

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 12th Street Ste. 600, **Wesley W. Hall Board Room** Modesto, CA 95354

September 26, 2017 1:30 p.m.

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

CONSENT/ACTION ITEMS: Consent matters include routine administrative actions and are identified under the Consent Items heading. All other items are considered to be action items "Action" means that the Board may dispose of any item by any action, including but not limited to the following acts: approve, disapprove, authorize, modify, defer, table, take no action, or receive and file.

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 http://www.stancera.org/agenda.

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
- Announcements
- 4. Public Comment
- 5. Consent Items
 - a. Approval of the August 22, 2017 Meeting Minutes View
 - b. Monthly Staff Report View
 - c. Legal/Legislation Update
 - d. Approval of Service Retirement(s) Government Code Sections 31499.14, 31670, 31662.2 & 31810
 - 1. Becker, Lois SBT Effective 09-08-17
 - 2. Casey, Linda Courts Effective 09-30-17
 - 3. Eggener, Marilyn CSA Effective 09-30-17
 - 4. Guerrero-Booker, Martha Public Defender Effective 09-02-17
 - Hancock, Shawn Stan Co Fire Effective 09-30-17
 - 6. Holsinger, Thomas Courts Effective 09-06-17
 - 7. Inderbitzen, Daniel DA Effective 09-04-17 *
 - 8. Machado, Dwayne Library Effective 09-01-17
 - 9. Mello, Crystal CSA Effective 09-02-17
 - 10. Ramirez, Virginia CSA Effective 09-16-17

- 11. Reid, Karen BHRS Effective 09-05-17
- 12. Sanders, Theresa SBT Effective 09-30-17
- 13. Tovar, Teresa Workforce Dev Effective 08-28-17
- 14. Vasquez, Ralph Workforce Dev Effective 09-01-17
- 15. Williams, Audrey Sheriff Effective 08-29-17
- 16. Williams, Daryl City of Ceres Effective 09-08-17
- 17. Wilson, Sandra CSA Effective 09-14-17
- 18. Wortham, George Sheriff Effective 09-07-17 *

* Indicates Safety Personnel

- e. Approval of Deferred Retirement(s) Government Code Section 31700
 - 1. Blewett, Kenneth Sheriff Effective 07-09-17 *
 - 2. Brooks, Devin Sheriff Effective 08-26-17 *
 - 3. Chau Yang, Laura CSA Effective 08-15-17
 - 4. Gomez, Monica DCSS Effective 08-04-17
 - 5. Gutierrez, Maria Probation Effective 08-03-17 *
 - 6. Leamy, Michael Library Effective 07-31-17
 - 7. Lew, Mabel DA Effective 08-26-17
 - 8. McKee, Mack Sheriff Effective 09-02-17
 - 9. Reavill, Rose Marie Assessor Effective 05-26-17
 - 10. Rodriguez, Katherine CSA Effective 08-05-17
 - 11. Uribe, Fatima CSA Effective 08-17-17
 - 12. Walbridge, Lanette CSA Effective 08-03-17
 - * Indicates Safety Personnel
- f. Approval of Death Benefit Section 31781
 - 1. Bernardi, Robert, Deceased September 16, 2017, CSA Active Member
 - 2. Harter, Marie, Deceased July 29, 2017, Courts Active Member
- g. Revised Q2 2017 Investment Performance Review View
- 6. <u>Executive Director Investment</u>
 - a. Fiscal Year 16/17 Auxiliary Investment Report View
 - b. Functionally Focused Portfolio Update View
 - c 2017 Due Diligence Trip Update View
- 7. Verus Investment Consultant
 - a. Workplan View
 - b. August 31, 2017 Flash Report View
 - c. Discussion and Action: Value Added Real Estate Education and Search View
- 8. <u>Executive Director Administrative</u>
 - a. Information Technology Solutions (ITS) Project Update View
 - b. Discussion and Action for Voting Proxy of State Association of County Retirement Systems (SACRS) 2017 Fall Business Meeting View

9. Closed Session

- a. Discussion and Action: Risk Parity Contract Negotiation –
 Government Code Section 54956.81
- b. 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)
- c. 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 54956.9d)(4)
- 10. Members' Forum (Information and Future Agenda Requests Only)
- 11. Adjournment

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BOARD OF RETIREMENT MINUTES August 22, 2017

Call Meeting to Order

Meeting called to order 1:30 p.m. by Trustee Gharat, Chair

2. Roll Call

Trustees Present: Darin Gharat, Sam Sharpe, Jim DeMartini, Donna Riley

Michael O'Neal, Lauren Klein, Jeff Grover and Mandip Dhillon

Trustees Absent: Mike Lynch

Alternate Trustee Rhonda Biesemeier, Alternate Retiree Representative

Staff Present: Rick Santos, Executive Board Director

Kellie Gomes, Executive Board Assistant

Natalie Elliott, Interim Fiscal Services Manager

Others Present: Fred Silva, General Legal Counsel

3. Announcements

Congratulations to Donna Riley Seat 3 General Member and Rhonda Biesemeier. Seat 8.a Alternate Retiree. They both have been elected to serve on the Retirement Board for a 3 year term ending June 30, 2020.

4. Public Comment

None

Consent Items

- a. Approval of the July 25, 2017 Meeting Minutes
- b. Monthly Staff Report
- c. Legal/Legislation Update
- d. Approval of Service Retirement(s) Government Code Sections 31499.14, 31670, 31662.2 & 31810
 - 1. Campbell, John Sheriff Effective 08-19-17 *
 - 2. Ford, Gordon Treasurer/Tax Collector Effective 08-01-17
 - 3. Gaudio, Gregory Workforce Development Effective 08-09-17
 - 4. Hall, Ilif DER Effective 08-05-17
 - 5. lehan, Margaret Library Effective 08-04-17
 - 6. Miranda, Daniel City of Ceres Effective 08-05-17
 - 7. Nelson, Ron CSA Effective 08-19-17
 - 8. Nicholes, Brian City of Ceres Effective 08-12-17 *
 - 9. Reyes, Joseph City of Ceres Effective 08-05-17
 - 10. Risen, Stanley CEO Effective 08-12-17
 - 11. Silim, Keo BHRS Effective 03-31-17
 - 12. Slate, Lynn Probation Effective 08-11-17 *
 - 13. Thomlison, Cynthia CEO Effective 08-26-17
 - 14. Young, Anita Library Effective 08-18-17
 - * Indicates Safety Personnel

e. Approval of Deferred Retirement(s) - Government Code Section 31700

- 1. Barlan, Kristina DER Effective 07-22-17
- Bumgardner, Mandy CSA Effective 05-26-17
 Cadeaux, Lili HSA Effective 05-20-17
- 4. Daniels, Rodney Probation Effective 07-08-17 *
- 5. De Jong, Elizabeth DA Effective 06-24-17
- 6. Ernest, Sheila Animal Services Effective 05-06-17
- 7. Franco, Lilia City of Ceres Effective 05-13-17
- 8. Garcia, Susan GSA Effective 06-16-17
- 9. Garner, Deborah HSA Effective 04-29-17
- 10. Gelfond, Matthew DA Effective 06-30-17
- 11. Gonzalez, Juan Public Works Effective 07-14-17
- 12. Hampton, Carlos City of Ceres Effective 02-25-17 *
- 13. Hicks, Phillip Sheriff Effective 03-16-17 *
- 14. Hernandez, Carmen HSA Effective 05-17-17
- 15. Hernandez, Monica HSA Effective 12-27-16
- 16. Lewis, Jeremy City of Ceres Effective 10-28-14 *
- 17. Lopez-Smith, Ninfa Alliance WorkNet Effective 08-19-16
- 18. Mazariegos, Leisser City of Ceres Effective 06-28-17
- 19. Munoz, Evelyn CSA Effective 06-01-17
- 20. Ocampo, Adriana CSA Effective 03-18-17
- 21. Oshana, Josephine CSA Effective 07-01-17
- 22. Randle, Laliah City of Ceres Effective 04-13-17
- 23. Reed, Adrienne DCSS Effective 07-14-17
- 24. Riley, James City of Ceres Effective 03-24-16 *
- 25. Rios, Grizelle BHRS Effective 04-08-17
- 26. Sandoval, Samuel Courts Effective 06-03-17
- 27. Stewart, Daniel StanCOG Effective 05-02-17
- 28. Wood, Whitney Planning Effective 03-10-17

f. Approval of Reciprocal Disability Retirement - Section 31838.5

- 1. Horal, Julie Probation, Service-Connected, Effective 07.13.17 *
- 2. Jeffries, Kevin Sheriff, Service-Connected, Effective 03.13.17 *

Motion was made by Trustee Grover and seconded by Trustee O'Neil to accept the consent items as presented

Motion carried unanimously

6. Executive Director - Investment

7. Verus – Investment Consultant

- a. Workplan
- b. July 27, 2017 Flash Report
- c. Investment Performance Quarter 2 Review
- d. Private Market Education

^{*} Indicates Safety Personnel

^{*} Indicates Safety Personnel

- 8. Executive Director Administrative
 - a. Information Technology Solutions (ITS) Project Update
- 9. Closed Session

Motion was made by Trustee Grover and seconded by Trustee O'Neil to go into closed session

Motion carried unanimously

- a. Discussion and Action: Risk Parity Contract Negotiation –
 Government Code Section 54956.81
- 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 54956.9d)(4)

Motion was made by Trustee Riley and seconded by Trustee Sharpe to go into open session.

Motion carried unanimously

Nothing to report out from closed session

- 10. Members' Forum (Information and Future Agenda Requests Only)
- 11. Adjournment

Meeting adjourned at 3:10 p.m.

Respectfully submitted,

Rick Santos, Executive Director

APPROVED AS TO FORM:

Fred Silva, GENERAL LEGAL COUNSEL

Fred Silva, General Legal Counsel



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September 26, 2017

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) Member & Employer Services During the month of August 2017, Member and Employer Services Staff processed 44 new hires (5 Safety and 39 General), 37 terminations, 22 member requests resulting in 55 estimates and 24 member requests resulting in 41 buy back contracts. There were 35 individual counseling sessions and one group counseling session at New Employee Orientation. Staff continues to devote many hours to meeting with the Tegrit Analysts to continue defining the business rules necessary to ensure that StanCERA's needs will be met with the Arrivos system. Staff spent several hours with the utilization testing of the Arrivos Imaging System. Staff continues to audit member files in anticipation of the data conversion that will be required with the implementation of the Arrivos pension administration system.
- b) Fiscal Services Employer and employee contributions totaling \$11,405,250 were received through 18 different payroll batches in June. In addition, 27 contribution refunds and death benefit payouts totaling \$324,885 were processed. The retiree payroll for August totaled \$9,885,691 and was processed as scheduled. Staff is working with the auditors on the fiscal year end audit. Final field work was completed September 15th and the fiscal year 16/17 CAFR is in production. Staff continues to partner with Member Services in defining the business rules for the new pension software. Staff continues to meet with Tegrit to define employer payroll upload business rules for the Arrivos system. Partnering with our employers, County payroll individuals are being invited to attend some of these meetings. The electronic document system is now available and staff is diligently gearing up to start working with the new processes taking place.

c) Investment Governance and Compliance – Staff is spending most of its time on the recruitment process for the Investment Officer position. StanCERA advertised in most major, national publications where interest in this type of position may be found. The recruitment process has winnowed the candidate pool down to approximately 40 candidates and the next phase of the interview process will begin the first week of October. The process has attracted many highly qualified candidates from across the Country and from many facets of the investment industry.

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 Santos, Executive Director

Dawn Lea, Member and Employer Services Manager

Natalie Elliott, Interim Fiscal Services Manager

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Stanislaus County Employees' Retirement Association

Investment Performance Review Period Ending: June 30, 2017

REVISED



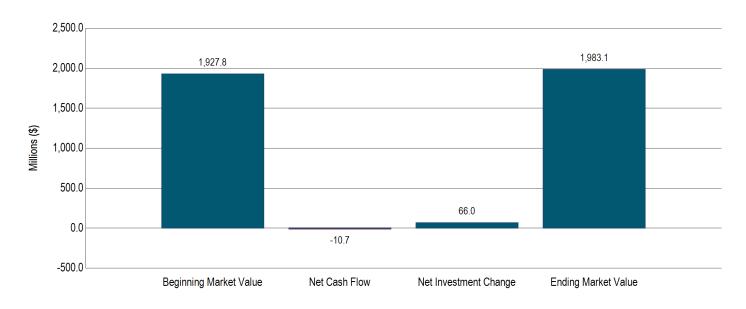
VERUSINVESTMENTS.COM

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

Portfolio Reconciliation

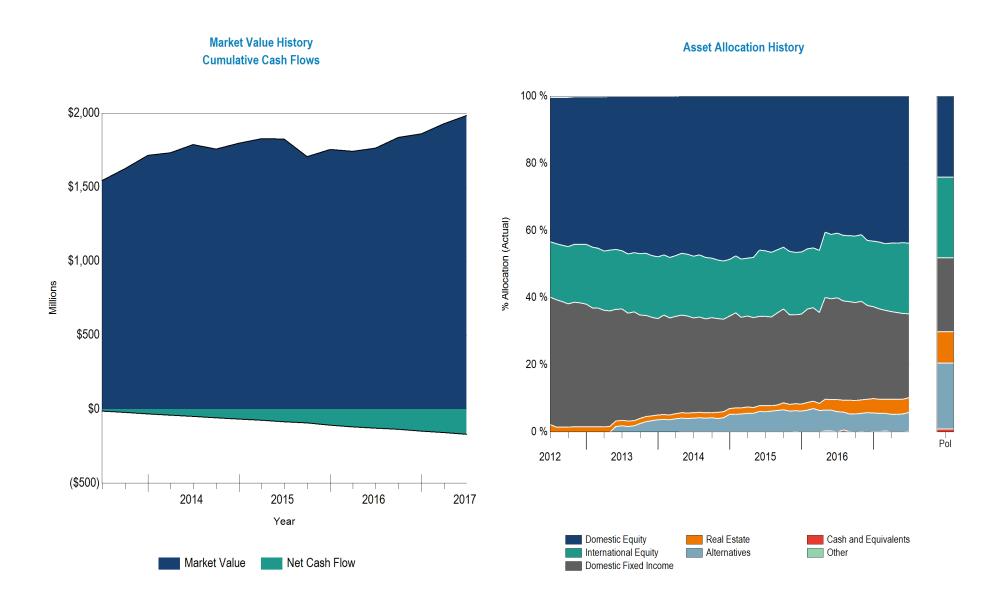
	Last Three Months	Fiscal Year-To-Date	Year-To-Date
Beginning Market Value	\$1,927,763,267	\$1,763,136,187	\$1,859,742,905
Net Cash Flow	-\$10,652,097	-\$37,297,105	-\$19,090,855
Net Investment Change	\$65,971,365	\$257,243,453	\$142,430,485
Ending Market Value	\$1,983,082,534	\$1,983,082,534	\$1,983,082,534

Change in Market Value Last Three Months



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





Policy Range

14.0% - 23.0%

1.0% - 10.0%

15.0% - 33.0%

15.0% - 29.0%

5.0% - 11.0%

0.0% - 10.0%

0.0% - 10.0%

0.0% - 3.0%

0.0% - 5.0%

9.0% - 19.0%

0.0% - 1.5%

Within IPS

Range?

No

No

Yes

Yes

No

Yes

Yes

Yes

Yes

No

Yes

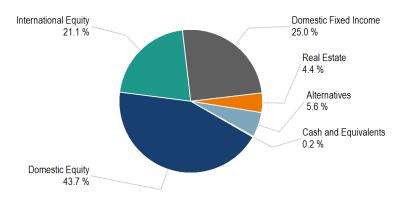
U.S. Equity Large Cap \$665,956,560 33.6% 18.5% U.S. Equity Small Cap \$200,361,658 10.1% 5.5% International Equity \$418,199,312 21.1% 24.0% U.S. Fixed Income \$495,956,391 25.0% 22.0% Real Estate \$65,607,472 3.3% 7.7% Private Equity 0.0% Direct Lending \$92,283,671 4.7% 5.0% Infrastructure \$19,142,549 1.0% 0.6% Value Added \$22,166,437 1.1% 1.7% Risk Parity 14.0% Cash and Equivalents \$3,408,485 0.2% 1.0% Total \$1,983,082,534 100.0%	Policy
8.5% International Equity \$418,199,312 21.1% 24.0% U.S. Fixed Income \$495,956,391 25.0% 22.0% Real Estate \$65,607,472 3.3% 7.7% Private Equity 0.0% Direct Lending \$92,283,671 4.7% 5.0% Infrastructure \$19,142,549 1.0% 0.6% Value Added \$22,166,437 1.1% 1.7% Risk Parity 14.0% Cash and Equivalents \$3,408,485 0.2% 1.0%	
U.S. Fixed Income \$495,956,391 25.0% 22.0% Real Estate \$65,607,472 3.3% 7.7% Private Equity 0.0% Direct Lending \$92,283,671 4.7% 5.0% Infrastructure \$19,142,549 1.0% 0.6% Value Added \$22,166,437 1.1% 1.7% Risk Parity 14.0% Cash and Equivalents \$3,408,485 0.2% 1.0%	
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Direct Lending	
Infrastructure \$19,142,549 1.0% 0.6% Value Added \$22,166,437 1.1% 1.7% Risk Parity 14.0% Cash and Equivalents \$3,408,485 0.2% 1.0%	
\$22,166,437	Direct Lendi
14.0% ivalents \$3,408,485 0.2% 1.0%	Infrastructure
alents \$3,408,485 0.2% 1.0%	Value Added
	Risk Parity
\$1,983,082,534 100.0% 100.0%	Cash and Equivalents
	Total

Cash Account includes cash held at Northern Trust for all closed end funds.



	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Fund	3.4	7.7	14.7	14.7	5.7	9.9	5.8
Policy Index	2.8	6.8	11.5	11.5	5.6	8.8	5.8
InvestorForce Public DB Gross Rank	19	40	10	10	32	13	26
US Equity	3.4	8.9	21.9	21.9	8.6	14.9	6.9
US Equity Blended	3.0	8.4	19.4	19.4	9.0	14.5	7.4
Russell 3000	3.0	8.9	18.5	18.5	9.1	14.6	7.3
InvestorForce All DB US Eq Gross Rank	25	50	10	10	57	20	62
International Equity	6.7	15.0	23.7	23.7	2.5	9.0	2.2
MSCI ACWI ex USA Gross	6.0	14.5	21.0	21.0	1.3	7.7	1.6
InvestorForce All DB ex-US Eq Gross Rank	42	68	20	20	47	38	40
US Fixed Income	1.6	2.9	3.0	3.0	3.4	3.7	5.7
BBgBarc US Aggregate TR	1.4	2.3	-0.3	-0.3	2.5	2.2	4.5
InvestorForce All DB US Fix Inc Gross Rank	51	52	28	28	41	43	42
Real Estate	1.8	3.8	4.6	4.6	10.8	12.4	
DJ US Select RESI	1.6	1.4	-2.4	-2.4	8.0	10.2	
Direct Lending	1.3	-0.7	1.5	1.5	4.8		-
9% Annual	2.2	4.4	9.0	9.0	9.0		
Infrastructure	1.8	-1.0	3.0	3.0			
CPI + 5%	1.7	4.0	6.7	6.7			

Current Allocation

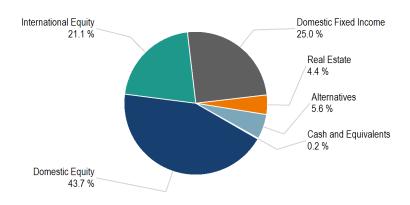


Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% BBgBarc US Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000.



