Return	Ending Value	Total Fees		% of Portfolio
Total Non-Alternative Portfolio	\$1,691,263,356	\$26,878,356	\$1,664,385,000	-\$47,080,796	-\$34,135,074	-\$16,237,369	\$1,593,810,118	\$5,238,577	-\$21,261,446	-1.29%
Domestic Equities	\$881,599,497	\$12,418,084	\$869,181,414	-\$51,895,389	-\$14,432,623	-\$14,859,166	\$800,412,319	\$2,610,732	-\$17,469,898	-2.08%
Large Cap Value	\$305,021,234	\$5,891,194	\$299,130,040	-\$363,300	-\$4,697,128	-\$3,078,480	\$296,882,326	\$374,112	-\$3,452,592	-1.15%
Dodge & Cox Equity	\$181,584,528	\$5,891,194	\$175,693,334	-\$338,158	-\$2,795,341	-\$3,283,746	\$175,167,284	\$347,927	-\$3,631,673	-2.04%
Blackrock Value Index Fund	\$123,436,706	\$0	\$123,436,706	-\$25,142	-\$1,901,787	\$205,266	\$121,715,043	\$26,185	\$179,081	0.15%
Large Cap Growth	\$275,658,902	\$2,323,163	\$273,335,739	-\$805,045	\$6,928,115	-\$9,766,070	\$272,015,903	\$824,234	-\$10,590,304	-3.87%
Jackson Square	\$164,352,777	\$2,323,163	\$162,029,614	-\$782,277	\$4,126,886	-\$9,816,044	\$157,881,342	\$799,795	-\$10,615,839	-6.59%
Blackrock Growth Index Fund	\$111,306,124	\$0	\$111,306,124	-\$22,768	\$2,801,230	\$49,974	\$114,134,561	\$24,439	\$25,535	0.02%
Small Cap Value	\$102,293,615	\$2,898,722	\$99,394,893	-\$13,173,641	-\$7,378,953	-\$1,258,144	\$80,482,878	\$673,311	-\$1,931,455	-2.11%
Capital Prospects	\$102,293,615	\$2,898,722	\$99,394,893	-\$13,173,641	-\$7,378,953	-\$1,258,144	\$80,482,878	\$673,311	-\$1,931,455	-2.11%
Small Cap Growth	\$95,396,144	\$1,305,004	\$94,091,140	-\$7,252,809	-\$10,856,130	-\$794,453	\$76,492,752	\$710.239	-\$1,504,693	-1.75%
Legato Capital	\$95,396,144	\$1,305,004	\$94,091,140	-\$7,252,809	-\$10,856,130	-\$794,453	\$76,492,752	\$710,239	-\$1,504,693	-1.75%
Legato capital	,55,550,1 <del>14</del>	J1,303,004	\$3 <del>4</del> ,091,140	-\$7,252,005	-910,050,150	-,-,-00	<i>J10,<del>4</del>32,132</i>	Ş710,233	-91,904,095	-1.7378
Core	\$103,229,602	\$0	\$103,229,602	-\$30,300,594	\$1,571,472	\$37,981	\$74,538,460	\$28,836	\$9,145	0.01%
BNYM S&P Index Fund	\$103,229,602	\$0	\$103,229,602	-\$30,300,594	\$1,571,472	\$37,981	\$74,538,460	\$28,836	\$9,145	0.01%
International Equities	\$313,702,532	\$3,764,444	\$309,938,087	\$35,140,783	-\$29,130,041	\$1,476,228	\$321,189,501	\$1,611,284	-\$135.057	-0.04%
LSV Asset Management	\$154,432,546	\$1,393,806	\$153,038,740	\$19,361,067	-\$14,433,034	-\$419,442	\$158,941,137	\$633,852	-\$1,053,293	-0.67%
Pyramis Global	\$159,269,986	\$2,370,639	\$156,899,347	\$15,779,716	-\$14,697,007	\$1,895,669	\$162,248,364	\$977.433	\$918,237	0.57%
.,		,,	, , ,		,,.	//		,,	+040/207	515770
Fixed Income	\$495,961,327	\$10,695,828	\$485,265,499	-\$30,326,190	\$9,427,591	-\$2,854,431	\$472,208,298	\$802,061	-\$3,656,491	-0.76%
Dodge & Cox Fixed Income	\$384.195.906	\$10,119,655	\$374.076.251	-\$29,949,714	\$7,240,080	-\$3,200,472	\$358,285,800	\$418,844	-\$3.619.315	-0.97%
PIMCO	\$111,765,421	\$576,173	\$111,189,248	-\$376,476	\$2,187,512	\$346,041	\$113,922,498	\$383,217	-\$37,176	-0.03%
	4111, 00, 111	40.0,170	¥111,100,1140	40.0,00	<i><i><i>v-y-vy-<i>y-y-y-y-<i>y-y-y-y-y-y-<i>y-y-y-y-<i>y-y-y-<i>y-y-y-y-<i>y-y-y-y-<i>y-y-<i>y-y-<i>y-y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-y-<i>y-<i>y-y-<i>y-<i>y-y-<i>y-<i>y-y-<i>y-y-<i>y-y-<i>y-<i>y-<i>y-y-<i>y-<i>y-y-<i>y-<i>y-y-<i>y-<i>y-y-<i>y-<i>y-y-<i>y-<i>y-<i>y-y-<i>y-<i>y-<i>y-<i>y-y-<i>y-<i>y-<i>y-<i>y-<i>y-y-<i>y-<i>y-<i>y-<i>y-<i>y-y-</i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i>	40 /0/UT1	<i>q</i> 220,022,700	4000,217	<i>401,110</i>	0.0070

Net cash flows include the net effects of StanCERA directed cash flows, dividends and managers moving internal cash into and out of the investment pool Passive return assumes all portfolio assets are fully invested



#### **Investment Fee Summary**

	1/1/2015	through		12/31/2015			
			Fees in Dollars			ualized Basi	
	Average Assets Under Management	<u>Managerial</u>	Custodial	<u>Total</u>	Managerial		<u>Total</u>
Total Portfolio	\$1,789,102,790	\$7,172,553	\$329,669	\$7,502,222	40.1	1.8	41.9
omestic Equities	\$842,372,791	\$2,556,376	\$143,992	\$2,700,368	30.3	1.7	32.3
Large Cap Value	\$303,219,941	\$361,516	\$14,961	\$376,477	11.9	0.5	12.4
Dodge & Cox Equity	\$181,299,720	\$337,172	\$12,802	\$349,973	18.6	0.7	19.
Blackrock Value Index Fund	\$121,920,221	\$24,345	\$2,159	\$26,504	2.0	0.2	2.
Large Cap Growth	\$277,005,175	\$818,059	\$16,179	\$834,238	29.5	0.6	30.
Jackson Square	\$165.812.921	\$795,754	\$14,020	\$809,774	48.0	0.8	48.
Blackrock Growth Index Fund	\$111,192,254	\$22,304	\$2,159	\$24,463	2.0	0.2	2.
Small Cap Value	\$89,609,375	\$671,832	\$44,064	\$715,896	75.0	4.9	79.
Capital Prospects	\$89,609,375	\$671,832	\$44,064	\$715,896	75.0	4,9	79.
Small Cap Growth	\$87,999,807	\$675,988	\$66,494	\$742,482	76.8	7.6	84.
Legato Capital	\$87,999,807	\$675,988	\$66,494	\$742,482	76.8	7.6	84.
Core	\$84,538,492	\$28,981	\$2,295	\$31,276	3.4	0.3	3.
BNYM S&P Index Fund	\$84,538,492	\$28,981	\$2,295	\$31,276	3.4	0.3	3
nternational Equities	\$328,834,708	\$1,429,677	\$141,431	\$1,571,108	43.5	4.3	47.
LSV Asset Management	\$162,466,649	\$549,029	\$78,489	\$627,518	33.8	4.8	38
Pyramis Global	\$166,368,059	\$880,648	\$62,943	\$943,591	52.9	3.8	56
ixed Income	\$486,036,691	\$776,704	\$30,330	\$807,034	16.0	0.6	16.
Dodge & Cox Fixed Income	\$374,905,706	\$405,308	\$20,004	\$425,312	10.8	0.5	11
PIMCO	\$111,130,985	\$371,396	\$10,326	\$381,723	33.4	0,9	34
eal Estate	\$32,087,604	\$556,114	\$7,498	\$563,611	173.3	2.3	175.
Blackrock US Real Estate Index	\$11,197,725	\$9,044	\$2,176	\$11,220	8.1	1.9	10
Greenfield GAP Real Estate	\$9,954,624	\$238,676	\$2,125	\$240,801	239.8	2.1	241
American Realty	\$7,438,076	\$262,740	\$2,117	\$264,857	353.2	2.8	356
Prime Property Fund	\$3,497,179	\$45,653	\$1,080	\$46,734	130.5	3.1	133
Direct Lending	\$99,770,997	\$1,597,432	\$6,418	\$1,603,850	160.1	0.6	160.
Medley Capital	\$32,322,816	\$501,839	\$2,125	\$503,964	155.3	0.7	155
Raven Capital	\$29,037,250 \$38,410,930	\$651,671 \$443,922	\$2,125 \$2,168	\$653,796 \$446,090	224.4 115.6	0.7 0.6	225 116

1.4

.

\$256,250

Alternative Managerial Fees may include other fees such as audit, legal, tax preparation, administrative, marketing and initial fund costs including true-ups Periodic reporting includes only funds or managers that were a part of the entire reporting period



## White Oak Alternative Investment Report for Quarter Ending December 31, 2015

			White Oak Cash Flow Activity Since Inception			
Distribution Activity Through 12/31/20	15		Date	Cash Flow		
Distributions	-\$17,476,588		8/2/2013	-\$1,195,179		
Offering Costs	<u>\$0</u>		8/5/2013	-\$1,072,131		
Net Distribution Activity	-\$17,476,588		8/27/2013	-\$504,810		
			9/24/2013	-\$1,759,299		
			9/26/2013	-\$9,074,704		
Interest and Expense Through Quarter Ending 1	12/31/2015		10/7/2013	-\$1,583,868		
Interest Income	\$8,166,821		11/5/2013	-\$1,557,519		
Undistributed Income Charge	\$0		11/19/2013	-\$1,595,710		
Dividend Income	\$0		12/2/2013	\$2,548,332		
Other Income	\$0		12/4/2013	-\$1,637,899		
Management Fees	-\$1,489,682		12/9/2013	-\$910,433		
Partnership Operations	\$0		12/12/2013	-\$861,352		
Professional Fees	\$0		2/21/2014	-\$297,534		
Organizational Expense	\$0		2/26/2014	\$7,885,764		
Other Expenses	-\$283,982		3/26/2014	-\$3,239,701		
Service Fees	\$0		4/25/2014	-\$2,338,689		
Realized Gain/(Loss)	\$77,416		5/25/2014	-\$840,670		
Unrealized Gain/(Loss)	<u>\$927,680</u>		7/31/2014	\$153,251		
Net Investment Income/(Loss)	\$7,398,253		9/23/2014	-\$808,389		
			9/25/2014	-\$261,101		
Gross Capital Calls as of Qtr End	\$49,164,828		10/3/2014	\$287,925		
Net Distribution Activity	-\$17,476,588		11/19/2014	-\$892,750		
Net Investment Activity	<u>\$5,926,092</u>		12/9/2014	-\$169,677		
Capital Balance as of Qtr End	\$37,614,331		12/11/2014	-\$6,368,205		
			12/23/2014	-\$3,171,213		
			12/23/2014	\$497,436		
Commitment Period Over			12/31/2014	-\$536,265		
			12/31/2014	-\$679,536		
			12/31/2014	\$679,536		
			1/21/2015	-\$297,534		
Expected Asset Value as of December 31, 2015	\$37,614,331		2/9/2015	-\$1,649,388		
Expected Asset Value using 5% Illiquidity Discount	\$35,733,615		2/13/2015	-\$1,867,840		
IRR Using 5% Illiquidity Discount	5.62%		3/9/2015	-\$496,670		
			3/10/2015	\$703,113		
Historical Internal Rates of	Return		3/18/2015	-\$2,993,052		
Date	<u>Quarter</u>	Inception	7/1/2015	-\$503,709		
September 30, 2014	-	8.92%	9/3/2015	\$788,722		
December 31, 2014	2.21%	11.33%	12/31/2015	\$2,058,983		
March 31, 2015	-0.59%	10.68%	12/31/2015	\$1,149,965		
June 30, 2015	-0.97%	9.60%		× A a		
September 30, 2015	-0.91%	8.60%		and the second s		
December 31, 2015	0.07%	8.68%		STANCERA		

## Medley Alternative Investment Report for Quarter Ending December 31, 2015

Distribution Activity Through 12/31/201	<b>5</b> -\$6,362,450
Offering Costs	<u>\$0</u>
Net Distribution Activity	-\$6,362,450
	104 1004 5
Interest and Expense Through Quarter Ending 12	
Interest Income	\$10,824,614
Undistributed Income Charge	-\$2,807,135
Dividend Income	\$0
Other Income	\$0
Management Fees	-\$1,640,026
Partnership Operations	-\$279,812
Professional Fees	\$0
Organizational Expense	\$0
Other Expenses	-\$252,518
Service Fees	\$0
Realized Gain/(Loss)	-\$1,587,920
Unrealized Gain/(Loss)	<u>-\$617,718</u>
Net Investment Income/(Loss)	\$3,639,485
Gross Capital Calls as of Qtr End	\$34,518,348
Net Distribution Activity	-\$6,362,450
Net Investment Activity	<u>\$3,639,485</u>
Capital Balance as of Qtr End	\$31,795,383

#### Medley Capital Cash Flow Activity Since Inception

•	
Date	Cash Flow
5/16/2013	-\$7,500,000
5/16/2013	-\$13,808,430
5/31/2013	\$1,020,522
7/30/2013	\$2,349,915
12/4/2013	-\$1,445,727
12/11/2013	-\$2,416,766
12/17/2013	-\$1,346,764
3/11/2014	-\$2,674,594
3/28/2014	-\$1,918,283
9/24/2014	-\$619,597
9/24/2014	-\$1,032,662
9/24/2014	\$1,172,341
11/12/2014	-\$1,755,525
10/8/2015	\$1,819,672

#### Commitment Period Over

Expected Asset Value as of December 31, 2015	\$31,795,383
Expected Asset Value using 5% Illiquidity Discount	\$30,205,614
IRR Using 5% Illiquidity Discount	3.14%

#### Historical Internal Rate of Return

Date	<u>Quarter</u>	Inception
September 30, 2014		3.73%
December 31, 2014	0.73%	4.48%
March 31, 2015	0.52%	5.03%
June 30, 2015	0.37%	5.42%
September 30, 2015	0.29%	5.73%
December 31, 2015	-0.59%	5.11%



## Raven I Alternative Investment Report for Quarter Ending December 31, 2015

		<b>Raven I Capital Cash Flow Activity</b>	Activity Since Inception		
Distribution Activity Through	12/31/2015	Date	Cash Flow		
Distributions	-\$10,474,584	5/22/2013	-\$10,753,342		
Pre Funding Distribution	\$650,487	8/15/2013	\$183,156		
Offering Costs	<u>-\$22,211</u>	10/1/2013	-\$6,279,640		
Net Distribution Activity	-\$9,846,308	10/1/2013	-\$3,139,820		
		11/14/2013	-\$2,354,865		
Interest and Expense Through Quarte	er Ending 12/31/2015	11/19/2013	\$272,747		
Interest Income	\$5,807,467	2/18/2014	\$418,643		
Undistributed Income Charge	-\$733,412	3/17/2014	-\$4,709,730		
Dividend Income	\$1,330,650	5/20/2014	\$932,788		
Other Income	\$308,043	8/18/2014	\$2,421,827		
Management Fees	-\$2,240,409	8/18/2014	\$717,993		
Partnership Operations	\$0	11/20/2014	\$478,040		
Professional Fees		11/20/2014	\$739,469		
Organizational Expense		12/23/2014	-\$7,430,908		
Other Expenses	-\$920,695	2/19/2015	\$432,318		
Service Fees		2/19/2015	\$300,306		
Realized Gain/(Loss)	\$402,958	6/11/2015	\$757,562		
Unrealized Gain/(Loss)	<u>-\$1,261,616</u>	6/11/2015	\$271,948		
Net Investment Income/(Loss)	\$2,692,985	8/20/2015 8/20/2015	\$639,738 \$485,364		
Gross Capital Call as of qtr End	\$34,668,306	11/18/2015	\$132,154		
Net Distribution Activity	-\$9,846,308	11/18/2015	\$202,760		
Net Investment Activity	<u>\$2,692,985</u>				
Capital Balance as of Qtr End	\$27,514,983				

#### Commitment Period Over

Expected Asset Value as of December 31, 2015	\$27,514,983
Expected Asset Value using 5% Illiquidity Discount	\$26,139,234
IRR Using 5% Illiquidity Discount	1.42%

#### Historical Internal Rate of Return

	Date	Quarter	Inception
September 30, 2014		ā.	6.13%
December 31, 2014		-0.25%	5.86%
March 31, 2015		-0.46%	5.38%
June 30, 2015		-1.25%	4.06%
September 30, 2015		-1.17%	2.84%
December 31, 2015		0.79%	3.65%



## Greenfield Alternative Investment Report for Quarter Ending December 31, 2015

		Greenfield Capital Cash Flow Activit	ty Since Inception
Distribution Activity Through 12/31/201	15	Date	Cash Flow
Distributions	-\$2,036,071	7/8/2014	-\$2,122,581
Pre Funding Distribution		8/22/2014	-\$1,212,903
Offering Costs	-	10/7/2014	\$2,103
Net Distribution Activity	-\$2,036,071	10/7/2014	\$134,135
		10/21/2014	-\$5,169,043
Interest and Expense Through Quarter Ending 1	2/31/2015	11/21/2014	-\$1,723,014
Interest Income	\$611,873	12/9/2014	-\$781,885
Undistributed Income Charge		12/12/2014	\$10,283
Dividend Income		12/12/2014	\$928,920
Other Income		12/16/2014	-\$3,955
Management Fees	-\$459,247	12/22/2014	\$7,776
Partnership Operations	\$0	12/22/2014	\$536,748
Professional Fees		6/12/2015	-\$591,608
Organizational Expense		6/30/2015	\$2,036,071
Other Expenses		6/30/2015	\$114,672
Service Fees		11/2/2015	-\$470,654
Realized Gain/(Loss)	\$221,201		
Unrealized Gain/(Loss)	<u>\$1,159,824</u>		
Net Investment Income/(Loss)	\$1,533,651		
Gross Capital Call as of Qtr End	\$10,429,395		
Net Distribution Activity	-\$2,036,071		
Net Investment Activity	\$1,533,651		
Capital Balance as of Qtr End	\$9,926,975		
Net Capital Calls to date	\$8,393,324		
Total Commitment	\$15,000,000		
Remaining Capital Commitment	\$6,606,676		
Commitment Period End Date	12/1/2017		
Management Fee	1.50%		
Max Mngmt. Fee on Remaining Capital Commitment	\$153,373		
Expected Asset Value as of December 31, 2015	\$9,926,975		
Expected Asset Value using 5% Illiquidity Discount IRR Using 5% Illiquidity Discount	\$9,430,626		

#### Historical Internal Rate of Return

Date	Quarter	Inception
September 30, 2014	0.50	0.00%
December 31, 2014	2.85%	2.85%
March 31, 2015	0.41%	3.27%
June 30, 2015	9.27%	12.84%
September 30, 2015	-2.22%	10.33%
December 31, 2015	3.34%	14.01%

7

STANCERA

## American Realty Alternative Investment Report for Quarter Ending December 31, 2015

			American Realty Cash Flow Activit	y Since Inception
Distribution Activity Through 12/31/2	2015		Date	Cash Flow
Distributions	\$37,690	)	12/15/2014	-\$3,549,100
Pre Funding Distribution			1/28/2015	-\$1,934,300
Offering Costs	<u>-\$5</u> 4	Ł	3/26/2015	-\$2,188,300
Net Distribution Activity	\$37,635	5		
Interest and Expense Through Quarter Ending	12/31/2015			
Interest Income	\$344,687	7		
Undistributed Income Charge				
Dividend Income				
Accrued Incentive Income	-\$161,213	3		
Management Fees	-\$101,439	)		
Partnership Operations	\$0	)		
Professional Fees				
Organizational Expense				
Other Expenses				
Service Fees				
Realized Gain/(Loss)	\$450,914	L.		
Unrealized Gain/(Loss)	\$740,377	2		
Net Investment Income/(Loss)	\$1,273,326	5		
Gross Capital Call as of Qtr End	\$7,671,700	)		
Net Distribution Activity	\$37,635	5		
Net Investment Activity	<u>\$1,273,326</u>	5		
Capital Balance as of Qtr End	\$8,982,661	L		
Commitment	\$30,000,000	)		
Net Capital Calls to date	\$7,671,700	)		
Remaining Capital Commitment	\$22,328,300	)		
Commitment Period End Date	Open End Fund			
Management Fee	1.20%	Weighted		
Max Mngmt. Fee on Remaining Capital Commitment	Only on Invested	Capital		
Expected Asset Value as of December 31, 2015	\$8,982,661	L		
Expected Asset Value using 5% Illiquidity Discount	\$8,533,528			
IRR Using 5% Illiquidity Discount	12.06%			
Historical Internal Rate of F	Return			
Date	Quarter	Inception		
March 31, 2015	23.54%	23.54%		



## North Haven Infrastructure Alternative Investment Report for Quarter Ending December 31, 2015

		North Haven Infrastructure Cash Flow Acti	vity Since Inception
Distribution Activity Through 12/31/2015		Date	Cash Flow
Distributions	-\$867,680	5/19/2015	-\$10,521,639
Pre Funding Distribution	\$0	8/25/2015	\$867,680
Syndication Costs	<u>-\$85,765</u>	8/28/2015	-\$81,684
Net Distribution Activity	-\$953,445		
Interest and Expense Through Quarter Ending 12/31,	/2015		
Interest Income	2023		
Undistributed Income Charge	-\$357,892		
Dividend Income			
Other Income			
Management Fees	-\$1,040,240		
Partnership Operations	\$0		
Professional Fees			
Organizational Expense			
Other Expenses	-\$266,685		
Service Fees			
Realized Gain/(Loss)	-\$34,111		
Unrealized Gain/(Loss)	<u>\$749,475</u>		
Net Investment Income/(Loss)	-\$949,453		
	A		
Gross Capital Call as of Qtr End	\$10,521,639		
Net Distribution Activity	-\$953,445		
Net Investment Activity	<u>-\$949,453</u>		
Capital Balance as of Qtr End	\$8,618,741		
Total Commitment	\$50,000,000		
Net Capital Calls to date	\$9,296,067		
Remaining Capital Commitment	\$40,703,933		
Commitment Period End Date	9/1/2019		
Management Fee	1.50%		
Max Mngmt. Fee on Remaining Capital Commitment	\$2,044,033		
Expected Asset Value as of December 31, 2015	\$8,618,741		
Expected Asset Value using 5% Illiquidity Discount	\$8,187,804		
IRR Using 5% Illiquidity Discount	-23.65%		
Historical Internal Rate of Return			
Date	Quarter	Inception	
June 30, 2015		N/A	WAAA
September 30, 2015	-22.33%	-22.33%	STANCERA
December 31, 2015	6.47%	-17.30%	2 5

## Raven III Investment Report for Quarter Ending December 31, 2015

-4.84%

11.89%

			Ra
Distribution Activity Through 12/31/2015			
Distributions	-\$19,110		7
Pre Funding Distribution			8,
Offering Costs			8,
Net Distribution Activity	-\$19,110		9,
			9,
Interest and Expense Through Quarter Ending 12/31/	2015		10
Interest Income	\$124,700		10
Undistributed Income Charge	\$18,635		1
Dividend Income			
Other Income			
Management Fees	-\$133,767		
Partnership Operations	\$0		
Professional Fees			
Organizational Expense	-\$28,013		
Other Expenses	-\$39,679		
Service Fees			
Realized Gain/(Loss)			
Unrealized Gain/(Loss)	<u>-\$3,953</u>		
Net Investment Income/(Loss)	-\$62,078		
Gross Capital Call as of Qtr End	\$3,088,706		
Net Distribution Activity	-\$19,110		
Net Investment Activity	<u>-\$62,078</u>		
Capital Balance as of Qtr End	\$3,007,518		
Total Commitment	\$15,000,000		
Net Capital Calls to date	\$3,088,706		
Remaining Capital Commitment	\$11,911,294		
Commitment Period End Date	9/1/2019		
Management Fee	1.75%		
Max Mngmt. Fee on Remaining Capital Commitment	\$699,834		
Expected Asset Value as of December 31, 2015	\$3,007,518		
Expected Asset Value using 5% Illiquidity Discount	\$2,857,142		
IRR Using 5% Illiquidity Discount	-16.69%		
Historical Internal Rate of Return			
<u>Date</u>	Quarter	Inception	
September 30, 2015	-14.95%	-14.95%	

December 31, 2015

Raven III Cash Flow Activi	ty Since Inception
Date	Cash Flow
7/6/2015	-\$2,996,475
8/20/2015	\$1,526,734
8/20/2015	\$14,724
9/29/2015	-\$1,559,575
9/29/2015	-\$1,847
10/16/2015	\$693,953
10/16/2015	\$9,675
12/9/2015	-\$753,343



## **Cash Flow Report**

Jan 2016 through March 2016

Beginning Cash Balance*	\$9,594,110	
Cash Flow In		
Sales of Investments	\$6,500,000	
Plan Sponsor Contributions	\$15,482,615	
Employee Contributions	\$6,265,463	
Employee Buybacks	\$11,081	
Interest Income	\$0	
Rental Income	\$13,086	
Commission Recapture	\$0	
Litigation Recovery	<u>\$0</u>	
	1	
Total Cash Flow In	\$28,272,244	
Cash Flow Out		
Retirement Benefits	\$26,306,093	
StanCERA Payroll	\$352,548	
Operations Expense	\$105,949	
Pension Software	\$0	
Fixed Asset Purchases	\$0	
Employee Refunds	\$212,823	
Post Retirement Death Benefits	\$18,671	
Burial Allowances	\$75,000	
Retiree Death - Return of Contributions	\$0	
Investment Consultant Fees	\$68,750	
Actuarial Fees	\$40,551	
Custodial Fees	\$165,237	
Audit Fees	\$0	
Legal Fees	<u>\$54,075</u>	
Total Cash Flow Out	\$27,399,698	
Ending Cash Balance	\$10,466,656	
Change in Cash Balance	\$872,546	
* Prior end balances may not always equal current beginning balance due to subsequent refinement of data		STANCERA

11



832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

#### May 24, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

- I. SUBJECT: Additional Investment Administration Resources
- II. ITEM NUMBER: 7.b
- III. ITEM TYPE: Information Only
- IV. STAFF RECOMMENDATION: None
- V. EXECUTIVE SUMMARY: Currently, the Board is contemplating six asset mixes that will set the strategic asset allocation for the next three years. Each of the mixes up for consideration vary by strategy and allocation to various asset types, yet all represent a significant departure from the traditional asset classes StanCERA has used in the past to fund its liabilities. All mixes require significant shifts out of domestic equity, and some permutation of a move into asset classes such as private equity, private credit, emerging market debt, high yield fixed income and risk parity. Before the Board makes the final asset allocation decision, they will need to weigh the additional resources needed to administer the new asset class types from an accounting and governance perspective. StanCERA estimates the additional oversight cost to be at least \$146,000 (0.81 bps) annually.
- VI. ANALYSIS: Below are matrices that show the percent and dollar <u>increases</u> from today's mix into alternative asset types that will create the greatest need for more administration, oversight and governance (see attachment 1 for prospective mixes). Keep in mind the list includes only real estate, private credit and private debt and does not include high yield fixed income, emerging market debt and risk parity. While these asset types may require some additional diligence, staff doesn't feel their demand for resources will be great on an ongoing basis.

Asset Type	Mix 1	Mix 2	Mix 3	FFP 2	FFP 3	FFP 4
Real Estate	7.5%	7.5%	4.0%	12.5%	7.5%	2.5%
Private Equity	10.0	10.0	0.0	15.0	15.0	15.0
Private Debt	4.3	<u>9.3</u>	<u>1.8</u>	<u>7.3</u>	<u>8.3</u>	<u>9.3</u>
Total	21.8%	26.8%	5.8%	34.8%	30.8%	26.8%

#### Percent Increases in Dollar Allocation to Alternatives By Mix

#### Approximate Increase in Dollar Allocation to Alternatives By Mix (in millions)

Asset Type	Mix 1	Mix 2	Mix 3	<u>FFP 2</u>	<u>FFP 3</u>	FFP 4
Real Estate	\$135.0	\$135.0	\$72.0	\$225.0	\$135.0	\$45.0
Private Equity	180.0	180.0	0.0	270.0	270.0	270.0
Private Debt	77.4	<u>\$167.4</u>	32.4	<u>131.4</u>	<u>149.4</u>	167.4
Total	\$392.4	\$482.4	\$104.4	\$626.4	\$554.4	\$482.4

As can be seen, nearly every mix has a large allocation to private equity and a significant increase in the allocation to private debt (direct lending) and real estate. Today, StanCERA has

approximately \$147 million allocated to the alternative space, thus all of the mixes above represent a significant increase in total dollars allocated to this space.

#### The Private Credit and Real Estate Asset Classes

The ability to acquire and maintain a level of comfort with these assets types can be quite challenging. StanCERA and the Board continue to demand transparency in the investment process and staff consistently works to satisfy this directive and administer our current investments as efficiently as possible. The following is a list of tasks that staff performs that are unique and specific to the alternative space\*:

- > Fee transparency work with the manager to understand and reconcile fees each quarter
- > Fee replication independent calculation of fees based on the partnership agreement
- > Capital calls and distributions managing money movement and timing across accounts
- Most Favored Nation monitoring whether other LP's are getting better terms
- > LPA changes processing amendments to the partnership agreement
- > Quarterly financial information fund updates, new investments and financial evaluation
- Contract negotiation LPA and side letter must meet StanCERA satisfaction
- > Public Record Requests alternatives garner more attention from the public
- > Alternative Reporting data gathering and assimilation for reporting purposes
- \* Fee replication done for all investments

Currently, 4 StanCERA staff members touch the entire investment process on a regular basis, each spending on average, a total of 17% of their time in this area (60% to 70% of this time is spent on just the alternatives). These general touch points include regular correspondence, accounting, account reconciliation, cash movement, fee monitoring, data gathering and assimilation and reporting.

Staff estimates today that resources and time spent on just the alternative investment governance process costs the System around \$54,000 annually. Given the average potential dollar increase to the new alternative mixes, \$450 million (3 times today's allocation), it is entirely reasonable and conservative to assume demands on staff time will at least double. This equates to an estimate of an additional \$54,000 annually in staff resources and time.

#### Additional Diligence

There are many tasks that StanCERA does not perform today that should be included in a comprehensive investment governance program and are not performed by our investment consultant. These include the following:

- Investment Policy compliance
- Review of annual SOC/ADV reports (recommended in the last StanCERA audit)
- Asset Liability Management
- Trade cost monitoring
- Custodial bank monitoring
- Regular attendance at Advisory Committee Meetings (by phone or in person)
- Side Letter and LPA monitoring (whether the manager is adhering to the contract)

During the RFP process for a new investment consultant last year, StanCERA received auxiliary bids for the tasks of investment policy compliance, asset liability management, trade cost monitoring and custodial bank monitoring. The cost to contract out these four additional services

#### Retirement Board – May 24, 2016

Additional Investment Administration Resources

Page 3

today is \$80,000. This estimate does not include the SOC/ADV review, advisory committee attendance and side letter/LPA monitoring. Thus the cost to perform these additional diligence items is estimated to be at least \$80,000 annually.