	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Fund	3.4	7.6	14.4	14.4	5.3	9.5	5.5
Policy Index	2.8	6.8	11.5	11.5	5.6	8.8	5.8
US Equity	3.3	8.7	21.5	21.5	8.3	14.6	6.6
US Equity Blended	3.0	8.4	19.4	19.4	9.0	14.5	7.4
Russell 3000	3.0	8.9	18.5	18.5	9.1	14.6	7.3
International Equity	6.6	14.8	23.2	23.2	2.1	8.5	1.7
MSCI ACWI ex USA Gross	6.0	14.5	21.0	21.0	1.3	7.7	1.6
US Fixed Income	1.6	2.9	2.8	2.8	3.2	3.5	5.6
BBgBarc US Aggregate TR	1.4	2.3	-0.3	-0.3	2.5	2.2	4.5
Real Estate	1.8	3.8	4.3	4.3	9.7	11.4	
DJ US Select RESI	1.6	1.4	-2.4	-2.4	8.0	10.2	
Direct Lending	1.3	-0.7	0.9	0.9	3.2	-	_
9% Annual	2.2	4.4	9.0	9.0	9.0		
Infrastructure	1.8	-1.0	-1.5	-1.5		-	
CPI + 5%	1.7	4.0	6.7	6.7			

Current Allocation

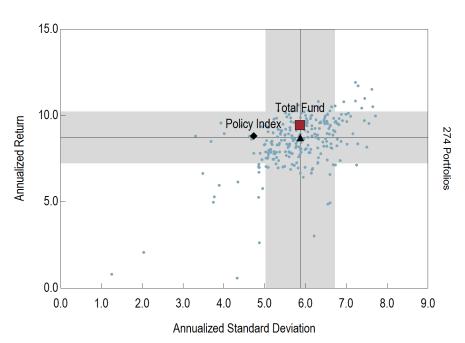


Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% BBgBarc US Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000.



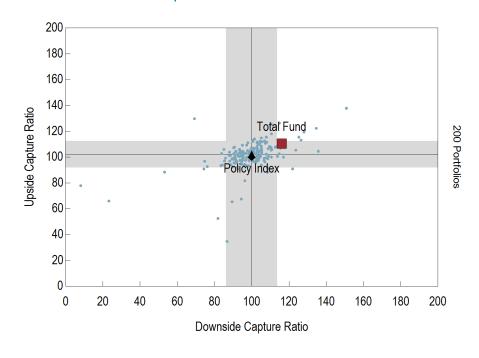
	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	9.45%	0.64%	5.87%	-1.15%	1.20	1.73%	0.94	1.58	0.37	110.56%	116.06%

Risk vs. Return



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

Up Markets vs. Down Markets



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012
Total Fund	1,983,082,534	100.0	3.4	7.7	14.7	14.7	5.7	9.9	5.8	8.2	-0.3	6.9	19.8	14.3
Policy Index			2.8	6.8	11.5	11.5	5.6	8.8	5.8	8.5	0.2	7.5	15.4	12.3
InvestorForce Public DB Gross Rank			19	40	10	10	32	13	26	31	61	23	12	10
US Equity	866,318,219	43.7	3.4	8.9	21.9	21.9	8.6	14.9	6.9	12.4	-0.2	10.9	36.9	18.8
US Equity Blended			3.0	8.4	19.4	19.4	9.0	14.5	7.4	13.9	-0.1	11.6	34.3	16.7
Russell 3000			3.0	8.9	18.5	18.5	9.1	14.6	7.3	12.7	0.5	12.6	33.6	16.4
InvestorForce All DB US Eq Gross Rank			25	50	10	10	57	20	62	58	63	54	13	6
Mellon S&P 500	96,405,453	4.9	3.1	9.3	17.9	17.9	9.6	14.7	7.2	12.0	1.4	13.7	32.4	16.0
S&P 500			3.1	9.3	17.9	17.9	9.6	14.6	7.2	12.0	1.4	13.7	32.4	16.0
eA US Large Cap Core Equity Gross Rank			47	44	47	47	28	40	65	31	41	42	58	40
BlackRock Russell 1000 Growth	102,682,320	5.2	4.7	14.0	20.5	20.5	11.2	15.4		7.2	5.7	13.1	33.5	15.4
Russell 1000 Growth			4.7	14.0	20.4	20.4	11.1	15.3		7.1	5.7	13.0	33.5	15.3
eA US Large Cap Growth Equity Gross Rank			57	53	53	53	33	38		26	42	37	56	53
Jackson Square	142,614,259	7.2	6.6	14.7	18.2	18.2	7.7	13.7	8.9	-4.4	5.9	13.8	35.6	17.0
Russell 1000 Growth			4.7	14.0	20.4	20.4	11.1	15.3	8.9	7.1	5.7	13.0	33.5	15.3
eA US Large Cap Growth Equity Gross Rank			17	43	73	73	88	79	50	98	39	32	39	36
BlackRock Russell 1000 Value	117,446,306	5.9	1.4	4.8	15.6	15.6	7.5	14.0		17.3	-3.6	13.5	32.6	17.6
Russell 1000 Value			1.3	4.7	15.5	15.5	7.4	13.9		17.3	-3.8	13.5	32.5	17.5
eA US Large Cap Value Equity Gross Rank			71	71	66	66	52	48		26	62	31	59	30
Dodge & Cox-Equity	206,808,222	10.4	1.9	6.8	28.3	28.3	8.9	16.3	6.5	21.4	-3.9	10.9	39.1	22.3
Russell 1000 Value			1.3	4.7	15.5	15.5	7.4	13.9	5.6	17.3	-3.8	13.5	32.5	17.5
eA US Large Cap Value Equity Gross Rank			53	37	2	2	20	9	51	6	64	72	15	3
Legato Capital	95,654,751	4.8	5.5	10.2	22.7	22.7	6.5	13.3		6.4	-0.7	3.0	47.3	18.1
Russell 2000 Growth			4.4	10.0	24.4	24.4	7.6	14.0		11.3	-1.4	5.6	43.3	14.6
eA US Small Cap Growth Equity Gross Rank			40	63	62	62	69	72		79	52	57	41	24
Capital Prospects	104,706,907	5.3	1.8	3.9	27.0	27.0	7.7	15.6		28.1	-7.0	5.8	37.9	23.8
Russell 2000 Value			0.7	0.5	24.9	24.9	7.0	13.4		31.7	-7.5	4.2	34.5	18.1
eA US Small Cap Value Equity Gross Rank			32	23	21	21	47	30		40	72	51	53	9

Individual closed end funds are not shown in performance summary table.



	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012
International Equity	418,199,312	21.1	6.7	15.0	23.7	23.7	2.5	9.0	2.2	5.7	-3.7	-4.2	20.0	18.0
MSCI ACWI ex USA Gross			6.0	14.5	21.0	21.0	1.3	7.7	1.6	5.0	-5.3	-3.4	15.8	17.4
InvestorForce All DB ex-US Eq Gross Rank			42	68	20	20	47	38	40	24	51	70	35	63
LSV Asset Mgt	211,624,045	10.7	6.2	14.8	28.1	28.1	2.4	9.5	2.0	8.8	-5.1	-4.0	20.4	16.7
MSCI ACWI ex USA Gross			6.0	14.5	21.0	21.0	1.3	7.7	1.6	5.0	-5.3	-3.4	15.8	17.4
eA ACWI ex-US Equity Unhedged Gross Rank			68	71	10	10	61	54	79	10	86	65	46	78
Fidelity	206,575,267	10.4	7.2	15.2	19.5	19.5	2.5	8.6	2.4	2.4	-2.0	-4.5	19.6	19.3
MSCI ACWI ex USA Gross			6.0	14.5	21.0	21.0	1.3	7.7	1.6	5.0	-5.3	-3.4	15.8	17.4
eA ACWI ex-US Equity Unhedged Gross Rank			49	64	62	62	60	73	69	46	66	70	55	55
US Fixed Income	495,956,391	25.0	1.6	2.9	3.0	3.0	3.4	3.7	5.7	5.4	0.3	6.2	0.3	7.9
BBgBarc US Aggregate TR			1.4	2.3	-0.3	-0.3	2.5	2.2	4.5	2.6	0.6	6.0	-2.0	4.2
InvestorForce All DB US Fix Inc Gross Rank			51	52	28	28	41	43	42	47	42	42	21	48
Dodge & Cox-Fixed	278,953,694	14.1	1.7	3.1	3.6	3.6	3.5	4.0	5.8	5.9	0.2	6.5	0.9	8.4
BBgBarc US Aggregate TR			1.4	2.3	-0.3	-0.3	2.5	2.2	4.5	2.6	0.6	6.0	-2.0	4.2
eA US Core Fixed Inc Gross Rank			27	9	2	2	7	4	7	3	89	26	3	9
PIMCO	117,063,806	5.9	1.4	2.5	1.0	1.0	2.8	2.5		3.7	0.9	5.0	-2.2	5.8
BBgBarc US Aggregate TR			1.4	2.3	-0.3	-0.3	2.5	2.2		2.6	0.6	6.0	-2.0	4.2
eA US Core Fixed Inc Gross Rank			80	56	21	21	50	73		29	49	83	89	54
Insight	99,938,891	5.0				-								
BBgBarc US Govt/Credit 1-5 Yr. TR														
eA US Short Duration Fixed Inc Gross Rank														
Real Estate	87,773,909	4.4	1.8	3.8	4.6	4.6	10.8	12.4		7.5	12.1	28.3	1.4	5.6
DJ US Select RESI			1.6	1.4	-2.4	-2.4	8.0	10.2		6.6	4.5	31.9	1.3	16.1
Prime Property Fund	17,599,725	0.9	2.2	4.2	9.6	9.6				10.4				
NCREIF-ODCE			1.7	3.5	7.9	7.9				8.8				
American Strategic Value Realty	22,166,437	1.1	2.4	5.3	11.4	11.4				13.1	21.4			
NCREIF Property Index			1.8	3.3	7.0	7.0				8.0	13.3			
BlackRock US Real Estate	35,190,427	1.8	1.6	1.4	-2.4	-2.4	8.0			6.6	4.4	31.9	1.4	
DJ US Select RESI TR USD			1.6	1.4	-2.4	-2.4	8.0			6.6	4.5	31.9	1.3	
eA US REIT Gross Rank			65	86	83	83	82			68	58	39	91	

Individual closed end funds are not shown in performance summary table.



	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return Since
Total Fund	1,983,082,534	100.0	3.4	7.6	14.4	14.4	5.3	9.5	5.5	7.7	-0.6	6.5	19.2	14.0	9.2 Dec-94
Policy Index			2.8	6.8	11.5	11.5	5.6	8.8	5.8	8.5	0.2	7.5	15.4	12.3	8.2 Dec-94
US Equity	866,318,219	43.7	3.3	8.7	21.5	21.5	8.3	14.6	6.6	12.1	-0.4	10.7	36.5	18.5	6.8 Jun-01
US Equity Blended			3.0	8.4	19.4	19.4	9.0	14.5	7.4	13.9	-0.1	11.6	34.3	16.7	7.0 Jun-01
Russell 3000			3.0	8.9	18.5	18.5	9.1	14.6	7.3	12.7	0.5	12.6	33.6	16.4	6.8 Jun-01
Mellon S&P 500	96,405,453	4.9	3.1	9.3	17.9	17.9	9.6	14.6	7.2	11.9	1.4	13.7	32.4	16.0	9.3 Apr-03
S&P 500			3.1	9.3	17.9	17.9	9.6	14.6	7.2	12.0	1.4	13.7	32.4	16.0	9.3 Apr-03
BlackRock Russell 1000 Growth	102,682,320	5.2	4.7	14.0	20.5	20.5	11.2	15.3		7.2	5.7	13.1	33.5	15.4	16.5 Jun-10
Russell 1000 Growth			4.7	14.0	20.4	20.4	11.1	15.3		7.1	5.7	13.0	33.5	15.3	16.5 Jun-10
Jackson Square	142,614,259	7.2	6.5	14.4	17.6	17.6	7.3	13.2	8.4	-4.9	5.5	13.4	34.9	16.6	8.9 Aug-06
Russell 1000 Growth			4.7	14.0	20.4	20.4	11.1	15.3	8.9	7.1	5.7	13.0	33.5	15.3	9.8 Aug-06
BlackRock Russell 1000 Value	117,446,306	5.9	1.4	4.7	15.6	15.6	7.4	14.0		17.3	-3.6	13.5	32.6	17.6	13.8 Jul-09
Russell 1000 Value			1.3	4.7	15.5	15.5	7.4	13.9		17.3	-3.8	13.5	32.5	17.5	13.7 Jul-09
Dodge & Cox-Equity	206,808,222	10.4	1.8	6.7	28.0	28.0	8.7	16.1	6.3	21.2	-4.0	10.7	38.8	22.1	12.2 Dec-94
Russell 1000 Value			1.3	4.7	15.5	15.5	7.4	13.9	5.6	17.3	-3.8	13.5	32.5	17.5	10.1 Dec-94
Legato Capital	95,654,751	4.8	5.3	9.7	21.8	21.8	5.8	12.5		5.6	-1.3	2.5	46.0	17.4	15.3 Dec-08
Russell 2000 Growth			4.4	10.0	24.4	24.4	7.6	14.0		11.3	-1.4	5.6	43.3	14.6	16.0 Dec-08
Capital Prospects	104,706,907	5.3	1.6	3.5	26.0	26.0	7.1	14.9		27.1	-7.5	5.2	36.8	23.2	15.4 Dec-08
Russell 2000 Value			0.7	0.5	24.9	24.9	7.0	13.4		31.7	-7.5	4.2	34.5	18.1	13.2 Dec-08
International Equity	418,199,312	21.1	6.6	14.8	23.2	23.2	2.1	8.5	1.7	5.0	-4.0	-4.5	19.4	17.5	5.6 Jun-01
MSCI ACWI ex USA Gross			6.0	14.5	21.0	21.0	1.3	7.7	1.6	5.0	-5.3	-3.4	15.8	17.4	6.3 Jun-01
LSV Asset Mgt	211,624,045	10.7	6.1	14.5	27.4	27.4	2.0	9.0	1.4	8.2	-5.4	-4.2	19.8	16.2	6.8 Aug-04
MSCI ACWI ex USA Gross			6.0	14.5	21.0	21.0	1.3	7.7	1.6	5.0	-5.3	-3.4	15.8	17.4	6.8 Aug-04
Fidelity	206,575,267	10.4	7.2	15.2	19.2	19.2	2.1	8.1	1.9	1.8	-2.3	-4.9	19.1	18.8	3.6 Apr-06
MSCI ACWI ex USA Gross			6.0	14.5	21.0	21.0	1.3	7.7	1.6	5.0	-5.3	-3.4	15.8	17.4	3.4 Apr-06
US Fixed Income	495,956,391	25.0	1.6	2.9	2.8	2.8	3.2	3.5	5.6	5.2	0.2	6.1	0.1	7.7	5.7 Jun-01
BBgBarc US Aggregate TR			1.4	2.3	-0.3	-0.3	2.5	2.2	4.5	2.6	0.6	6.0	-2.0	4.2	4.7 Jun-01
Dodge & Cox-Fixed	278,953,694	14.1	1.6	3.0	3.5	3.5	3.4	3.9	5.7	5.7	0.1	6.4	0.8	8.3	6.7 Dec-94
BBgBarc US Aggregate TR			1.4	2.3	-0.3	-0.3	2.5	2.2	4.5	2.6	0.6	6.0	-2.0	4.2	5.8 Dec-94
PIMCO	117,063,806	5.9	1.3	2.3	0.7	0.7	2.5	2.2		3.4	0.6	4.7	-2.5	5.5	3.6 May-10
BBgBarc US Aggregate TR			1.4	2.3	-0.3	-0.3	2.5	2.2		2.6	0.6	6.0	-2.0	4.2	3.4 May-10
Insight	99,938,891	5.0				-					-				Jun-17
BBgBarc US Govt/Credit 1-5 Yr. TR															Jun-17

Individual closed end funds are not shown in performance summary table.



	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2016	2015	2014	2013	2012	Return	Since
Real Estate	87,773,909	4.4	1.8	3.8	4.3	4.3	9.7	11.4		6.6	10.5	27.4	1.3	2.7	3.1	Feb-08
DJ US Select RESI			1.6	1.4	-2.4	-2.4	8.0	10.2		6.6	4.5	31.9	1.3	16.1	5.4	Feb-08
Prime Property Fund	17,599,725	0.9	2.2	4.2	9.1	9.1				9.2					9.6	Sep-15
NCREIF-ODCE			1.7	3.5	7.9	7.9				8.8					9.0	Sep-15
American Strategic Value Realty	22,166,437	1.1	2.4	5.3	10.9	10.9				11.7	18.3				14.2	Dec-14
NCREIF Property Index			1.8	3.3	7.0	7.0				8.0	13.3				9.8	Dec-14
BlackRock US Real Estate	35,190,427	1.8	1.6	1.3	-2.5	-2.5	7.9			6.6	4.4	31.9	1.3		9.5	Sep-12
DJ US Select RESI TR USD			1.6	1.4	-2.4	-2.4	8.0			6.6	4.5	31.9	1.3		9.6	Sep-12

					Ve	erus Internal Ana	lysis			
Inception Date	Manager Name/Fund Name	Estimated Market Value as of 6/30/2017 ³	Total Commitment	Capital Called	% Called	Remaining Commitment	Total Distributions	Distrib./ Paid-In (DPI) ¹	Tot. Value/ Paid-In (TVPI) ²	Latest Valuation
Real Estate										
7/31/2014	Greenfield Gap	\$12,817,321	\$15,000,000	\$11,021,141	73%	\$3,978,859	\$1,137,413	10.3%	126.6%	3/31/2017
	Total Real Estat	e \$12,817,321	\$15,000,000	\$11,021,141	73%	\$3,978,859	\$1,137,413	10.3%	126.6%	
	% of Portfolio (Market Value	0.6%								
Direct Lend	ling									
	Medley Capital	\$22,996,174	\$30,000,000	\$29,000,453	97%	\$999,547	\$16,489,758	56.9%	136.2%	3/31/2017
5/31/2013	Raven Capital	\$15,453,392	\$40,000,000	\$34,505,763	86%	\$5,494,237	\$20,439,805	59.2%	104.0%	3/31/2017
7/31/2015	Raven Opportunity III	\$18,090,723	\$50,000,000	\$17,214,515	34%	\$32,785,485	\$200,411	1.2%	106.3%	3/31/2017
8/31/2013	White Oak Pinnacle	\$35,743,382	\$40,000,000	\$40,000,000	100%	\$5,153,060	\$29,602,846	74.0%	163.4%	3/31/2017
	Total Direct Lendin	g \$92,283,671	\$160,000,000	\$120,720,731	75%	\$44,432,329	\$66,732,820	55.3%	131.7%	
	% of Portfolio (Market Value	4.7%								
Infrastructu	ıre									
	MS Infrastructure Partners II	\$19,142,549	\$50,000,000	\$20,016,500	40%	\$29,983,500	\$122,400	0.6%	96.2%	3/31/2017
	Total Infrastructure	\$19,142,549	\$50,000,000	\$20,016,500	40%	\$29,983,500	\$122,400	0.6%	96.2%	
	% of Portfolio (Market Value)	1.0%								

⁴ Includes deemed contributions, which are amounts withheld from distributions and applied to fulfill capital calls.



^{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

Real Estate	Inception	Fund Level (G)	StanCERA (G)	Fund Level (N)	StanCERA (N)	IRR Date
Greenfield Gap	7/31/2014	17.3%	18.8%	13.6%	13.3%	3/31/2017
Direct Lending						
Medley Capital	5/31/2013	8.7%	7.7%	6.8%	5.3%	3/31/2017
Raven Capital	5/31/2013	5.3%	5.3%	1.7%	1.7%	3/31/2017
Raven Opportunity III	7/31/2015	5.2%	5.2%	-10.8%	-10.8%	3/31/2017
White Oak Pinnacle	8/31/2013	13.3%	14.5%	8.4%	8.6%	3/31/2017
Infrastructure						
MS Infrastructure Partners II	5/31/2015	9.1%	9.1%	-1.7%	-5.4%	3/31/2017

2.51%

7.92%

0.03%

-0.09%

2.93%

12.59%

0.39%

-0.08%

90.31%

99.41%

77.07%

100.34%

				3	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	9.61%	0.00%	6.96%	0.00%	1.00	0.02%	1.00	1.35	-0.03	99.93%	99.75%
BlackRock Russell 1000 Growth	11.16%	0.05%	7.53%	0.05%	1.00	0.05%	1.00	1.45	1.06	100.48%	100.07%
Jackson Square	7.30%	-3.81%	11.32%	-7.29%	1.31	5.99%	0.76	0.62	-0.64	73.85%	136.05%
BlackRock Russell 1000 Value	7.45%	0.09%	8.02%	0.12%	0.99	0.07%	1.00	0.90	1.21	100.45%	98.83%
Dodge & Cox-Equity	8.70%	1.34%	10.13%	0.67%	1.09	5.09%	0.75	0.83	0.26	117.21%	107.58%
Legato Capital	5.80%	-1.84%	13.43%	-1.65%	0.98	2.62%	0.96	0.41	-0.70	92.48%	107.96%
Capital Prospects	7.05%	0.03%	12.52%	0.91%	0.88	2.86%	0.97	0.54	0.01	88.05%	81.92%
LSV Asset Mgt	1.97%	0.71%	12.53%	0.62%	1.07	2.78%	0.95	0.14	0.25	111.20%	102.19%
Fidelity	2.12%	0.86%	10.97%	0.93%	0.94	2.21%	0.96	0.17	0.39	105.39%	95.46%
Dodge & Cox-Fixed	3.42%	0.94%	2.62%	1.81%	0.65	1.84%	0.71	1.22	0.51	95.87%	39.36%

0.85

1.00

0.70%

0.03%

0.97

1.00

0.77

0.61

0.04

-3.18

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	14.62%	-0.01%	7.68%	0.00%	1.00	0.02%	1.00	1.88	-0.52	99.87%	99.71%
BlackRock Russell 1000 Growth	15.34%	0.04%	8.05%	0.05%	1.00	0.05%	1.00	1.88	0.84	100.30%	99.79%
Jackson Square	13.20%	-2.10%	11.04%	-6.00%	1.25	4.88%	0.84	1.18	-0.43	86.03%	119.01%
BlackRock Russell 1000 Value	14.00%	0.06%	8.51%	0.11%	1.00	0.06%	1.00	1.63	1.05	100.31%	98.83%
Dodge & Cox-Equity	16.14%	2.20%	9.88%	1.52%	1.05	4.19%	0.82	1.62	0.53	120.66%	107.58%
Legato Capital	12.49%	-1.49%	13.06%	-1.72%	1.02	2.67%	0.96	0.94	-0.56	92.94%	107.96%
Capital Prospects	14.88%	1.49%	11.74%	2.35%	0.94	3.03%	0.94	1.25	0.49	104.02%	81.92%
LSV Asset Mgt	8.98%	1.27%	11.67%	0.74%	1.07	2.28%	0.97	0.76	0.56	113.26%	100.66%
Fidelity	8.11%	0.41%	10.19%	0.98%	0.93	2.38%	0.95	0.78	0.17	97.41%	89.70%
Dodge & Cox-Fixed	3.93%	1.72%	2.65%	2.28%	0.74	1.52%	0.76	1.42	1.13	114.88%	27.38%
PIMCO	2.16%	-0.05%	2.96%	0.10%	0.93	0.68%	0.95	0.67	-0.08	94.40%	91.33%

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



PIMCO

BlackRock US Real Estate

Total Fund Investment Fund Fee Analysis

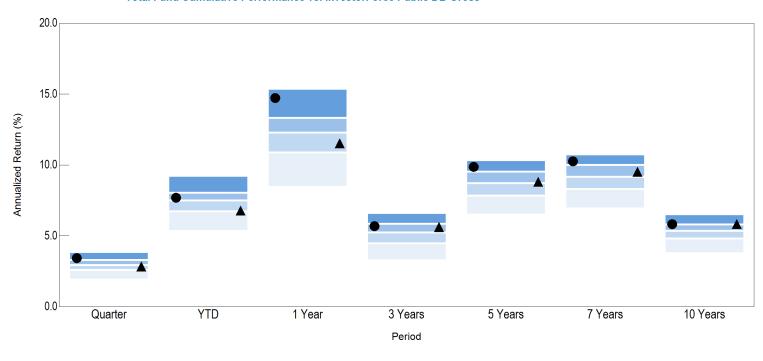
Period Ending: June 30, 2017

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Mellon S&P 500	Domestic Equity	0.04% of Assets	\$96,405,453	\$33,742	0.04%
BlackRock Russell 1000 Growth	Domestic Equity	0.02% of Assets	\$102,682,320	\$20,536	0.02%
Jackson Square	Domestic Equity	0.50% of First \$100.0 Mil, 0.45% Thereafter	\$142,614,259	\$691,764	0.49%
BlackRock Russell 1000 Value	Domestic Equity	0.02% of Assets	\$117,446,306	\$23,489	0.02%
Dodge & Cox-Equity	Domestic Equity	0.40% of First \$10.0 Mil, 0.20% of Next \$90.0 Mil, 0.15% Thereafter	\$206,808,222	\$380,212	0.18%
Legato Capital		0.77% of Assets	95,654,751	\$736,542	0.77%
Capital Prospects		0.75% of Assets	104,706,907	\$785,302	0.75%
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	\$211,624,045	\$1,127,308	0.53%
Fidelity	International Equity	0.25% of Assets	\$206,575,267	\$516,438	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	\$278,953,694	\$312,954	0.11%
PIMCO	Domestic Fixed Income	0.50% of First \$25.0 Mil, 0.38% of Next \$25.0 Mil, 0.25% Thereafter	\$117,063,806	\$386,410	0.33%
Insight	Domestic Fixed Income	0.12% of Assets	\$99,938,891	\$119,927	0.12%
Prime Property Fund	Real Estate	0.84% of Assets	\$17,599,725	\$147,838	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	\$22,166,437	\$270,997	1.22%
BlackRock US Real Estate	Real Estate	0.09% of First \$100.0 Mil, 0.07% Thereafter	\$35,190,427	\$31,671	0.09%
Cash Account	Cash and Equivalents	0.10% of Assets	\$3,408,485	\$3,408	0.10%
Total			\$1,858,838,993	\$5,588,539	0.30%

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



Total Fund Cumulative Performance vs. InvestorForce Public DB Gross

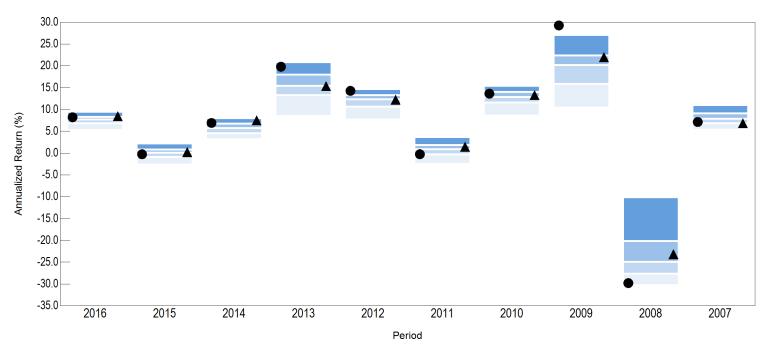


5th Percentile 25th Percentile Median 75th Percentile 95th Percentile # of Portfolios

■ Total Fund▲ Policy Index

Return (Rank)													
3.8		9.2		15.4		6.6		10.3		10.7		6.5	
3.3		8.1		13.3		5.9		9.5		10.0		5.8	
2.9		7.5		12.3		5.3		8.7		9.2		5.4	
2.6		6.8		10.9		4.5		7.9		8.3		4.8	
1.9		5.4		8.5		3.3		6.5		7.0		3.8	
330	;	329		326		296		274		245		223	
\ \ \	19) 57)	7.7 6.8	(40) (74)	14.7 11.5	(10) (65)	5.7 5.6	(32) (35)	9.9 8.8	(13) (48)	10.3 9.5	(16) (40)	5.8 5.8	(26) (25)

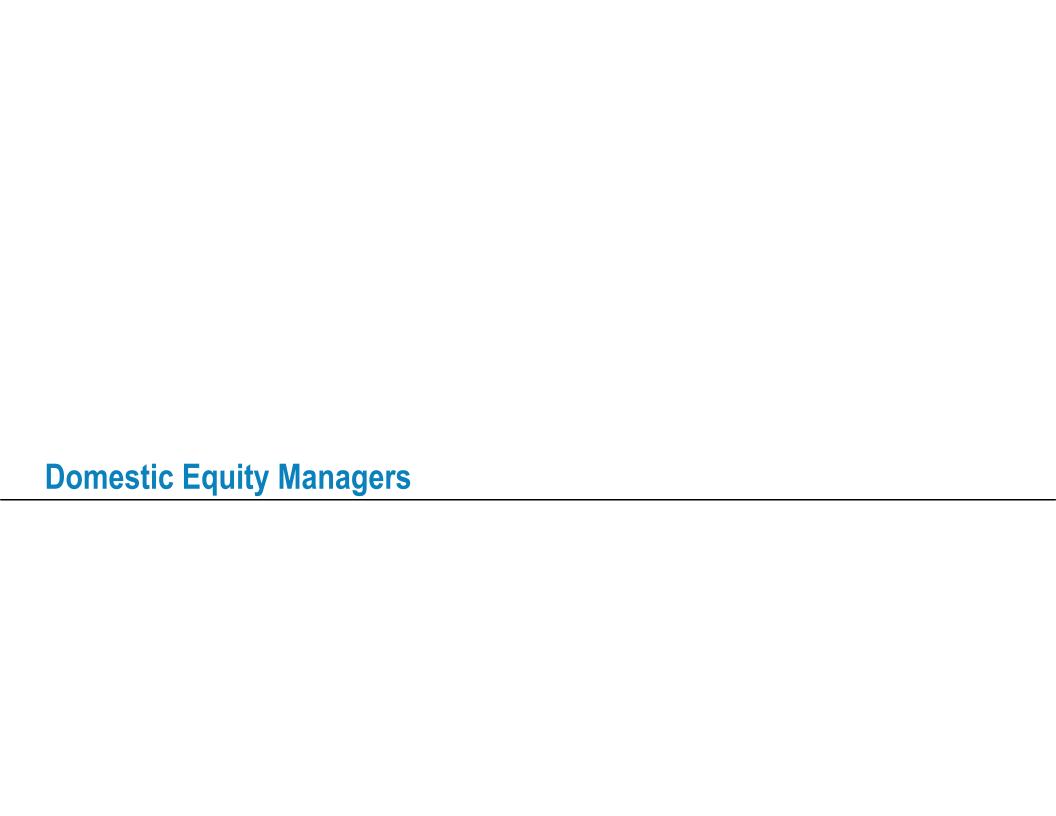
Total Fund Consecutive Periods vs. InvestorForce Public DB Gross



5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
of Portfolios

Total FundPolicy Index

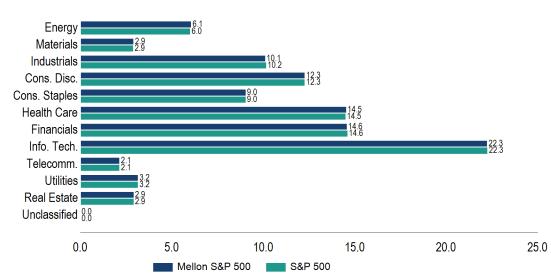
Return (Rai	nk)								
9.4	2.2	8.0	20.8	14.6	3.6	15.4	27.0	-10.1	11.0
8.4	0.9	6.8	18.0	13.4	1.9	14.0	22.4	-20.1	9.1
7.7	0.1	5.8	15.5	12.4	0.9	12.9	20.2	-24.9	7.9
6.9	-0.9	4.6	13.3	10.7	-0.3	11.7	15.9	-27.6	6.9
5.3	-2.6	3.2	8.5	7.8	-2.5	8.6	10.5	-30.3	5.4
305	316	248	231	236	206	188	184	181	177
8.2 (31 8.5 (23	, ,	6.9 (23) 7.5 (12)	19.8 (12) 15.4 (52)	14.3 (10) 12.3 (53)	-0.3 (75) 1.4 (35)	13.6 (35) 13.3 (42)	29.3 (1) 22.0 (29)	-29.8 (92) -23.2 (37)	7.1 (68) 6.9 (76)
•	, , ,	,	` '	` '	` '	· /	, ,	` '	` '



Characteristics

	Portfolio	S&P 500
Number of Holdings	500	505
Weighted Avg. Market Cap. (\$B)	155.57	154.74
Median Market Cap. (\$B)	20.54	20.58
Price To Earnings	25.18	24.69
Price To Book	5.36	4.59
Price To Sales	3.62	3.35
Return on Equity (%)	20.27	18.97
Yield (%)	2.01	2.00
Beta	1.00	1.00

Sector Allocation (%) vs S&P 500



Largest Holdings

Top Contributors

Bottom Contributors

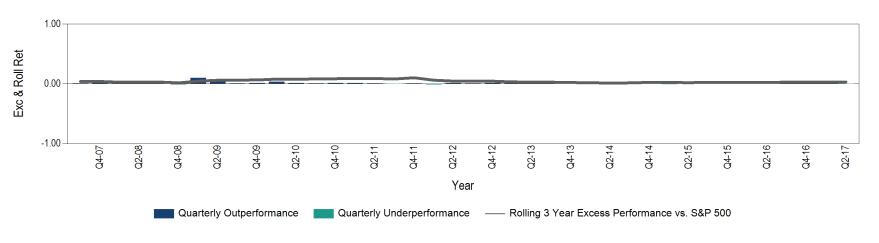
- a. 900.			• •	p continuate						
	End Weight	Return		Avg Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
APPLE	3.62	0.66	ALPHABET 'C'	2.63	9.54	0.25	GENERAL ELECTRIC	1.22	-8.61	-0.11
ALPHABET 'C'	2.64	9.54	AMAZON.COM	1.81	9.19	0.17	AT&T	1.20	-8.10	-0.10
MICROSOFT	2.56	5.25	MICROSOFT	2.57	5.25	0.13	SCHLUMBERGER	0.50	-15.08	-0.08
AMAZON.COM	1.85	9.19	JOHNSON & JOHNSON	1.66	6.91	0.11	INTERNATIONAL	0.68	-10.80	-0.07
JOHNSON & JOHNSON	1.72	6.91	NVIDIA	0.34	32.85	0.11	BUS.MCHS.	0.00	-10.00	-0.07
FACEBOOK CLASS A	1.72	6.29	UNITEDHEALTH GROUP	0.80	13.52	0.11	VERIZON	0.94	-7.30	-0.07
EXXON MOBIL	1.65	-0.64	FACEBOOK CLASS A	1.70	6.29	0.11	COMMUNICATIONS	2.24		
JP MORGAN CHASE & CO.	1.56	4.65	MCDONALDS	0.56	18.90	0.11	CISCO SYSTEMS	0.81	-6.59	-0.05
BERKSHIRE HATHAWAY 'B'	1.55	1.61	CITIGROUP	0.81	12.10	0.10	WALT DISNEY	0.80	-6.30	-0.05
WELLS FARGO & CO	1.20	0.24	ORACLE	0.66	12.88	0.09	INTEL	0.83	-5.77	-0.05
WELLS FARGO & CO	1.20	0.24	URACLE	0.00	12.00	0.09	ANADARKO PETROLEUM	0.16	-26.80	-0.04
							CONOCOPHILLIPS	0.29	-11.36	-0.03

Unclassified sector allocation includes cash allocations.