#### The Functionally Focused Portfolio

Three of the current mixes up for consideration employ a concept that matches future short-term benefit payment shortfalls with assets that pay out at the appropriate time. This new concept will involve StanCERA staff projecting total system payroll, employer rates and benefit payments.

Armed with this information and working in conjunction with one of our fixed income managers, staff will supply information to help craft a fixed income portfolio that meets the objectives of this concept. This exercise will also require staff to work closely with the actuary (projecting future contribution rates) and decision makers at our three largest plan sponsors to help with future payroll projections. This exercise and coordination with the fixed income manager will need to be done on a semi-regular basis, depending on the level of error inherent in staff's projections. After the initial start-up, staff estimates an additional 12 hours a month will be needed to maintain this program at an annual cost of approximately \$12,000.

#### In-House Investment Technician

Given the above analysis, the value of performing these necessary tasks is estimated to be at least \$146,000 annually. In conjunction with the Executive Director, accounting staff and the fiscal services manager, StanCERA would be able to implement the above tasks with the help of an investment technician. This position would be "at will" and not function in the role of a Chief Investment Officer, but rather take direction from the Executive Director and perform more technical and analytical type work. With benefits, and depending on experience, staff estimates the annual cost of this position to have a range of \$100,000 to \$150,000.

#### The Outsourced CIO

In general, the concept of an outsourced CIO (OCIO) involves a decision by the institutional investor (i.e. StanCERA) to transfer or delegate discretionary authority over the investment process to a third party. This of course would not relieve StanCERA of its fiduciary responsibilities, however, the decision making process in all aspects of governance, investment and policy decisions would be in the hands of the OCIO.

Online research shows the cost of an outsourced OCIO ranges from between 25 and 65 bps, yet there are some claims this cost can be recovered through higher returns and lower investment manager fees.

#### Alternative Third Party Oversight

Other than the pure bookkeeping function, it is conceivable that all of our current (and future additional) diligence and oversight duties on the alternatives could be delegated and outsourced to a third party. However, staff feels that this is a step backwards in terms of our role as custodians of the pension fund and at the very least a certain level of internal oversight will be necessary to monitor those third parties. There are certain functions in the governance process that StanCERA simply should not delegate away. If the Board does feel that this is a viable option, then staff will research the idea of hiring a third party to administer the alternative oversight function.

Retirement Board – May 24, 2016 Additional Investment Administration Resources Page 4

- VII. RISK: None
- VIII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently\*
- IX. ADMINISTRATIVE BUDGET IMPACT: NONE

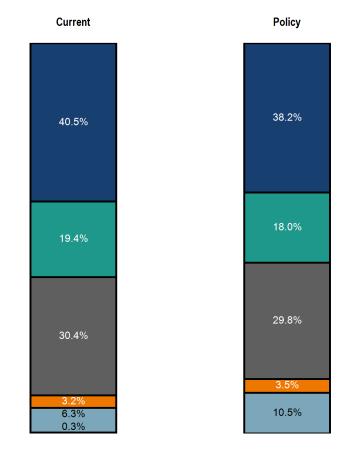
**Rick Santos, Executive Director** 

## Total Fund Flash Report (Net of Fees) - Preliminary

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,758,395,176	100.0	1.2	0.9
Policy Index			0.9	2.6
US Equity	711,934,787	40.5	0.8	-0.8
US Equity Blended			0.7	1.4
Russell 3000			0.6	1.6
Mellon S&P 500	84,685,131	4.8	0.4	1.7
S&P 500			0.4	1.7
BlackRock Russell 1000 Growth	83,910,622	4.8	-0.9	-0.2
Russell 1000 Growth			-0.9	-0.2
Jackson Square	120,618,636	6.9	-1.9	-8.0
Russell 1000 Growth			-0.9	-0.2
BlackRock Russell 1000 Value	99,211,252	5.6	2.1	3.7
Russell 1000 Value			2.1	3.8
Dodge & Cox-Equity	163,853,343	9.3	2.1	1.4
Russell 1000 Value			2.1	3.8
Legato Capital	76,766,580	4.4	0.2	-7.3
Russell 2000 Growth			1.0	-3.7
Capital Prospects	82,889,222	4.7	2.9	3.9
Russell 2000 Value			2.1	3.9
International Equity	340,658,219	19.4	2.9	1.5
MSCI ACWI ex USA Gross			2.7	2.4
LSV Asset Mgt	168,950,353	9.6	3.1	2.6
MSCI ACWI ex USA Gross			2.7	2.4
Pyramis	171,707,866	9.8	2.7	0.4
MSCI ACWI ex USA Gross			2.7	2.4
US Fixed Income	533,932,142	30.4	1.0	3.6
Barclays Aggregate			0.4	3.4
Dodge & Cox-Fixed	419,472,565	23.9	1.2	3.7
Barclays Aggregate			0.4	3.4
PIMCO	114,459,577	6.5	0.4	3.4
Barclays Aggregate			0.4	3.4

## Period Ending: April 30, 2016

	Current	%	Policy	%
Domestic Equity	\$711,934,787	40.5%	\$671,706,957	38.2%
International Equity	\$340,658,219	19.4%	\$316,511,132	18.0%
Domestic Fixed Income	\$533,932,142	30.4%	\$524,001,762	29.8%
Real Estate	\$55,944,924	3.2%	\$61,543,831	3.5%
Alternatives	\$110,602,138	6.3%	\$184,631,493	10.5%
Cash and Equivalents	\$5,322,966	0.3%		
Total	\$1,758,395,176	100.0%	\$1,758,395,176	100.0%



Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000. All data is preliminary.

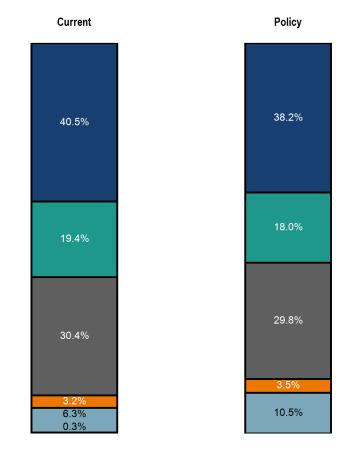


## Total Fund Flash Report (Net of Fees) - Preliminary

	Market Value	% of Portfolio	1 Mo	YTD
Real Estate	55,944,924	3.2	-1.4	0.5
DJ US Select RESI			-2.9	2.0
Prime Property Fund	15,754,509	0.9	0.0	1.9
NCREIF-ODCE			0.0	2.2
American Strategic Value Realty	7,208,080	0.4	0.0	3.2
NCREIF Property Index			0.0	2.2
BlackRock US Real Estate	22,859,188	1.3	-2.9	2.0
DJ US Select RESI TR USD			-2.9	2.0
Greenfield Gap	10,123,148	0.6		
Direct Lending	104,105,232	5.9		
Medley Capital	27,922,900	1.6		
Raven Capital	26,431,355	1.5		
Raven Opportunity III	10,667,294	0.6		
White Oak Pinnacle	39,083,683	2.2		
Infrastructure	6,496,906	0.4		
MS Infrastructure Partners II	6,496,906	0.4		
Cash Account	5,322,966	0.3	0.0	0.3

## Period Ending: April 30, 2016

	Current	%	Policy	%
Domestic Equity	\$711,934,787	40.5%	\$671,706,957	38.2%
International Equity	\$340,658,219	19.4%	\$316,511,132	18.0%
Domestic Fixed Income	\$533,932,142	30.4%	\$524,001,762	29.8%
Real Estate	\$55,944,924	3.2%	\$61,543,831	3.5%
Alternatives	\$110,602,138	6.3%	\$184,631,493	10.5%
Cash and Equivalents	\$5,322,966	0.3%		
Total	\$1,758,395,176	100.0%	\$1,758,395,176	100.0%



Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000. All data is preliminary.



# Disclosures

This report is subject to the terms and conditions of the Consulting Agreement. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvestorForce, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.



## **Stanislaus County Employees' Retirement Association**

Investment Performance Review Period Ending: March 31, 2016



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700 LOS ANGELES 310-297-1777 SAN FRANCISCO 415-362-3484

Sources of Portfolio Growth	Last Three Months	Year-To-Date
Beginning Market Value	\$1,754,035,445	\$1,754,035,445
Net Additions/Withdrawals	-\$8,842,269	-\$8,842,269
Investment Earnings	-\$4,346,135	-\$4,346,135
Ending Market Value	\$1,740,847,040	\$1,740,847,040

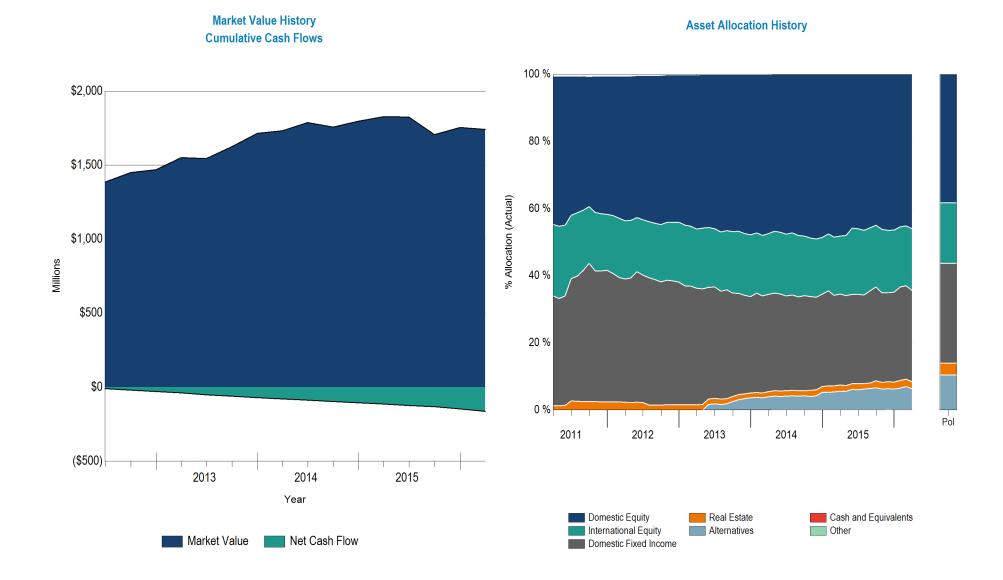
### **Portfolio Reconciliation**

#### Change in Market Value Last Three Months



Contributions and withdrawals may include intra-account transfers between managers/funds.





Verus<sup>777</sup>

## Total Fund Asset Allocation vs. Policy

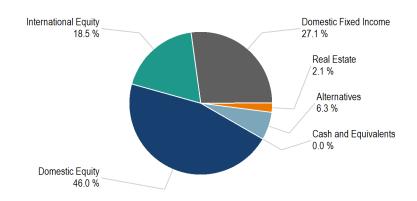
Current	Policy		Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
4.3%	4.8%	Domestic Equity Large Cap Core	\$74,531,770	4.3%	4.8%	-\$9,028,888	3.8% - 5.8%	Yes
15.6%	11.3%	Domestic Equity Large Cap Growth	\$272,015,903	15.6%	11.3%	\$75,300,188	7.8% - 14.8%	No
15.6%		Domestic Equity Large Cap Value	\$296,882,326	17.1%	14.4%	\$46,200,352	11.4% - 17.4%	Yes
	14.4%	Domestic Equity Small Cap Growth	\$76,492,752	4.4%	3.7%	\$12,081,412	2.7% - 4.7%	Yes
17.1%		Domestic Equity Small Cap Value	\$80,482,878	4.6%	4.0%	\$10,848,996	3.0% - 5.0%	Yes
	3.7%	International Equity	\$321,189,501	18.5%	18.0%	\$7,837,034	15.0% - 21.0%	Yes
	4.0%	Domestic Fixed Income	\$472,208,298	27.1%	29.8%	-\$46,564,120	26.0% - 33.6%	Yes
4.4%	4.0%	Real Estate	\$36,578,403	2.1%	3.5%	-\$24,351,243	1.0% - 4.5%	Yes
		Direct Lending	\$103,962,233	6.0%	7.5%	-\$26,601,295	2.5% - 9.0%	Yes
4.6%		Infrastructure	\$6,496,906	0.4%	3.0%	-\$45,728,505	0.0% - 4.0%	Yes
	18.0%	Cash and Equivalents	\$6,070	0.0%	0.0%	\$6,070	0.0% - 2.0%	Yes
		Total	\$1,740,847,040	100.0%	100.0%			
18.5%								
27.1%	29.8%							
2 10/	3.5%							
2.1% 6.0% 0.4% 0.5%	7.5% 3.0% 0.0%							



## Total Fund Executive Summary (Gross of Fees)

	QTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Fund	-0.2	-2.9	-2.5	6.3	6.9	5.7
Policy Index	1.6	0.0	-0.4	6.3	6.8	6.0
InvestorForce Public DB Gross Rank	95	85	79	38	30	35
US Equity	-1.5	-4.5	-3.5	10.2	10.8	6.0
US Equity Blended	0.6	-1.8	-1.6	10.6	10.6	6.9
Russell 3000	1.0	-0.5	-0.3	11.1	11.0	6.9
InvestorForce All DB US Eq Gross Rank	92	87	80	68	32	82
International Equity	-1.1	-9.6	-8.4	1.6	1.5	2.9
MSCI ACWI ex USA Gross	-0.3	-9.4	-8.8	0.8	0.8	2.4
InvestorForce All DB ex-US Eq Gross Rank	68	68	64	55	58	36
US Fixed Income	2.6	2.5	1.4	2.9	4.4	5.9
Barclays Aggregate	3.0	3.7	2.0	2.5	3.8	4.9
InvestorForce All DB US Fix Inc Gross Rank	60	63	45	36	47	40
Real Estate	2.2	10.3	9.3	11.6	6.7	
DJ US Select RESI	5.1	16.4	4.7	11.1	10.7	
Direct Lending	-0.6	2.6	4.7			
9% Annual	2.2	6.7	9.0			
Infrastructure	0.0	6.5				
CPI + 5%	1.9	3.5				

#### **Current Allocation**



Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000. All data prior to 6/30/2015 provided by the previous consultant. Medley, Greenfield, White Oak and MS Infrastructure fund market values are as of 12/31/2015 adjusted for any calls and distributions in 1Q 2016. Raven Capital and Raven Opportunity fund III market values are preliminary.



## Total Fund Executive Summary (Net of Fees)

	QTD	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Fund	-0.3	-3.3	-2.9	5.9	6.5	5.3
Policy Index	1.6	0.0	-0.4	6.3	6.8	6.0
US Equity	-1.6	-4.7	-3.7	9.9	10.5	5.7
US Equity Blended	0.6	-1.8	-1.6	10.6	10.6	6.9
Russell 3000	1.0	-0.5	-0.3	11.1	11.0	6.9
International Equity	-1.3	-10.0	-8.9	1.2	1.1	2.4
MSCI ACWI ex USA Gross	-0.3	-9.4	-8.8	0.8	0.8	2.4
US Fixed Income	2.6	2.4	1.3	2.8	4.2	5.7
Barclays Aggregate	3.0	3.7	2.0	2.5	3.8	4.9
Real Estate	1.9	9.1	7.9	10.8	5.5	
DJ US Select RESI	5.1	16.4	4.7	11.1	10.7	
Direct Lending	-0.6	1.8	3.8			
9% Annual	2.2	6.7	9.0			
Infrastructure	0.0	2.5				
CPI + 5%	1.9	3.5				

Fiscal

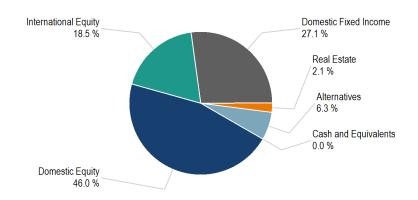
...

~ \ /

- > /

40.14

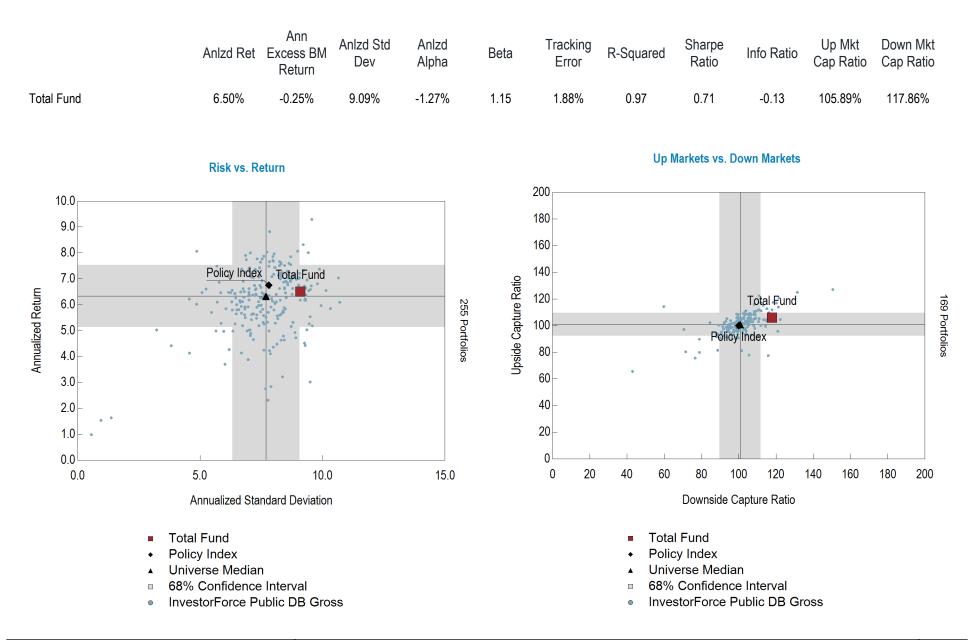
#### **Current Allocation**



Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000. All data prior to 6/30/2015 provided by the previous consultant. Medley, Greenfield, White Oak and MS Infrastructure fund market values are as of 12/31/2015 adjusted for any calls and distributions in 1Q 2016. Raven Capital and Raven Opportunity fund III market values are preliminary.



## Total Fund Risk Analysis - 5 Years (Net of Fees)



## Verus<sup>77</sup>

## Total Fund Performance Summary (Gross of Fees)

Period Ending: March 31, 2016

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2015	2014	2013	2012	2011
Total Fund	1,740,847,040	100.0	-0.2	-2.9	-2.5	6.3	6.9	5.7	-0.3	6.9	19.8	14.3	-0.3
Policy Index			1.6	0.0	-0.4	6.3	6.8	6.0	0.2	7.5	15.4	12.3	1.4
InvestorForce Public DB Gross Rank			95	85	79	38	30	35	61	23	12	10	75
US Equity	800,405,629	46.0	-1.5	-4.5	-3.5	10.2	10.8	6.0	-0.2	10.9	36.9	18.8	0.5
US Equity Blended			0.6	-1.8	-1.6	10.6	10.6	6.9	-0.1	11.6	34.3	16.7	0.7
Russell 3000			1.0	-0.5	-0.3	11.1	11.0	6.9	0.5	12.6	33.6	16.4	1.0
InvestorForce All DB US Eq Gross Rank			92	87	80	68	32	82	63	54	13	6	49
Mellon S&P 500	74,531,770	4.3	1.4	1.5	1.8	11.8	11.6	7.1	1.4	13.7	32.4	16.0	2.1
S&P 500			1.3	1.5	1.8	11.8	11.6	7.0	1.4	13.7	32.4	16.0	2.1
eA US Large Cap Core Equity Gross Rank			36	28	26	45	45	66	41	42	58	40	40
BlackRock Russell 1000 Growth	114,134,561	6.6	0.7	2.4	2.6	13.6	12.5		5.7	13.1	33.5	15.4	2.8
Russell 1000 Growth			0.7	2.4	2.5	13.6	12.4		5.7	13.0	33.5	15.3	2.6
eA US Large Cap Growth Equity Gross Rank			19	14	17	34	28		42	37	56	53	21
Jackson Square	157,881,342	9.1	-6.1	-5.0	-3.5	11.6	13.0		5.9	13.8	35.6	17.0	8.9
Russell 1000 Growth			0.7	2.4	2.5	13.6	12.4		5.7	13.0	33.5	15.3	2.6
eA US Large Cap Growth Equity Gross Rank			97	87	81	68	17		39	32	39	36	3
BlackRock Russell 1000 Value	121,715,042	7.0	1.6	-1.5	-1.4	9.5	10.4		-3.6	13.5	32.6	17.6	0.5
Russell 1000 Value			1.6	-1.6	-1.5	9.4	10.2		-3.8	13.5	32.5	17.5	0.4
eA US Large Cap Value Equity Gross Rank			41	41	41	61	49		62	31	59	30	50
Dodge & Cox-Equity	175,167,284	10.1	-0.6	-5.9	-3.3	9.7	10.5	5.7	-3.9	10.9	39.1	22.3	-3.0
Russell 1000 Value			1.6	-1.6	-1.5	9.4	10.2	5.7	-3.8	13.5	32.5	17.5	0.4
eA US Large Cap Value Equity Gross Rank			74	79	63	56	46	79	64	72	15	3	75
Legato Capital	76,492,752	4.4	-7.1	-15.1	-12.8	7.1	8.3		-0.7	3.0	47.3	18.1	-2.0
Russell 2000 Growth			-4.7	-13.6	-11.8	7.9	7.7		-1.4	5.6	43.3	14.6	-2.9
eA US Small Cap Growth Equity Gross Rank			79	65	67	64	52		52	57	41	24	54
Capital Prospects	80,482,878	4.6	1.4	-7.9	-9.1	6.8	8.7		-7.0	5.8	37.9	23.8	-4.0
Russell 2000 Value			1.7	-6.6	-7.7	5.7	6.7		-7.5	4.2	34.5	18.1	-5.5
eA US Small Cap Value Equity Gross Rank			66	74	82	74	53		72	51	53	9	59

Verus<sup>777</sup>

## Total Fund Performance Summary (Gross of Fees)

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2015	2014	2013	2012	2011
International Equity	321,189,501	18.5	-1.1	-9.6	-8.4	1.6	1.5	2.9	-3.7	-4.2	20.0	18.0	-13.1
MSCI ACWI ex USA Gross			-0.3	-9.4	-8.8	0.8	0.8	2.4	-5.3	-3.4	15.8	17.4	-13.3
InvestorForce All DB ex-US Eq Gross Rank			68	68	64	55	58	36	51	70	35	63	51
LSV Asset Mgt	158,941,137	9.1	-0.3	-10.3	-9.0	1.6	1.3	2.6	-5.1	-4.0	20.4	16.7	-12.5
MSCI ACWI ex USA Gross			-0.3	-9.4	-8.8	0.8	0.8	2.4	-5.3	-3.4	15.8	17.4	-13.3
eA ACWI ex-US Equity Unhedged Gross Rank			40	80	81	81	83	87	86	65	46	78	55
Pyramis	162,248,364	9.3	-1.9	-8.8	-7.6	1.8	1.9		-2.0	-4.5	19.6	19.3	-13.5
MSCI ACWI ex USA Gross			-0.3	-9.4	-8.8	0.8	0.8		-5.3	-3.4	15.8	17.4	-13.3
eA ACWI ex-US Equity Unhedged Gross Rank			65	72	72	78	74		66	70	55	55	63
US Fixed Income	472,208,298	27.1	2.6	2.5	1.4	2.9	4.4	5.9	0.3	6.2	0.3	7.9	5.9
Barclays Aggregate			3.0	3.7	2.0	2.5	3.8	4.9	0.6	6.0	-2.0	4.2	7.8
InvestorForce All DB US Fix Inc Gross Rank			60	63	45	36	47	40	42	42	21	48	77
Dodge & Cox-Fixed	358,285,800	20.6	2.5	2.2	1.1	3.1	4.5	5.9	0.2	6.5	0.9	8.4	5.4
Barclays Aggregate			3.0	3.7	2.0	2.5	3.8	4.9	0.6	6.0	-2.0	4.2	7.8
eA US Core Fixed Inc Gross Rank			89	95	96	17	30	16	89	26	3	9	95
PIMCO	113,922,498	6.5	3.0	3.6	2.3	2.1	4.0		0.9	5.0	-2.2	5.8	8.6
Barclays Aggregate			3.0	3.7	2.0	2.5	3.8		0.6	6.0	-2.0	4.2	7.8
eA US Core Fixed Inc Gross Rank			52	58	37	93	67		49	83	89	54	19
Real Estate	36,578,403	2.1	2.2	10.3	9.3	11.6	6.7		12.1	28.3	1.4	5.6	-10.2
DJ US Select RESI			5.1	16.4	4.7	11.1	10.7		4.5	31.9	1.3	16.1	0.4
Prime Property Fund	15,754,509	0.9	2.2										
NCREIF-ODCE			2.2										
American Strategic Value Realty	7,208,080	0.4	3.6	14.3	18.5				21.4				
NCREIF Property Index			2.2	8.4	11.8				13.3				
BlackRock US Real Estate	3,492,734	0.2	5.1	16.4	4.7	11.1			4.4	31.9	1.4		
DJ US Select RESI TR USD			5.1	16.4	4.7	11.1			4.5	31.9	1.3		
eA US REIT Gross Rank			55	42	56	67			58	39	91		

Verus<sup>777</sup>

## Total Fund Performance Summary (Net of Fees)

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2015	2014	2013	2012	2011
Total Fund	1,740,847,040	100.0	-0.3	-3.3	-2.9	5.9	6.5	5.3	-0.6	6.5	19.2	14.0	-0.6
Policy Index			1.6	0.0	-0.4	6.3	6.8	6.0	0.2	7.5	15.4	12.3	1.4
US Equity	800,405,629	46.0	-1.6	-4.7	-3.7	9.9	10.5	5.7	-0.4	10.7	36.5	18.5	0.2
US Equity Blended			0.6	-1.8	-1.6	10.6	10.6	6.9	-0.1	11.6	34.3	16.7	0.7
Russell 3000			1.0	-0.5	-0.3	11.1	11.0	6.9	0.5	12.6	33.6	16.4	1.0
Mellon S&P 500	74,531,770	4.3	1.3	1.5	1.8	11.8	11.6	7.0	1.4	13.7	32.4	16.0	1.9
S&P 500			1.3	1.5	1.8	11.8	11.6	7.0	1.4	13.7	32.4	16.0	2.1
BlackRock Russell 1000 Growth	114,134,561	6.6	0.7	2.4	2.5	13.6	12.4		5.7	13.1	33.5	15.4	2.8
Russell 1000 Growth			0.7	2.4	2.5	13.6	12.4		5.7	13.0	33.5	15.3	2.6
Jackson Square	157,881,342	9.1	-6.3	-5.3	-3.8	11.1	12.5		5.5	13.4	34.9	16.6	8.3
Russell 1000 Growth			0.7	2.4	2.5	13.6	12.4		5.7	13.0	33.5	15.3	2.6
BlackRock Russell 1000 Value	121,715,042	7.0	1.6	-1.5	-1.4	9.5	10.3		-3.6	13.5	32.6	17.6	0.5
Russell 1000 Value			1.6	-1.6	-1.5	9.4	10.2		-3.8	13.5	32.5	17.5	0.4
Dodge & Cox-Equity	175,167,284	10.1	-0.7	-6.0	-3.5	9.6	10.3	5.6	-4.0	10.7	38.8	22.1	-3.2
Russell 1000 Value			1.6	-1.6	-1.5	9.4	10.2	5.7	-3.8	13.5	32.5	17.5	0.4
Legato Capital	76,492,752	4.4	-7.5	-16.2	-13.9	6.1	7.4		-1.8	2.5	46.0	17.4	-2.9
Russell 2000 Growth			-4.7	-13.6	-11.8	7.9	7.7		-1.4	5.6	43.3	14.6	-2.9
Capital Prospects	80,482,878	4.6	1.0	-8.9	-10.1	5.9	7.9		-7.9	5.2	36.8	23.2	-4.8
Russell 2000 Value			1.7	-6.6	-7.7	5.7	6.7		-7.5	4.2	34.5	18.1	-5.5
International Equity	321,189,501	18.5	-1.3	-10.0	-8.9	1.2	1.1	2.4	-4.0	-4.5	19.4	17.5	-13.6
MSCI ACWI ex USA Gross			-0.3	-9.4	-8.8	0.8	0.8	2.4	-5.3	-3.4	15.8	17.4	-13.3
LSV Asset Mgt	158,941,137	9.1	-0.4	-10.6	-9.4	1.2	0.8	2.1	-5.4	-4.2	19.8	16.2	-13.0
MSCI ACWI ex USA Gross			-0.3	-9.4	-8.8	0.8	0.8	2.4	-5.3	-3.4	15.8	17.4	-13.3
Pyramis	162,248,364	9.3	-2.2	-9.4	-8.2	1.3	1.4		-2.3	-4.9	19.1	18.8	-13.9
MSCI ACWI ex USA Gross			-0.3	-9.4	-8.8	0.8	0.8		-5.3	-3.4	15.8	17.4	-13.3
US Fixed Income	472,208,298	27.1	2.6	2.4	1.3	2.8	4.2	5.7	0.2	6.1	0.1	7.7	5.7
Barclays Aggregate			3.0	3.7	2.0	2.5	3.8	4.9	0.6	6.0	-2.0	4.2	7.8
Dodge & Cox-Fixed	358,285,800	20.6	2.5	2.1	1.1	3.0	4.4	5.8	0.1	6.4	0.8	8.3	5.3
Barclays Aggregate			3.0	3.7	2.0	2.5	3.8	4.9	0.6	6.0	-2.0	4.2	7.8
PIMCO	113,922,498	6.5	2.9	3.3	2.0	1.8	3.7		0.6	4.7	-2.5	5.5	8.2
Barclays Aggregate			3.0	3.7	2.0	2.5	3.8		0.6	6.0	-2.0	4.2	7.8

## Total Fund Performance Summary (Net of Fees)

## Period Ending: March 31, 2016

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2015	2014	2013	2012	2011
Real Estate	36,578,403	2.1	1.9	9.1	7.9	10.8	5.5		10.5	27.4	1.3	2.7	-10.8
DJ US Select RESI			5.1	16.4	4.7	11.1	10.7		4.5	31.9	1.3	16.1	0.4
Prime Property Fund	15,754,509	0.9	1.9										
NCREIF-ODCE			2.2										
American Strategic Value Realty	7,208,080	0.4	3.2	12.2	16.3				18.3				
NCREIF Property Index			2.2	8.4	11.8				13.3				
BlackRock US Real Estate	3,492,734	0.2	5.1	16.3	4.7	11.0			4.4	31.9	1.3		
DJ US Select RESI TR USD			5.1	16.4	4.7	11.1			4.5	31.9	1.3		