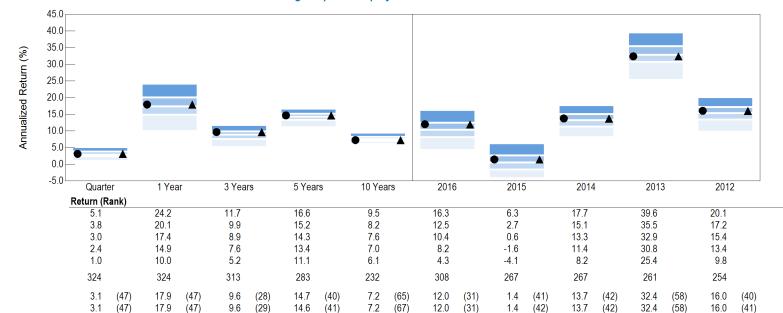


Manager Performance Comparisons (Gross of Fees)

Rolling Annualized Excess Performance



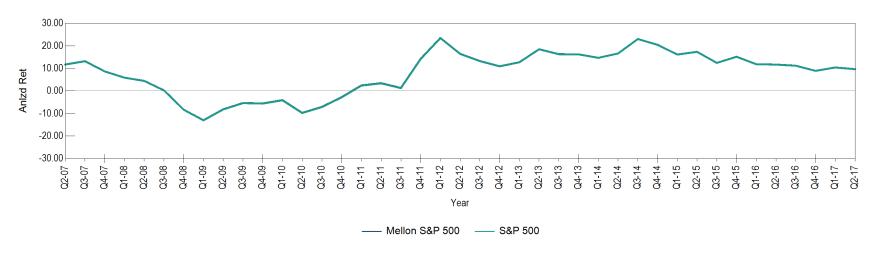
Mellon S&P 500 vs. eA US Large Cap Core Equity Gross Universe



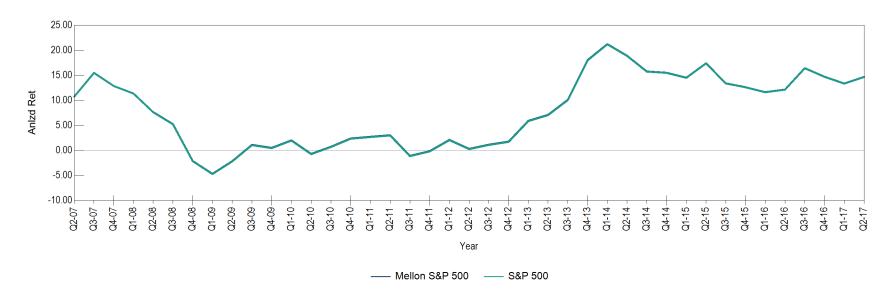
5th Percentile 25th Percentile Median 75th Percentile 95th Percentile # of Portfolios Mellon S&P 500 S&P 500

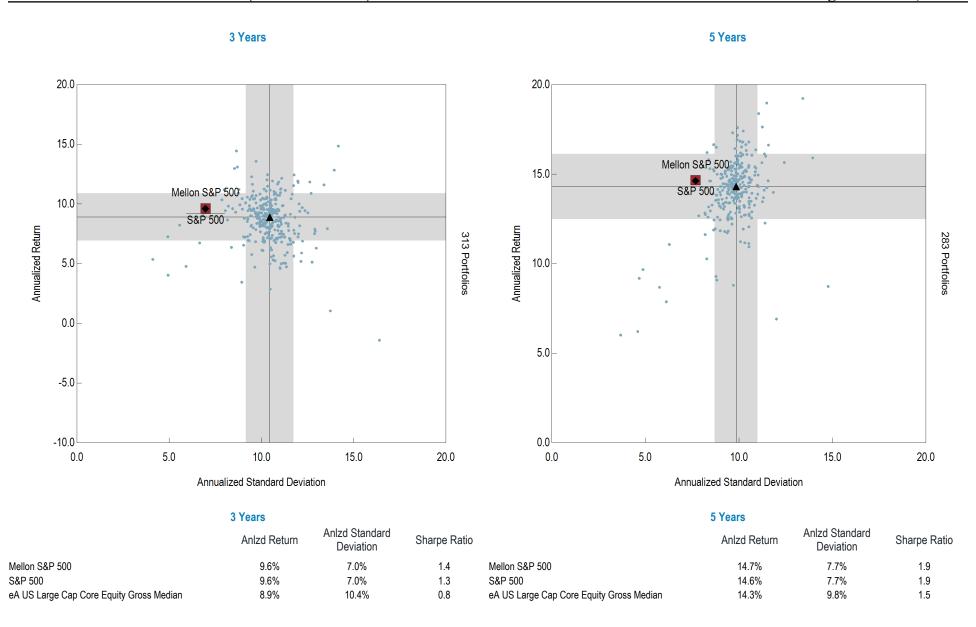


Rolling 3 Year Annualized Return (%)

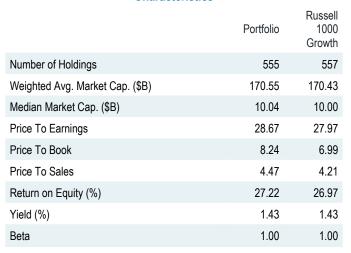


Rolling 5 Year Annualized Return (%)

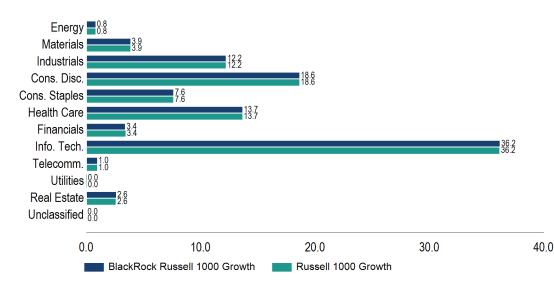




Characteristics



Sector Allocation (%) vs Russell 1000 Growth



Largest Holdings

Top Contributors End Weight Contribution Return Avg Wgt Return Avg Wgt Return Contribution APPLE 6.62 0.66 AMAZON.COM 3.13 0.29 WALT DISNEY 1.57 -0.10 9.19 -6.30 **MICROSOFT** 4.56 5.25 **MICROSOFT** 4.43 0.23 INTERNATIONAL 5.25 0.84 -10.80-0.09 BUS.MCHS. 9.66 0.22 AMAZON.COM 3.39 9.19 ALPHABET 'A' 2.32 **VERIZON** FACEBOOK CLASS A 3.11 6.29 ALPHABET 'C' 2.29 9.54 0.22 0.83 -7.30-0.06 COMMUNICATIONS ALPHABET 'A' 2.44 9.66 **MCDONALDS** 1.00 18.90 0.19 **KROGER** 0.24 -20.61 -0.05 2.42 9.54 UNITEDHEALTH GROUP 13.52 0.19 ALPHABET 'C' 1.39 O REILLY AUTOMOTIVE 0.21 -18.94 -0.04 0.18 HOME DEPOT 1.62 5.08 **FACEBOOK CLASS A** 2.85 6.29 0.44 TJX -8.38 -0.04 UNITEDHEALTH GROUP 1.57 13.52 **NVIDIA** 0.52 32.85 0.17 **GENERAL ELECTRIC** 0.42 -8.61 -0.04 VISA 'A' 1.53 **BOFING** 0.94 0.12 5.71 12.68 AUTOZONE 0.17 -21.10-0.04 **PAYPAL HOLDINGS** COMCAST 'A' 1.49 4.39 0.46 24.76 0.11 LOWE'S COMPANIES 0.63 -5.30 -0.03 VIACOM 'B'

Unclassified sector allocation includes cash allocations.



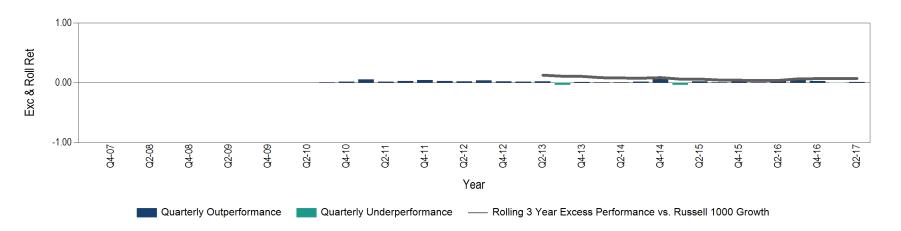
Bottom Contributors

0.11

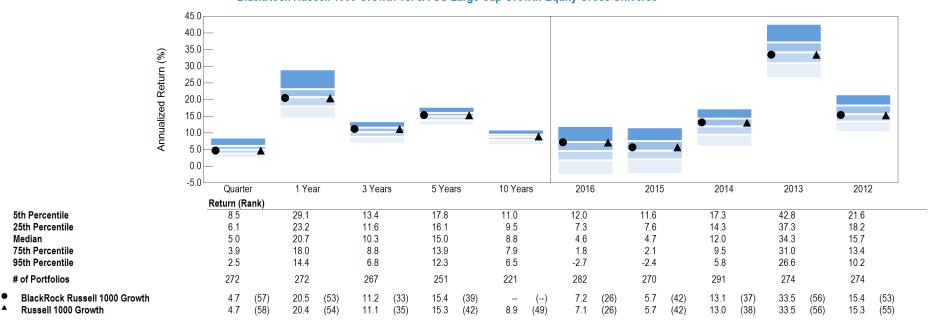
-27.59

-0.03

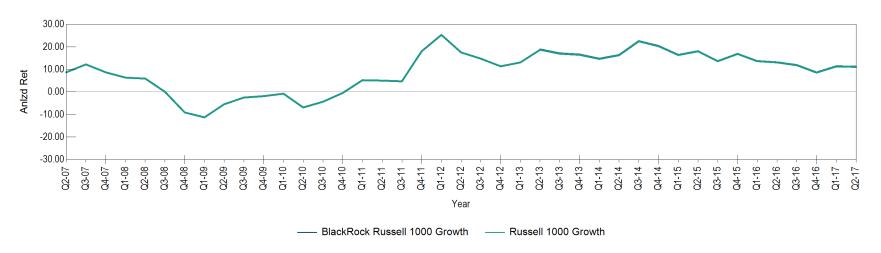
Rolling Annualized Excess Performance



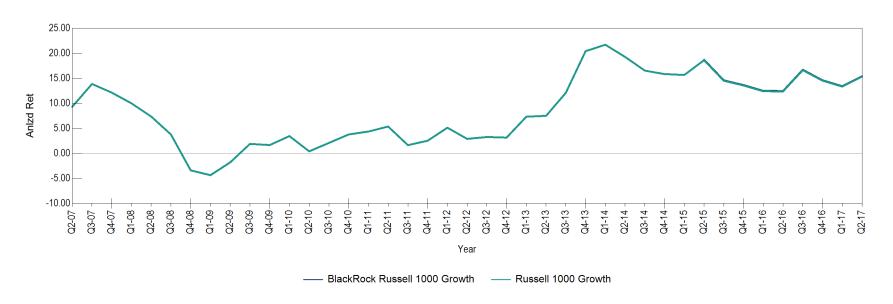
BlackRock Russell 1000 Growth vs. eA US Large Cap Growth Equity Gross Universe

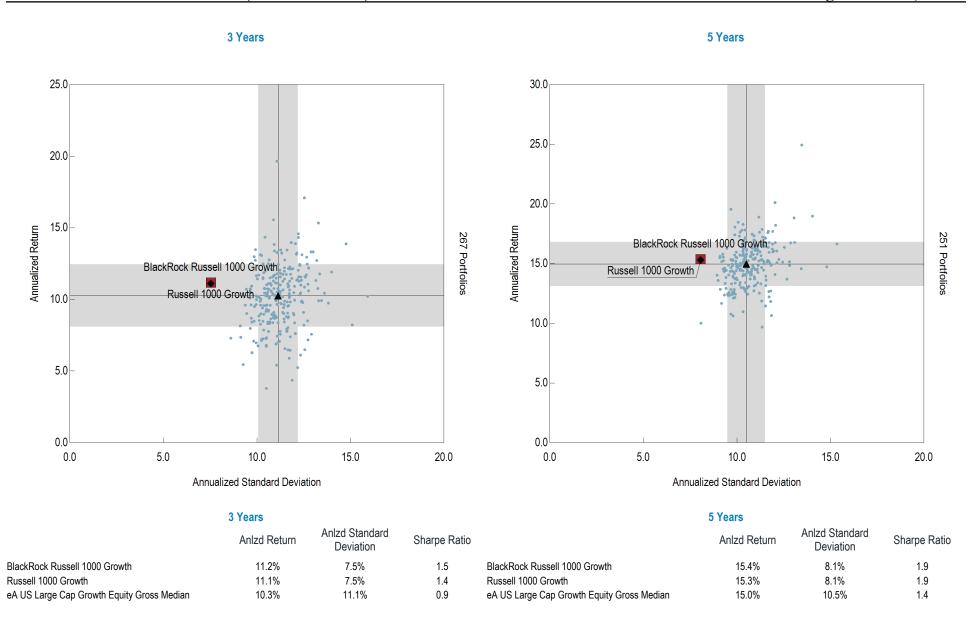


Rolling 3 Year Annualized Return (%)

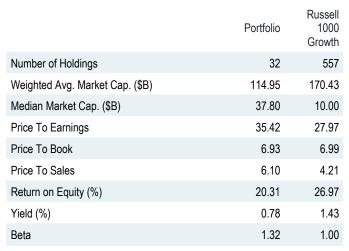


Rolling 5 Year Annualized Return (%)

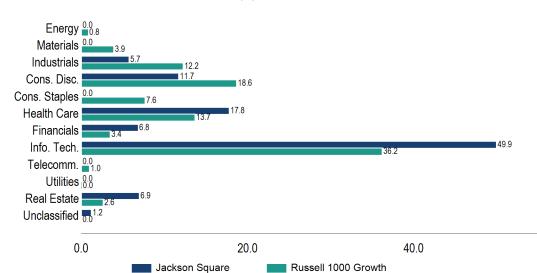




Characteristics



Sector Allocation (%) vs Russell 1000 Growth



Largest Holdings

Top Contributors

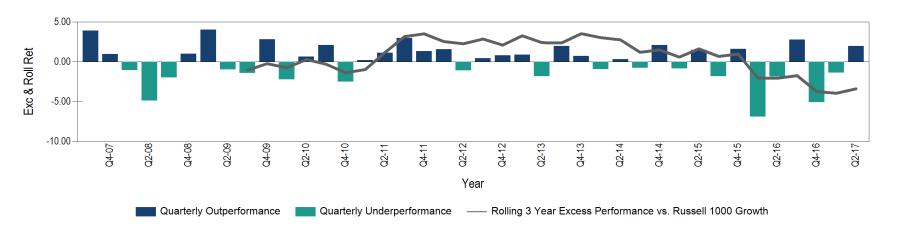
Bottom Contributors

=4.9001.	. oranigo		• •	p continuate						
	End Weight	Return		Avg Wgt	Return	Contribution	1	Avg Wgt	Return	Contribution
PAYPAL HOLDINGS	6.53	24.76	PAYPAL HOLDINGS	6.01	24.76	1.49	LIBERTY GLOBAL SR.C	2.49	-11.02	-0.27
MICROSOFT	5.91	5.25	LIBERTY INTACT.QVC	3.84	22.58	0.87	TRIPADVISOR 'A'	2.38	-11.49	-0.27
VISA 'A'	5.68	5.71	GROUP 'A'	J.0 4	22.00	0.07	SYMANTEC	3.23	-7.69	-0.25
CELGENE	5.60	4.37	ELECTRONIC ARTS	3.75	18.10	0.68	NIELSEN	2.18	-5.59	-0.12
MASTERCARD	4.64	8.20	ALPHABET 'A'	4.08	9.66	0.39	LIBERTY GLOBAL CL.A	0.65	-10.45	-0.07
CROWN CASTLE INTL.	4.45	7.06	INTERCONTINENTAL EX.	3.66	10.45	0.38	QUALCOMM	1.32	-2.74	-0.04
EBAY	4.29	4.02	MASTERCARD	4.65	8.20	0.38	WALGREENS BOOTS	0.43	-5.29	-0.02
LIBERTY INTACT.QVC GROUP 'A'	4.22	22.58	FEDEX	3.23	11.63	0.38	ALLIANCE	0.43	-5.29	-0.02
ALPHABET 'A'	3.98	9.66	QUINTILES TRNAT.HDG.	3.28	11.14	0.36	ASML HLDG.ADR 1:1	1.52	-0.90	-0.01
INTERCONTINENTAL EX.	3.87	10.45	VISA 'A'	5.78	5.71	0.33	ALLERGAN	2.89	2.06	0.06
			MICROSOFT	6.17	5.25	0.32	DOLLAR GENERAL	1.86	3.77	0.07

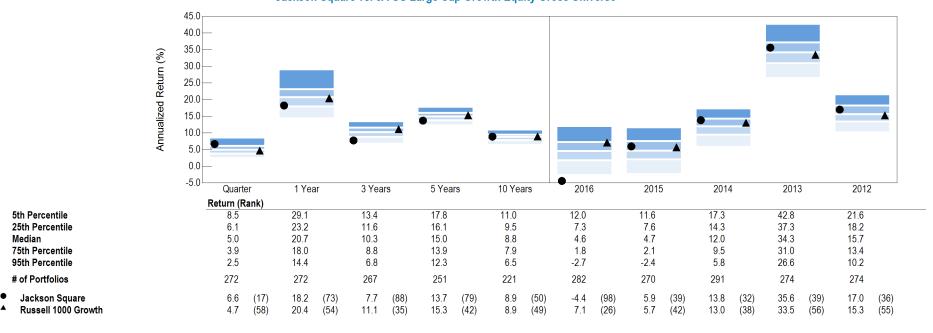
Unclassified sector allocation includes cash allocations.



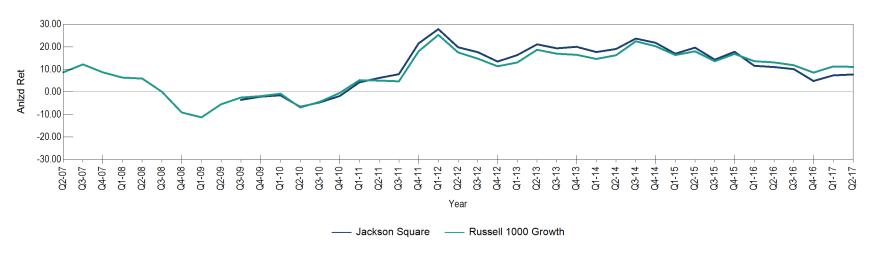
Rolling Annualized Excess Performance



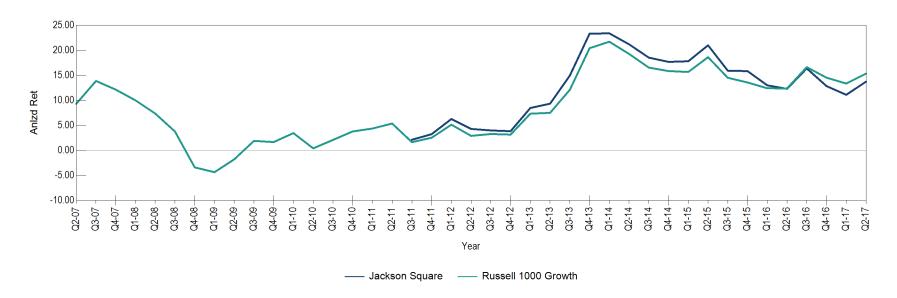
Jackson Square vs. eA US Large Cap Growth Equity Gross Universe

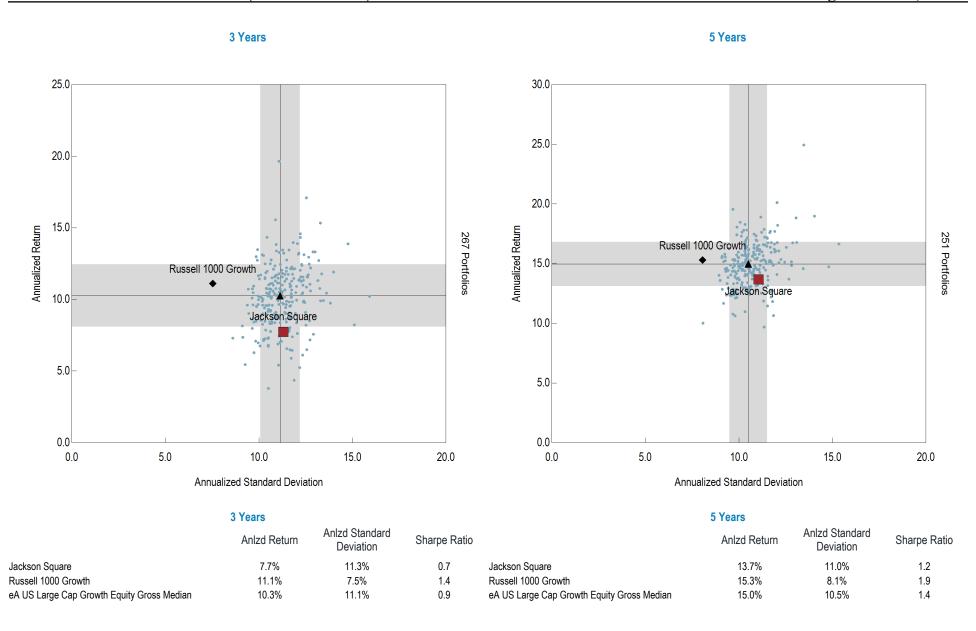


Rolling 3 Year Annualized Return (%)



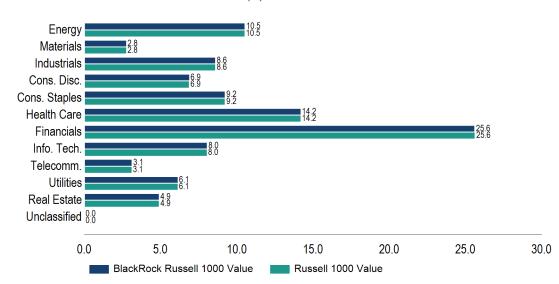
Rolling 5 Year Annualized Return (%)





Portfolio	Russell 1000 Value
716	719
108.84	108.85
8.54	8.46
22.36	20.93
2.33	2.56
2.89	2.85
13.27	12.04
2.45	2.44
1.00	1.00
	716 108.84 8.54 22.36 2.33 2.89 13.27 2.45

Sector Allocation (%) vs Russell 1000 Value



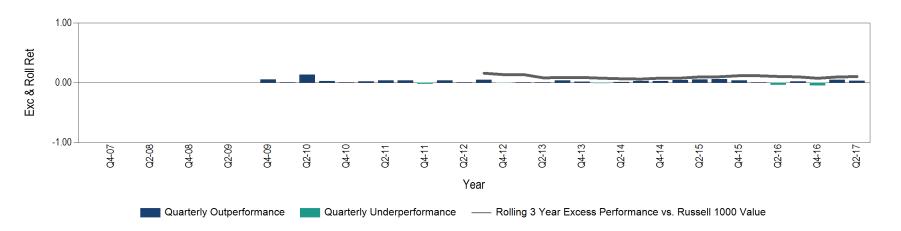
Largest Holdings

Top Contributors

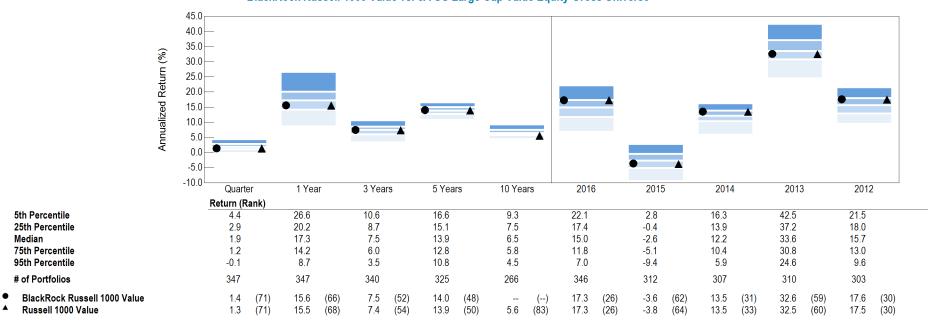
Bottom Contributors

3 - 3										
	End Weight	Return		Avg Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
EXXON MOBIL	2.89	-0.64	CITIGROUP	1.48	12.10	0.18	AT&T	2.20	-8.10	-0.18
BERKSHIRE HATHAWAY 'B'	2.75	1.61	JOHNSON & JOHNSON	2.55	6.91	0.18	GENERAL ELECTRIC	1.80	-8.61	-0.16
JP MORGAN CHASE & CO.	2.73	4.65	ORACLE	1.07	12.88	0.14	SCHLUMBERGER	0.91	-15.08	-0.14
JOHNSON & JOHNSON	2.55	6.91	JP MORGAN CHASE &	2 79	4.65	0.13	CISCO SYSTEMS	1.49	-6.59	-0.10
WELLS FARGO & CO	2.10	0.24	JOHNSON & JOHNSON 2.55 ORACLE 1.07 JP MORGAN CHASE & 2.79 CO. MEDTRONIC 1.04 CATERPILLAR 0.50 UNITED TECHNOLOGIES 0.81	4.00	0.10	INTEL	1.39	-5.77	-0.08	
BANK OF AMERICA	2.04	3.18	MEDTRONIC	1.04	10.17	0.11	ANADARKO PETROLEUM	0.28	-26.80	-0.08
AT&T	1.96	-8.10	CATERPILLAR	0.50	16.79	0.08	VERIZON	0.86	-7.30	-0.06
PROCTER & GAMBLE	1.79	-2.26	UNITED TECHNOLOGIES	0.81	9.42	0.08	COMMUNICATIONS	0.00	-1.50	-0.00
PFIZER	1.68	-0.86	CSX	0.43	17.64	0.08	CONOCOPHILLIPS	0.53	-11.36	-0.06
CHEVRON	1.66	-1.83	PHILIP MORRIS INTL.	1.42	4.93	0.07	HALLIBURTON	0.36	-12.86	-0.05
			BANK OF AMERICA	2.12	3.18	0.07	PROCTER & GAMBLE	2.02	-2.26	-0.05

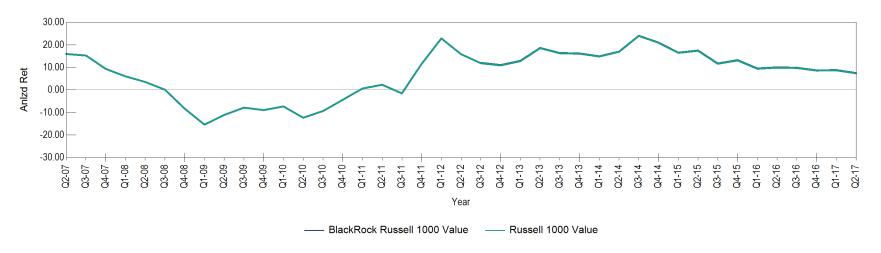




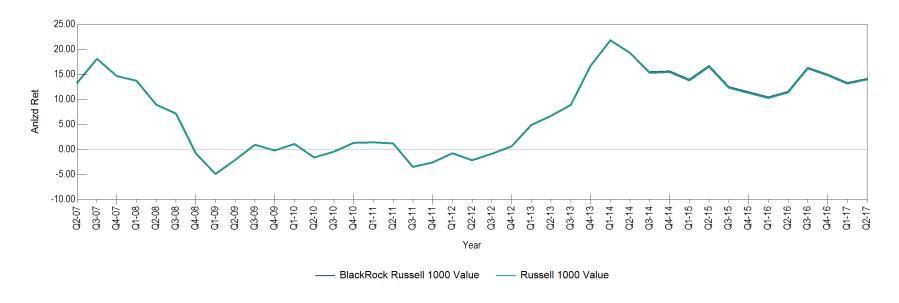
BlackRock Russell 1000 Value vs. eA US Large Cap Value Equity Gross Universe

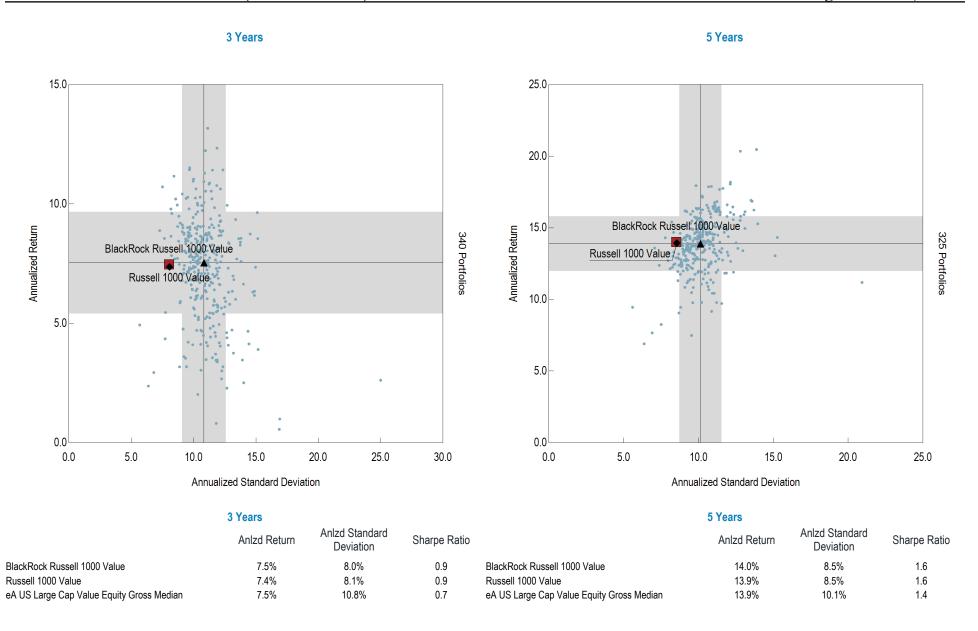


Rolling 3 Year Annualized Return (%)



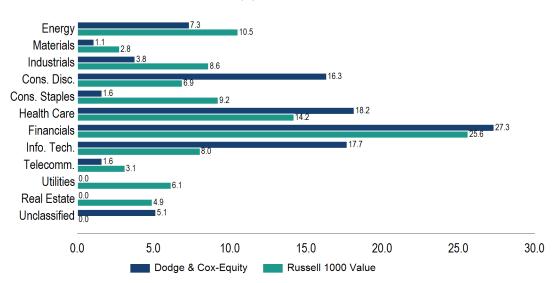
Rolling 5 Year Annualized Return (%)





	Portfolio	Russell 1000 Value
Number of Holdings	66	719
Weighted Avg. Market Cap. (\$B)	116.45	108.85
Median Market Cap. (\$B)	39.11	8.46
Price To Earnings	19.58	20.93
Price To Book	2.98	2.56
Price To Sales	2.87	2.85
Return on Equity (%)	16.00	12.04
Yield (%)	1.73	2.44
Beta	1.09	1.00

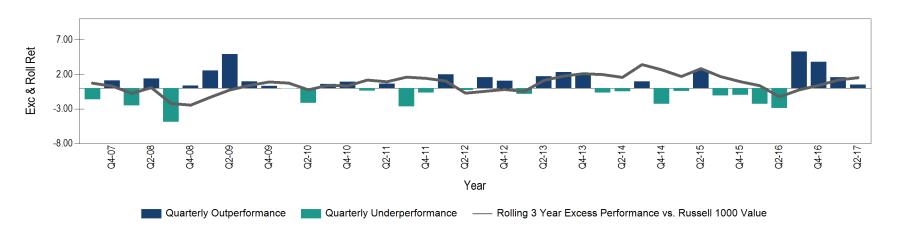
Sector Allocation (%) vs Russell 1000 Value



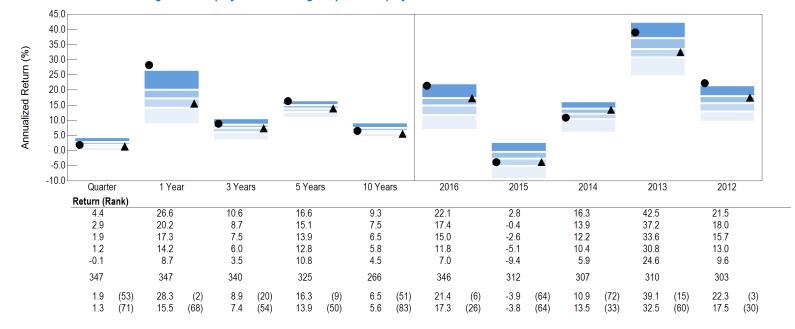
Largest Holdings Top Contributors Bottom Contributors

	End Weight	Return		Avg Wgt	Return	Contribution	ı	Avg Wgt	Return	Contribution
CHARLES SCHWAB	3.83	5.48	NOVARTIS 'B' SPN.ADR	2.89	12.39	0.36	ANADARKO PETROLEUM	1.21	-26.80	-0.32
BANK OF AMERICA	3.75	3.18	1:1	2.00	12.00	0.50	SCHLUMBERGER	1.94	-15.08	-0.29
WELLS FARGO & CO	3.62	0.24	SANOFI ADR 2:1	3.17	9.47	0.30	HEWLETT PACKARD	2.92	-6.20	-0.18
CAPITAL ONE FINL.	3.40	-4.19	CIGNA	1.86	14.27	0.27	ENTER.	2.32	-0.20	-0.10
CHARTER COMMS.CL.A	3.26	2.91	FEDEX	2.09	11.63	0.24	NATIONAL OILWELL	0.97	-17.71	-0.17
NOVARTIS 'B' SPN.ADR 1:1	3.03	12.39	ALNYLAM	0.41	55.63	0.23	VARCO	0.40	4.40	0.44
TIME WARNER	3.01	3.18	PHARMACEUTICALS				CAPITAL ONE FINL.	3.40	-4.19	-0.14
COMCAST 'A'	2.99	4.39	ALPHABET 'C'	2.34	9.54	0.22	CISCO SYSTEMS	1.99	-6.59	-0.13
SANOFI ADR 2:1	2.97	9.47	UNITEDHEALTH GROUP	1.56	13.52	0.21	BAKER HUGHES	1.40	-8.61	-0.12
MICROSOFT	2.75	5.25	CHARLES SCHWAB	3.57	5.48	0.20	WEATHERFORD INTL.	0.22	-41.80	-0.09
MICROSOFI	2.13	3.23	BANK OF NEW YORK	1.98	8.46	0.17	GOLDMAN SACHS GP.	2.78	-3.07	-0.09
			MELLON	1.50	0.40	0.17	APACHE	1.32	-6.26	-0.08
			ASTRAZENECA SPN.ADR.2:1	1.73	9.47	0.16				



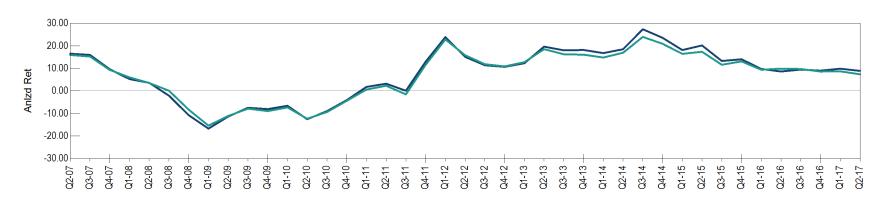


Dodge & Cox-Equity vs. eA US Large Cap Value Equity Gross Universe



5th Percentile 25th Percentile Median 75th Percentile 95th Percentile # of Portfolios

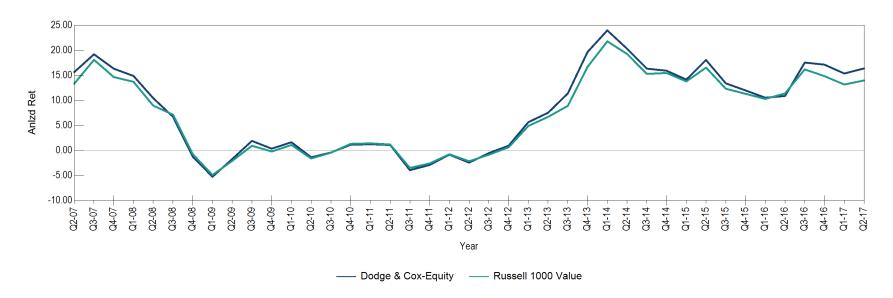
Dodge & Cox-Equity
Russell 1000 Value

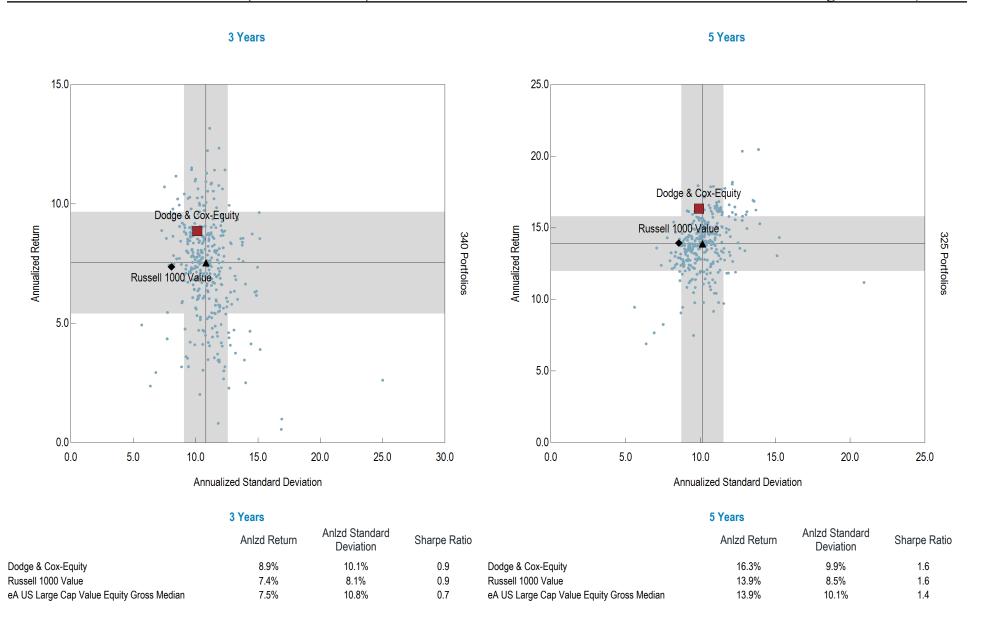


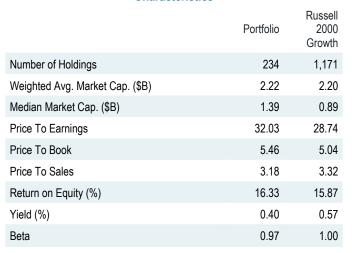
— Dodge & Cox-Equity — Russell 1000 Value