Inception Date	Manager Name/Fund Name	Estimated Market Value as of 3/31/16 <sup>3</sup>	Total Commitment	Capital Called	% Called	Remaining Commitment	Total Distributions	Distrib./ Paid-In (DPI) <sup>1</sup>	Tot. Value/ Paid-In (TVPI) <sup>2</sup>	Latest Valuation
Real Estate										
07/31/2014	Greenfield Gap	\$10,123,081	\$15,000,000	\$8,589,430	57%	\$6,410,570	\$135,428	1.6%	119.4%	12/31/2015
	Total Real Estat	te \$10,123,081	\$15,000,000	\$8,589,430	57%	\$6,410,570	\$135,428	1.6%	119.4%	
	% of Portfolio (Market Value	2) 0.6%								
Direct Lend	ling									
	Medley Capital	\$27,922,900	\$30,000,000	\$29,000,453	97%	\$999,547	\$9,777,456	33.7%	130.0%	12/31/2015
	Raven Capital	\$26,288,356	\$40,000,000	\$34,505,763	86%	\$5,494,237	\$11,351,116	32.9%	109.1%	03/31/2016
	Raven Opportunity III	\$10,667,294	\$15,000,000	\$13,069,073	87%	\$1,930,927	\$2,315,465	17.7%	99.3%	03/31/2016
08/31/2013	White Oak Pinnacle	\$39,083,683	\$40,000,000	\$40,000,000	100%	\$0	\$10,092,930	25.2%	122.9%	12/31/2016
	Total Direct Lendin	g \$103,962,233	\$125,000,000	\$116,575,289	93%	\$8,424,711	\$33,536,967	28.8%	117.9%	
	% of Portfolio (Market Value	e) 6.0%								
Infrastructu	ıre									
05/31/2015	MS Infrastructure Partners II	\$6,496,906	\$50,000,000	\$7,601,982	15%	\$42,398,018	\$1,295,430	17.0%	102.5%	12/31/2015
	Total Infrastructure	\$6,496,906	\$50,000,000	\$7,601,982	15%	\$42,398,018	\$1,295,430	17.0%	102.5%	
	% of Portfolio (Market Value)	0.4%								

1 (DPI) is equal to (capital returned / capital called) 2 (TVPI) is equal to (market value + capital returned) / capital called 3 Last known market value + capital calls - distributions

Verus<sup>777</sup>

## Total Fund Performance Analysis - 3 and 5 Years (Net of Fees)

## Period Ending: March 31, 2016

3 Years											
	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Mellon S&P 500	11.81%	-0.01%	8.41%	0.00%	1.00	0.03%	1.00	1.40	-0.25	99.90%	99.75%
BlackRock Russell 1000 Growth	13.62%	0.01%	8.44%	0.02%	1.00	0.05%	1.00	1.61	0.19	100.09%	100.07%
Jackson Square	11.14%	-2.47%	11.78%	-6.52%	1.30	5.01%	0.86	0.94	-0.49	87.39%	136.05%
BlackRock Russell 1000 Value	9.47%	0.09%	9.01%	0.12%	1.00	0.05%	1.00	1.05	1.97	100.43%	98.83%
Dodge & Cox-Equity	9.56%	0.18%	10.21%	-0.44%	1.07	3.44%	0.89	0.93	0.05	104.16%	107.58%
Legato Capital	6.14%	-1.77%	15.37%	-2.01%	1.03	3.01%	0.96	0.40	-0.59	94.17%	109.39%
Capital Prospects	5.95%	0.22%	12.07%	0.53%	0.95	2.94%	0.94	0.49	0.08	95.46%	91.25%
LSV Asset Mgt	1.22%	0.46%	12.74%	0.39%	1.09	1.39%	0.99	0.09	0.33	112.71%	105.70%
Pyramis	1.29%	0.53%	10.86%	0.60%	0.91	2.76%	0.95	0.11	0.19	93.87%	89.24%
Dodge & Cox-Fixed	3.01%	0.51%	2.80%	1.11%	0.76	1.57%	0.76	1.06	0.33	85.88%	34.77%
PIMCO	1.81%	-0.69%	3.17%	-0.62%	0.97	0.59%	0.97	0.55	-1.16	84.51%	104.93%
BlackRock US Real Estate	11.00%	-0.05%	13.75%	-0.04%	1.00	0.05%	1.00	0.80	-1.02	99.68%	100.09%

5 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Mellon S&P 500	11.57%	-0.01%	12.73%	0.00%	1.00	0.02%	1.00	0.90	-0.41	99.87%	99.90%
BlackRock Russell 1000 Growth	12.43%	0.05%	12.78%	0.06%	1.00	0.05%	1.00	0.97	1.06	100.25%	99.65%
Jackson Square	12.50%	0.12%	14.16%	-0.58%	1.06	4.27%	0.91	0.88	0.03	99.60%	97.24%
BlackRock Russell 1000 Value	10.33%	0.08%	13.78%	0.10%	1.00	0.05%	1.00	0.75	1.65	100.31%	99.43%
Dodge & Cox-Equity	10.31%	0.06%	15.16%	-0.72%	1.08	3.19%	0.96	0.68	0.02	107.43%	110.31%
Legato Capital	7.38%	-0.32%	18.36%	-0.10%	0.97	3.01%	0.97	0.40	-0.11	93.47%	96.50%
Capital Prospects	7.87%	1.20%	17.13%	1.35%	0.98	2.84%	0.97	0.46	0.42	105.78%	96.42%
LSV Asset Mgt	0.85%	0.08%	15.85%	0.04%	1.06	1.39%	1.00	0.05	0.06	109.81%	105.15%
Pyramis	1.45%	0.68%	14.92%	0.69%	0.99	2.19%	0.98	0.09	0.31	101.36%	96.17%
Dodge & Cox-Fixed	4.40%	0.62%	2.51%	2.37%	0.54	2.37%	0.42	1.73	0.26	95.31%	19.10%
PIMCO	3.74%	-0.04%	3.14%	-0.11%	1.02	0.65%	0.96	1.17	-0.06	98.45%	97.52%

Performance Analysis excludes closed end funds and those funds without 3 and 5 years of performance.

Verus<sup>777</sup>

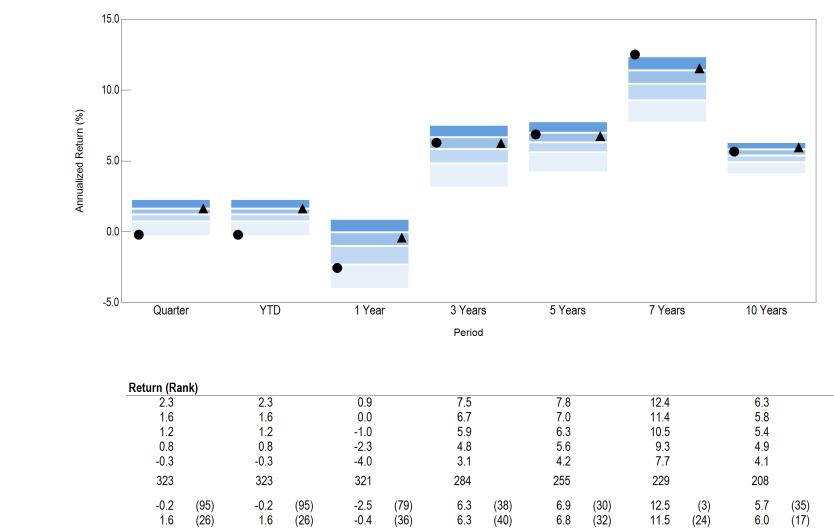
## Total Fund Investment Fund Fee Analysis

## Period Ending: March 31, 2016

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Mellon S&P 500	Domestic Equity	0.04% of Assets	\$74,531,770	\$26,086	0.04%
BlackRock Russell 1000 Growth	Domestic Equity	0.02% of Assets	\$114,134,561	\$22,827	0.02%
Jackson Square	Domestic Equity	0.50% of First \$100.0 Mil, 0.45% Thereafter	\$157,881,342	\$760,466	0.48%
BlackRock Russell 1000 Value	Domestic Equity	0.02% of Assets	\$121,715,042	\$24,343	0.02%
Dodge & Cox-Equity	Domestic Equity	0.40% of First \$10.0 Mil, 0.20% of Next \$90.0 Mil, 0.15% Thereafter	\$175,167,284	\$332,751	0.19%
Legato Capital	Domestic Equity	0.77% of Assets	\$76,492,752	\$588,994	0.77%
Capital Prospects	Domestic Equity	0.75% of Assets	\$80,482,878	\$603,622	<b>0.7</b> 5%
LSV Asset Mgt	International Equity	0.75% of First \$25.0 Mil, 0.65% of Next \$25.0 Mil, 0.55% of Next \$50.0 Mil, 0.45% Thereafter	\$158,941,137	\$890,235	0.56%
Pyramis	International Equity	0.25% of Assets	\$162,248,364	\$405,621	0.25%
Dodge & Cox-Fixed	Domestic Fixed Income	0.40% of First \$4.0 Mil, 0.30% of Next \$6.0 Mil, 0.20% of Next \$10.0 Mil, 0.10% Thereafter	\$358,285,800	\$392,286	0.11%
PIMCO	Domestic Fixed Income	0.50% of First \$25.0 Mil, 0.38% of Next \$25.0 Mil, 0.25% Thereafter	\$113,922,498	\$378,556	0.33%
Prime Property Fund	Real Estate	0.84% of Assets	\$15,754,509	\$132,338	0.84%
American Strategic Value Realty	Real Estate	1.25% of First \$10.0 Mil, 1.20% of Next \$15.0 Mil, 1.10% of Next \$25.0 Mil, 1.00% Thereafter	\$7,208,080	\$90,101	1.25%
BlackRock US Real Estate	Real Estate	0.09% of First \$100.0 Mil, 0.07% Thereafter	\$3,492,734	\$3,143	0.09%
Cash Account	Cash and Equivalents	0.10% of Assets	\$6,070	\$6	0.10%
Total			\$1,620,264,821	\$4,651,375	0.29%

Closed end funds excluded from fee analysis. Pyramis has performance based fees which are not included in the analysis above; fee shown is the annual base fee only.

Verus<sup>777</sup>



#### Total Fund Cumulative Performance vs. InvestorForce Public DB Gross

Verus<sup>77</sup>

**5th Percentile** 

25th Percentile

75th Percentile

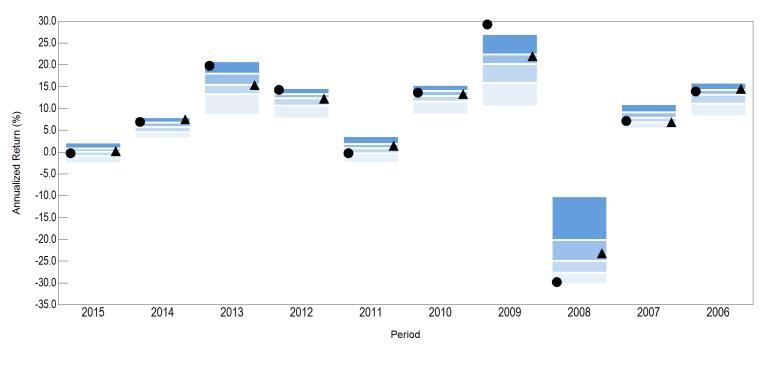
95th Percentile

# of Portfolios

• Total Fund

▲ Policy Index

Median



Total Fund	Consecutive	Periods vs.	InvestorForce	Public DB Gross

	Return (Rank)									
5th Percentile	2.2	8.0	20.8	14.6	3.6	15.4	27.0	-10.1	11.0	15.9
25th Percentile	0.9	6.8	18.0	13.4	1.9	14.0	22.4	-20.1	9.1	14.2
Median	0.1	5.8	15.5	12.4	0.9	12.9	20.2	-24.9	7.9	13.2
75th Percentile	-0.9	4.6	13.3	10.7	-0.3	11.7	15.9	-27.6	6.9	11.2
95th Percentile	-2.6	3.2	8.5	7.8	-2.5	8.6	10.5	-30.3	5.4	8.3
# of Portfolios	316	248	231	236	206	188	184	181	177	171
Total Fund	-0.3 (61)	6.9 (23)	19.8 (12)	14.3 (10)	-0.3 (75)	13.6 (35)	29.3 (1)	-29.8 (92)	7.1 (68)	13.9 (31)
Policy Index	0.2 (46)	7.5 (12)	15.4 (52)	12.3 (53)	1.4 (35)	13.3 (42)	22.0 (29)	-23.2 (37)	6.9 (76)	14.5 (22)

**Domestic Equity Managers** 

## Mellon S&P 500 Manager Portfolio Overview

### **Characteristics**

	Portfolio	S&P 500
Number of Holdings	500	504
Weighted Avg. Market Cap. (\$B)	129.46	128.86
Median Market Cap. (\$B)	18.21	18.28
Price To Earnings	24.21	22.73
Price To Book	4.91	4.24
Price To Sales	3.50	2.98
Return on Equity (%)	18.81	17.79
Yield (%)	2.17	2.16
Beta	1.00	1.00

#### Energy 6.8 Materials 2.8 Industrials 10.1 10.1 Cons. Disc. 12.9 10.4 Cons. Staples Health Care 14.3 15.7 15.6 Financials Info. Tech 20.8 20.8 Telecomm. 2.8 2.8 Utilities 3.4 Unclassified 0.0 0.0 5.0 10.0 15.0 20.0 25.0

Mellon S&P 500

### Sector Allocation (%) vs S&P 500

Т	op Contributo	ors		Bot	tom Contribu	tors	
	Avg Wgt	Return	Contribution		Avg Wgt	Return	Contribution
VERIZON	1.15	18.46	0.21	BANK OF AMERICA	0.87	-19.37	-0.17
COMMUNICATIONS	1.15	10.40	0.21	AMAZON.COM	1.34	-12.17	-0.16
AT&T	1.27	15.44	0.20	CITIGROUP	0.76	-19.22	-0.15
EXXON MOBIL	1.89	8.21	0.16	WELLS FARGO & CO	1.36	-10.34	-0.14
APPLE	3.22	4.10	0.13	JP MORGAN CHASE &	1.00	0.00	0.40
FACEBOOK CLASS A	1.42	9.02	0.13	CO.	1.29	-9.69	-0.13
BERKSHIRE HATHAWAY	1.43	7.45	0.11	ALLERGAN	0.68	-14.23	-0.10
'B'	1.45	7.45	0.11	PFIZER	1.10	-7.25	-0.08
PHILIP MORRIS INTL.	0.80	12.78	0.10	CELGENE	0.48	-16.42	-0.08
JOHNSON & JOHNSON	1.67	6.09	0.10	REGENERON PHARMS.	0.20	-33.60	-0.07
COCA COLA	0.98	8.82	0.09	GILEAD SCIENCES	0.75	-8.79	-0.07
ORACLE	0.68	12.46	0.08				

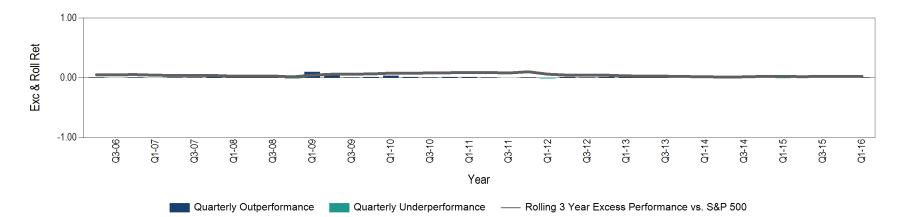
S&P 500

	End Weight	Return
APPLE	3.37	4.10
ALPHABET 'C'	2.47	-1.84
MICROSOFT	2.43	0.25
EXXON MOBIL	1.93	8.21
JOHNSON & JOHNSON	1.66	6.09
GENERAL ELECTRIC	1.65	2.86
BERKSHIRE HATHAWAY 'B'	1.48	7.45
FACEBOOK CLASS A	1.46	9.02
AT&T	1.34	15.44
AMAZON.COM	1.28	-12.17

Largest Holdings

nclassified sector allocation in	ncludes cash allocations.





**Annualized Excess Performance** 

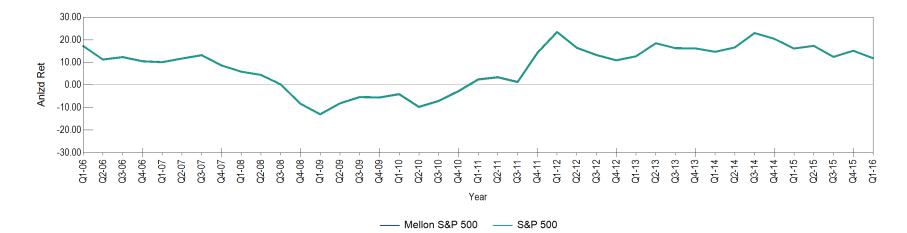
#### 45.0 40.0 35.0 Annualized Return (%) 30.0 25.0 20.0 15.0 10.0 5.0 0.0 -5.0 -10.0 Quarter 2015 2013 2011 1 Year 3 Years 5 Years 10 Years 2014 2012 Return (Rank) 5th Percentile 4.8 5.7 14.7 14.3 9.5 6.3 17.7 39.6 20.1 7.0 25th Percentile 2.0 1.9 12.7 12.3 8.1 2.7 35.5 3.6 15.1 17.2 Median 0.5 -0.3 11.5 11.3 7.4 0.6 13.3 32.9 15.4 1.3 75th Percentile -0.7 -2.5 10.6 10.0 6.8 -1.6 30.8 13.4 -1.5 11.4 95th Percentile -2.7 -6.5 7.8 8.2 6.0 -4.1 8.2 25.4 9.8 -5.9 # of Portfolios 248 248 244 231 189 267 267 261 254 259 Mellon S&P 500 1.4 (36) 1.8 (26)11.8 (45) 11.6 (45) 7.1 (66) 1.4 (41)13.7 (42) 32.4 (58) 16.0 (40) 2.1 (40) S&P 500 1.3 (36) 1.8 (26) 11.8 (45) 11.6 (46) 7.0 (67) 1.4 (42) 13.7 (42) 32.4 (58) 16.0 (41) 2.1 (40)

#### Mellon S&P 500 vs. eA US Large Cap Core Equity Gross Universe

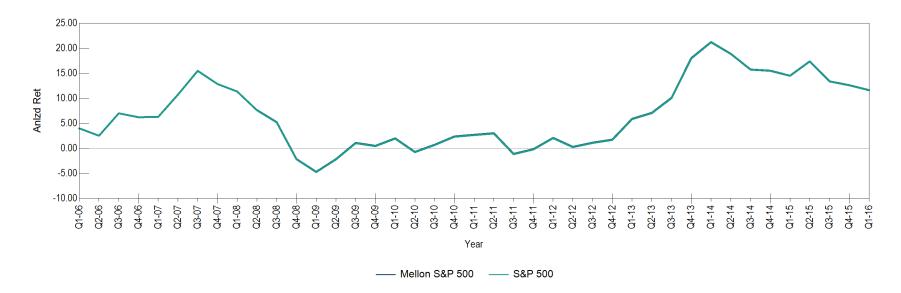
Verus<sup>77</sup>

•

▲

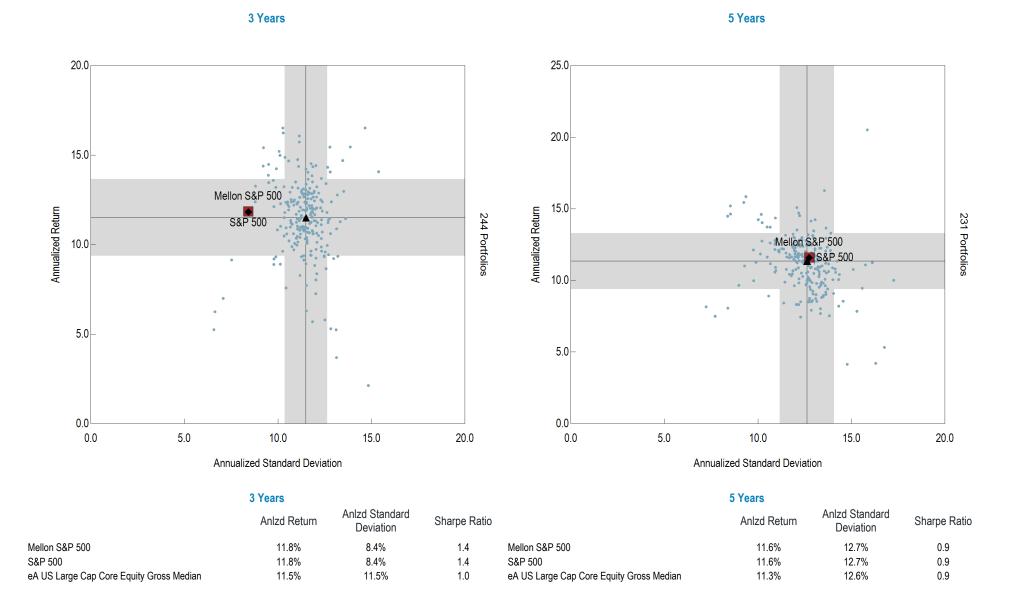








## Mellon S&P 500 Risk vs. Return 3 & 5 Year (Gross of Fees)



### BlackRock Russell 1000 Growth Manager Portfolio Overview

### Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	634	635
Weighted Avg. Market Cap. (\$B)	125.73	125.80
Median Market Cap. (\$B)	8.52	8.50
Price To Earnings	27.71	25.33
Price To Book	7.18	6.65
Price To Sales	4.39	3.66
Return on Equity (%)	25.47	24.23
Yield (%)	1.63	1.61
Beta	1.00	1.00

Largest Holdings

End Weight

5.95

2.40

2.34

2.14

2.08

2.08

1.94

1.72

1.64

1.60

Return

4.10

0.25

9.02

-12.17

-1.94

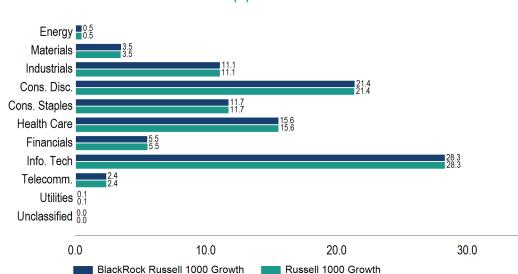
-1.84

18.46

8.82

1.44

-5.49



### Sector Allocation (%) vs Russell 1000 Growth

T	op Contributo	rs		Bot	tom Contribu	tors		
	Avg Wgt	Return	Contribution		Avg Wgt	Return	Contribution	
VERIZON	1.83	18.46	0.34	AMAZON.COM	2.27	-12.17	-0.28	
COMMUNICATIONS	1.00	10.10	0.01	CELGENE	0.83	-16.42	-0.14	
APPLE	5.66	4.10	0.23	REGENERON PHARMS.	0.35	-33.60	-0.12	
FACEBOOK CLASS A	2.30	9.02	0.21	GILEAD SCIENCES	1.31	-8.79	-0.11	
COCA COLA	1.66	8.82	0.15	ELI LILLY	0.76	-13.94	-0.11	
COMCAST 'A'	1.26	8.73	0.11	BOEING	0.87	-11.38	-0.10	
3M	0.96	11.42	0.11	LINKEDIN CLASS A	0.19	-49.20	-0.10	
UNITEDHEALTH GROUP	1.05	10.02	0.10	BIOGEN	0.61	-15.03	-0.09	
ALTRIA GROUP	1.10	8.63	0.10	EXPRESS SCRIPTS	0.42	01 40	0.00	
PHILIP MORRIS INTL.	0.68	12.78	0.09	HOLDING	0.43	-21.42	-0.09	
ORACLE	0.69	12.46	0.09	ALEXION PHARMS.	0.34	-27.01	-0.09	

#### Unclassified sector allocation includes cash allocations.

APPLE

MICROSOFT

AMAZON.COM

ALPHABET 'A'

ALPHABET 'C'

COCA COLA

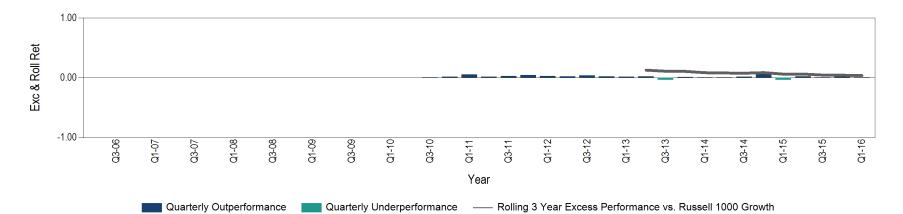
HOME DEPOT

WALT DISNEY

FACEBOOK CLASS A

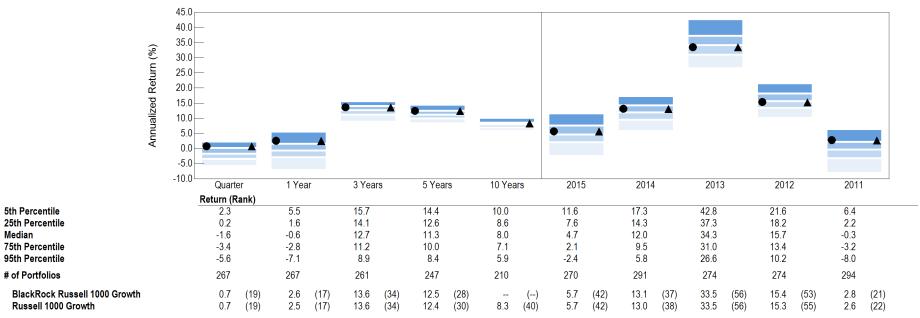
VERIZON COMMUNICATIONS

### BlackRock Russell 1000 Growth Manager Performance Comparisons (Gross of Fees)



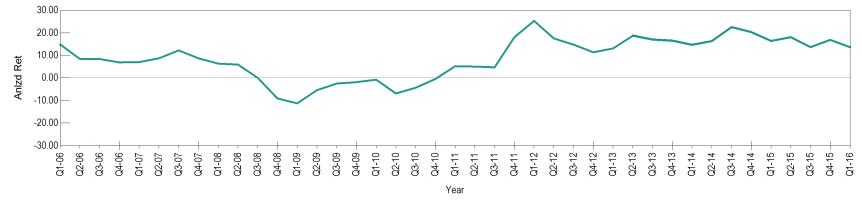
Annualized Excess Performance

### BlackRock Russell 1000 Growth vs. eA US Large Cap Growth Equity Gross Universe



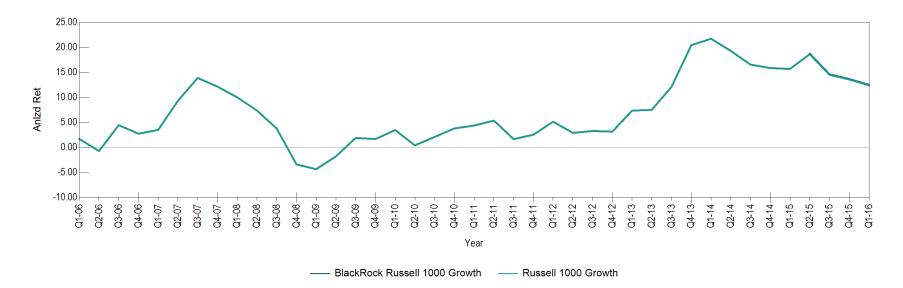
•

▲



— BlackRock Russell 1000 Growth — Russell 1000 Growth



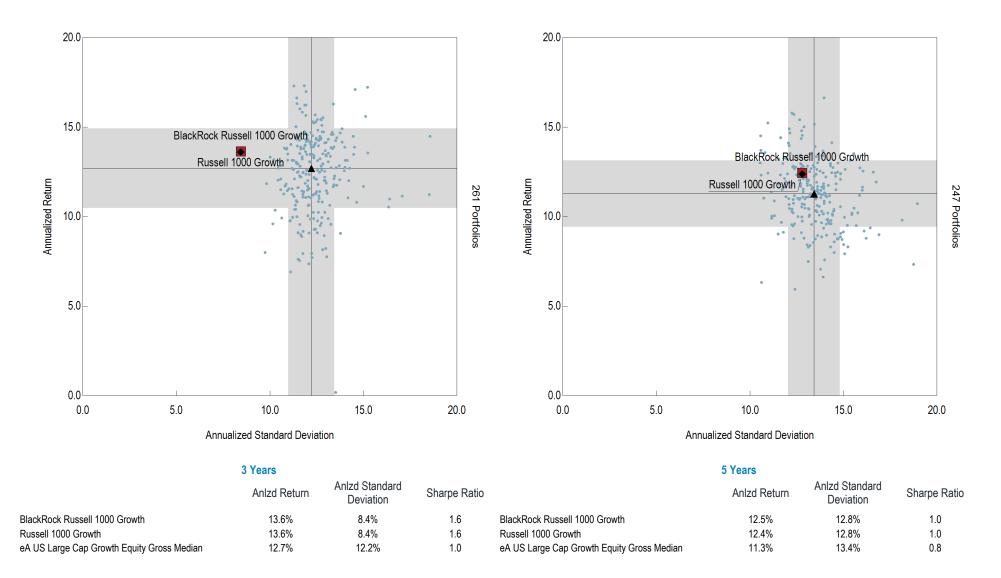




### BlackRock Russell 1000 Growth Risk vs. Return 3 & 5 Year (Gross of Fees)

#### 3 Years

5 Years



### Jackson Square Manager Portfolio Overview

### Characteristics

Russell

Return

-1.19

3.28

-14.23

-16.42

0.25

-0.61

1.10

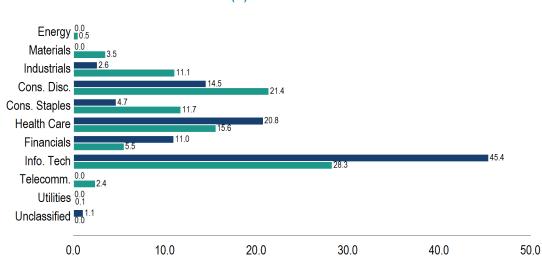
6.63

-7.58

-2.74

	Portfolio	1000 Growth
Number of Holdings	31	635
Weighted Avg. Market Cap. (\$B)	96.40	125.80
Median Market Cap. (\$B)	27.99	8.50
Price To Earnings	34.43	25.33
Price To Book	6.27	6.65
Price To Sales	6.74	3.66
Return on Equity (%)	19.67	24.23
Yield (%)	1.04	1.61
Beta	1.30	1.00

. . . . . .



Russell 1000 Growth

### Sector Allocation (%) vs Russell 1000 Growth

Te	- 0-	السلامين		
10	ը ՐԸ	ontrii	butors	

Jackson Square

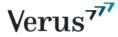
#### **Bottom Contributors**

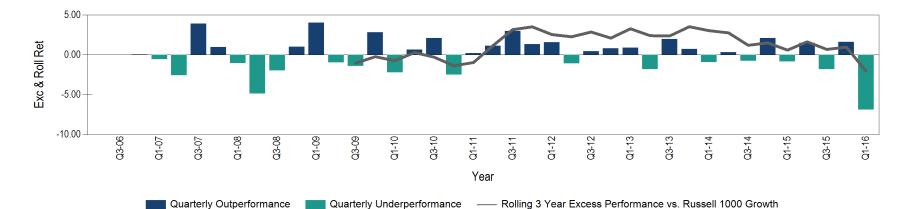
Largest H	loldings
	End Weight
VISA 'A'	5.72
QUALCOMM	5.60
ALLERGAN	5.10
CELGENE	5.04
MICROSOFT	4.86
WALGREENS BOOTS ALLIANCE	4.68
CROWN CASTLE INTL.	4.59
PAYPAL HOLDINGS	4.52
LIBERTY INTACT.QVC GROUP 'A'	4.38
MASTERCARD	4.36

	Top Contribut	013
	Avg Wgt	Return
EQUINIX	4.02	10.00
FACEBOOK CLASS A	3.34	9.02
PAYPAL HOLDINGS	3.87	6.63
NIELSEN	1.71	13.63
QUALCOMM	5.17	3.28
INTUIT	1.99	8.12
DISCOVERY COMMS.	'C' 1.25	7.06
DISCOVERY COMMS.	'A' 0.71	7.31
CROWN CASTLE INTL	4.50	1.10
BAIDU 'A' ADR 10:1	1.96	0.97

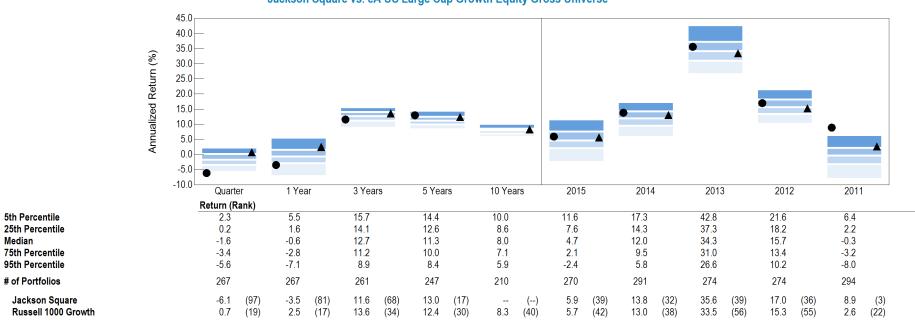
Contribution	l	Avg Wgt	Return	Contribution
0.40 0.30	VALEANT PHARMS. (NYS) INTL.	2.86	-74.13	-2.12
0.26	CELGENE	5.28	-16.42	-0.87
0.23	ALLERGAN	5.51	-14.23	-0.78
0.17	TRIPADVISOR 'A'	2.62	-21.99	-0.58
0.16	BIOGEN	3.49	-15.03	-0.53
0.09	EBAY	3.11	-13.17	-0.41
0.05 0.05	LIBERTY INTACT.QVC GROUP 'A'	4.47	-7.58	-0.34
0.03	INTERCONTINENTAL EX.	3.40	-7.91	-0.27
0.02	NOVO NORDISK 'B' ADR 1:1	3.41	-5.06	-0.17
	L BRANDS	3.04	-5.45	-0.17

Unclassified sector allocation includes cash allocations.





**Annualized Excess Performance** 

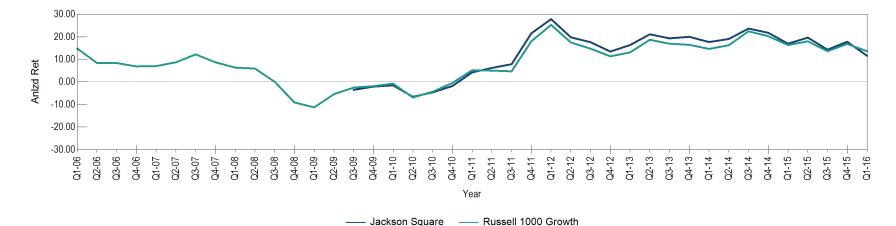


Jackson Square vs. eA US Large Cap Growth Equity Gross Universe

Verus<sup>77</sup>

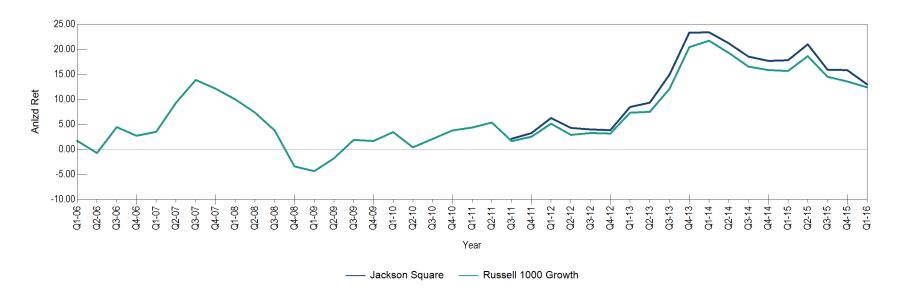
•

▲







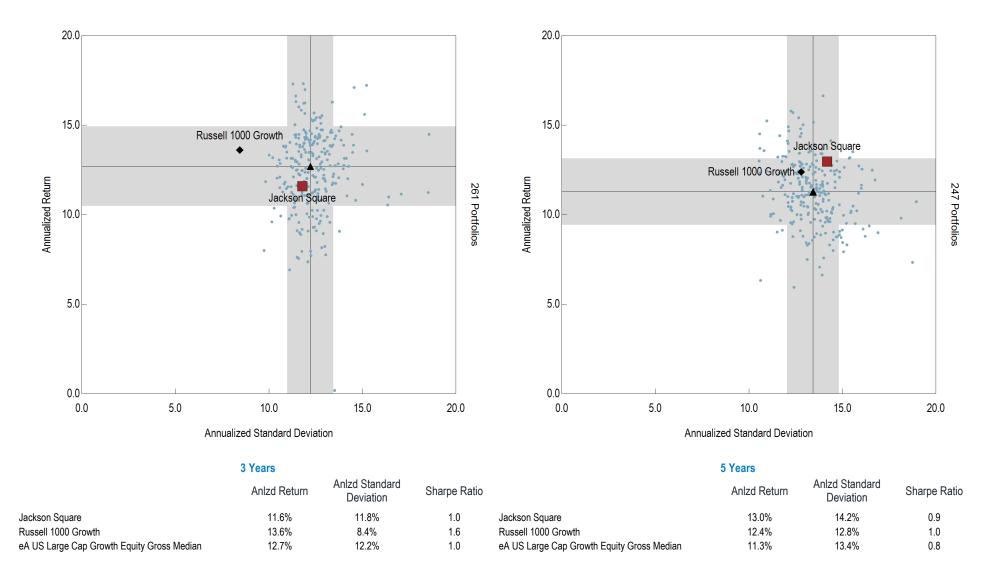




### Jackson Square Risk vs. Return 3 & 5 Year (Gross of Fees)

#### 3 Years

5 Years



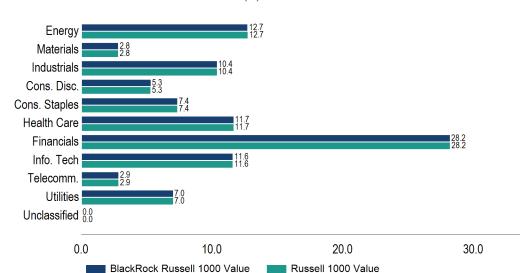
### BlackRock Russell 1000 Value Manager Portfolio Overview

### **Characteristics**

Duesell

	Portfolio	Russell 1000 Value
Number of Holdings	683	684
Weighted Avg. Market Cap. (\$B)	105.30	105.28
Median Market Cap. (\$B)	6.92	6.91
Price To Earnings	20.12	20.00
Price To Book	2.28	2.26
Price To Sales	2.63	2.54
Return on Equity (%)	11.54	11.46
Yield (%)	2.62	2.59
Beta	1.00	1.00

Largest Holdings



### Sector Allocation (%) vs Russell 1000 Value

loldings		То	p Contributo	ors		Bo	tom Contribu	tors	
End Weight	Return		Avg Wgt	Return	Contribution		Avg Wgt	Return	Contribution
3.55	8.21	AT&T	1.96	15.44	0.30	BANK OF AMERICA	1.60	-19.37	-0.31
3.03	2.86	EXXON MOBIL	3.47	8.21	0.29	CITIGROUP	1.42	-19.22	-0.27
2.65	6.09	BERKSHIRE HATHAWAY	2.42	7.45	0.18	WELLS FARGO & CO	2.48	-10.34	-0.26
2.50	7.45	'B'	2.42	7.45	0.10	JP MORGAN CHASE &	2.37	-9.69	-0.23
2.29	-10.34	JOHNSON & JOHNSON	2.66	6.09	0.16	CO.	2.57	-9.09	-0.23
2.27	4.56	WAL MART STORES	1.08	12.56	0.14	PFIZER	2.00	-7.25	-0.15
2.23	-9.69	CHEVRON	1.72	7.38	0.13	ALLERGAN	0.67	-14.23	-0.10
2.06	15.44	PROCTER & GAMBLE	2.30	4.56	0.11	GOLDMAN SACHS GP.	0.75	-12.52	-0.09
1.96	0.25	PHILIP MORRIS INTL.	0.74	12.78	0.09	MORGAN STANLEY	0.44	-20.91	-0.09
1.85	-7.25	EXELON	0.29	30.42	0.09	AMERICAN INTL.GP.	0.73	-12.24	-0.09
		GENERAL ELECTRIC	2.96	2.86	0.08	INTEL	1.47	-5.26	-0.08

#### Unclassified sector allocation includes cash allocations.

EXXON MOBIL

GENERAL ELECTRIC

WELLS FARGO & CO

**PROCTER & GAMBLE** 

AT&T

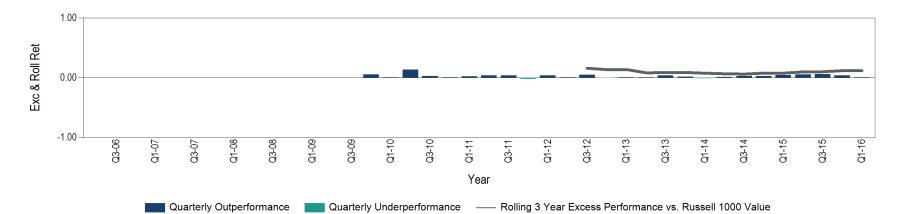
MICROSOFT PFIZER

**JOHNSON & JOHNSON** 

BERKSHIRE HATHAWAY 'B'

JP MORGAN CHASE & CO.

### BlackRock Russell 1000 Value Manager Performance Comparisons (Gross of Fees)



Annualized Excess Performance

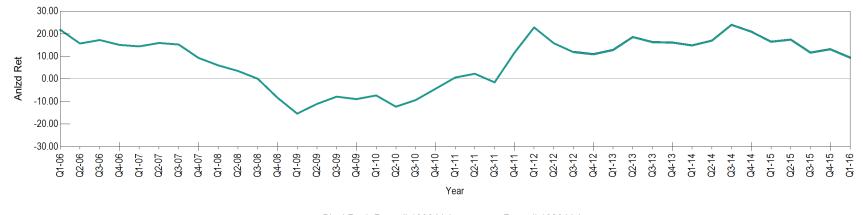
#### 45.0<sub>1</sub> 40.0 35.0 Annualized Return (%) 30.0 25.0 20.0 15.0 10.0 5.0 0.0 -5.0 -10.0 -15.0 Quarter 2013 2011 1 Year 3 Years 5 Years 10 Years 2015 2014 2012 Return (Rank) 5th Percentile 5.8 5.1 12.7 13.2 9.3 2.8 16.3 42.5 21.5 9.5 25th Percentile 2.9 37.2 3.4 0.1 11.2 11.4 7.6 -0.4 13.9 18.0 Median 0.9 -2.0 10.0 10.3 6.7 -2.6 12.2 33.6 15.7 0.5 75th Percentile -0.7 -4.9 8.6 -5.1 10.4 30.8 13.0 -3.1 9.1 6.0 95th Percentile -3.1 -9.8 5.6 6.5 4.2 -9.4 5.9 9.6 -8.6 24.6 # of Portfolios 317 317 309 294 245 312 307 310 303 310 BlackRock Russell 1000 Value 1.6 (41) -1.4 (41)9.5 (61) 10.4 (49) -3.6 (62)13.5 (31) 32.6 (59) 17.6 (30) 0.5 (50) ---(--) (80) Russell 1000 Value 1.6 (41) -1.5 (43) 9.4 (64) 10.2 (52) 5.7 -3.8 (64) 13.5 (33) 32.5 (60) 17.5 (30) 0.4 (51)

BlackRock Russell 1000 Value vs. eA US Large Cap Value Equity Gross Universe

Verus<sup>77</sup>

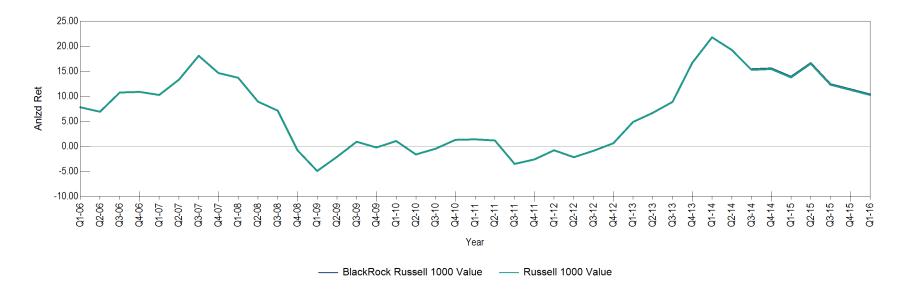
•

▲



BlackRock Russell 1000 Value
 — Russell 1000 Value

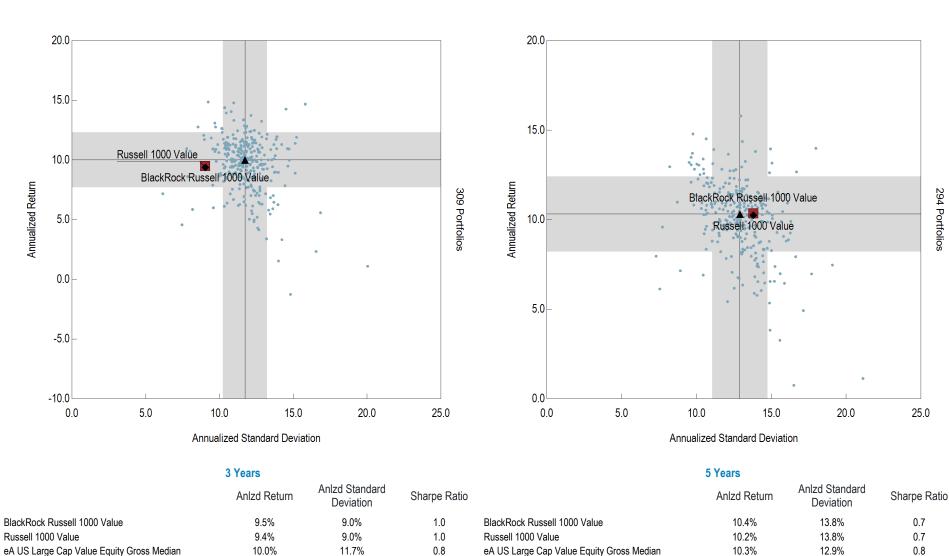






## BlackRock Russell 1000 Value Risk vs. Return 3 & 5 Year (Gross of Fees)

Verus<sup>77</sup>



3 Years

5 Years

**Stanislaus County Employees' Retirement Association** 

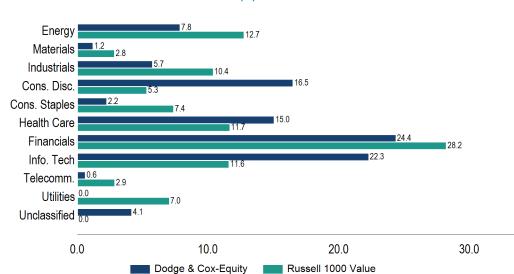
32

## Dodge & Cox-Equity Manager Portfolio Overview

### **Characteristics**

Duesell

	Portfolio	Russell 1000 Value
Number of Holdings	64	684
Weighted Avg. Market Cap. (\$B)	91.96	105.28
Median Market Cap. (\$B)	36.77	6.91
Price To Earnings	20.77	20.00
Price To Book	2.72	2.26
Price To Sales	2.39	2.54
Return on Equity (%)	12.91	11.46
Yield (%)	2.08	2.59
Beta	1.07	1.00



### Sector Allocation (%) vs Russell 1000 Value

Тор	Contributors	
	Avg Wgt	I

3.89

2.28

2.88

2.83

1.53

1.92

2.02

1.24

0.72

2.87

Return

10.66

17.05

12.86

8.73

14.11

10.02

9.41

15.13

26.06

6.49

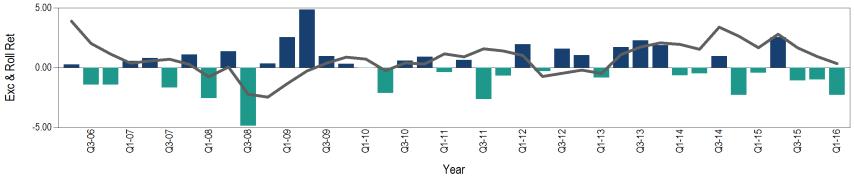
**Bottom Contributors** 

Larges	t Holdings		Το
	End Weight	Return	
TIME WARNER CABLE	4.11	10.66	TIME WARNER CABLE
CAPITAL ONE FINL.	3.76	-3.34	HEWLETT PACKARD
WELLS FARGO & CO	3.63	-10.34	ENTER.
MICROSOFT	3.18	0.25	TIME WARNER
CHARLES SCHWAB	3.12	-14.69	COMCAST 'A'
TIME WARNER	2.98	12.86	WALMART STORES (SGO)
BANK OF AMERICA	2.97	-19.37	UNITEDHEALTH GROUP
COMCAST 'A'	2.93	8.73	FEDEX
SCHLUMBERGER	2.86	6.49	CORNING
NOVARTIS 'B' SPN.ADR 1:1	2.84	-12.56	ADT
			SCHLUMBERGER

Contribution	l	Avg Wgt	Return	Contribution
0.41	BANK OF AMERICA	2.98	-19.37	-0.58
0.39	CHARLES SCHWAB	3.17	-14.69	-0.47
0.33	EXPRESS SCRIPTS HOLDING	2.04	-21.42	-0.44
0.25	WELLS FARGO & CO	4.10	-10.34	-0.42
0.22 0.19	Novartis 'B' Spn.adr 1:1	3.12	-12.56	-0.39
0.19	GOLDMAN SACHS GP.	2.15	-12.52	-0.27
0.19	BANK OF NEW YORK MELLON	2.40	-10.23	-0.25
0.19	JP MORGAN CHASE & CO.	1.76	-9.69	-0.17
	AMERICAN EXPRESS	1.33	-11.32	-0.15
	SANOFI ADR 2:1	2.43	-5.84	-0.14

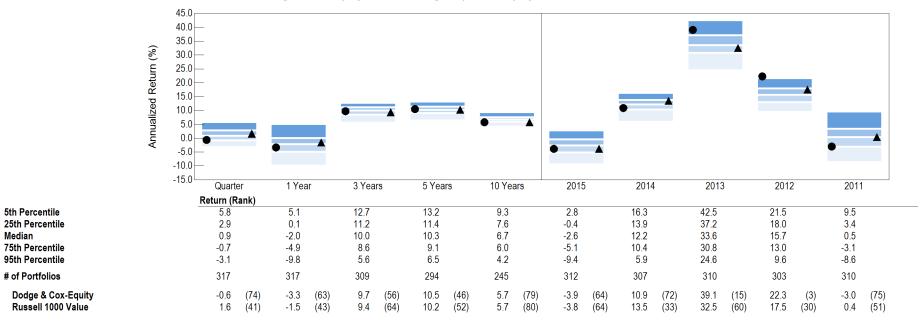
Unclassified sector allocation includes cash allocations.





**Annualized Excess Performance** 

Quarterly Outperformance Quarterly Underperformance — Rolling 3 Year Excess Performance vs. Russell 1000 Value



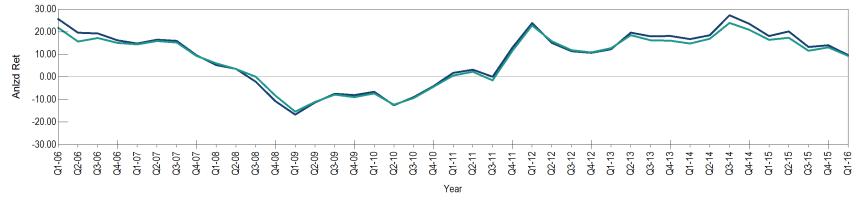
Dodge & Cox-Equity vs. eA US Large Cap Value Equity Gross Universe

# Verus<sup>77</sup>

•

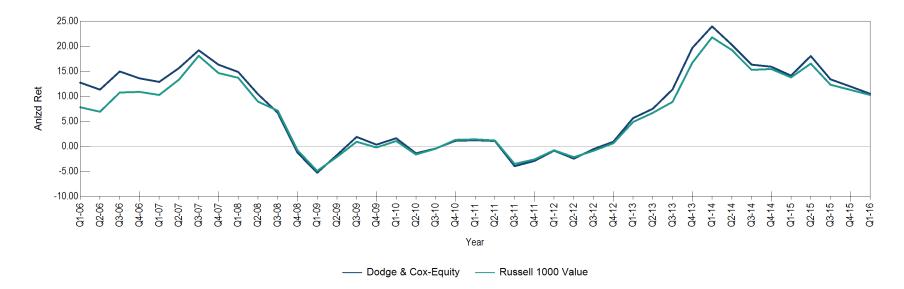
▲

Median



— Dodge & Cox-Equity — Russell 1000 Value



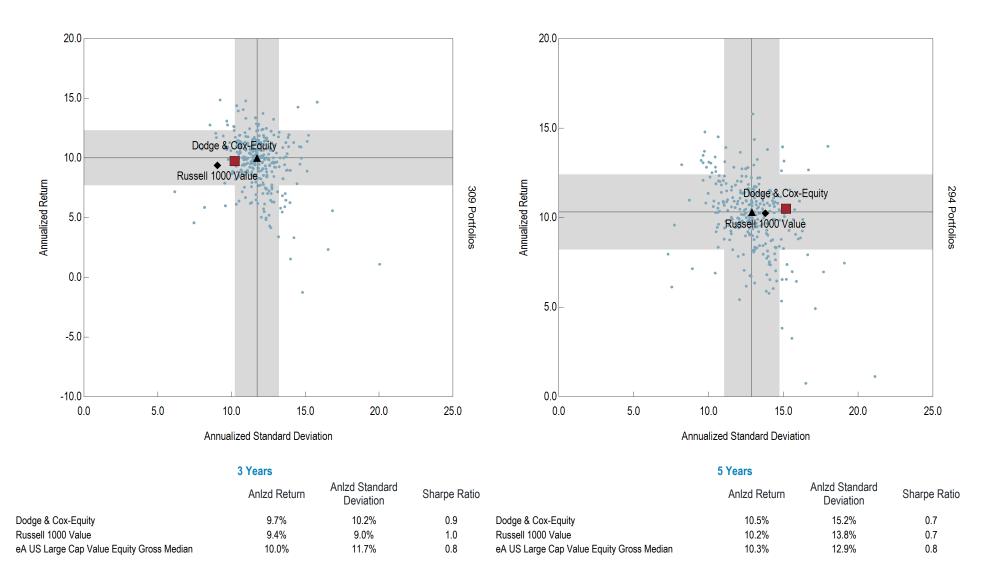




## Dodge & Cox-Equity Risk vs. Return 3 & 5 Year (Gross of Fees)



5 Years

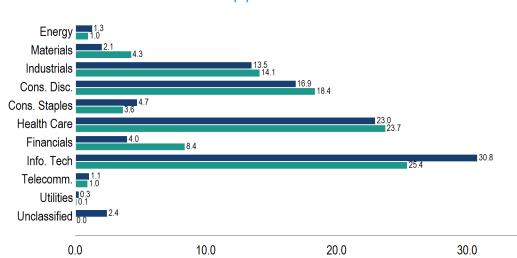


## Legato Capital Manager Portfolio Overview

### Characteristics

Russell

	Portfolio	2000 Growth
Number of Holdings	400	1,181
Weighted Avg. Market Cap. (\$B)	2.06	2.02
Median Market Cap. (\$B)	1.41	0.69
Price To Earnings	31.73	27.42
Price To Book	4.36	4.21
Price To Sales	3.15	3.18
Return on Equity (%)	12.50	16.59
Yield (%)	0.42	0.58
Beta	1.02	1.00



Russell 2000 Growth

### Sector Allocation (%) vs Russell 2000 Growth

Largest	Holdings		Т	op Contributo	rs		Bot	tom Contribu	tors	
	End Weight	Return		Avg Wgt	Return	Contribution		Avg Wgt	Return	Contribution
	2.49	-1.23	ECHO GLOBAL	1.45	33.20	0.48	IGI LABORATORIES	1.05	-44.94	-0.47
STICS	2.06	33.20	LOGISTICS	1.45	55.20	0.40	ADVISORY BOARD	1.27	-34.99	-0.44
	1.07	0.00	ANIKA THERAPEUTICS	1.08	17.19	0.19	LIFELOCK	1.83	-15.89	-0.29
	1.97	-8.20	BROADSOFT	1.02	14.11	0.14	INTERNAP	0.44	-57.34	-0.25
	1.74	-15.89	WEST PHARM.SVS.	0.86	15.36	0.13	BLACKHAWK NETWORK	0.0-	00.40	
	1.35	11.12	FRESH MARKET	0.56	21.82	0.12	HDG.	0.95	-22.42	-0.21
000 GW.	1.32	-4.60	G & K SERVICES 'A'	0.70	17.10	0.12	SUNOPTA (NAS)	0.60	-34.80	-0.21
	1.31	4.60	TELEFLEX	0.57	19.72	0.11	J2 GLOBAL	0.82	-24.86	-0.20
	1.22	-3.04	RUBICON PROJECT	0.94	11.12	0.10	NEXSTAR BCAST.GP.	0.73	-24.08	-0.18
	1.21	14.11	POOL	1.15	8.96	0.10	ANACOR	0.24	-52.69	0.16
	1.12	8.96	CHEESECAKE FACTORY	0.64	15.60	0.10	PHARMACEUTICALS	0.31	-52.09	-0.16
							PRA GROUP	1.03	-15.28	-0.16

Legato Capital

Unclassified sector allocation includes cash allocations.

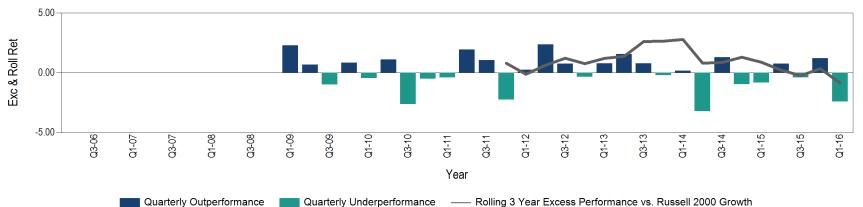
LIGAND PHARMS.'B' ECHO GLOBAL LOGISTICS

RUBICON PROJECT

CRITEO ADR 1:1 STAMPS.COM BROADSOFT POOL

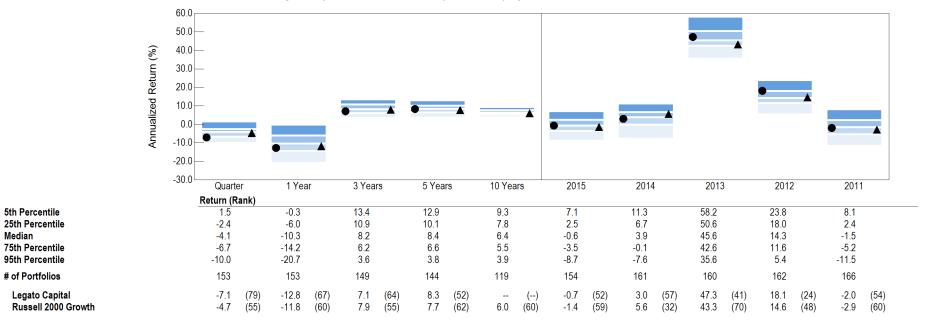
ISHARES RUSSELL 2000 GW.

SYNCHRONOSS TECHNOLOGIES LIFELOCK



**Annualized Excess Performance** 

### Quarterly Underperformance

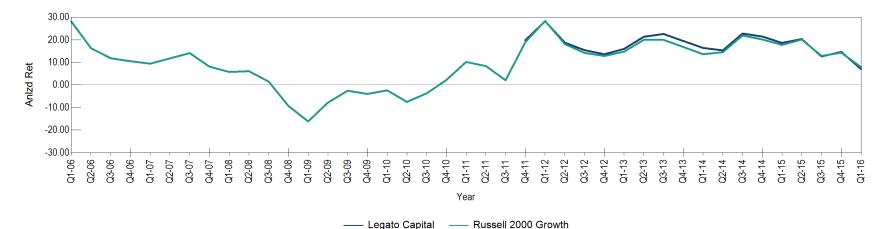


Legato Capital vs. eA US Small Cap Growth Equity Gross Universe

•

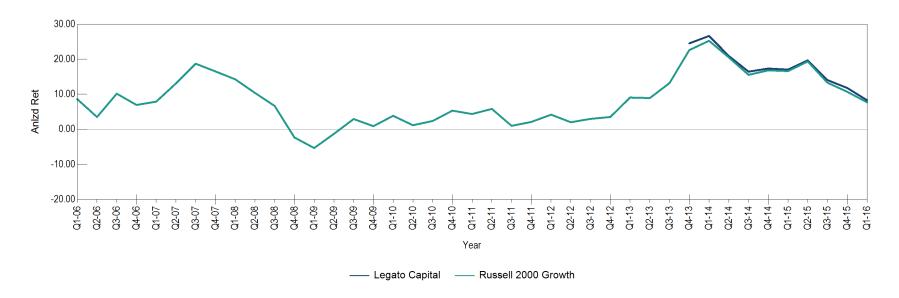
▲

Median



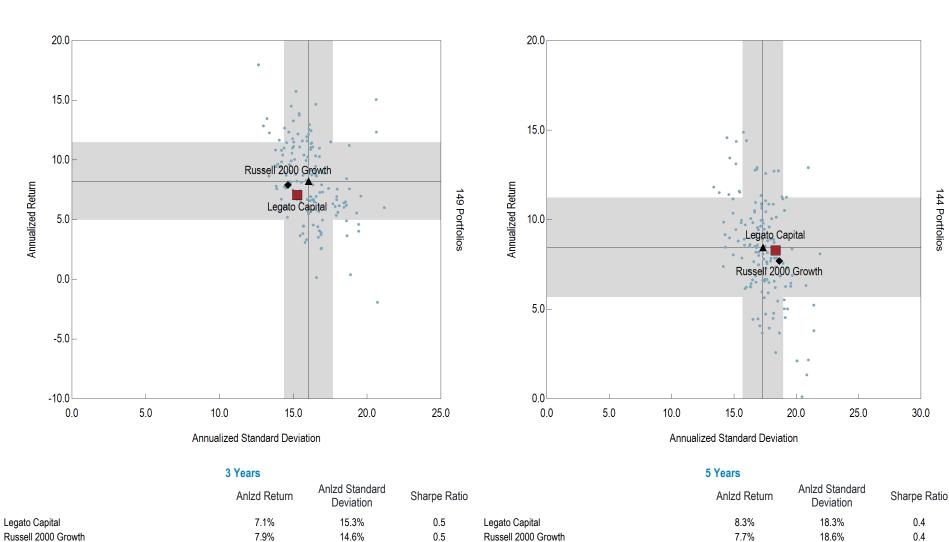








## Legato Capital Risk vs. Return 3 & 5 Year (Gross of Fees)



3 Years

8.2%

16.0%

0.5

eA US Small Cap Growth Equity Gross Median

5 Years



eA US Small Cap Growth Equity Gross Median

17.3%

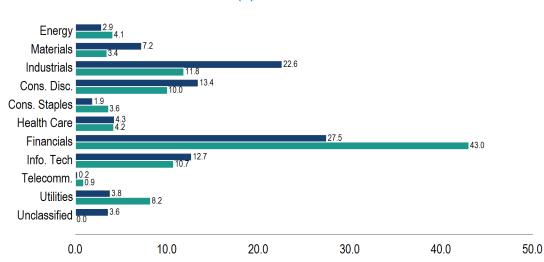
0.5

8.4%

### **Capital Prospects** Manager Portfolio Overview

### **Characteristics**

	Portfolio	Russell 2000 Value
Number of Holdings	313	1,325
Weighted Avg. Market Cap. (\$B)	1.94	1.74
Median Market Cap. (\$B)	1.10	0.58
Price To Earnings	21.11	20.37
Price To Book	2.14	1.64
Price To Sales	1.92	2.50
Return on Equity (%)	10.80	7.13
Yield (%)	2.14	2.01
Beta	0.94	1.00



Russell 2000 Value

### Sector Allocation (%) vs Russell 2000 Value

n l	Con	trih	utor	c

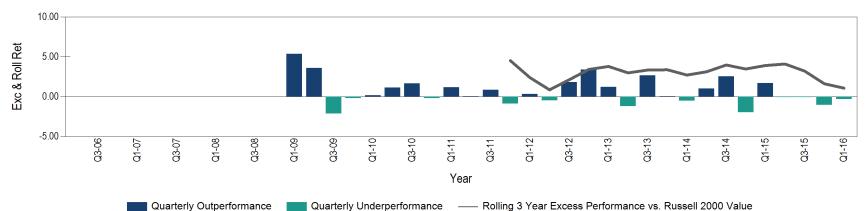
Capital Prospects

#### **Bottom Contributors**

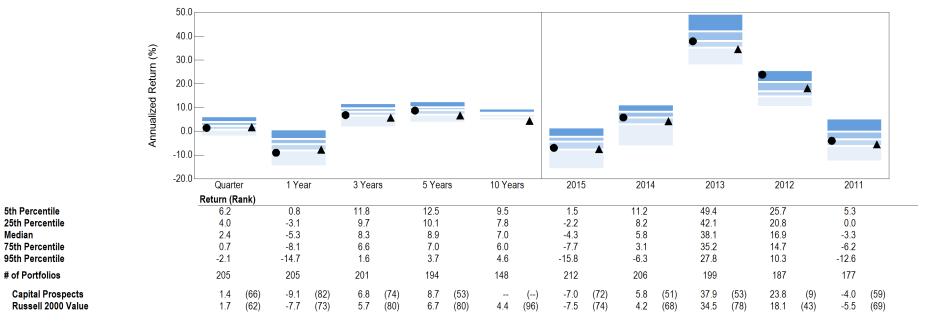
Largest	Holdings			Top Contributo	ors			Bottom Contribu	tors	
	End Weight	Return		A∨g Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
ALLETE	1.61	11.40	LITTELFUSE	1.43	15.34	0.22	AMERICAN	0.78	-30.09	-0.23
LITTELFUSE	1.45	15.34	GENERAC HOLDINGS	0.78	25.09	0.19	EQ.INV.LF.HLDG.	0.70	00.00	0.20
HILLENBRAND	1.29	1.79	MISTRAS GROUP	0.64	29.75	0.19	BARRETT BUS.SVS.	0.42	-33.55	-0.14
MB FINANCIAL	1.10	0.76	ENPRO INDS.	0.58	32.04	0.19	VERINT SYSTEMS	0.75	-17.70	-0.13
CINEMARK HOLDINGS	0.88	8.07	ALLETE	1.55	11.40	0.18	OCH-ZIFF	0.40	-30.18	-0.12
AIR LEASE	0.85	-3.91	BELDEN	0.59	28.84	0.17	CAP.MAN.GP.CL.A	o o=		
CORPORATE OFFICE PROPS.	0.04	04.40	CORPORATE OFFICE	0.70	04.40	0.40	STIFEL FINANCIAL	0.37	-30.12	-0.11
TST.	0.84	21.46	PROPS. TST.	0.76	21.46	0.16	LITHIA MOTORS 'A'	0.59	-17.96	-0.11
ABM INDS.	0.82	14.17	RADISYS	0.33	42.60	0.14	GRAY TELEVISION	0.33	-28.10	-0.09
IBERIABANK	0.80	-6.27	INSTEEL INDUSTRIES	0.28	46.30	0.13	MAGICJACK VOCALTE	EC 0.28	-30.58	-0.08
GENERAC HOLDINGS	0.80	25.09	TRINSEO	0.42	30.53	0.13	PACWEST BANCORP	0.64	-12.34	-0.08
							ANIXTER INTL.	0.55	-13.71	-0.08

Unclassified sector allocation includes cash allocations.