Year

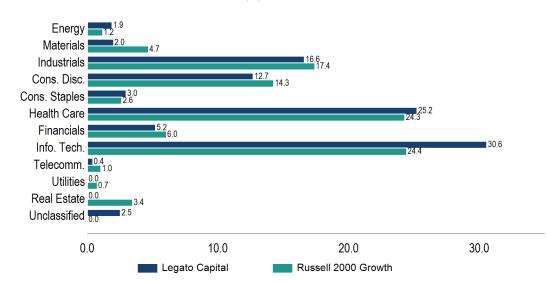
Rolling 5 Year Annualized Return (%)







Sector Allocation (%) vs Russell 2000 Growth



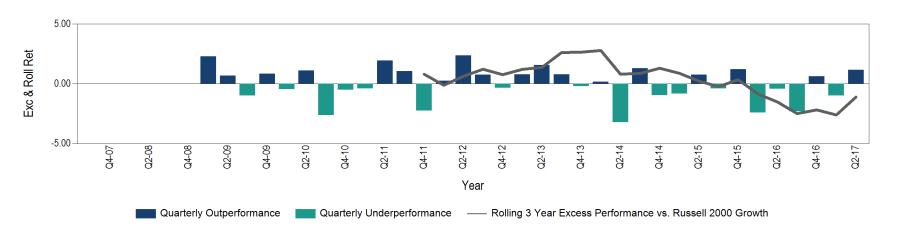
Largest Holdings

	-	4 40		
Tor	o Co	ntril	huta	arc

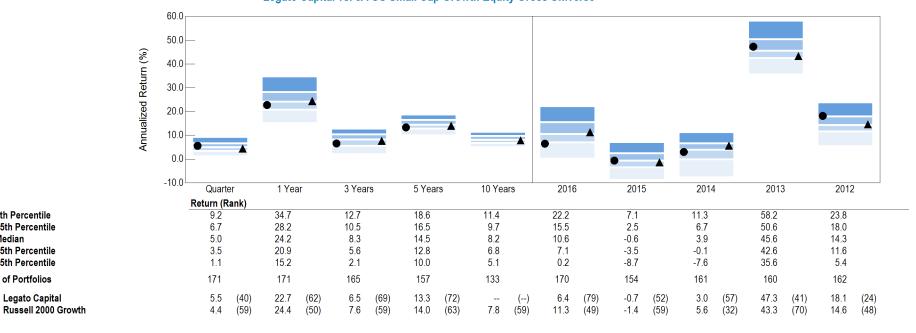
Bottom Contributors

	End Weight	Return		Avg Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
LIGAND PHARMS.'B'	2.47	14.70	STAMPS.COM	2.95	30.86	0.91	CARDTRONICS	1.11	-29.71	-0.33
STAMPS.COM	2.44	30.86	ALBANY	1.41	54.67	0.77	CHEESECAKE FACTORY	1.23	-20.29	-0.25
SUPERNUS PHARMACEUTICALS	1.57	37.70	MOLECULR.RESH.	1.41	J 4 .07	0.77	NEKTAR THERAPEUTICS	1.40	-16.70	-0.23
ISHARES RUSSELL 2000 GW.	1.54	4.40	SUPERNUS	1.63	37.70	0.62	SMART & FINAL STORES	0.73	-24.79	-0.18
DREW INDS.	1.46	3.17	PHARMACEUTICALS	2.00	44.70	0.45	BUFFALO WILD WINGS	1.03	-17.05	-0.18
CRITEO ADR 1:1	1.33	-1.88	LIGAND PHARMS.'B'	3.09	14.70	0.45	CALLON PTL.DEL.	0.78	-19.38	-0.15
POOL	1.32	-1.17	CEVA	1.32	28.03	0.37	SNYDERS LANCE	1.09	-13.74	-0.15
DAVE & BUSTER'S ENTM.	1.10	8.87	INC RESEARCH HOLDINGS CL.A	1.28	27.59	0.35	PROGENICS PHARMS.	0.53	-28.07	-0.15
ECHO GLOBAL LOGISTICS	1.05	-6.79	MERIT MEDICAL SYS.	0.84	32.01	0.27	ECHO GLOBAL LOGISTICS	1.66	-6.79	-0.11
TETRA TECH	1.01	12.24	IGI LABORATORIES	1.28	17.16	0.22	BANK OF THE OZARKS	1.12	-9.56	-0.11
			INNERWORKINGS	1.21	16.47	0.20	DANK OF THE OZAKKO	1.12	-5.50	-0.11
			TETRA TECH	1.60	12.24	0.20				





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



5th Percentile

25th Percentile

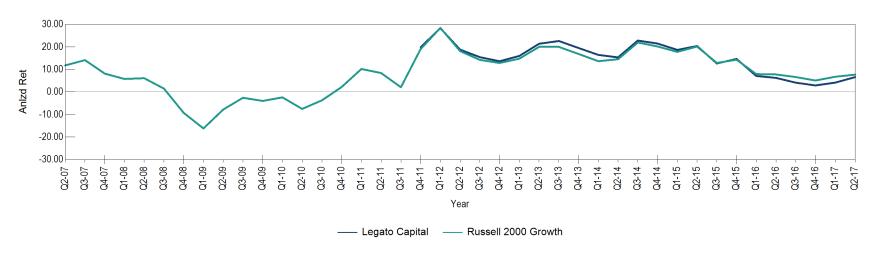
75th Percentile

95th Percentile

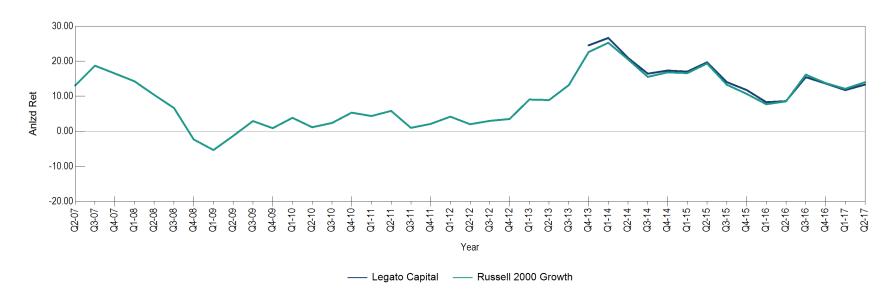
of Portfolios

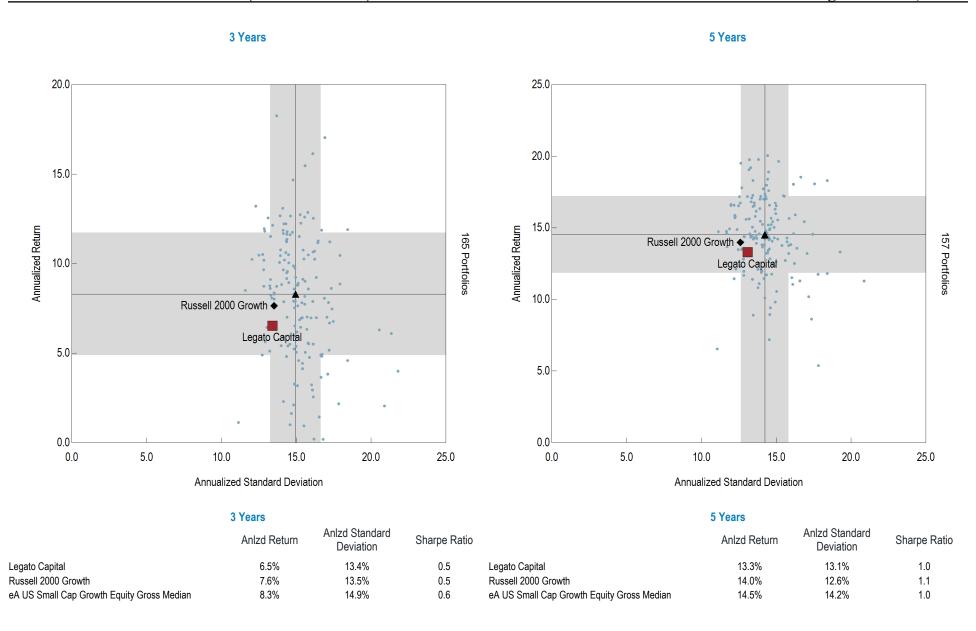
Median

Rolling 3 Year Annualized Return (%)



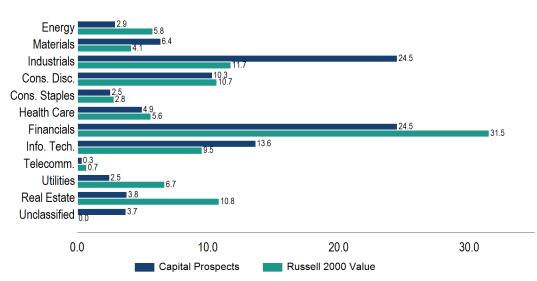
Rolling 5 Year Annualized Return (%)





	Portfolio	Russell 2000 Value
Number of Holdings	295	1,399
Weighted Avg. Market Cap. (\$B)	2.17	1.83
Median Market Cap. (\$B)	1.23	0.66
Price To Earnings	23.21	20.07
Price To Book	2.85	1.71
Price To Sales	2.29	2.72
Return on Equity (%)	13.09	7.40
Yield (%)	1.57	1.70
Beta	0.87	1.00

Sector Allocation (%) vs Russell 2000 Value



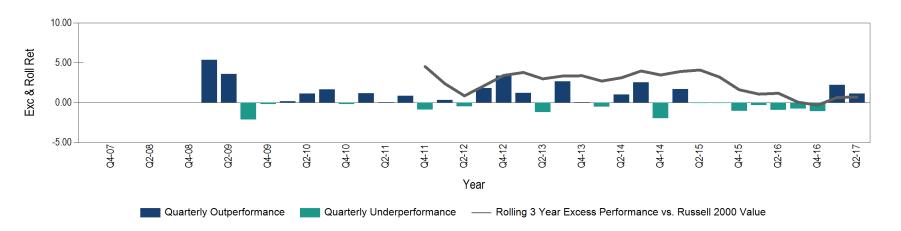
Largest Holdings

Top Contributors

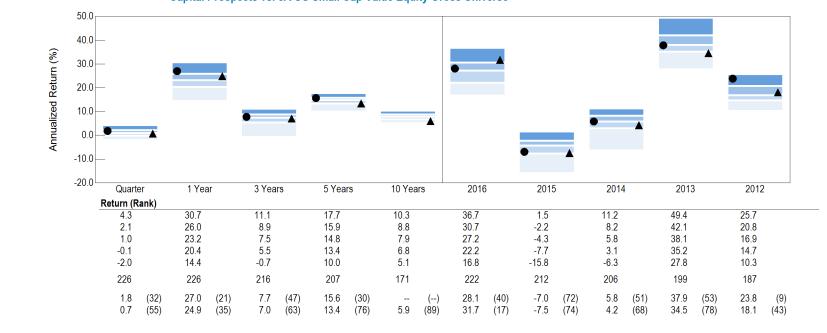
Bottom Contributors

•	End Weight	Return		Avg Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
ALLETE	1.38	6.68	CAI INTERNATIONAL	0.44	49.94	0.22	PCM	0.35	-33.16	-0.12
GORES HOLDINGS CL.A	1.36	1.45	MODINE	0.59	35.66	0.21	STEELCASE 'A'	0.67	-15.66	-0.10
LITTELFUSE	1.30	3.39	MANUFACTURING	0.55	33.00	0.21	TOWER INTERNATIONAL	0.60	-16.80	-0.10
HILLENBRAND	1.15	1.26	FREIGHTCAR AMERICA	0.52	39.50	0.21	CINEMARK HOLDINGS	0.81	-11.74	-0.10
MB FINANCIAL	1.14	3.33	CATALENT	0.65	23.94	0.16	RANGE RES.	0.44	-20.31	-0.09
ABM INDS.	0.94	-4.39	ALBANY	0.23	54.67	0.12	VERSO CL A ORD	0.41	-21.83	-0.09
ARTISAN PTNS.ASTMGMT.	0.94	13.62	MOLECULR.RESH.				TWIN DISC	0.41	-21.54	-0.09
AIR LEASE	0.93	-3.40	STERLING CONSTRUCTION	0.28	41.30	0.12	CRH MEDICAL	0.29	-30.28	-0.09
JOHN BEAN TECHNOLOGIES	0.93	11.56	ARTISAN				LAREDO PETROLEUM	0.31	-27.95	-0.09
AMERICAN EQ.INV.LF.HLDG.	0.85	11.21	PTNS.ASTMGMT.	0.85	13.62	0.12	OIL STS.INTL.	0.45	-18.10	-0.08
			ASURE SOFTWARE	0.27	42.12	0.12				
			POLYONE	0.81	14.05	0.11				
			MSA SAFETY	0.72	15.34	0.11				





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



5th Percentile

25th Percentile

75th Percentile

95th Percentile

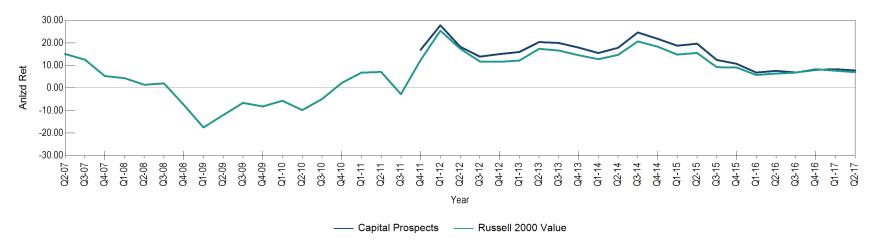
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Capital Prospects

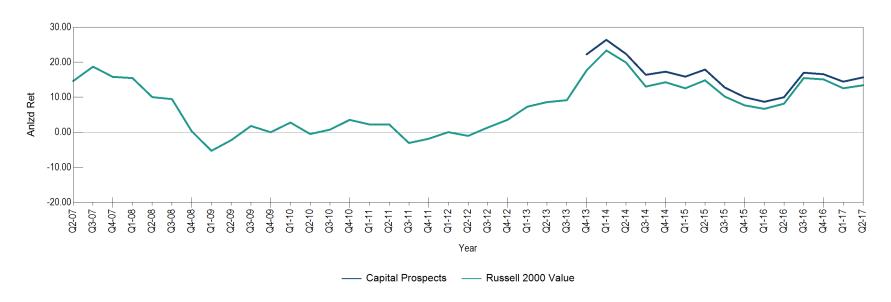
Russell 2000 Value

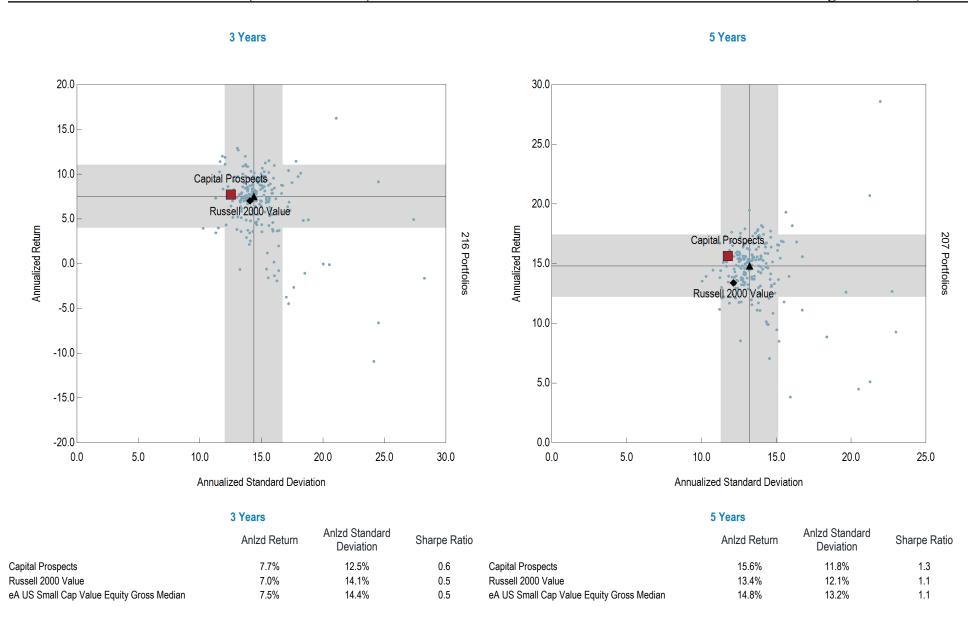
Median

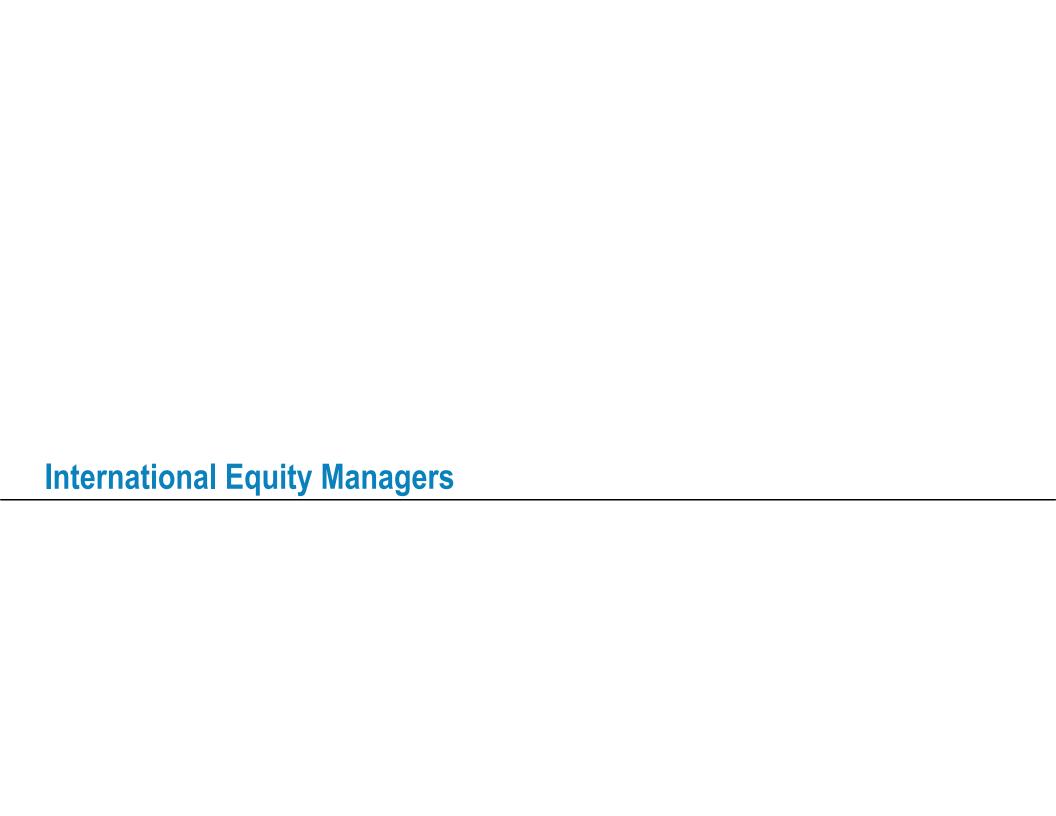
Rolling 3 Year Annualized Return (%)