### **Capital Prospects** Manager Performance Comparisons (Gross of Fees)



**Annualized Excess Performance** 



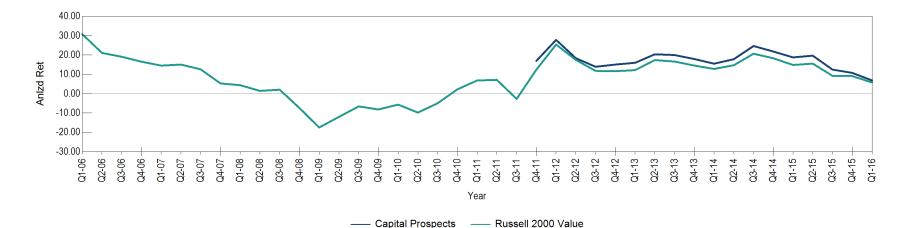
Capital Prospects vs. eA US Small Cap Value Equity Gross Universe

Verus<sup>77</sup>

•

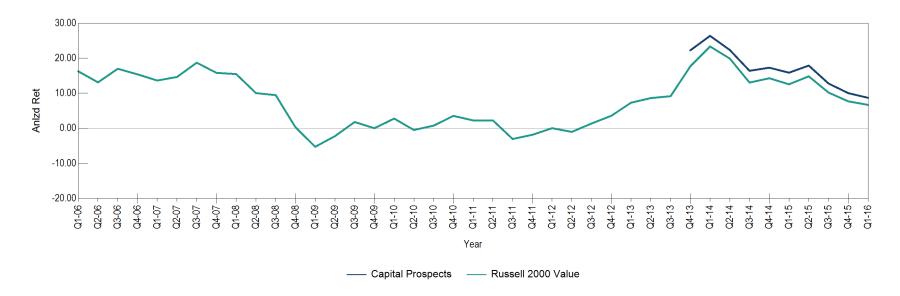
▲

Median











### **Capital Prospects** Risk vs. Return 3 & 5 Year (Gross of Fees)

194 Portfolios

.

25.0

20.0

#### 15.0 15.0 10.0 10.0 Capital Prospects Capital Prospects Russell 2000 Value 5.0 Russell 2000 Value 5.0 Annualized Return Annualized Return 201 Portfolios 0.0 0.0 -5.0 -5.0 -10.0 -15.0 -10.0 5.0 0.0 10.0 15.0 20.0 25.0 0.0 5.0 10.0 15.0 Annualized Standard Deviation Annualized Standard Deviation

### 3 Years

5 Years

3 Years 5 Years Anlzd Standard Anlzd Standard Sharpe Ratio Anlzd Return Anlzd Return Sharpe Ratio Deviation Deviation **Capital Prospects** 6.8% 12.0% 0.6 **Capital Prospects** 8.7% 17.1% 0.5 12.4% 6.7% 17.3% 0.4 Russell 2000 Value 5.7% 0.5 Russell 2000 Value eA US Small Cap Value Equity Gross Median 8.3% 14.2% 0.6 eA US Small Cap Value Equity Gross Median 8.9% 16.0% 0.6



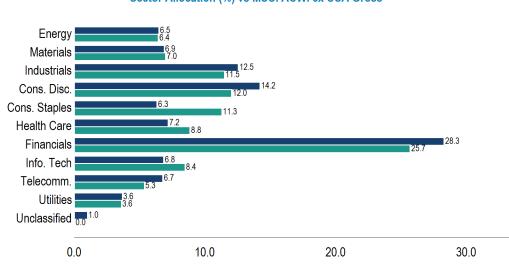
**International Equity Managers** 

### LSV Asset Mgt Manager Portfolio Overview

### **Characteristics**

MCCI

	Portfolio	ACWI ex USA Gross
Number of Holdings	247	1,856
Weighted Avg. Market Cap. (\$B)	27.65	46.70
Median Market Cap. (\$B)	6.45	6.58
Price To Earnings	12.66	17.56
Price To Book	1.56	2.37
Price To Sales	1.01	2.25
Return on Equity (%)	12.13	14.45
Yield (%)	4.16	3.21
Beta	1.09	1.00



Sector Allocation (%) vs MSCI ACWI ex USA Gross

### Top Contributors

LSV Asset Mgt

**Bottom Contributors** 

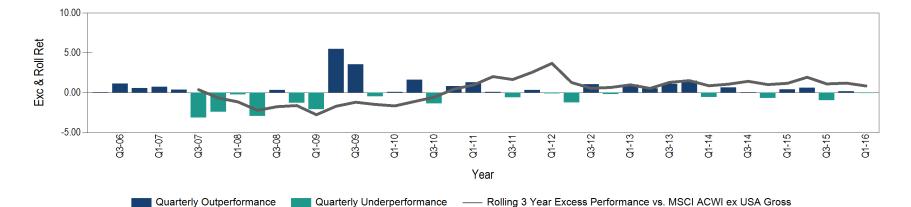
MSCI ACWI ex USA Gross

Larg	Largest Holdings			
	End Weight			
NIPPON TELG. & TEL.	1.87			
SAMSUNG ELECTRONICS	1.61			
SANOFI	1.55			
MAGNA INTL.	1.46			
ALLIANZ	1.40			
BAE SYSTEMS	1.39			
SWISS RE	1.25			
DAIMLER	1.22			
OLD MUTUAL	1.05			
DELHAIZE GROUP	1.02			

Top Contributors				Bottom Contributors				
Return		Avg Wgt	Return	Contribution		Avg Wgt	Return	Contribution
8.58	RONA	0.47	106.18	0.50	CREDIT SUISSE GROUP	1.09	-34.41	-0.37
6.76	MORRISON(WM)SPMKTS.	0.55	30.75	0.17	Ν	1.00	-0-1.1	-0.01
-5.43	NIPPON TELG. & TEL.	1.87	8.58	0.16	RESONA HOLDINGS	0.80	-25.78	-0.21
7.50	CIA.SANMT.BASICO SPN.ADR 1:1	0.35	43.48	0.15	SUMITOMO MITSUI FINL.GP.	0.86	-19.00	-0.16
-8.19	BCE	0.69	20.31	0.14	DEUTSCHE BANK	0.52	-30.52	-0.16
-0.65					SOCIETE GENERALE	0.75	-19.96	-0.15
-5.32	KING YUAN ELTN.	0.39	35.45	0.14				
-8.65	CANADIAN IMP.BK.COM.	0.86	15.66	0.13	MITSUBISHI UFJ FINL.GP.	0.48	-25.03	-0.12
8.66	WEIQIAO TEXTILE 'H'	0.23	53.87	0.12	ALLIANZ	1.47	-8.19	-0.12
7.19	PRIMARY HEALTH CARE	0.17	72.00	0.12	MIZUHO FINL.GP.	0.48	-24.49	-0.12
7.15	METRO	0.45	25.35	0.12	AXA	0.79	-13.98	-0.11
					DAIMLER	1.23	-8.65	-0.11

Unclassified sector allocation includes cash allocations.

## LSV Asset Mgt Manager Performance Comparisons



Annualized Excess Performance

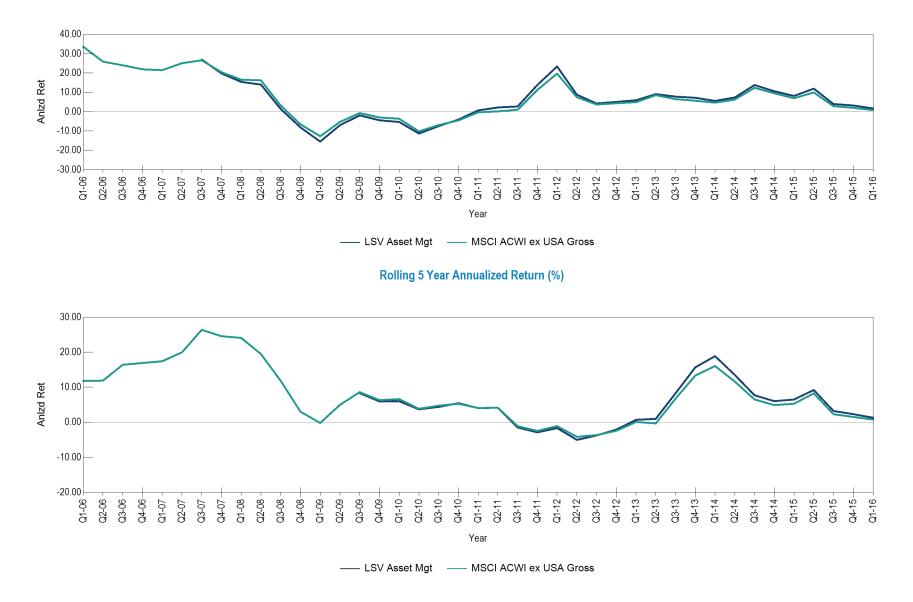
#### 35.0 30.0 25.0 Annualized Return (%) 20.0 15.0 10.0 5.0 0.0 -5.0 . -10.0 -15.0 -20.0 -25.0 Quarter 2015 2013 2011 1 Year 3 Years 5 Years 10 Years 2014 2012 Return (Rank) 5th Percentile 3.8 5.4 9.4 8.2 8.9 13.5 1.6 32.9 26.8 -5.3 3.5 25th Percentile 0.6 -1.5 5.5 23.4 22.1 -9.6 5.0 5.6 -0.8 Median -1.0 -5.1 3.7 3.4 4.8 -0.3 -2.9 20.3 19.5 -11.9 75th Percentile -2.6 -8.1 1.9 3.1 -3.3 -5.3 16.9 16.9 -15.1 1.8 95th Percentile -10.9 -0.7 -0.2 -8.3 -8.7 13.2 -19.6 -4.6 1.8 14.3 # of Portfolios 184 184 166 143 91 179 147 136 127 125 LSV Asset Mgt -0.3 (40) -9.0 (81) 1.6 (81) 1.3 (83) 2.6 (87) -5.1 (86)-4.0 (65) 20.4 (46) 16.7 (78) -12.5 (55) MSCI ACWI ex USA Gross -0.3 (40) -8.8 (80) 8.0 (88) 0.8 (89) 2.4 (91) -5.3 (87) -3.4 (58) 15.8 (87) 17.4 (74) -13.3 (62)

#### LSV Asset Mgt vs. eA ACWI ex-US Equity Unhedged Gross Universe

Verus<sup>77</sup>

•

▲





## LSV Asset Mgt Risk vs. Return 3 & 5 Year (Gross of Fees)

3 Years

143 Portfolios

25.0

5 Years

#### 20.0 15.0 15.0 10.0 10.0 5.0 Annualized Return Annualized Return 166 Portfolios 5.0 LSV Asset Mgt LSV Asset Mgt MSCI ACWI ex USA Gross 0.0 0.0 MSCI ACWI ex USA Gross -5.0 -5.0 -10.0 -10.0 0.0 5.0 5.0 10.0 15.0 20.0 0.0 10.0 15.0 20.0 Annualized Standard Deviation Annualized Standard Deviation 3 Years 5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
LSV Asset Mgt	1.6%	12.8%	0.1	LSV Asset Mgt	1.3%	15.9%	0.1
MSCI ACWI ex USA Gross	0.8%	11.7%	0.1	MSCI ACWI ex USA Gross	0.8%	14.9%	0.0
eA ACWI ex-US Equity Unhedged Gross Median	3.7%	13.0%	0.3	eA ACWI ex-US Equity Unhedged Gross Median	3.4%	15.5%	0.2

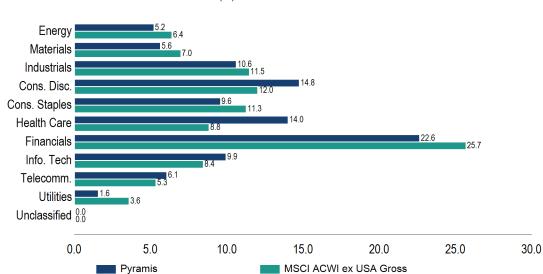
Verus<sup>77</sup>

### Pyramis Manager Portfolio Overview

### **Characteristics**

MCCI

	Portfolio	ACWI ex USA Gross
Number of Holdings	307	1,856
Weighted Avg. Market Cap. (\$B)	48.40	46.70
Median Market Cap. (\$B)	11.10	6.58
Price To Earnings	20.83	17.56
Price To Book	3.58	2.37
Price To Sales	2.76	2.25
Return on Equity (%)	16.86	14.45
Yield (%)	2.96	3.21
Beta	0.91	1.00



### Sector Allocation (%) vs MSCI ACWI ex USA Gross

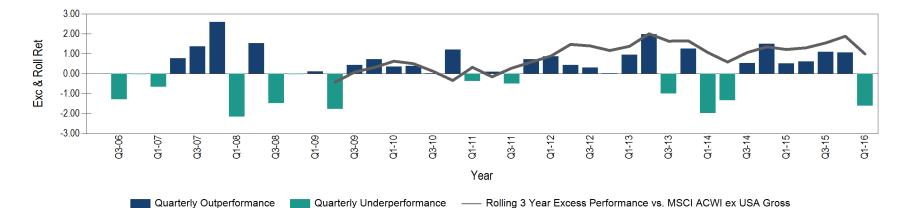
Largest Holdings				
	End Weight	Return		
NESTLE 'R'	1.69	0.75		
ROCHE HOLDING	1.43	-7.60		
SAP	1.37	0.77		
BRITISH AMERICAN TOBACCO	1.17	8.50		
ROYAL DUTCH SHELL A	1.16	8.30		
BAYER	1.16	-6.74		
TAIWAN SEMICON.MNFG.	1.10	15.62		
TOTAL	1.00	3.34		
AIA GROUP	1.00	-5.76		
NOVO NORDISK 'B'	0.99	-5.01		

Top Contributors					
	Avg Wgt	Return	Contribution		
TAIWAN SEMICON.MNFG.	0.70	15.62	0.11		
COPA HOLDINGS S A	0.26	41.55	0.11		
BRITISH AMERICAN TOBACCO	1.12	8.50	0.10		
ROYAL DUTCH SHELL A	1.07	8.30	0.09		
FRANCO-NEVADA	0.24	35.79	0.09		
ASML HOLDING	0.58	13.45	0.08		
ONO PHARM.	0.42	18.00	0.07		
TORONTO-DOMINION BANK	0.61	12.08	0.07		
SOSEI GROUP	0.10	74.58	0.07		
TSMS.ALIANCA ENELA. UTS.	0.21	34.49	0.07		

#### **Bottom Contributors**

n		Avg Wgt	Return	Contribution
	MITSUBISHI UFJ FINL.GP.	0.90	-25.03	-0.22
	BARCLAYS	0.70	-31.71	-0.22
	HSBC HDG. (ORD \$0.50)	0.99	-18.49	-0.18
	UBS GROUP	0.96	-17.05	-0.16
	NOVARTIS 'R'	1.27	-12.89	-0.16
	TOYOTA MOTOR	1.02	-14.93	-0.15
	ROCHE HOLDING	1.64	-7.60	-0.12
	KBC GROUP	0.66	-17.54	-0.12
	KANSAI ELECTRIC PWR.	0.43	-26.91	-0.12
	PRUDENTIAL	0.75	-14.76	-0.11

Unclassified sector allocation includes cash allocations.



Annualized Excess Performance

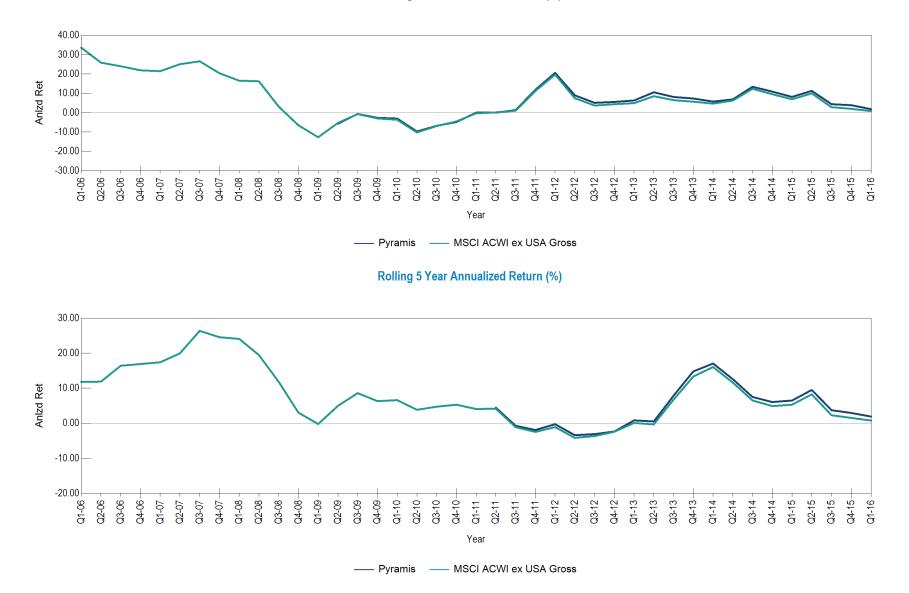
#### 35.0 30.0 25.0 Annualized Return (%) 20.0 15.0 10.0 5.0 0.0 -5.0 -10.0 -15.0 -20.0 -25.0 Quarter 2015 2013 2011 1 Year 3 Years 5 Years 10 Years 2014 2012 Return (Rank) 5th Percentile 3.8 5.4 9.4 8.2 8.9 13.5 1.6 32.9 26.8 -5.3 3.5 25th Percentile 0.6 -1.5 5.5 23.4 22.1 -9.6 5.0 5.6 -0.8 Median -1.0 -5.1 3.7 3.4 4.8 -0.3 -2.9 20.3 19.5 -11.9 75th Percentile -2.6 -8.1 1.9 3.1 -3.3 -5.3 16.9 16.9 -15.1 1.8 95th Percentile -10.9 -0.7 -0.2 -8.3 -8.7 13.2 -19.6 -4.6 1.8 14.3 # of Portfolios 184 184 166 143 91 179 147 136 127 125 **Pyramis** -1.9 (65) -7.6 (72)1.8 (78) 1.9 (74) -2.0 (66)-4.5 (70) 19.6 (55) 19.3 (55) -13.5 (63) ---(--) MSCI ACWI ex USA Gross -0.3 (40) -8.8 (80) 8.0 (88) 0.8 (89) 2.4 (91) -5.3 (87) -3.4 (58) 15.8 (87) 17.4 (74) -13.3 (62)

## Pyramis vs. eA ACWI ex-US Equity Unhedged Gross Universe

Verus<sup>777</sup>

•

▲



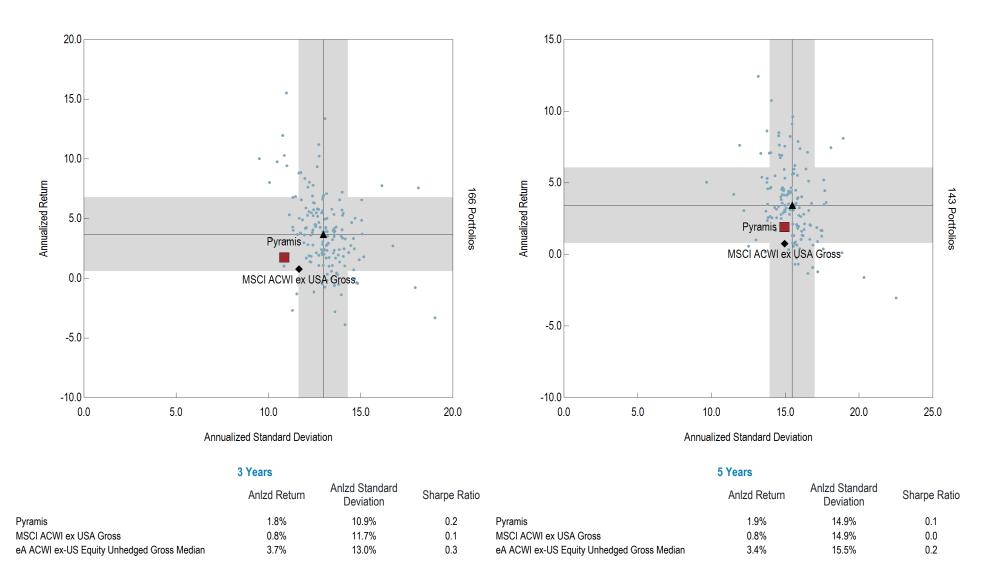
Rolling 3 Year Annualized Return (%)



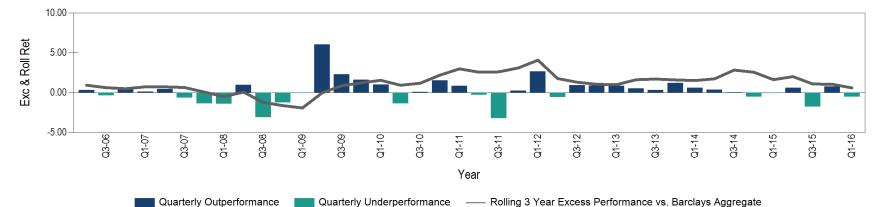
## Pyramis Risk vs. Return 3 & 5 Year (Gross of Fees)



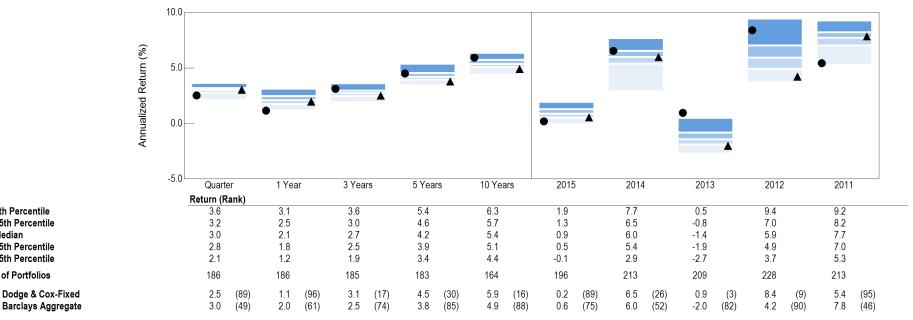
5 Years



**Domestic Fixed Income Managers** 



**Annualized Excess Performance** 



## Dodge & Cox-Fixed vs. eA US Core Fixed Inc Gross Universe

Verus<sup>77</sup>

•

▲

5th Percentile

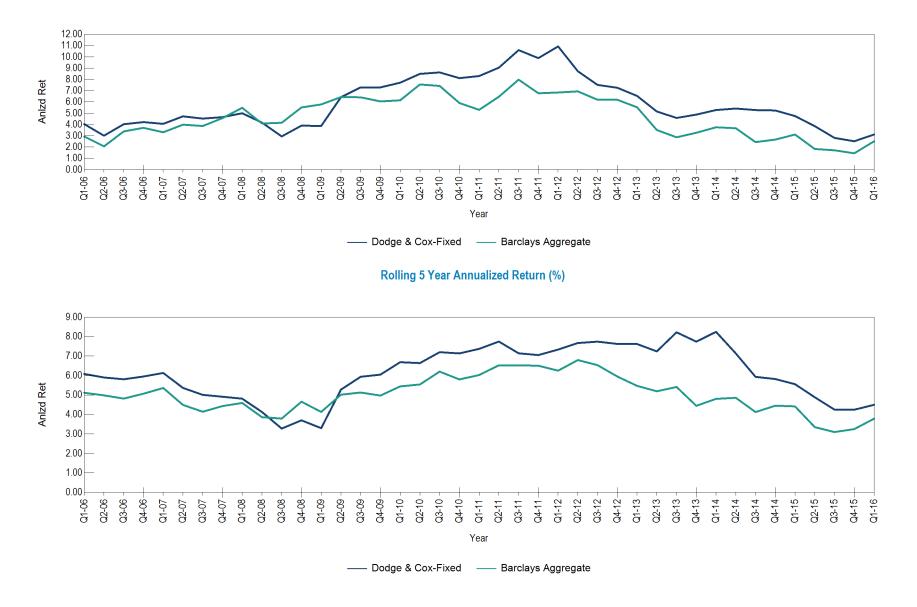
25th Percentile

75th Percentile

95th Percentile

# of Portfolios

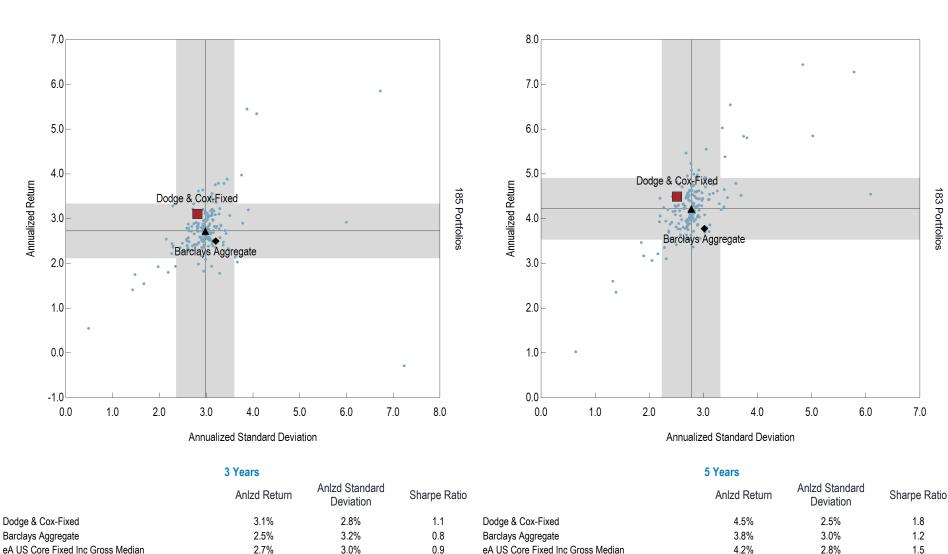
Median



Rolling 3 Year Annualized Return (%)

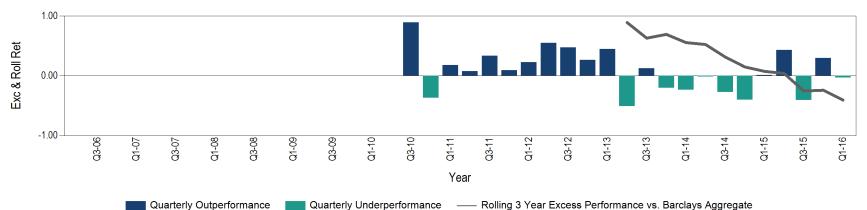


## Dodge & Cox-Fixed Risk vs. Return 3 & 5 Year (Gross of Fees)



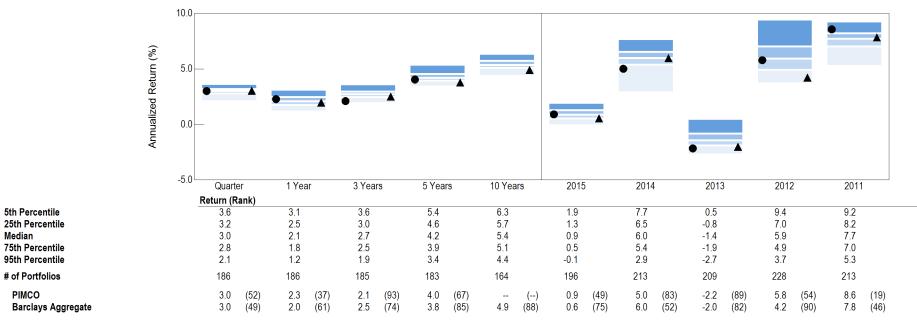
3 Years

5 Years



**Annualized Excess Performance** 

## Quarterly Underperformance — Rolling 3 Year Excess Performance vs. Barclays Aggregate



#### PIMCO vs. eA US Core Fixed Inc Gross Universe

## Verus<sup>77</sup>

•

▲

Median



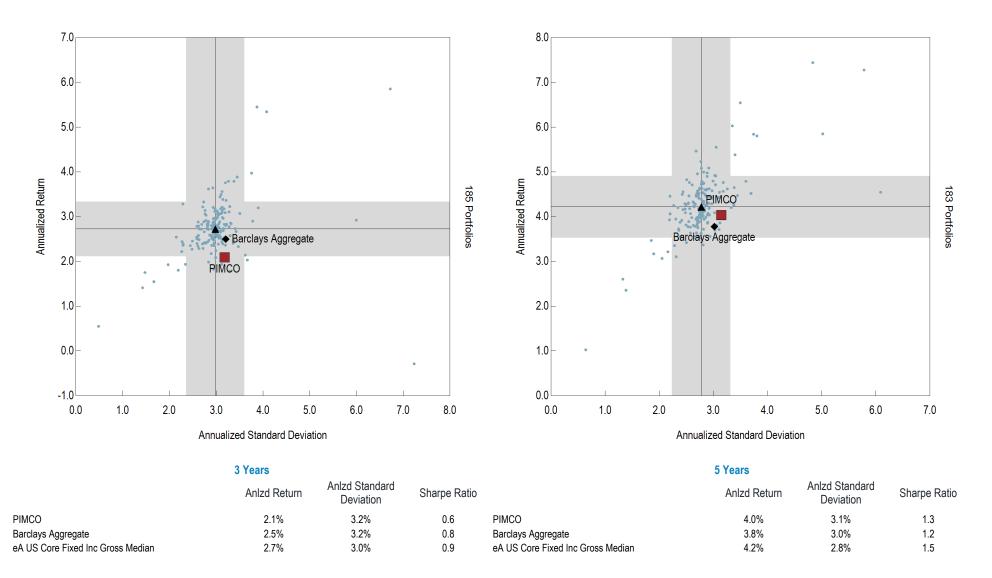
Rolling 3 Year Annualized Return (%)



## PIMCO Risk vs. Return 3 & 5 Year (Gross of Fees)

### 3 Years

5 Years



Verus<sup>777</sup>

#### Performance Return Calculations

Returns calculated in the performance summary tables are time-weighted rates of return (TWRR). TWRR are calculated from changes in monthly market values, adjusted for weighted cash flows between months. Our performance methodology assumes that cash flows occur at the end of day for modified dietz calculations. Returns are linked geometrically and annualized for periods longer than one year.

#### Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

#### **Illiquid Alternatives**

Closed end funds including but not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit may lag performance and market value data due to delayed reporting. Verus will show market values for closed end funds as of the most recent reported performance adjusted for capital calls and distributions. Closed end fund managers report performance using an internal rate of return (IRR), which differs from the TWRR calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Manager Line Up					
<u>Manager</u>	Fund Incepted	Data Source	<u>Manager</u>	Fund Incepted	Data Source
Mellon S&P 500	04/30/2003	Mellon	Prime Property Fund	09/30/2015	Prime Property
BlackRock Russell 1000 Growth	06/30/2010	BlackRock	American Strategic Value Realty	12/31/2014	American Realty
Jackson Square	08/31/2006	Northern Trust	BlackRock US Real Estate	09/30/2012	BlackRock
BlackRock Russell 1000 Value	07/31/2009	BlackRock	Greenfield Gap	07/31/2014	Greenfield
Dodge & Cox - Equity	12/31/1994	Northern Trust	Invesco	02/29/2008	Mellon
Legato Capital	12/31/2008	Northern Trust	Medley Capital	05/31/2013	Medley Capital
Capital Prospects	12/31/2008	Northern Trust	Raven Capital	05/31/2013	Raven Capital
LSV Asset Mgt	08/31/2004	Northern Trust	Raven Opportunity III	07/31/2015	Raven Capital
Pyramis	04/30/2006	Northern Trust	White Oak Pinnacle	08/31/2013	White Oak
Dodge & Cox - Fixed	12/31/1994	Northern Trust	MS Infrastructure	05/31/2015	Morgan Stanley
PIMCO	05/31/2010	Northern Trust			

#### Policy & Custom Index Composition

Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%.

US Equity Blended: 80% Russell 1000, 20% Russell 2000.

#### Other Disclosures

Fiscal Year End: 6/30

All data prior to 6/30/2015 provided by the previous consultant.

## Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - Risk-free Rate)].

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager. Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

**Book-to-Market:** The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios. Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

**Correlation:** A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

**Excess Return:** A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

**Portfolio Turnover:** The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

**Price-to-Earnings Ratio (P/E):** Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

**R-Squared:** Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

**Standard Deviation:** A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

**Style Map:** A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

Verus<sup>77</sup>

## Disclaimer

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvestorForce, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.

## Verus<sup>77</sup>



## STCERA Risk Dashboard

03/31/2016



Portfolio: 9.9%

## 2 Portfolio equity beta



Portfolio: 0.65



Policy: 0.60



Typical Peer: 8.1%



Typical Peer: 0.53

## 3 Portfolio interest rate risk – Duration



Portfolio: 1.7

Policy: 1.9



Typical Peer: 1.7

## 4 Portfolio credit risk – Spread duration







Policy: 0.3

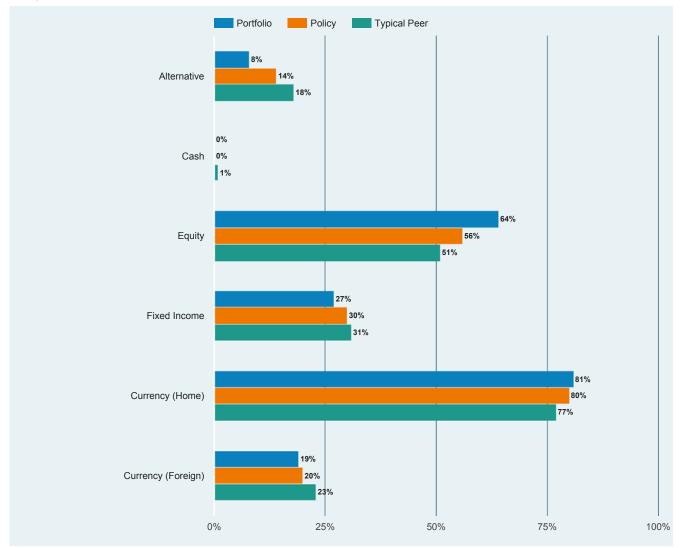


Typical Peer: 0.1

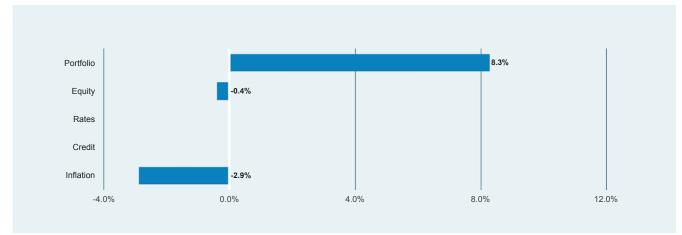
## 5 Exposure allocation by asset class

		Portfolio	Policy	Typical Peer
Alternative	Real Assets	0.0%		2.1%
	Hedge Fund	0.0%		8.1%
	Infrastructure	0.4%	3.0%	
	Real Estate	2.1%	3.5%	7.4%
	Private Credit	6.0%	7.5%	
Alternative Total		8.4%	14.0%	17.6%
Cash	Cash	0.0%		1.1%
Cash Total		0.0%		1.1%
Equity	EM Equity	0.0%		3.4%
	Private Equity	0.0%		6.0%
	US Large Cap Core	4.3%	4.8%	26.1%
	US Small Cap Growth	4.4%	3.7%	
	US Small Cap Value	4.6%	4.0%	
	US Large Cap Growth	15.6%	11.3%	
	US Large Cap Value	17.1%	14.4%	
	Non-US Equity	18.5%	18.0%	15.1%
Equity Total		64.4%	56.2%	50.6%
Fixed Income	EM Bonds	0.0%		2.4%
	Global Bonds	0.0%		4.3%
	Non-US Bonds	0.0%		1.5%
	US Bonds	27.1%	29.8%	22.5%
Fixed Income Total		27.1%	29.8%	30.7%
Total Portfolio		100%	100%	100%

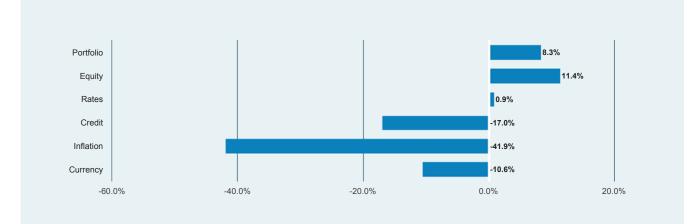
## 6 Exposure allocation



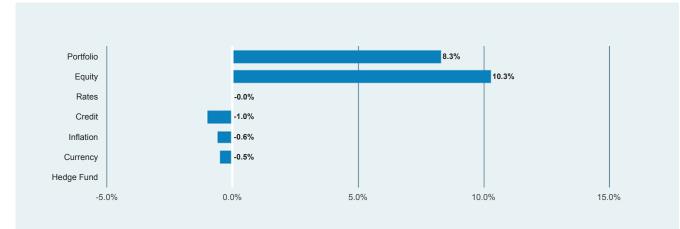
## 7 Relative risk vs target by bucket

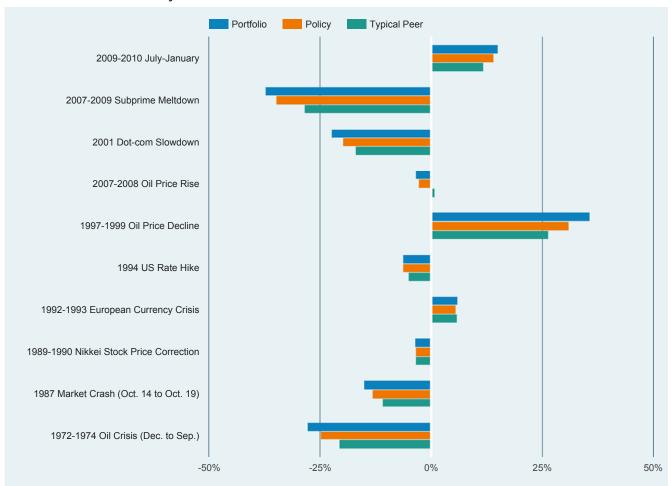


## 8 Relative risk vs target by risk factor



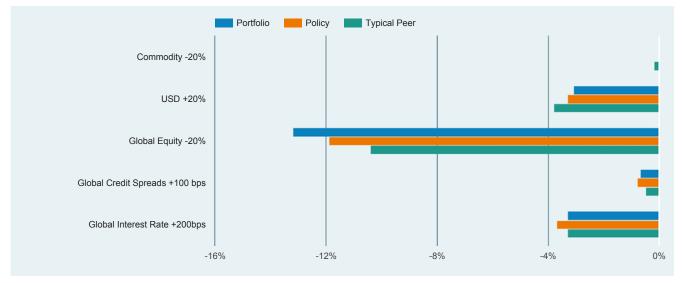
## 9 Risk factor weight relative to target



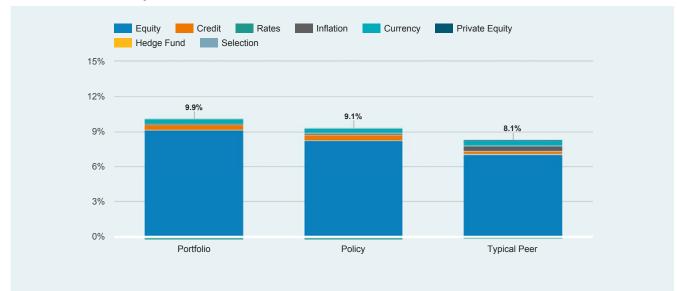


## 10 Tail risk – Scenario analysis

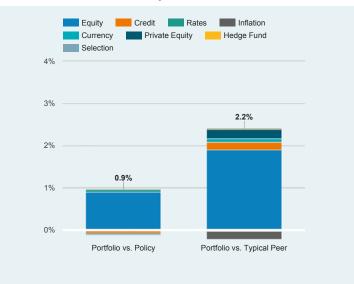
## 11 Tail risk – Stress tests



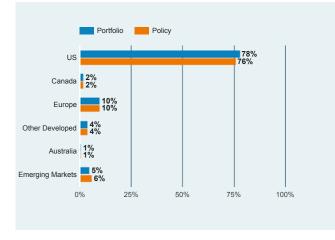
## 12 Risk contribution by risk factor



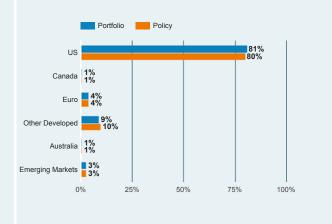
## 13 Active risk contribution by risk factor



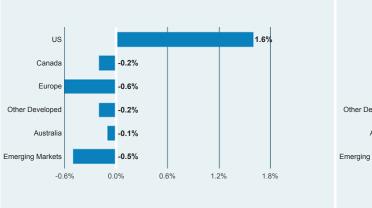
## 14 Geographic exposure



## 15 Currency exposure



## 16 Net geographic exposure



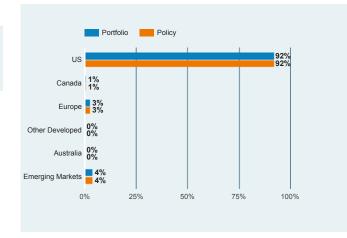
## 17 Net currency exposure



## 18 Interest rate bucket

	Portfolio	Policy	Difference
Duration	5-3	5.3	0.0
Yield to Maturity	2.7%	2.7%	0.0%
Wt. Avg. Rating	Aa1 / Aa2	Aa1 / Aa2	

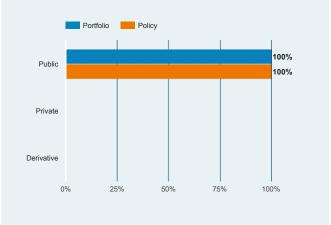
## 19 Rates bucket – Geographic exposure



## 20 Rates bucket – Currency exposure



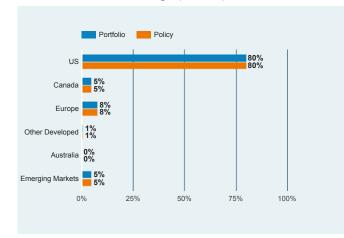
## 21 Rates bucket – Security type



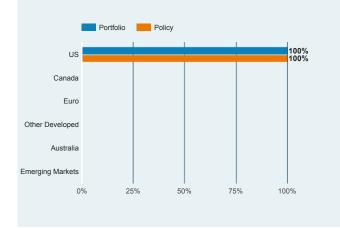
## 22 Credit bucket

	Portfolio	Policy	Difference
Duration	4.0	4.0	0.0
Coupon Yield	7.4%	7.4%	0.0%
Yield to Maturity	8.0%	8.0%	0.0%
Wt. Avg. Rating	B1 / B2	B1 / B2	

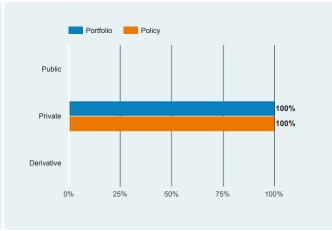
## 23 Credit bucket – Geographic exposure



## 24 Credit bucket – Currency exposure



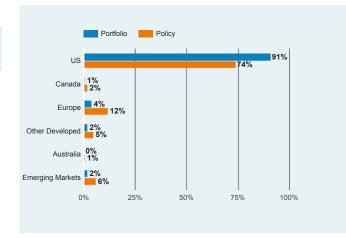
## 25 Credit bucket – Security type



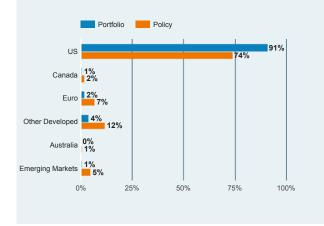
## 26 Inflation bucket

	Portfolio	Policy	Difference
Real Estate Allocation	2.1%	3.5%	-1.4%
Global Infrastructure	0.4%	3.0%	-2.6%

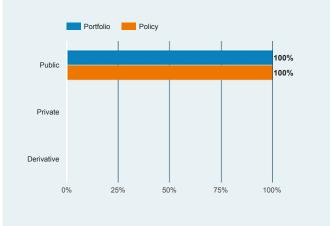
## 27 Inflation bucket – Geographic exposure



## 28 Inflation bucket – Currency exposure



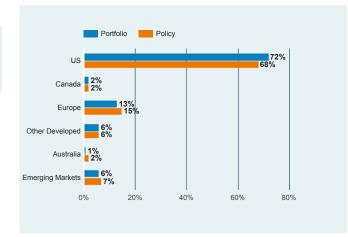
## 29 Inflation bucket – Security type



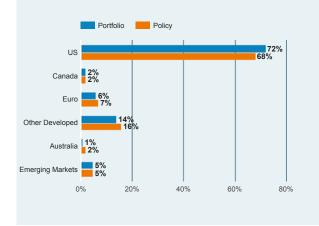
## 30 Equity bucket

	Portfolio	Policy	Difference
Beta	1.0	1.0	0.0
Dividend Yield	2.4%	2.5%	-0.1%
PE Ratio	19.2	19.3	-0.1

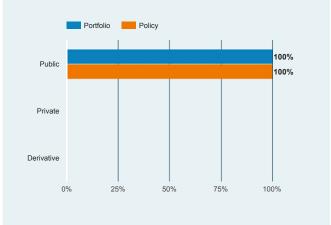
## 31 Equity bucket – Geographic exposure



## 32 Equity bucket – Currency exposure



## 33 Equity bucket – Security type



## 39 Market value summary per BarraOne

Bucket	Asset Class	Account Name	Account	Market Value (millions)
Cash	Cash	Cash	Cash	0.0
Cash Total				0.0
Credit	HY Bonds	White Oak Pinnacle	White Oak Pinnacle	39.1
		Medley Capital	Medley Capital	27.9
		Raven Capital	Raven Capital	26.3
		Raven Opportunity III	Raven Opportunity III	10.7
Credit Total				104.0
Equity	EAFE Equity	Pyramis	Pyramis	162.3
		LSV Asset Mgt	LSV Asset Mgt	158.9
	US Equity	Dodge & Cox-Equity	Dodge Cox Equity	175.2
		Jackson Square	Jackson Square	157.9
		BlackRock Russell 1000 Value	BlackRock Russell 1000 Value	121.7
		BlackRock Russell 1000 Growth	BlackRock Russell 1000 Growth	114.1
		Capital Prospects	Capital Prospects	80.5
		Legato Capital	Legato Capital	76.5
		Mellon S&P 500	Mellon S&P 500	74.5
Equity Total				1,121.6
Inflation	Infrastructure	MS Infrastructure Partners II	MS Infrastructure Partners II	6.5
	Real Estate	Prime Property Fund	Prime Property Fund	15.8
		Greenfield Gap	Greenfield Gap	10.1
		American Strategic Value Realty	American Strategic Value Realty	7.2
		BlackRock US Real Estate	BlackRock US Real Estate	3.5
Inflation Total				43.1
Rates	US Bonds	Dodge & Cox-Fixed	Dodge Cox Fixed	358.3
		РІМСО	РІМСО	113.9
Rates Total				472.2
Total Portfolio	o (millions)			1,740.9

#### **Chart Definitions**

#### 1 Portfolio risk

Total risk comparison of portfolio, Policy, and Avg. Pension. Policy is composed of 18% MSCI ACWI ex US, 4.8% S&P 500, 11.3% Russell 1000 Growth, 14.4% Russell 1000 Value, 3.7% Russell 2000 Growth, 4.0% Russell 2000 Value, 29.8% Barclays Capital US Aggregate, 3% MSCI ACWI Infrastructure, 7.5% Barclays Capital US Corporate High Yield, and 3.5% NFI ODCE. Average pension is based on median allocation of DB Plans > \$1 Billion, which is composed of 1.1% Cash, 26.1% US Equity, 15.1% Global ex-US Equity, 3.4% EM Equity, 6% Private Equity, 22.5% US Fixed Income, 4.3% Global Fixed Income, 1.5% Global ex-US Fixed Income, 2.4% EM Fixed Income, 8.1% Hedge Fund, 1.05% Commodity, 1.05% Forestry, and 7.4% Real Estate.

#### 2 Portfolio equity beta

Equity risk presented by equity beta to market. Equity beta is a measure describing the sensitivity of portfolio returns with returns of the equity market (MSCI ACWI).

#### 3 Portfolio interest rate risk – Duration

Interest rate risk presented by duration and dollar movement of portfolios. Duration of a financial asset that consists of fixed cash flows is the weighted average of the times until those fixed cash flows are received (measured in years). It also measures the percentage change in price for a given change in yields (the price sensitivity to yield). DVo1 \$ (dollar duration) is the change in price in dollars of a financial instrument resulting from a one basis point change in yield.

#### 4 Portfolio credit risk – Spread duration

Credit risk presented by spread duration and dollar movement of portfolios. Spread duration measures the percentage change in price for a one percentage point change in spreads.

#### 5 Exposure allocation by asset class

Exposure allocation among various asset classes.

#### 6 Exposure allocation

Exposure allocation among major risk buckets (rates, credit, equity, inflation, currency) and net currency exposure (domestic vs. foreign). Full Cash collateral is assumed for all derivatives.

#### 7 Relative risk vs target by bucket

Comparative riskiness of Portfolio vs. Policy on total portfolio and risk bucket levels: For example, equity bucket relative risk compares the riskiness of the Portfolio equity bucket vs the Policy equity bucket.

#### 8 Relative risk vs target by risk factor

Comparative riskiness of Portfolio vs. Policy on a total portfolio level and major risk factor levels.

#### 9 Risk factor weight relative to target

Contribution by factor to total relative risk of the Portfolio vs the Policy: For example, Equity is equity risk contribution to Portfolio minus equity risk contribution to the Policy, divided by total risk of the Policy. The factor overweights are additive to the total relative risk at the top line.

#### 10 Tail risk - Scenario analysis

Expected performance under various historical scenarios. For each historical scenario, the current market value is recalculated to determine total return under identical market conditions. Tail risk is a form of risk that arises when the possibility that an investment will have losses greater than what the normal distribution would suggest.

#### 11 Tail risk – Stress tests

Expected performance under various one-risk-factor stress tests. Directly affected asset classes are revalued at the factor levels.

#### 12 Risk contribution by risk factor

Risk contribution by risk factor. Volatility measures the price variation of a portfolio or financial instrument over time.

#### 13 Active risk contribution by risk factor

Active risk in terms of annual tracking error: Tracking Error (TE) measures how closely a portfolio follows its benchmark. It is the standard deviation of the difference between the portfolio and benchmark returns.

#### 14 Geographic exposure

Geographic exposures are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

#### 15 Currency exposure

Currency portfolio allocation. Currency exposures from both the underlying securities and the purchasing currency of the futures contract are included.

#### 16 Net geographic exposure

Difference between portfolio and policy allocation among major geographic areas.

#### 17 Net currency exposure

Difference between portfolio and policy allocation among major currencies.

#### 18 Interest rate bucket

Coupon yield (nominal yield) of a fixed income security is a fixed percentage of the par value that does not vary with the market price of the security. Yield to Maturity (YTM) is the interest rate of return earned by an investor who buys a fixed-interest security today at the market price and holds it until maturity. Ratings indicate credit quality of a security and the issuer's ability to make payments of interest and principal.

#### 19 Rates bucket – Geographic exposure

Geographic exposures specific to the Rates bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

#### 20 Rates bucket – Currency exposure

Currency allocation of interest rate instruments.

#### 21 Rates bucket - Security type

Allocation of interest rate instruments among different security types.

#### 22 Credit bucket

Various characteristics of credit instruments.

#### 23 Credit bucket – Geographic exposure

Geographic exposures specific to the Credit bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

#### 24 Credit bucket – Currency exposure

Currency allocation of credit instruments.

#### 25 Credit bucket – Security type

Allocation of credit instruments among different security types.

#### 26 Inflation bucket

Composition of inflation hedging instruments in portfolio and benchmark. Notional duration of real rates instruments is also included.

#### 27 Inflation bucket – Geographic exposure

Geographic exposures specific to the Inflation bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

#### 28 Inflation bucket – Currency exposure

Currency allocation of inflation instruments.

#### 29 Inflation bucket - Security type

Allocation of inflation instruments among different security types.

#### 30 Equity bucket

P/E ratio is a valuation ratio of a company's current share price compared to its per-share earnings. Beta measures sensitivity to Global Equities.

#### 31 Equity bucket – Geographic exposure

Geographic exposures specific to the Equity bucket are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

#### 32 Equity bucket – Currency exposure

Currency allocation of equity assets.

#### 33 Equity bucket – Security type

Allocation of equity assets among different security types.

#### 39 Market value summary per BarraOne

Summary of market value of Portfolio holdings by bucket as reported through BarraOne. Some differences may exist due to timing, pricing sources and availability of information on new investments.

#### Tail Risk Scenario Definitions

#### 1 2009-2010 July-January

(7/1/2009 – 12/31/2009) As global economic woes persisted, many countries were saddled with widening budget deficits, rising borrowing costs, slowing growth, higher unemployment, and higher inflation, which made monetary stimulus difficult. Dubai World sought to delay its huge debt repayments, shocking the global market, while the financial distress in Greece and Ireland began to emerge in late 2009.

#### 2 2007-2009 Subprime Meltdown

(1/10/2007 – 2/27/2009) The burst of the housing bubble in mid-2007 marked the beginning of the years-long subprime mortgage crisis, rooted from the easy credit, low interest rates, and loose regulatory environment in the early 2000s, which made low quality (subprime) mortgaging extremely easy. The contagious meltdown quickly led to plunging asset prices in the financial markets, rising bankruptcies, delinquencies, and foreclosures, and central bank monetary rescues and fiscal interventions by governments around the globe.

#### 3 2007-2008 Oil Price Rise

(1/18/2007 - 6/27/2008) Oil prices spiked from around \$60/bbl in 2007 to a record high of \$145/bbl on 3 July 2008.

#### 4 2001 Dot-com Slowdown

(3/10/2001 - 10/9/2002) Upon the burst of the tech bubble in 2000, more and more internet companies went out of businessas the stock market plummeted further.

#### 5 1997-1999 Oil Price Decline

(1/8/1997 - 2/16/1999) The combined effect of OPEC overproduction and lower oil demand due to the Asia economic crisis sent oil prices into a downward spiral.

#### 6 1994 US Rate Hike

(1/31/1994 – 12/13/1994) In combating inflation, the U.S. Federal Reserve raised its interest rate from 3.25% in February to 5.5% in November 1994.

#### 7 1992-1993 European Currency Crisis

(9/1/1992 – 8/13/1993) Upon Germany's reunification, the German mark appreciated rapidly, which destabilized exchange rates between European countries under the European Monetary System. It led to a series of European currency devaluations, interest rate increases, and the widening range of exchange rates in 1992.

#### 8 1989-1990 Nikkei Stock Price Correction

(12/29/1989 – 3/30/1990) After hitting the Nikkei stock index's all-time high on December 29, 1989, the Japan financial market crashed and plunged to a low in March 1990.

#### 9 1987 Market Crash (Oct. 14 to Oct. 19)

(10/14/1987 – 10/19/1987) The U.S. stock market began to topple on October 14, 1987 after reaching a record high. It was triggered by reports of a larger trade deficit and the elimination of the tax benefits of financing mergers. The aggravating selling pressure in October 19, from confused and fearful investors, and the failing portfolio insurers' models led to a substantial global market sell-off.

#### 10 1972-1974 Oil Crisis (Dec. to Sep.)

(12/1/1972 – 9/30/1974) Many developed countries suffered in this energy crisis as OPEC members placed an oil embargo on the U.S. and Israel's allies during the Yom Kippur War in October 1973, which sent global oil prices soaring.

#### DISCLAIMERS AND NOTICES

All the information presented in this risk report is furnished on a confidential basis for use solely by the client in connection with Verus Advisory, Inc. and/or Verus Investors, LLC (hereinafter collectively or individually the "Company") and the entity to whom this risk report is provided (hereinafter the client). It is agreed that use of the risk report is acceptance that the information contained therein is subject to the terms and conditions of the confidentiality agreement by and between the Company and the client and that such information is being presented through the proprietary technology known as the risk report.

The information contained in the risk report may not be copied, reproduced or distributed, in whole or in part, nor may its contents or facts or terms of any securities (if any) contained therein be disclosed to any other person except in accordance with the terms of the confidentiality agreement or unless in full conformity with prevailing NASD or SEC regulations. The information presented does not constitute a recommendation by the Company and cannot be used for advertising or sales promotion purposes.

The information presented has been prepared by the Company from sources that it believes to be reliable and the Company has exercised all reasonable professional care in preparing the information presented. However, the Company cannot insure the accuracy of the information contained therein. Subject to specific contractual terms between the Company and the client, the Company shall not be liable to clients or anyone else for inaccuracy or in-authenticity of information in the analysis or for any errors or omissions in content, except to the extent arising from sole gross negligence, regardless of the cause of such inaccuracy, in-authenticity, error, or omission. In no event shall the Company be liable for consequential damages.

Nothing contained therein is, or should be relied on as, a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the client should be prepared to bear. The information presented may be deemed to contain "forward looking" information. Examples of forward looking information including, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure, and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward looking terminology such as "believes," "expects, "may," "will, "should, "anticipates," or the negative of any of the foregoing or other variations thereon or comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward looking information. Such factors that could cause the actual results to differ materially from future results expressed or implied by such forward looking information. Such factors that could cause the actual results to differ materially from future results expressed or implied by such forward looking information. Such factors that could cause the actual results to differ materially from future results expressed or implied by such forward looking information. Such factors that could cause the actual results to cost levels, (v) changes in the competitive marketplace and/or client requirements, (iii) unanticipated changes in Company management, (v) inability to perform client contracts at anticipated cost levels, (v) changes in the regulatory requirements of the industry, and (vi) other factors that affect businesses within the various industries within which they work.

The information presented does not purport to be all-inclusive nor does it contain all information that the client may desire for its purposes. The information presented should be read in conjunction with any other material furnished by the Company. The Company will be available, upon request, to discuss the information presented in the risk report that clients may consider necessary, as well as any information needed to verify the accuracy of the information set forth therein, to the extent Company possesses the same or can acquire it without unreasonable effort or expense.

#### Company disclaimers required by information and service providers

(The identification of the information and service provider in the heading of each paragraph is for reference only)

#### Barra, LLC

This report has been prepared and provided by the Company solely for the client's internal use and may not be redistributed in any form or manner to any third party other than on a need to know basis to your board of directors, investment consultants, and other third parties with direct responsibility for monitoring the client's investments. The report contains proprietary third party data from Barra, LLC.

The data is provided to the client on an "as is" basis. The Company, its information providers (including without limitation Barra, LLC), and any other third party involved in or related to the making or compiling of the data make no representation or warranty of any kind, either express or implied, with respect to the data in this report (or the results to be obtained by the use thereof). Company, its information providers (including without limitation Barra, LLC), and any other third party involved in or related to the making or compiling of the data expressly disclaim any and all implied warranties of originality, accuracy, completeness, non-infringement, merchantability and fitness for a particular purpose.

The client assumes the entire risk of any use the client may make of the data. In no event shall the Company, its information providers (including without limitation Barra, LLC) or any third party involved in or related to the making or compiling of the data, be liable to the client, or any other third party, for any pdirect or indirect damages, including, without limitation, any lost profits, lost savings or other incidental or consequential damages arising out of this agreement or the inability of the client to use the data, regardless of the form of action, even if Company, any of its information providers (including without limitation Barra, LLC), or any other third party, for any other third party, for any any direct or indirect damages, including, without limitation any lost profits, lost savings or other incidental or consequential damages arising out of this agreement or the inability of the client to use the data, regardless of the form of action, even if Company, any of its information providers (including without limitation Barra, LLC), or any other third party involved in or related to the making or compiling of the data has been advised of or otherwise might have anticipated the possibility of such damages.

#### FTSE TMX Global Debt Capital Markets, Inc.

The client agrees that FTSE TMX Global Debt Capital Markets, Inc. and the parties from whom FTSE TMX Global Debt Capital Markets, Inc. obtains data do not have any liability for the accuracy or completeness of the data provided or for delays, interruptions or omissions therein or the results to be obtained through the use of this data. The client further agrees that neither FTSE TMX Global Debt Capital Markets, Inc. nor the parties from whom it obtains data make any representation, warranty or condition, either express or implied, as to the results to be obtained from the use of the data, or as to the merchantable quality or fitness of the data for a particular purpose.

Verus<sup>777</sup>

## PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

MAY 2016

Asset Allocation Study

**Stanislaus County Employees' Retirement Association** 

# Table of Contents



**VERUSINVESTMENTS.COM** 

 SEATTLE
 206-622-3700

 LOS ANGELES
 310-297-1777

 SAN FRANCISCO
 415-362-3484

Session goals	3
Asset allocation analysis	4
Private fund investing	14
Appendix	18

**Past performance is no guarantee of future results.** This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. and Verus Investors, LLC ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended.

# Session goals

- Determine appropriate asset mix for the investment portfolio
- Identify implementation issues and potential solutions



# Asset allocation analysis



# Asset allocation analysis

								Return	Standard	Sharpe
	Policy	Α	В	С	FFP 6-Yr	FFP 8-Yr	FFP 10-Yr	(10 Yr)	Deviation	Ratio
Domestic Equity										
US Large	30.5	12.0	12.0	12.0	12.0	12.0	12.0	5.9	15.1	0.26
US Small	7.7	3.0	3.0	3.0	3.0	3.0	3.0	5.2	19.8	0.16
	38.2	15.0	15.0	15.0	15.0	15.0	15.0			
International Equity										
International Developed	14.4	24.0	20.0	16.0	16.0	16.0	16.0	9.2	18.5	0.39
Emerging Markets	3.6	6.0	5.0	4.0	4.0	4.0	4.0	11.3	23.6	0.39
	18.0	30.0	25.0	20.0	20.0	20.0	20.0			
Total Equity	56.2	45.0	40.0	35.0	35.0	35.0	35.0			
Fixed Income										
Core Fixed Income	29.8	24.0	29.0	34.0	-	-	-	3.2	3.2	0.37
US Treasury	-	-	-	-	3.0	5.0	7.0	2.3	6.5	0.04
Short-Term Gov't/Credit	-	-	-	-	18.0	26.0	36.0	2.5	1.3	0.37
	29.8	24.0	29.0	34.0	21.0	31.0	43.0			
Real Assets										
Core Real Estate	6.5	5.0	5.0	5.0	5.0	5.0	5.0	4.7	13.2	0.20
Value-Add Real Estate	-	5.0	5.0	5.0	5.0	5.0	5.0	6.7	23.3	0.20
	6.5	10.0	10.0	10.0	10.0	10.0	10.0			
Alternatives										
Risk Parity	-	7.5	7.5	7.5	14.0	9.0	-	7.0	10.0	0.50
Private Equity	-	5.0	5.0	5.0	5.0	5.0	5.0	8.2	23.7	0.26
Private Credit	7.5	7.5	7.5	7.5	14.0	9.0	6.0	9.1	10.9	0.65
	7.5	20.0	20.0	20.0	33.0	23.0	11.0			
Cash	_	1.0	1.0	1.0	1.0	1.0	1.0	2.0	0.6	-
Total Allocation	100	100	100	100	100	100	100			

3% target policy allocation for Infrastructure is represented in Core Real Estate Verus' capital market assumptions incorporates an inflation rate of 2.1%



# Asset allocation analysis

	Policy	А	В	С	FFP 6-Yr	FFP 8-Yr	FFP 10-Yr
Mean Variance Optimizer Analysis							
Forecast 10 Year Return	6.3	7.3	7.0	6.7	7.1	6.6	6.0
Forecast 10 Year Real Return	4.2	5.2	4.9	4.6	5.0	4.5	3.9
Standard Deviation	10.3	10.6	9.7	8.8	9.4	8.7	8.1
Return/Std. Deviation	0.6	0.7	0.7	0.8	0.8	0.8	0.7
Sharpe Ratio	0.46	0.54	0.55	0.56	0.58	0.56	0.52
Verus Scenario Analysis							
10 Year Return Forecast							
Stagflation	5.2	5.8	5.7	5.6	5.9	5.7	5.5
Weak	2.4	3.4	3.4	3.5	3.8	3.4	3.0
Base CMA	5.8	6.8	6.5	6.1	6.5	6.0	5.5
Strong	9.8	10.2	9.6	8.9	9.3	8.9	8.4
Range of Scenario Forecast	7.4	6.9	6.1	5.4	5.6	5.5	5.4
Shock (1 year)	-22.9	-20.5	-18.2	-15.8	-16.2	-15.7	-15.7
10 Year <u>Real</u> Return Forecast							
Stagflation	-0.9	-0.3	-0.4	-0.5	-0.2	-0.4	-0.6
Weak	1.3	2.3	2.3	2.4	2.7	2.3	1.9
Base CMA	3.7	4.7	4.4	4.0	4.4	3.9	3.4
Strong	7.2	7.6	7.0	6.3	6.7	6.3	5.8
Range of Scenario Forecast	8.1	7.9	7.3	6.8	6.9	6.7	6.5

3% target policy allocation for Infrastructure is represented in Core Real Estate

Scenario Analysis utilizes April 2016 Verus Capital Market Assumptions

*Verus' capital market assumptions incorporates an inflation rate of 2.1%* 



## Relative investment model evaluation

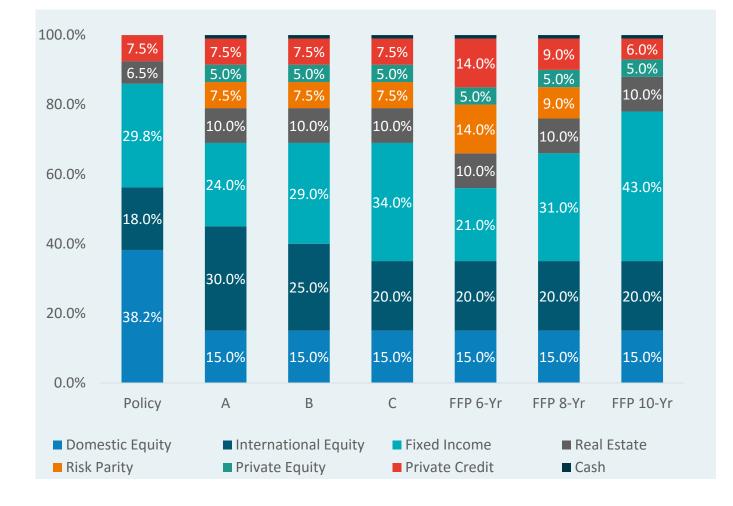
Selection Criteria	Policy	А	В	С	FFP 6-Yr	FFP 8-Yr	FFP 10-Yr
Risk/Return Metrics							
Expected Return	6.3%	7.3%	7.0%	6.7%	7.1%	6.6%	6.0%
Volatility	10.3%	10.6%	9.7%	8.8%	9.4%	8.7%	8.1%
Sharpe Ratio	0.46	0.54	0.55	0.56	0.58	0.56	0.52
% chance of meeting 4.25% Real Return	49.0%	61.0%	58.0%	54.2%	60.4%	53.2%	43.9%
Daily CVaR (95% confidence, \$MM)	\$27.0	\$25.2	\$23.0	\$20.9	\$23.3	\$20.8	\$18.2
Illiquid Asset Exposure	14.0%	22.5%	22.5%	22.5%	29.0%	24.0%	21.0%
2007-2009 Drawdown (Simulation)	-33.4%	-31.7%	-28.9%	-26.0%	-28.7%	-25.5%	-22.4%
1972-1974 Drawdown (Simulation)	-24.0%	-19.4%	-18.1%	-16.7%	-17.8%	-17.3%	-16.2%
Portfolio Heuristics							
Portfolio Complexity	low	med	med	med	high	high	med
Leverage	low	med	med	med	high	high	med
Peer/Headline Risk	low	high	med	med	high	high	high
Tail Risk	high	high	med	low	med	low	low
Equity Risk Allocation	high	med	med	low	low	med	med

Assets as of April 30, 2016

Verus' capital market assumptions incorporates an inflation rate of 2.1%

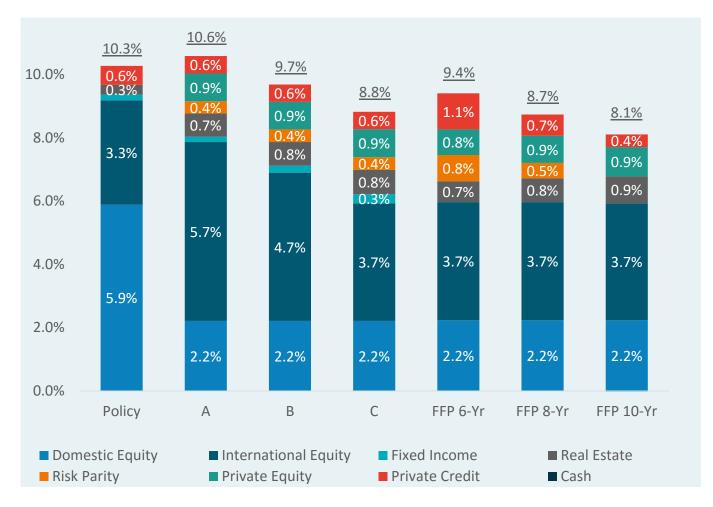


### Asset allocation by asset class





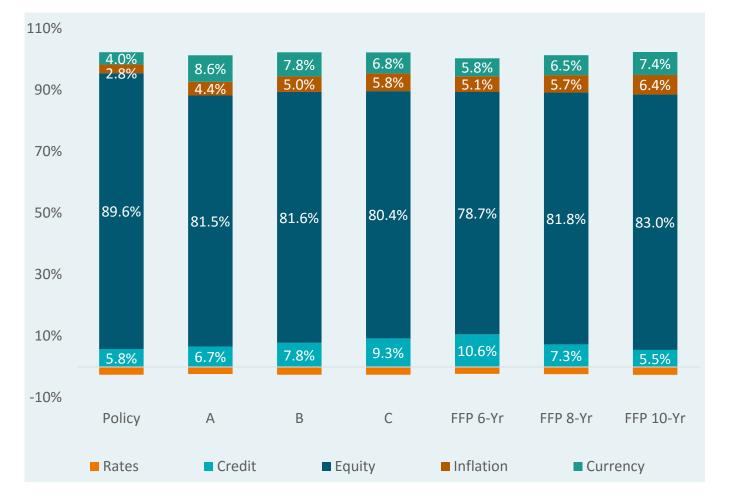
### Risk contribution by asset class



Risk contribution based on Verus' Capital Market Assumptions



## Risk contribution by risk factor

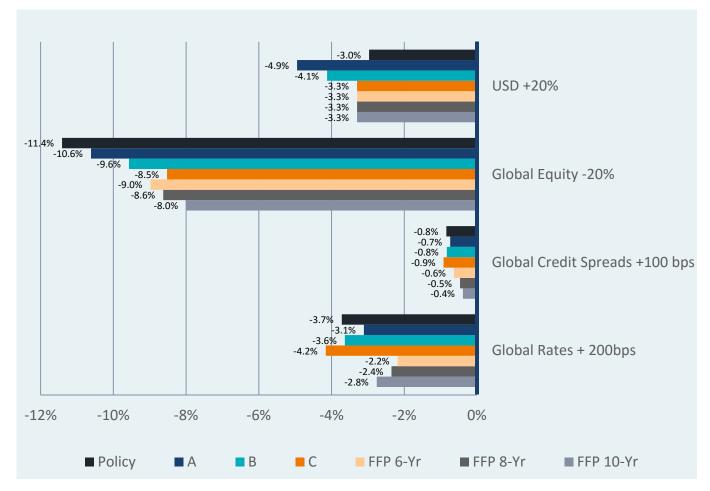


Risk contribution based on MSCI BarraOne's Capital Market Assumptions



### Stress test

#### TAIL RISK - STRESS TEST



BarraOne's risk decomposition analysis can hypothesize how the different portfolios would have performed in certain hypothetical stress tests or historical environments.

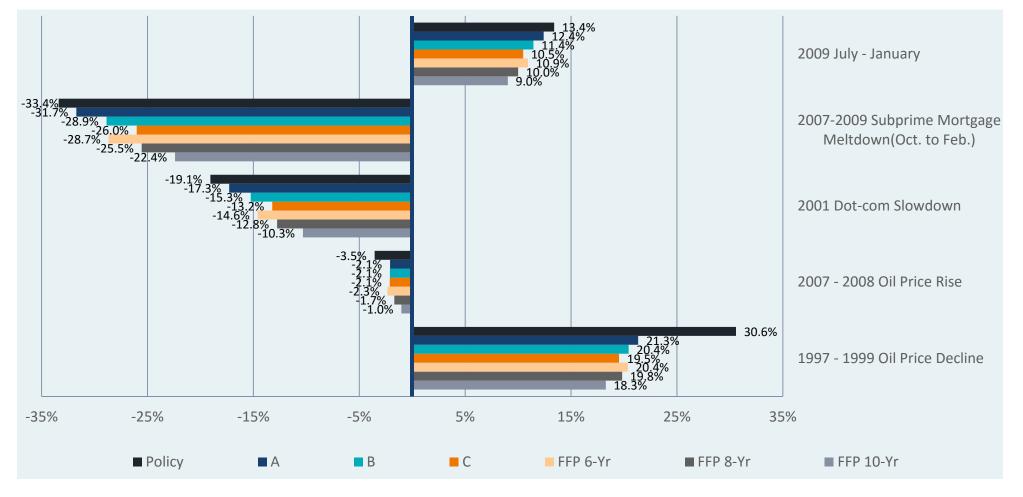
This analysis is based on how the risk factors inherent in the current index holdings reacted in those environments.

Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI Barra One



## Historical scenario analysis

#### TAIL RISK - SCENARIO ANALYSIS

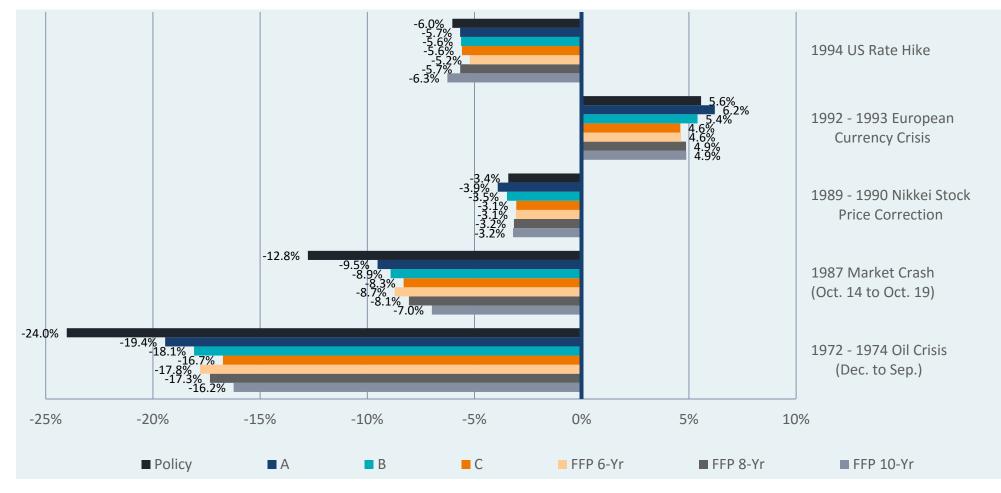


Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI Barra One



### Historical scenario analysis

#### TAIL RISK - SCENARIO ANALYSIS



Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI Barra One



# **Private fund investing**



# Private fund investing – process

Private investments have a long time horizon, consisting of multiple stages:

- Target size
  - The fund determines target investments and the amount of capital needed
- Initial subscriptions
  - The fund secures capital commitments from investors
  - Committed capital becomes an obligation of each investor in the fund
- Investment period (typically 3-5 years)
  - Capital is called on an as-needed basis
  - Contributed Capital = Total Capital Called
- Distributions (can occur for 10-12 years after initial investment)
  - As investments are realized, capital is distributed to investors



# Committed capital vs. invested capital

Because distributions begin before the full commitment is called, committed capital does not equal invested capital for most private fund investments:

- Committed capital = Total contributed capital over life of fund
- Invested Capital at time x = Contributed Capital up to time x Distributions up to time x
  - → Over-commitment is required to reach targeted allocation of invested capital

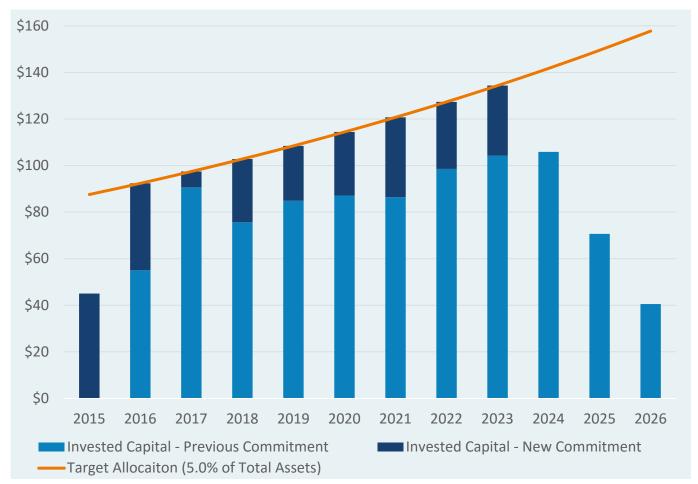
In order for invested capital to reach and sustain a target allocation:

- Cash flow contributions and distributions need to be projected
- A new commitment (based on projections) is made to reach the target allocation
- Actual cash flows and new projections are incorporated into analysis before the next commitment is made



## Achieving target allocation

#### HYPOTHETICAL INVESTED CAPITAL PROJECTION



Before a new commitment is made, invested capital is taken into account with current projections to determine the new commitment necessary to achieve a target allocation.

The analysis is conducted periodically (typically annually) with updated information in order to consistently reach target allocations over time.







# Plan profile

As of March 4, 2016:

— Total market value of assets = \$1,701,678,969

As of June 30, 2015:

- Average monthly Plan cash flows based on the previous 24 months:
  - Total Contributions = \$6.06mm
  - Total Benefit Payments & Expenses = \$8.39mm
    - Benefit Payments = \$8.19mm
    - Operating Expenses = \$0.19mm
  - Net Operating Cash Outflow = \$2.33mm
  - Total Interest & Dividends = \$3.67mm
  - Net Cash Inflow = \$1.34mm
- Total participants = 8,808 (4,145 or 47.1% active, 1,198 or 13.6% inactive, 3,456 or 39.3% retired)
- Open to new participants

As of June 30, 2014:

- Accrued liability = \$2,026.4 mil (based on interest rate of 7.75%)
- Actuarial assumed rate of return = 7.75% (subsequently reduced to 7.25%)
- Funded ratio = 81.1% (actuarial value of assets) and 84.0% (March 4, 2016 market value of assets)

Sources: StanCERA Comprehensive Annual Financial Reports, Cheiron Actuarial Valuation Reports



### 10 year return & risk assumptions

		Ten Year Re	<u>turn Forecast</u>	Standard Deviation	Sharpe Ratio (g)	Sharpe Ratio (a)	Ten Year Historical	Ten Year Historical
Asset Class	Index Proxy	Geometric	Arithmetic	Forecast	Forecast	Forecast	Sharpe Ratio (g)	Sharpe Ratio (a)
Equities								
US Large	S&P 500	5.9%	7.0%	15.1%	0.26	0.33	0.40	0.46
US Small	Russell 2000	5.2%	7.0%	19.8%	0.16	0.25	0.28	0.37
International Developed	MSCI EAFE	9.2%	10.8%	18.5%	0.39	0.47	0.10	0.19
International Small	MSCI EAFE Small Cap	8.6%	10.4%	19.7%	0.33	0.43	0.17	0.26
Emerging Markets	MSCI EM	11.3%	13.6%	23.6%	0.39	0.49	0.10	0.22
Global Equity	MSCI ACWI	7.7%	9.1%	16.9%	0.34	0.42	0.21	0.29
Private Equity	Cambridge Private Equity	8.2%	11.0%	23.7%	0.26	0.37	1.01	1.08
Fixed Income								
Cash	30 Day T-Bills	2.0%	2.0%	0.6%	-	-		-
US TIPS	Barclays US TIPS 5 - 10	2.7%	2.9%	6.3%	0.11	0.14	0.43	0.45
US Treasury	Barclays Treasury 7 - 10 year	2.3%	2.5%	6.5%	0.04	0.07	0.67	0.68
Global Sovereign ex US	Barclays Global Treasury ex US	2.6%	2.9%	7.8%	0.07	0.11	0.24	0.28
Core Fixed Income	Barclays US Aggregate Bond	3.2%	3.3%	3.2%	0.37	0.40	1.02	1.00
Core Plus Fixed Income	Barclays US Corporate IG	4.2%	4.4%	6.0%	0.33	0.40	0.68	0.68
Short-Term Gov't/Credit	Barclays US Gov't/Credit 1 - 3 year	2.5%	2.5%	1.3%	0.37	0.37	1.20	1.30
Short-Term Credit	Barclays Credit 1 - 3 year	2.9%	3.0%	2.2%	0.40	0.45	1.01	0.98
Long-Term Credit	Barclays Long US Corporate	4.2%	4.7%	10.5%	0.20	0.26	0.47	0.50
High Yield Corp. Credit	Barclays High Yield	7.1%	7.6%	10.6%	0.48	0.53	0.54	0.57
Bank Loans	S&P/LSTA	4.1%	4.5%	8.1%	0.24	0.31	0.38	0.40
Global Credit	Barclays Global Credit	2.4%	2.7%	6.9%	0.06	0.10	0.50	0.52
Emerging Markets Debt (Hard)	JPM EMBI Global Diversified	6.4%	6.8%	8.8%	0.50	0.54	0.64	0.65
Emerging Markets Debt (Local)	JPM GBI EM Global Diversified	6.8%	7.6%	12.9%	0.37	0.43	0.24	0.30
Private Credit	High Yield + 200 bps	9.1%	9.7%	10.9%	0.65	0.71	-	-
Other								
Commodities	Bloomberg Commodity	4.0%	5.6%	18.2%	0.11	0.20	-0.42	-0.34
Hedge Funds	HFRI Fund of Funds	6.0%	6.4%	9.0%	0.44	0.49	0.19	0.21
Hedge Funds (Fund of Funds)	HFRI Fund of Funds	5.0%	5.4%	9.0%	0.33	0.38	-	-
Core Real Estate	NCREIF Property	4.7%	5.8%	13.2%	0.20	0.27	0.92	0.98
Value-Add Real Estate	NCREIF Property + 200bps	6.7%	9.1%	23.3%	0.20	0.30	-	-
Opportunistic Real Estate	NCREIF Property + 400bps	8.7%	13.3%	33.2%	0.20	0.34	-	-
REITS	Wilshire REIT	4.7%	7.8%	26.4%	0.10	0.22	0.23	0.36
Risk Parity		7.0%	7.5%	10.0%	0.50	0.54	-	-
Inflation		2.0%	-	1.5%*	-	-	-	-

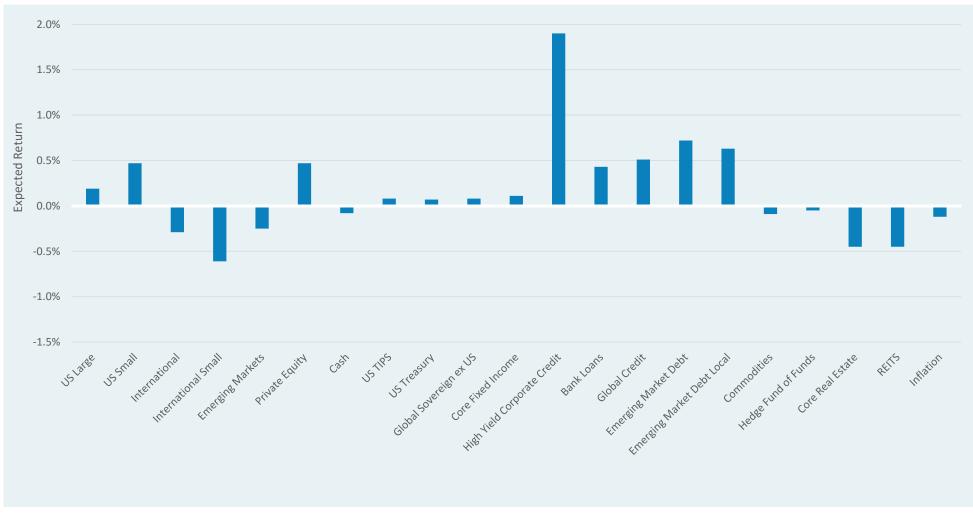
Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

\*Historical volatility of inflation. This is not a forecast.



### 2016 vs 2015 return forecast

#### 2016 VS 2015 RETURN FORECAST





### **Correlation assumptions**

	Cash	US Large	US Small	Developed Large	Developed Small	EM	Global Equity	PE	US TIPS	US Treasury	Global Sovereign exUS	US Core		Short –Term Govt/Credit		Long-Term Credit	US HY	Bank Loans	Global Credit	EMD USD	EMD Local	Commodi ties	Hedge Funds	Real Estate	REITs	Risk Parity	Inflation
Cash	1																										
US Large	-0.1	1																									
US Small	-0.1	0.9	1																								
Developed Large	-0.1	0.9	0.8	1																							
Developed Small	-0.1	0.8	0.8	1.0	1																						
EM	0.0	0.8	0.7	0.9	0.9	1																					
Global Equity	-0.1	0.9	0.8	0.9	0.9	0.9	1																				
PE	-0.2	0.7	0.7	0.8	0.8	0.7	0.7	1																			
US TIPS	0.0	0.2	0.1	0.3	0.3	0.3	0.3	0.1	1																		
US Treasury	0.1	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	0.6	1																	
Global Sovereign exUS	0.1	0.2	0.2	0.4	0.4	0.4	0.3	0.1	0.6	0.5	1																
US Core	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.8	0.9	0.6	1															
US Core Plus	-0.2	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.7	0.5	0.5	0.7	1														
Short –Term Govt/Credit	0.4	-0.1	-0.1	0.1	0.1	0.1	0.0	-0.2	0.6	0.6	0.6	0.7	0.4	1													
Short-Term Credit	0.1	0.3	0.2	0.4	0.4	0.4	0.3	-0.1	0.4	0.1	0.4	0.5	0.4	0.7	1												
Long-Term Credit	-0.1	0.3	0.2	0.4	0.4	0.4	0.3	0.1	0.6	0.5	0.5	0.8	0.8	0.5	0.6	1											
US HY	-0.1	0.7	0.7	0.8	0.8	0.8	0.8	0.6	0.4	-0.2	0.3	0.2	0.6	0.1	0.5	0.5	1										
Bank Loans	-0.1	0.6	0.5	0.5	0.6	0.5	0.5	0.2	0.2	-0.4	0.0	0.0	0.2	-0.1	0.6	0.3	0.8	1									
Global Credit	0.0	0.6	0.5	0.8	0.8	0.7	0.7	0.5	0.6	0.2	0.7	0.6	0.8	0.5	0.6	0.7	0.8	0.5	1								
EMD USD	-0.1	0.6	0.5	0.7	0.7	0.7	0.7	0.6	0.7	0.2	0.5	0.6	0.8	0.3	0.5	0.7	0.8	0.5	0.9	1							
EMD Local	0.1	0.7	0.6	0.8	0.8	0.8	0.8	0.6	0.5	0.1	0.6	0.4	0.5	0.3	0.4	0.5	0.7	0.4	0.8	0.8	1						
Commodities	0.1	0.5	0.4	0.6	0.6	0.6	0.6	0.2	0.3	-0.2	0.4	0.1	0.2	0.2	0.4	0.2	0.5	0.4	0.6	0.5	0.6	1					
Hedge Funds	-0.1	0.7	0.6	0.8	0.8	0.8	0.8	0.6	0.2	-0.3	0.1	0.0	0.4	-0.1	0.3	0.2	0.6	0.5	0.6	0.5	0.5	0.6	1				
Real Estate	-0.1	0.3	0.3	0.3	0.3	0.3	0.6	0.3	0.0	-0.1	0.1	0.0	0.1	-0.1	0.0	0.1	0.2	0.0	0.2	0.2	0.2	0.0	0.2	1			
REITS	-0.1	0.7	0.8	0.7	0.6	0.6	0.7	0.6	0.3	-0.1	0.3	0.3	0.4	0.0	0.2	0.4	0.7	0.5	0.6	0.6	0.6	0.3	0.4	0.4	1		
Risk Parity	0.1	0.5	0.4	0.5	0.5	0.5	0.5	0.0	0.6	0.3	0.6	0.6	0.4	0.5	0.7	0.6	0.5	0.4	0.7	0.6	0.6	0.6	0.4	-0.1	0.4	1	
Inflation	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	-0.3	0.0	-0.3	0.0	-0.2	-0.1	-0.3	0.2	0.3	0.1	0.1	0.1	0.3	0.3	0.0	0.1	0.0	1

Note: Correlation assumptions are based on the last ten years. Private Equity and Real Estate correlations are especially difficult to model – we have therefore used BarraOne correlation data to strengthen these correlation estimates.



# Date horizon of historical scenario analysis

Scenario	From	То
1972 - 1974 Oil Crisis (Dec. to Sep.)	December 1, 1972	September 30, 1974
1987 Market Crash (Oct. 14 to Oct. 19)	October 14, 1987	October 19, 1987
1989 - 1990 Nikkei Stock Price Correction	December 29, 1989	March 30, 1990
1992 - 1993 European Currency Crisis	September 1, 1992	August 13, 1993
1994 US Rate Hike	January 31, 1994	December 13, 1994
1997 - 1999 Oil Price Decline	January 8, 1997	February 16, 1999
2001 Dot-com Slowdown	March 10, 2001	October 9, 2002
2007 - 2008 Oil Price Rise	January 18, 2007	June 27, 2008
2007-2009 Subprime Mortgage Meltdown(Oct. to Feb.)	October 1, 2007	February 27, 2009
2009 July - January	July 1, 2009	December 31, 2009

Source: MSCI BarraOne



### Notices & disclosures

**Past performance is no guarantee of future results.** The information presented in this report is provided pursuant to the contractual agreement (the "Contract") by and between Stanislaus County Employees' Retirement Association ("Client") and Verus Advisory, Inc. ("Company"). In the event of conflict between the terms of this disclosure and the Contract, the Contract shall take precedence. Client is an institutional counter-party and in no event should the information presented be relied upon by a retail investor.

The information presented has been prepared by the Company from sources that it believes to be reliable and the Company has exercised all reasonable professional care in preparing the information presented. However, the Company cannot guarantee the accuracy of the information contained therein. The Company shall not be liable to Client or any third party for inaccuracy or in-authenticity of information obtained or received from third parties in the analysis or for any errors or omissions in content.