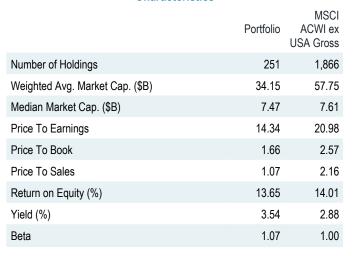


Rolling 5 Year Annualized Return (%)

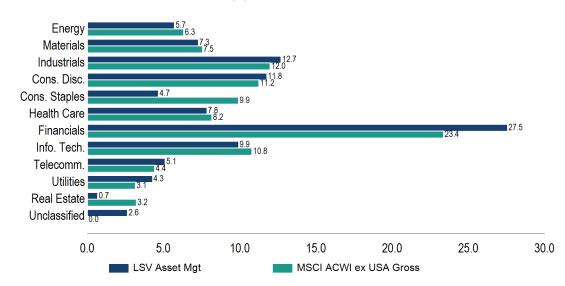








Sector Allocation (%) vs MSCI ACWI ex USA Gross



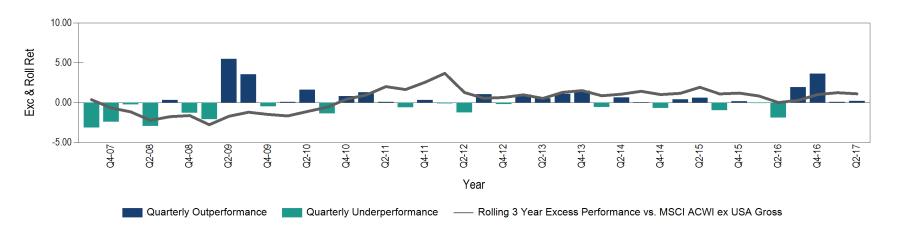
Largest Holdings

Top Contributors

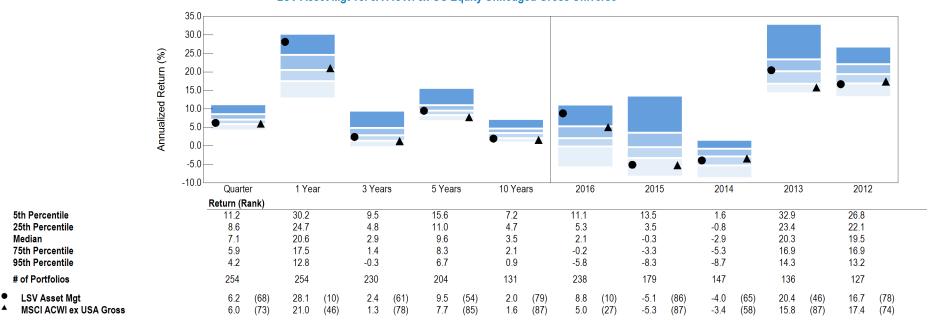
Bottom Contributors

_	End Weight	Return		Avg Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
SAMSUNG ELECTRONICS	2.16	12.78	SAMSUNG ELECTRONICS	2.09	12.78	0.27	JBS ON	0.28	-38.53	-0.11
SANOFI	1.76	9.00	BYD ELECTRONIC (INTL.)	0.61	43.33	0.27	FUFENG GROUP	0.28	-32.19	-0.09
NIPPON TELG. & TEL.	1.52	10.82	OMV	0.70	34.76	0.24	BANCO BRASIL SPN.ADR	0.36	-24.01	-0.09
BAE SYSTEMS	1.30	4.52	QANTAS AIRWAYS	0.40	47.85	0.19	1:1	0.50	-24.01	-0.03
ALLIANZ	1.27	11.16	DEUTSCHE LUFTHANSA	0.36	44.92	0.16	CIA PARANAENSE DE	0.35	-23.26	-0.08
MAGNA INTL.	1.17	8.15	SANOFI	1.80	9.00	0.16	ENERGIA COPEL PN			
ENEL	1.14	13.41	NIPPON TELG. & TEL.	1.50	10.82	0.16	MOBL.TELSMS.OJSC SPN.ADR 1:2	0.32	-24.03	-0.08
SWISS LIFE HOLDING	1.10	8.20	BAYER	1.01	14.59	0.15	TECK RESOURCES 'B'	0.29	-20.28	-0.06
KDDI	1.02	0.97	ALLIANZ	1.27	11.16	0.14	NORTHGATE	0.32	-16.31	-0.05
BAYER	1.02	14.59	AIR CHINA 'H'	0.46	29.52	0.14	KOREA ELECTRIC POWER	0.34	-14.15	-0.05
							FORTESCUE METALS GP.	0.29	-15.75	-0.05
							CHINA RAILWAY CON.'H'	0.48	-8.04	-0.04

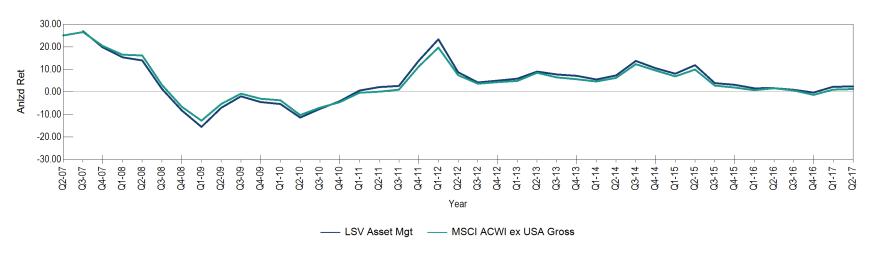




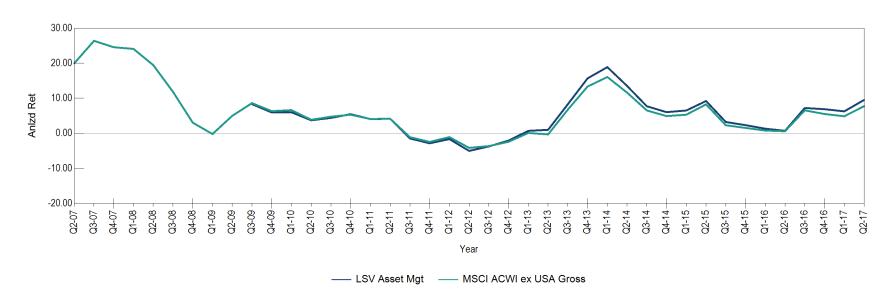
LSV Asset Mgt vs. eA ACWI ex-US Equity Unhedged Gross Universe

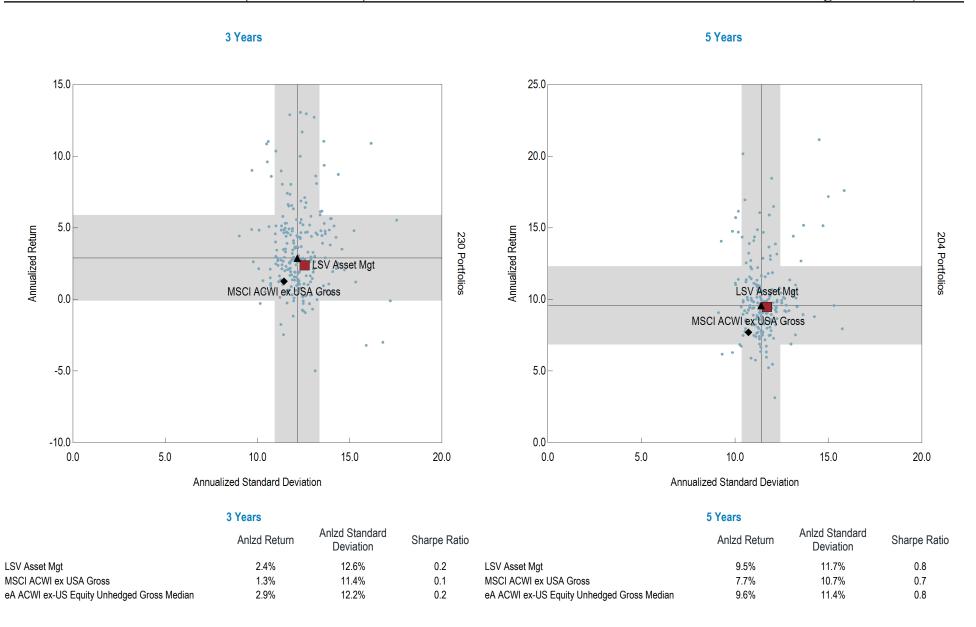


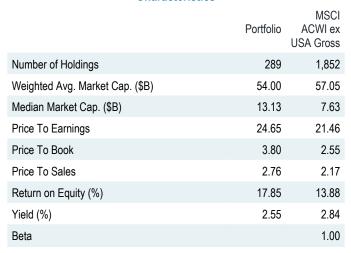
Rolling 3 Year Annualized Return (%)



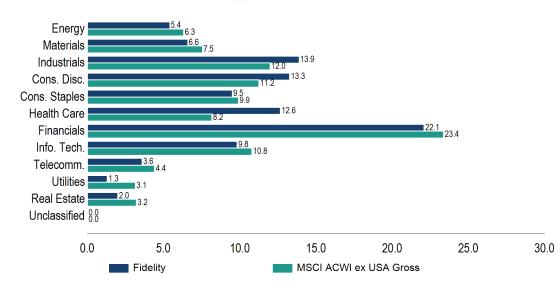
Rolling 5 Year Annualized Return (%)







Sector Allocation (%) vs MSCI ACWI ex USA Gross



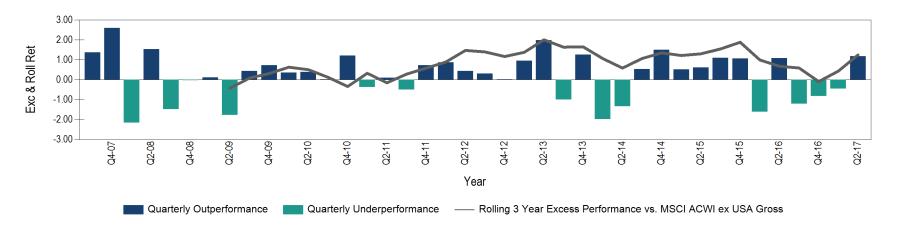
Largest Holdings

Top Contributors

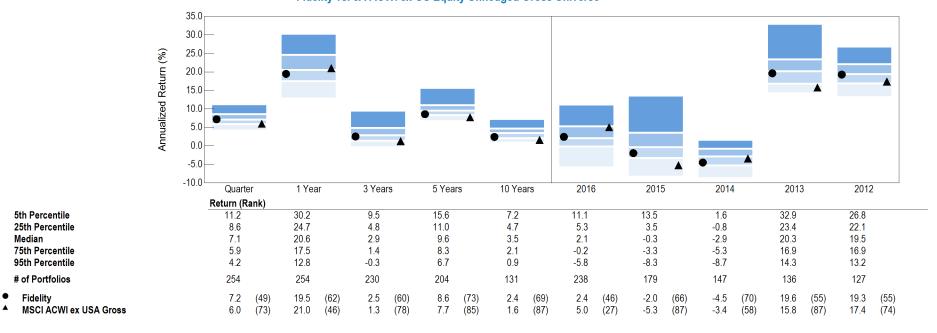
Bottom Contributors

3										
	End Weight	Return		Avg Wgt	Return	Contributio	n	Avg Wgt	Return	Contribution
NESTLE 'R'	1.87	16.95	NESTLE 'R'	1.73	16.95	0.29	HIKMA	0.26	-22.20	-0.06
SAP	1.47	7.87	PIRAMAL ENTERPRISES	0.51	47.63	0.24	PHARMACEUTICALS	0.20	22.20	0.00
ROCHE HOLDING	1.34	-0.22	NINTENDO	0.49	44.64	0.22	DENTSU	0.51	-11.09	-0.06
BRITISH AMERICAN TOBACCO	1.23	2.58	AIA GROUP	1.12	17.25	0.19	VALID SOLUCOES E SERVICOS ON	0.18	-30.41	-0.05
PHILIPS ELTN.KONINKLIJKE	1.19	12.79	PHILIPS	1.17	12.79	0.15	SHIRE	0.93	-5.55	-0.05
ROYAL DUTCH SHELL A	1.18	2.38	ELTN.KONINKLIJKE				÷····-			
AIA GROUP	1.13	17.25	ING GROEP	0.89	16.75	0.15	DAIRY FARM INTL.HDG.	0.39	-13.22	-0.05
NASPERS	1.10	12.50	BAYER	1.02	14.59	0.15	CCL PRODUCTS (INDIA)	0.34	-14.42	-0.05
BAYER	1.07	14.59	GUARANTY TRUST BANK	0.40	35.97	0.15	BARCLAYS	0.72	-6.44	-0.05
			NOVO NORDISK 'B'	0.60	24.16	0.14	WOOD GROUP (JOHN)	0.40	-10.49	-0.04
SAMSUNG ELECTRONICS	0.95	12.78					WESTPAC BANKING	0.42	-9.86	-0.04
			KERING	0.42	32.59	0.14				
							NSK	0.33	-12.60	-0.04





Fidelity vs. eA ACWI ex-US Equity Unhedged Gross Universe



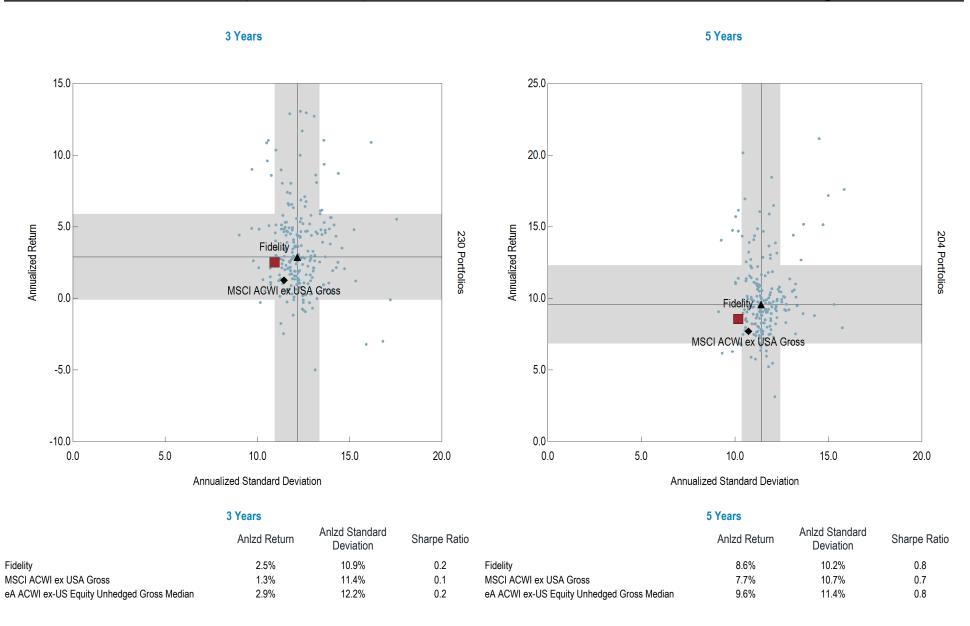
Rolling 3 Year Annualized Return (%)

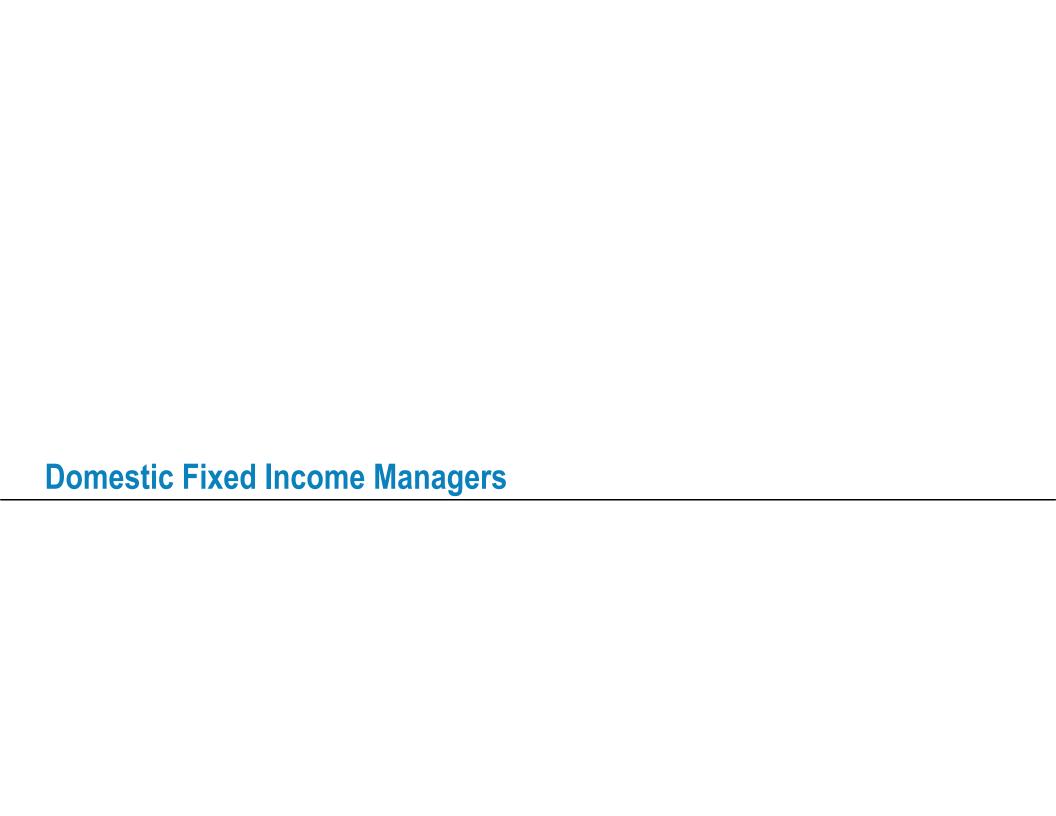


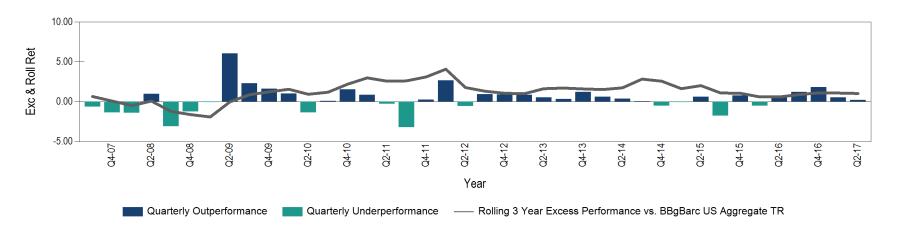
Rolling 5 Year Annualized Return (%)