The information presented does not purport to be all-inclusive nor does it contain all information that the Client may desire for its purposes. The information presented should be read in conjunction with any other material furnished by the Company. The Company will be available, upon request, to discuss the information presented in the report that Client may consider necessary, as well as any information needed to verify the accuracy of the information set forth therein, to the extent Company possesses the same or can acquire it without unreasonable effort or expense. Nothing contained therein is, or should be relied on as, a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the client should be prepared to bear.

The material may include estimates, outlooks, projections and other "forward-looking statements." Such statements can be identified by the use of terminology such as "believes," "expects," "may," "will," "should," "anticipates," or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward-looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.





832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

### May 24, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Kathy Herman, Fiscal Services Manager

- I. SUBJECT: Legal Counsel To Assist with Procurement Contracts for the Information Technology Solutions Project (ITS)
- II. ITEM NUMBER: 9.b.
- III. ITEM TYPE: Discussion and Action
- IV. STAFF RECOMMENDATION: Approve the retention of Steve Miller and Robert McFarlane, of HansonBridget LLP to act as legal counsel in preparation for and negotiation of procurement contracts for the Information Technology Solutions Projects and authorize the Executive Director to execute the engagement letter for the not-to-exceed price of \$30,000.

ANALYSIS: On January 29, 2014 Tyler Inc. the company that installed and maintains the pension software system stated they would no longer enhance or be selling the current system. On October 10, 2014 the Board directed staff to begin the process of replacing the pension software system. A request for proposal for an I.T. Consultant was completed and the requirements were drafted for a new pension administration system. On April 29, 2016 the process to search for and select a vendor began. As part of the request for proposal a sample contract is provided.

Technology and software solution contracts require a particular set of rules in procurement in order to protect both parties without jeopardizing the project. Software agreements must include language for the implementation, maintenance, intellectual property rights, source code ownership, data privacy and security that will need expertise review. Retaining specialized counsel will ensure StanCERA is properly represented in this process. Legal assistance will also be needed for the website redesign and any other software solution requiring a separate vendor contract.

Three law firms were contacted to determine a reasonable cost for contract and procurement legal services. StanCERA received two responses, both similar in price, \$20,000 - \$50,000 depending upon the depth of involvement in the process. Both firms come highly recommended. HansonBridgett LLP has a good professional relationship with StanCERA and is based in California.

- V. RISK: Software solution contracts are distinct in many ways; not retaining experienced counsel could put StanCERA and major projects in jeopardy.
- VI. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently\*
- VII. ADMINISTRATIVE BUDGET IMPACT: There is no additional impact to the budget. The General Counsel budgeted amount is sufficient to cover this cost.

Kathy Herman, Fiscal Services Manager

Rick Santos, Executive Director



832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

### May 24, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Kathy Herman, Fiscal Services Manager

- I. SUBJECT: Completion of Vacant Space at 832 12th Street, Suite 600
- II. ITEM NUMBER: 9.c
- III. ITEM TYPE: Discussion and Action
- IV. STAFF RECOMMENDATION:
  - 1. Accept the proposal, and authorize the Executive Director to negotiate the final terms and enter into contract with Norwood Construction for the not-to-exceed price of \$67,113 for the buildout of the vacant space on the 6<sup>th</sup> floor of 832 12<sup>th</sup> Street, Modesto, CA.
  - 2. Direct staff to include an additional \$22,146 to the Fiscal Year 2016-2017 budget to complete the project. (\$17,113 plus 7.5% contingency)
- V. EXECUTIVE SUMMARY: On October 27, 2015, the Board of Retirement (Board) approved a budget of \$50,000 and the use of County General Services to serve as the project manager to complete the shell of the remaining 896 sq. ft. of unfinished space on the 6<sup>th</sup> floor. The actual process has taken longer than expected, therefore the previously budgeted funds will roll forward into the new fiscal year. The Request for Proposal was published on March 17, 2016. Once received it was clear the cost of the project would be higher than expected. Consequently in order to move forward, approval is being recommended to accept the bid, award the contract, and approve the additional funds needed.
- VI. ANALYSIS: In June 2015, Staff received a request to research the cost of expanding or building a larger board room into the unfinished 896 sq. ft. on the 6<sup>th</sup> floor of 832 12<sup>th</sup> Street. The current board room is 560 sq. ft. StanCERA owns the 6<sup>th</sup> floor; however, the County of Stanislaus owns the core and shell of the building. This includes heating and air conditioning, plumbing, electrical and fire systems. Any buildout has to be coordinated with the County and all tenants in the building and go through the competitive bid process. Matt Innes a contract employee with the County's General Services Agency agreed to assist StanCERA with this project. Matt Innes, performed a site evaluation, and considering the special nature of a custom design/build of a public board room, he suggested we first build out the shell. His very rough "unofficial" estimate was \$45,000 -\$50,000 for the shell. This would complete the mechanical connections, install the ceiling, finish the walls and floors and add doors.

Stanislaus County Issues Bid	3/17/2016
Mandatory Bid Walk	3/31/2016
Questions Deadline	4/7/2016
Assistance to Proposers with Disability Deadline	4/7/2016
Submission Deadline	4/28/2016
Mail – Notice of Intent to Award	5/5/2016
Protest Deadline	5/12/2016

The following is a schedule of the request for proposal.

Several contractors were in attendance for the bid walk. Through the question and answer period, it was determined that since the final use of the space may be for public meetings, additional fire

Retirement Board – May 24, 2016 Completion of Vacant Space at 832 12th Street, Suite 600 Page 2

regulations had to be met. The schedule was adjusted to accommodate this and three bids were received on April 28, 2016. A formal waiting period was then allowed for any protest to the bid process. No protests were received by the deadline of 5/12/2016 and now StanCERA has the ability to move forward with the project.

As stated three bids were received, in the amounts of \$165,000, \$91,350 and \$67,113. The lowest bid came from Norwood Construction out of Rancho Cordova, CA. The Board approved \$50,000 for this project; unfortunately all of the bids came in higher. Initially it was thought that the additional space would not need to conform to Type 1 occupancy, but out of caution it was decided to have the additional space meet this requirement. Type 1 occupancy allows the most flexible use of the space.

Norwood Construction is a general contracting company with 35 years of experience. Much of it in the public sector. If the Board approves this request an additional \$22,146 (\$17,113 for the bid and \$5,033 for contingencies) will be added to the Fiscal Year 2016-2017 budget.

- VII. RISK: There is always some risk when contracting for building improvements; however any future use of the space will require this work to be done.
- VIII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently\*
- IX. ADMINISTRATIVE BUDGET IMPACT: Work on this project will be completed after the end of the current fiscal year. \$50,000 will be rolled forward to the Fiscal Year 2016-2017 budget and if approved, an additional \$22,146 will be added for the bid plus contingency at a total of budgeted amount of \$72,146.

Fiscal Services Manager

Rick Santos, Executive Director



832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

### May 24, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Kathy Herman, Fiscal Services Manager

- I. SUBJECT: Fiscal Year 2016-2017 Proposed Administrative Budget
- II. ITEM NUMBER: 9.d
- III. ITEM TYPE: Discussion and Action
- IV. STAFF RECOMMENDATION: Approve the Recommended Proposed Administrative Budget for Fiscal Year 2016-2017
- V. EXECUTIVE SUMMARY: Each year staff prepares a budget of general operating expenses for review and approval by the Board of Retirement (Board). Typically, there are few unexpected expenses and one budget presented and approved has been sufficient. With the Board's 2014 directive to move forward with updating the information systems, several adjustments were necessary for the final Fiscal Year 2015-2016 budget. With costs still to be determined, the Fiscal Year 2016-2017 proposed budget cans not include several major projects such as the Information Technology Solutions project, additional design and buildout of the Board room, rebalance and correction of the HVAC system, and repositioning of the power lines in the alley. An adjusted recommended budget will be brought to the Board once cost information is available.

In preparation of the proposed budget, staff compares the current year budget with the current year expenditures. Those numbers, as well as the proposed budget request for Fiscal Year 2016-2017 are reflected in the summary below. In Fiscal Year 2015-2016 the total estimated expenditures of \$2,399,317 fall below the final budget approved by the Board of Retirement. Projected legal fees, fiduciary education, as well as salary savings can be attributed with the bulk of the savings. Funds that were set aside for the build out of the vacant space and the pension software project have not been realized and will be carried over to the next fiscal year. A total of \$2,977,307 is being requested for Fiscal Year 2016-2017.

STANISLAUS COU		FES' RETIDE	MENT ASSOCIA		
PROPOSED FISC					
	Approved		Fiscal Year		Fiscal Year
	FY 15/16	FY 15/16	2016-2017	Technology	2016-2017
	Budget	Estimated	Budget	exception	Budget
DESCRIPTION	Including I.T.	Expenditures	Limited - §31580.2	§31580.2(b)	Request
Salaries & Benefits	1,379,931	1,311,849	1,552,543	95,700	1,648,24
Technology	126,157	108,591	113,350	21,000	134,35
ITS Projects	277,000	224,055	0	52,945	52,94
Legal Counsel & Services	505,000	250,232	425,000		425,00
County Support Services	154,700	166,005	148,466		148,46
Communication & Printing	34,000	21,254	74,000		74,00
General Operations	118,000	54,687	101,500		101,50
Fiduciary Education & Travel	180,000	141,206	175,000		175,00
Capital Expenditures	50,000	0	92,146		92,14
Capital Depreciation	174,000	173,782	178,000		178,00
6th Floor Lease Revenue	(52,343)		(52,343)		(52,34
TOTAL BUDGET	2,946,445	2,399,317	2,807,661	169,645	2,977,30
Valuation Year	2014		2015	N/A	
Actuarial Liability	2,026,371,000		2,391,522,000		
Maximum Allowable Budget (21 bps)	4,255,379		5,022,196		
Budgeted Amount	2,946,445		2,807,661		
Difference	(1,308,934)		(2,214,535)		
Actual Basis Points (bps)	0.12%		0.12%		

Government Code section 31580.2 within the 1937 Act allows for expenditures of administrative services (other than software, hardware and computer technology consulting services) to be the greater of 0.21% of the accrued actuarial liability or \$2,000,000. The accrued actuarial liability of StanCERA as of the June 30, 2015 actuarial valuation was \$2,391,522,000 of which 0.21% (\$5,022,196) is available for administrative expenses. We have shown the costs related to the I.T. Coordinator, computer technology software, hardware and consulting services separately in this budget.

VI. ANALYSIS:

### Review of the Current Year's Administrative Budget and Expenditures

In Fiscal Year 2015-2016 the total estimated expenditures of \$2,399,317 will fall below the budget approved by the Board. Legal fees, in particular were much lower (\$255,000) than anticipated, due to the completion of one lawsuit and lack of movement in either of the remaining two. In addition, it has taken longer than expected to fill the two new positions approved by the Board in December, work has not yet started on the vacant space, and the expenses for the I.T. consultant have not been completely realized, all resulting in savings

#### Fiscal Year 2016-2017 Proposed Administrative Budget Request

A total of \$2,977,307 is requested for all administrative expenses in Fiscal Year 2016-2017 including the \$169,645 related to the I.T. Coordinator and computer technology. See **<u>Attachment I</u>** The cost for several projects either approved in concept or directly by the Board of Retirement have not been finalized and are not included in this proposed budget. These include the pension software system; project management costs, Website redesign and implementation, member record back file conversion as well as several construction projects. The 6<sup>th</sup> Floor lease revenue continues to offset 6<sup>th</sup> floor expenses.

#### Salaries & Benefits

Total estimated budget for **Salaries and Benefits** is \$1,648,243. Salaries include thirteen fulltime staff, contract wages for temporary staff used for back fill on projects; and three part-time extra help staff who continue to work on a variety of projects 20 hours per week. Benefits include employer retirement contributions, medical, dental and vision care, workers comp and other negotiated and required taxes and fees. See <u>Attachment II</u> for the proposed organizational chart.

Health care is particularly dependent upon individual staff selections. If a staff member selects to use County health care coverage for a family of three or more, the budgeted amount is \$22,375 per year. Staff does have some flexibility, therefore the overall cost to the department can vary throughout the year.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
SALARIES & BENEFITS Salaries Employee Benefits I.T. Specialist - Salary & Benefits	916,861 367,371 95,700	853,175 369,505 89,169	522,973	95,700	1,029,570 522,973 95,700
Salaries & Benefits	1,379,931	1,311,849	1,552,543	95,700	1,648,243

### Technology

The technology budget includes current needs as well as some project costs. The request for proposal for a new pension software system is in process. Once completed, a budget adjustment will be presented to the Board for review and approval. The contractual costs for annual maintenance \$48,645, and disaster recovery \$13,475 with **Tyler Technologies** for our pension system are included. The Tyler maintenance contract is based on a percentage of the original implementation cost and has been extended to allow time for implementation of the new system.

The **StanCERA Website** budget of \$2,400 is based on a bare bones structure and allows room for required upgrades. As part of the overall Information Technology project the website will be redesigned. This project will be brought to the Board at a later date and, if approved, the budget will be amended.

The **Computer Software Equipment and Support** budget of \$10,000 is in line with last year, to cover basic equipment needs and emergencies. Fortunately, the Information Technology support needed for Fiscal Year 2015-2016 was minimal. In order to keep **Computers and Equipment** somewhat current, \$11,000 is budgeted each year for replacements and repairs.

In Fiscal Year 2016-2017 **Copier Expenses** of \$15,000, will move to this category and will be budgeted separately. This includes leases, maintenance and supplies. StanCERA processes letterhead, specialized forms, member statements and retiree payroll notices on site.

StanCERA contracts with the County for network access, email, server maintenance, security and phones. The Strategic Business Technology (**SBT**) budgeted amount, \$33,830, is provided by the County Information Technology department for these services. The amount provided for Fiscal Year 2016-2017 is within a reasonable range of costs at this time.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
TECHNOLOGY	g			50.000(1)	
Tyler Software Maint	46,000	45,133	48,645		48,645
Tyler Disaster Maint	12,250	12,250	13,475		13,475
StanCERA Website	2,400	220	2,400		2,400
Software & Support and Service	10,000	2,485		10,000	10,000
Computers & Equipment	10,707	4,684		11,000	11,000
Copier Lease & Maint	15,000	13,064	15,000		15,000
SBT - Data Processing Services	24,500	25,786	28,365		28,365
SBT - Telecommunications	5,300	4,968	5,465		5,465
Technology	126,157	108,591	113,350	21,000	134,350
Information Technology Solution (ITS ) Projects					
I.T. Consulting Services (RFP - Procurement)	277,000	224,055		52,945	52,945
I.T. Consulting / Project Management				TBD	-
Pension Administration System				TBD	-
Website redesign & implementation				TBD	-
Member Record Back File Conversion	077.000	004.055		TBD	-
ITS Projects	277,000	224,055	0	52,945	52,945

### Legal Counsel & Services

StanCERA contracts with multiple specialized firms for legal counsel. Only one firm is on retainer. The estimated cost for **Legal Counsel** includes \$120,000 for Disability Counsel, \$100,000 to continue to respond to the O'Neal vs StanCERA appeal, \$75,000 for General Legal Counsel based on current year expenditure levels and \$100,000 for the StanCERA vs Buck

lawsuit. The General Counsel budget may include expenses from multiple law firms depending on the subject matter.

**Medical Exams, Reviews, and Hearing** costs related to the processing of disability retirement applications (medical exams, hearing costs, etc.) are budgeted at \$30,000 for the year. Fortunately, none of the cases reviewed during the previous year became so complicated to require the use of these funds.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
LEGAL COUNSEL & SERVICES					
Legal Counsel - Disability Legal Counsel - O'Neal vs StanCERA	130,000 100,000	105,009 52,819	120,000 100,000		120,000 100,000
Legal Counsel - General	75,000	57,487	75,000		75,000
Legal Counsel - Nasrawi vs Stancera	20,000	0			-
Legal Counsel - StanCERA vs Buck	150,000	34,916	100,000		100,000
Medical Exams, Reviews, Hearings	30,000	0	30,000		30,000
Legal Counsel & Services	505,000	250,232	425,000		425,000

#### **County Support Services**

The Stanislaus County, General Services Agency (GSA) is responsible for acquiring goods and services, negotiating contracts, leasing property and equipment, providing consultation on procurement needs and contract facilitation to County departments. In addition GSA manages the sale and/or disposal of surplus County property, mailroom messenger services, and salvage services. As an Internal Service Fund, the costs of these services are based on the level of service provided.

**The Building** projections provided by the County are budgeted at \$95,150. This includes common area expenses for janitorial, and StanCERA's portion of maintenance, utilities and security.

GSA estimates StanCERA's **Central Services and Mail Room** cost to be \$10,000 for Fiscal Year 2016-2017. Postage is now being categorized separately, which explains the significant drop in this budget item.

Also provided by the County is general and auto liability insurance, administrative functions by CEO/Personnel, Auditor, Purchasing, Risk Management, and a true-up process for capital expenses from the previous year. The true-up amount can fluctuate considerably from positive to negative each year. The total for these services are budgeted at \$43,316.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
COUNTY SUPPORT SERVICES					
Building Janitorial	1,200	499	1,200		1,200
Building Maintenance	25,000	26,633	27,500		27,500
Building Utilities	39,500	37,500	39,500		39,500
Building Security	24,500	23,568	26,950		26,950
Central Services, Mail Room, Salvage	43,000	49,103	10,000		10,000
CEO/Personnel (true up)	10,000	18,460	20,306		20,306
Auditor	9,000	7,496	9,000		9,000
Purchasing	1,000	617	1,100		1,100
Risk Management	1,500	2,129	1,650		1,650
Insurance (General Liability & Auto)			11,260		11,260
County Support Services	154,700	166,005	148,466		148,466

#### Communication & Printing

We have budgeted for **Communications and Printing** a total of \$74,000 which includes the Comprehensive Annual Financial Report, Popular Annual Financial Report, semi-annual member statements, two elections, and printing and distribution of StanCERA's newsletter via U.S. Postal services to active members (employees). Distribution through County payroll is no longer available. In addition the printing services for retiree payroll and the associated postage has now been included in this category. On average the monthly postage expense through the County's mail room is \$4,091. The bulk of which is retiree payroll. It's important to note that StanCERA does not pre-order letter head, specialized forms, member statements or retiree payroll notices. These items are printed in-house as needed.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
COMMUNICATION & PRINTING					
Annual Reports, Trustee Elections Mass member communication Postage	34,000	21,254	34,000 40,000		34,000 - 40,000
Communication & Printing	34,000	21,254	74,000		74,000

#### **General Operations**

Often during any fiscal year, legislative changes or a Board request will produce a need for professional services not provided by staff. The budgeted amount for **Other Professional Services** of \$30,000 is set aside to cover the cost of professional service providers not associated with investments.

The \$8,000 amount budgeted for **Office Supplies** is lower than estimated for the current year, however in the future printing and postage for any mass mailing done in house will be budgeted in the Communications and Printing category.

The **Other Office Expense** budgeted at \$10,000 for Fiscal Year 2015-2016 includes document storage expenses as well as other items needed for securing critically important historical documents, confidential shredding, alarm services, and other ongoing services that are periodically used to complete special projects. This budget is also set aside to accommodate unexpected ergonomic needs, safety expenses, furniture needs, etc.

The **6**<sup>th</sup> **Floor** budget of \$53,500 includes the costs of regular janitorial services provided by an outside provider, the additional cost for cleaning and/or replacing flooring, window cleaning, some painting, as well as any cost due to the lease of the vacant space. This budget item will be offset by the estimated lease revenue of \$52,343.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
GENERAL OPERATIONS					
Other Professional Services Office Supplies	40,000 10.000	7.147	30,000 8,000		30,000 8,000
Other Office Expense	16,000	2,871	10,000		10,000
6th Floor Security	2,000	348	2,000		2,000
6th Floor Janitorial & Supplies 6th Floor taxes (Downtown Redevelopment)	20,000 0	17,407 1,218	20,000 1,500		20,000 1,500
6th Floor Maint	30,000	25,696	30,000		30,000
Rebalance & Correction of 6th floor HVAC			TBD		
General Operations	118,000	54,687	101,500		101,500
6th Floor Lease Revenue	(52,343)	(52,343)	(52,343)		(52,343

### Fiduciary Education & Travel

Staff, trustees and service providers to StanCERA have a fiduciary responsibility to the fund. As such, it is imperative that continuous education be provided. Access to **Professional Publications** and Memberships are important to the continuing education of staff and trustees. The Wall Street Journal (WSJ) and other subscriptions provide key information to fiduciaries. A budgeted amount of \$6,000 is in line with this fiscal year's estimated expenditures. The costs of **Professional Memberships** (SACRS, CALAPRS and NCPERS) seem to have leveled out and the budgeted amount of \$11,000 reflects the estimated expenditures for Fiscal Year 2015-2016 and projected increases for Fiscal Year 2016-2017. Membership in these organizations continues to provide high quality education and access to pension and investment information to Board Trustees and staff.

With StanCERA's needs for education in investment, tax, actuarial and the benefits arenas, maintaining this budget allows for Board Trustees and staff to receive appropriate training and is in line with the Retirement Board's Strategic Plan goal to keep current and up to date. \$30,000 is set aside for **Staff Education** and associated travel expenses.

The Board of Retirement consists of nine members and one alternate. Continuing education for Board of Retirement Trustees is required by law. \$40,000 has been set aside to accommodate **Trustee Fiduciary Education** and associated travel expenses. A Meeting Allowance is provided for trustees not elected by active members. Annually \$13,000 is budgeted for total allowances paid.

The \$75,000 budgeted for **Insurance** includes the estimated cost of Automobile Liability, General Liability and Fiduciary insurances in Fiscal Year 2016-2017. The Fiduciary Insurance annual coverage cost is expected to increase. It will be based on the 6/30/2015 fund balance and past experience. Staff continues to research potential vulnerabilities to the system that might be well served by further coverage.

Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
6,000 25,000 11,000 45,000	849 24,326 10,348 29,927	6,000 30,000 11,000 40,000		6,000 30,000 11,000 40,000
13,000	8,400	13,000		13,000
		- /		75,000 175,000
	Budget Including I.T. 6,000 25,000 11,000 45,000	Budget Including I.T.         Estimated Expenditures           6,000         849           25,000         24,326           11,000         10,348           45,000         29,927           13,000         8,400           80,000         67,356	Budget Including LT.         Estimated Expenditures         Budget Limited - §31580.2           6,000         849         6,000           25,000         24,326         30,000           11,000         10,348         11,000           45,000         29,927         40,000           13,000         8,400         13,000           80,000         67,356         75,000	Budget Including LT.         Estimated Expenditures         Budget Limited - §31580.2         exception §31580.2(b)           6,000         849         6,000         \$31580.2           25,000         24,326         30,000         11,000           11,000         10,348         11,000         45,000         29,927           13,000         8,400         13,000         8,400         13,000

### **Capital Expenditures**

The budgeted **Depreciation** of \$178,000 includes the Tyler computer software, 12th Street offices, tenant improvements, furniture, phone systems, audio system, and security monitoring systems.

Most of the current **Capital Expenditures** budget request of \$92,146 is carried forward from the previous year. Work has not yet started on the buildout of the vacant space on the 6<sup>th</sup> floor and because of this build out, upgrading the audio equipment in the Board room was put on hold.

Major software purchases are considered a capital expenditure. StanCERA is currently in a request for proposal (RFP) process to purchase pension administration software. Until this process is completed it is not possible to assume a cost estimate.

DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request
CAPITAL EXPENDITURES					
Pension Administration System					0
Reposition powerlines in alley			TBD		
Audio Visual Equipment	0	0	20,000		20,000
6th Floor vacant space completion	50,000	0	72,146		72,146
Design and Build of Board Room			TBD		
Capital Expenditures	50,000	0	92,146		92,146
Capital Depreciation	174,000	173,782	178,000		178,000

### Non- Administrative Expenses

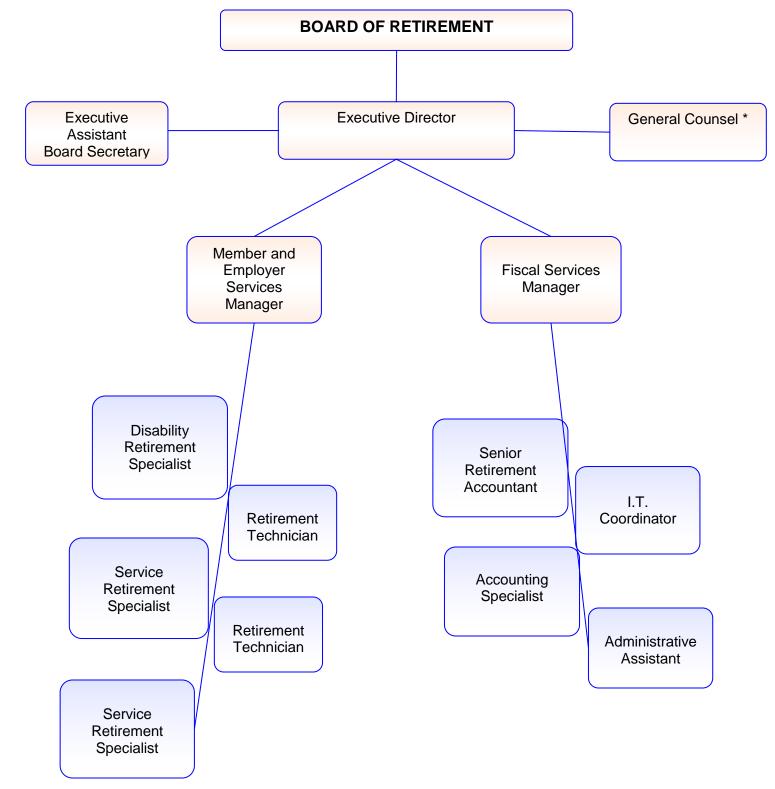
Section 31596.1 of the CERL states: the following expenses shall not be considered a cost of administration to the retirement system, but shall be considered as a reduction in earnings from those investments or a charge against the assets of the retirement system as determined by the Board. These expenses are reported in the Audited financial statements presented to the Board of Retirement in the Comprehensive Annual Financial Report.

- Actuarial Fees
- Investment Consultant Fees
- Attorney Fees –directly related to an investment
- Investment Manager Fees
- Custodial Bank Fees.
- VII. RISK: Government Code section 31580.2 allows for expenditures for administrative services (other than software, hardware and computer technology consulting services) to be the greater of 0.21% of the accrued actuarial liability or \$2,000,000. In Fiscal Year 2016-2017, we continue to exercise prudence in budgeting administrative expenses and are submitting a budget which is only 0.12% of the accrued actuarial liability and well below the allotted legal amount.
- VIII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently.
- IX. ADMINISTRATIVE BUDGET IMPACT: A total budget of \$2,977,307 is being requested for administrative expenses in Fiscal Year 2016-2017 including the \$169,645 related to the I.T. Coordinator and computer technology. The requested budget for Fiscal Year 2016-2017 is only \$30,862 higher than the previous requested years budget. The increased cost of health care and retirement are somewhat mitigated by the significant drop is legal fees.

Kathy Herman, Fiscal Services Manager

Rick Santos, Executive Director

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PROPOSED FISCAL YEAR 2016-2017 ADMINISTRATIVE BUDGET						
DESCRIPTION	Approved FY 15/16 Budget Including I.T.	FY 15/16 Estimated Expenditures	Fiscal Year 2016-2017 Budget Limited - §31580.2	Technology exception §31580.2(b)	Fiscal Year 2016-2017 Budget Request	
SALARIES & BENEFITS						
Salaries	916,861	853,175	1,029,570		1,029,570	
Employee Benefits	367,371	369,505	522,973		522,973	
I.T. Specialist - Salary & Benefits	95,700	89,169		95,700	95,700	
TECHNOLOGY						
Tyler Software Maint	46,000	45,133	48,645		48,645	
Tyler Disaster Maint	12,250	12,250	13,475		13,47	
StanCERA Website Software & Support and Service	2,400 10,000	220 2,485	2,400	10,000	2,40 10,00	
Computers & Equipment	10,707	4,684		11,000	11,00	
Copier Lease & Maint	15,000	13,064	15,000	,	15,00	
SBT - Data Processing Services	24,500	25,786	28,365		28,36	
SBT - Telecommunications	5,300	4,968	5,465		5,46	
Information Technology Solution (ITS ) Projects						
I.T. Consulting Services (RFP - Procurement) I.T. Consulting / Project Management Pension Administration System Website redesign & implementation Member Record Back File Conversion .EGAL COUNSEL & SERVICES	277,000	224,055		52,945 TBD TBD TBD TBD TBD	52,94	
Legal Counsel - Disability	130,000	105,009	120,000		120,000	
Legal Counsel - O'Neal vs StanCERA	100,000	52,819	100,000		120,00	
Legal Counsel - General	75,000	57,487	75,000		75,00	
Legal Counsel - Nasrawi vs Stancera	20,000	0	,		,	
Legal Counsel - StanCERA vs Buck	150,000	34,916	100,000		100,00	
Medical Exams, Reviews, Hearings COUNTY SUPPORT SERVICES	30,000	0	30,000		30,00	
Building Janitorial	1,200	499	1,200		1,20	
Building Maintenance	25,000	26,633	27,500		27,50	
Building Utilities Building Security	39,500 24,500	37,500 23,568	39,500 26,950		39,50 26,95	
Central Services, Mail Room, Salvage	43,000	49,103	10,000		10,00	
CEO/Personnel (true up)	10,000	18,460	20,306		20,30	
Auditor	9,000	7,496	9,000		9,00	
Purchasing	1,000	617	1,100		1,10	
Risk Management	1,500	2,129	1,650		1,65	
Insurance (General Liability & Auto)			11,260		11,26	
Annual Reports, Trustee Elections	34,000	21,254	34,000		34,00	
Mass member communication Postage			40,000		40,00	
ENERAL OPERATIONS			40,000		40,00	
	10.000					
Other Professional Services Office Supplies	40,000 10,000	7,147	30,000 8,000		30,00 8,00	
Other Office Expense	16,000	2,871	10,000		10,00	
6th Floor Security	2,000	348	2,000		2,00	
6th Floor Janitorial & Supplies	20,000	17,407	20,000		20,00	
6th Floor taxes (Downtown Redevelopment) 6th Floor Maint	0 30,000	1,218 25,696	1,500		1,50	
Rebalance & Correction of 6th floor HVAC	30,000	25,696	30,000 TBD		30,00	
IDUCIARY EDUCATION & TRAVEL			100			
Professional Dublications & Subscriptions	6.000	940	6 000		6.00	
Professional Publications & Subscriptions Staff Education & Travel	6,000 25,000	849 24,326	6,000 30,000		6,00 30,00	
Professional Memberships	11,000	10,348	11,000		11,00	
Trustee Education & Travel	45,000	29,927	40,000		40,00	
Trustee Meeting Allowance	13,000	8,400	13,000		13,00	
Insurance (Fiduciary & Auto) APITAL EXPENDITURES	80,000	67,356	75,000		75,00	
Pension Administration System			TBD			
Reposition powerlines in alley Audio Visual Equipment	0	0	20,000		20,00	
6th Floor vacant space completion	50,000	0	72,146		72,14	
Design and Build of Board Room	- 3,000	3	TBD		, :	
Capital Depreciation	174,000	173,782	178,000		178,00	
6th Floor Lease Revenue	(52,343) <b>2,946,445</b>	(52,343) <b>2,399,317</b>	(52,343) 2,807,661	169,645	(52,34 <b>2,977,30</b>	



 $\ast$  Retirement Board utilizes private legal counsel . Revised 05/24/2016