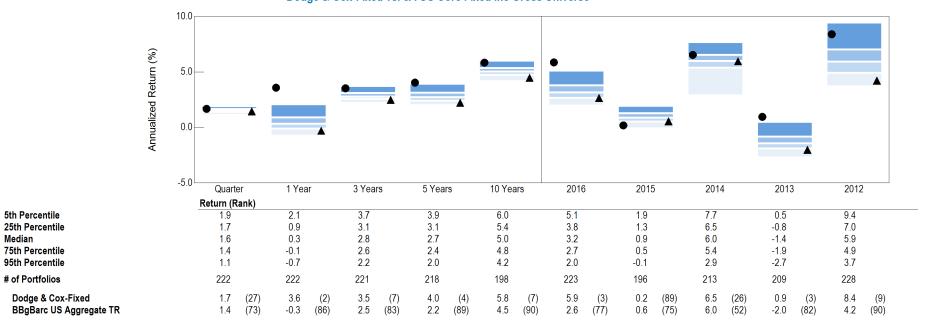
Risk vs. Return 3 & 5 Year (Gross of Fees)



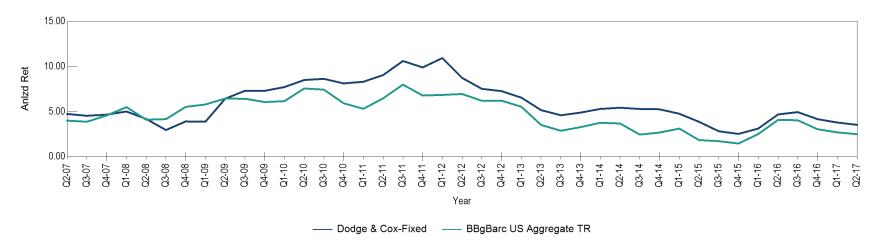




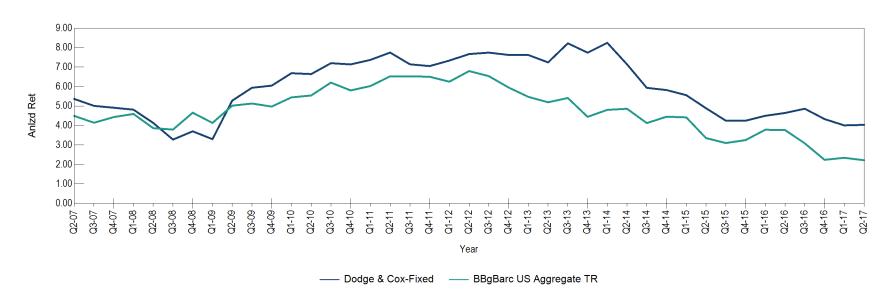
Dodge & Cox-Fixed vs. eA US Core Fixed Inc Gross Universe

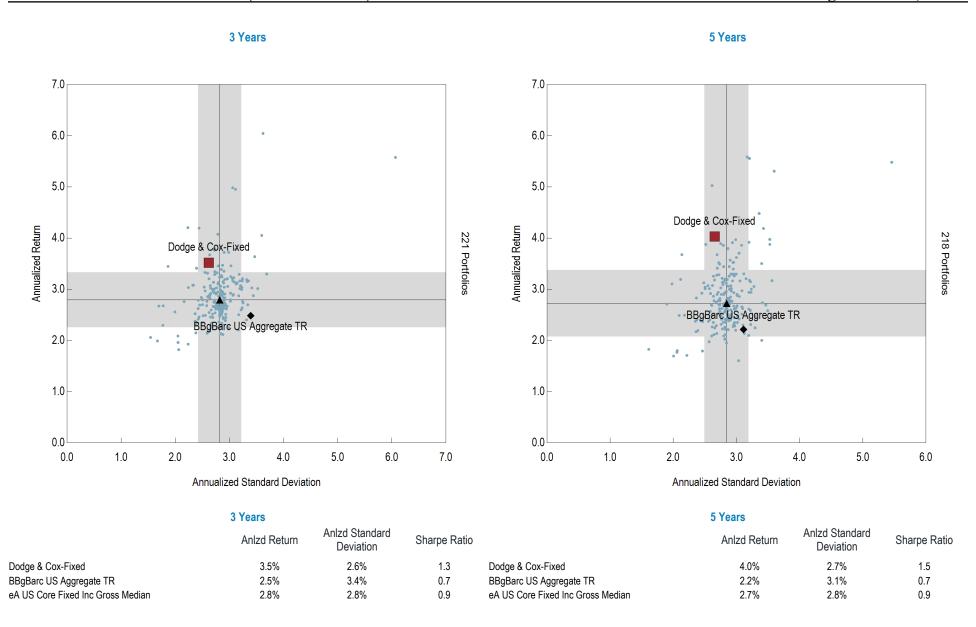


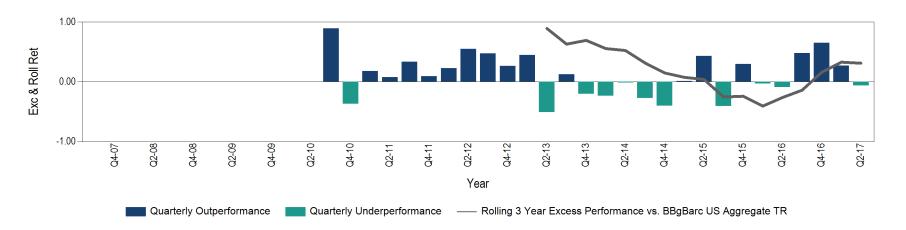
Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)



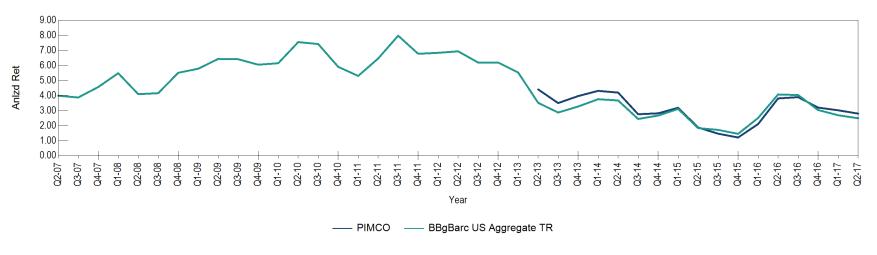




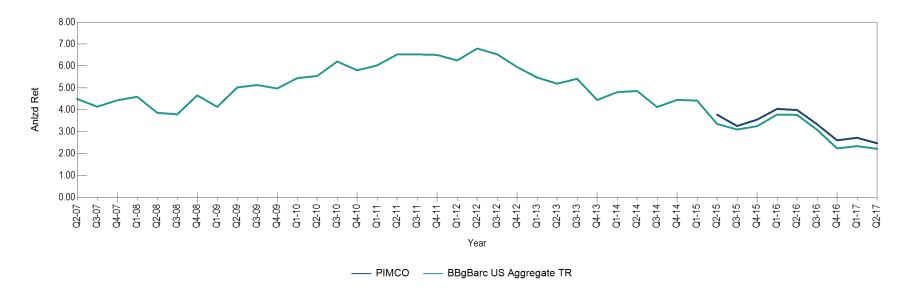
PIMCO vs. eA US Core Fixed Inc Gross Universe

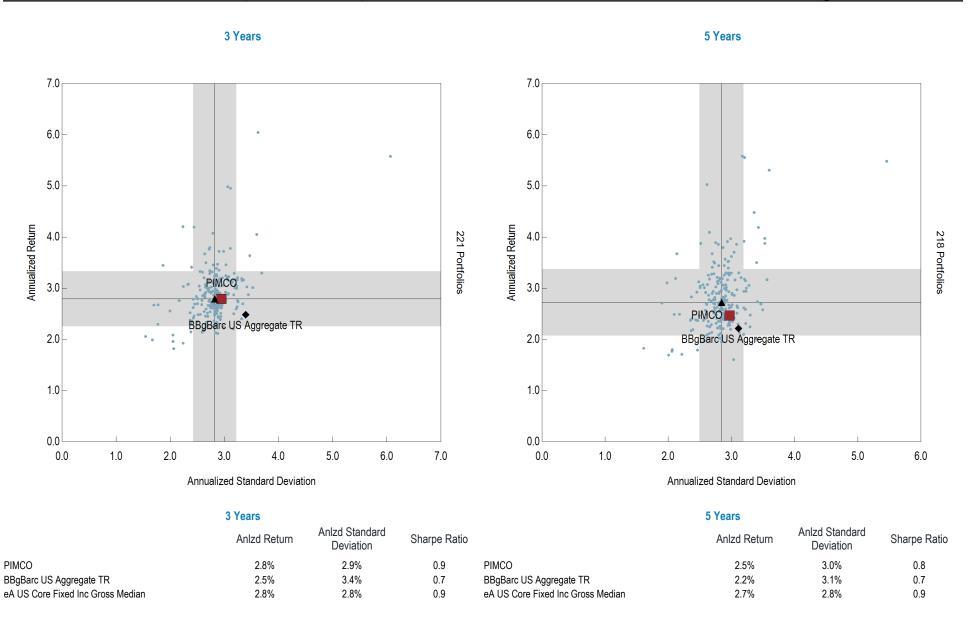


Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)





Performance Return Calculations

Performance is calculated using Modified Dietz and for time periods with large cash flow (generally greater than 10% of portfolio value), Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked 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

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up					
<u>Manager</u>	Fund_Incepted	Data_Source	<u>Manager</u>	Fund Incepted	Data Source
Mellon S&P 500	4/30/2003	Mellon	Insight	6/29/2017	Northern Trust
BlackRock Russell 1000 Growth	6/30/2010	BlackRock	Prime Property Fund	9/30/2015	Prime Property
Jackson Square	8/31/2006	Northern Trust	American Strategic Value Realty	12/31/2014	American Realty
BlackRock Russell 1000 Value	7/31/2009	BlackRock	BlackRock US Real Estate	9/30/2012	BlackRock
Dodge & Cox - Equity	12/31/1994	Northern Trust	Greenfield Gap	7/31/2014	Greenfield
Legato Capital	12/31/2008	Northern Trust	Invesco	2/29/2008	Mellon
Capital Prospects	12/31/2008	Northern Trust	Medley Capital	5/31/2013	Medley Capital
LSV Asset Mgt	8/31/2004	Northern Trust	Raven Capital	5/31/2013	Raven Capital
Pyramis	4/30/2006	Northern Trust	Raven Opportunity III	7/31/2015	Raven Capital
Dodge & Cox - Fixed	12/31/1994	Northern Trust	White Oak Pinnacle	8/31/2013	White Oak
PIMCO	5/31/2010	Northern Trust	MS Infrastructure	5/31/2015	Morgan Stanley

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% BBgBarc US 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

Cash Account includes cash held at Northern Trust for all closed end funds and cash held by BlackRock.

Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation.

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)].

Beachmark 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.

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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

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

September 26, 2017

Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: 2016-2017 Fiscal Year Auxiliary Investment Report

II. ITEM NUMBER: 6.a

III. ITEM TYPE: Information/Discussion

IV. STAFF RECOMMENDATION: None

V. ANALYSIS: Attachment 1 contains the 2016-2017 Fiscal Year Auxiliary Investment Report.

Value Added (pages 1 − 2)

StanCERA's non-alternative portfolio added approximately \$33 million in value relative to the passive benchmark. This contrasts sharply with the \$39 million in value lost in fiscal year 2015-2016. Dodge & Cox's Fixed Income and Equity accounts added the most value (\$14.3 and \$17.7 million, respectively) over the period. Capital Prospect's Pacific Ridge added approximately \$1.6 million on the small cap value side. All passive managers added modest value above the benchmark (as is ususally the case), due mainly to securities lending income and overlay. Internationally, LSV added \$8.7 million, while Fidelity lost \$3.0 million.

Investment Fee Summary (pages 3 – 5)

In total, StanCERA paid approximately \$9.6 million in fees (52.3 bps) to manage its entire portfolio. This amount includes all fees paid, including managerial, performance, custodial and other fee types associated with the alternatives. The amount does not include consultant fees or staff time. On a peer comparison basis (leaving out alternatives and custodial fees), StanCERA paid approximately 29 bps to manage its portfolio. Fees were dominated by the direct lending asset class totaling 332 bps (\$3.1 million) or 3.3% of the total direct lending portfolio. The Raven III and North Haven Infrastructure Fund accounted for the most fees on an individual basis, however, StanCERA is still in the investment period and is paying fees on total committed capital.

Alternative Auxiliary Reports

The alternative auxiliary reports display information on the direct lending, infrastructure, core real estate and value added real estate asset classes. Much of this information is a disclosre requirement of AB2833. All real estate investments show net internal rates of return in the 10% to 15% range, with investment multiples above \$1.2. Regarding the direct lending asset class, Raven I, Medley and White Oak show net internal rates of returns as of June 30, 2017 of 0.85%, 5.28% and 7.85% and investment multiples of \$1.02, \$1.18 and \$1.16, respectively.

Cash Flow Report

This report is self-explanatory. However of note, StanCERA paid \$113 million in retirement benefits and took in approximately \$88 million in employee and plan sponsor contributions in fiscal year 2016-2017.

Retirement Board – September 26, 2017 2016-2017 Fiscal Year Auxiliary Investment Report Page 2

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 Santos, Executive Director



Total StanCERA Value Added - Equities

StanCERA Value Added Analysis - Equities Fiscal Year to Date

7/1/2016

\$1,162,846,323

\$15,020,353

thru

6/30/2017

\$1,147,825,970 \$236,464,998 \$214,660,448

				Active	Domestic Equity					
		Portfolio Averages					Dollar Returns			
Mngr ID	Manager	Benchmark Index	Assets Managed	Uninvested Assets	Invested Assets	Manager	Benchmark	Excess	Fees	Value Added
1	Dodge Cox Equity	Russell 1000 Value	\$189,752,986	\$5,543,530	\$184,209,456	\$45,826,833	\$27,732,224	\$18,094,609	\$375,661	\$17,718,948
7	Jackson Square	Russell 1000 Growth	\$130,778,990	\$1,617,571	\$129,161,419	\$22,269,833	\$24,574,605	-\$2,304,772	\$624,231	-\$2,929,004
19	AMI	Russell 2000 Growth	\$20,425,183	\$524,873	\$19,900,310	\$3,112,182	\$4,665,213	-\$1,553,031	\$164,534	-\$1,717,565
20	CastleArk	Russell 2000 Growth	\$12,719,185	\$138,271	\$12,580,914	\$2,514,658	\$3,128,194	-\$613,535	\$112,641	-\$726,176
21	Lee Munder	Russell 2000 Growth	\$12,894,308	\$378,889	\$12,515,418	\$2,527,801	\$3,198,505	-\$670,704	\$114,131	-\$784,835
22	Rice Hall	Russell 2000 Growth	\$26,071,871	\$393,357	\$25,678,514	\$6,659,916	\$5,729,813	\$930,103	\$211,905	\$718,198
25	Channing	Russell 2000 Value	\$21,782,558	\$487,113	\$21,295,445	\$4,360,748	\$4,942,538	-\$581,790	\$167,834	-\$749,624
26	Inview	Russell 2000 Value	\$21,183,410	\$931,927	\$20,251,483	\$4,615,621	\$4,786,597	-\$170,976	\$159,061	-\$330,037
27	Keeley	Russell 2000 Value	\$11,959,074	\$298,646	\$11,660,428	\$1,900,677	\$2,743,895	-\$843,218	\$93,152	-\$936,371
28	Pacific Ridge	Russell Micro Cap Value	\$16,332,216	\$394,813	\$15,937,403	\$6,143,500	\$4,378,768	\$1,764,731	\$153,372	\$1,611,360
29	Walthausen	Russell 2000 Value	\$12,828,019	\$873,346	\$11,954,673	\$3,195,442	\$2,888,404	\$307,037	\$101,708	\$205,330
4	Bernzott	Russell 2000 Value	\$12,662,973	\$649,400	\$12,013,572	\$2,337,148	\$2,831,076	-\$493,928	\$97,800	-\$591,727
Total Activ	e Domestic Equity		\$489,390,773	\$12,231,737	\$477,159,037	\$105,464,358	\$91,599,833	\$13,864,526	\$2,376,031	\$11,488,495
					Domestic Equity					
				Portfolio Averages			Dollar Returns			
Mngr ID	Manager	Benchmark Index	Assets Managed	Uninvested Assets	Invested Assets	<u>Manager</u>	<u>Benchmark</u>	Excess	Fees	Value Added
11	Blackrock Value	Russeli 1000 Value	\$110,487,919	-\$20	\$110,487,939	\$16,213,905	\$16,140,854	\$73,050	\$25,926	\$47,125
12	Blackrock Growth	Russell 1000 Growth	\$93,282,916	-\$42	\$93,282,958	\$17,825,782	\$17,758,089	\$67,693	\$22,230	\$45,463
14	BNYM S&P	S&P 500	\$94,128,188	\$92	\$94,128,096	\$15,813,968	\$15,724,956	\$89,012	\$36,976	\$52,036
Total Passi	ve Domestic Equity		\$297,899,023	\$29	\$297,898,994	\$49,853,655	\$49,623,899	\$229,755	\$85,131	\$144,624
					national Equity					
				Portfolio Averages			Dollar Returns			
Mngr ID	<u>Manager</u>	Benchmark Index	Assets Managed	Uninvested Assets	Invested Assets	<u>Manager</u>	<u>Benchmark</u>	Excess	Fees	Value Added
8	LSV	MSCI ACWI ex USA GD	\$188,635,092	\$1,398,020	\$187,237,072	\$46,902,704	\$36,931,892	\$9,970,812	\$1,178,404	\$8,792,408
10	Fidelity	MSCI ACWI ex USA GD	\$186,921,435	\$1,390,567	\$185,530,868	\$34,244,281	\$36,504,824	-\$2,260,543	\$643,100	-\$2,903,643
Total Inter	national Equity	s ·	\$375,556,527	\$2,788,587	\$372,767,940	\$81,146,985	\$73,436,716	\$7,710,269	\$1,821,504	\$5,888,765

\$17,521,884

\$21,804,550 **\$4,282,666**



StanCERA Value Added Analysis - Fixed Income

7/1/2016

thru

6/30/2017

Domestic Fixed Income

				Portfolio Average	S	7	Dollar Returns			
Mngr_ID	Manager	Benchmark Index	Assets Managed	Uninvested Assets	Invested Assets	<u>Manager</u>	<u>Benchmark</u>	Excess	Fees	Value Added
2	PIMCO	BB Barclays U.S. Aggregate	\$116,132,588	\$363,681	\$115,768,907	\$1,249,255	-\$311,690	\$1,560,945	\$394,557	\$1,166,387
9	Dodge Cox Fixed Income	BB Barclays U.S. Aggregate	\$392,783,457	\$10,021,961	\$382,761,496	\$13,239,988	-\$1,471,339	\$14,711,327	\$456,078	\$14,255,248
Total StanC	CERA Value Added - Fix	ked Income	\$508,916,045	\$10,385,642	\$498,530,403	\$14,489,243	-\$1,783,029	\$16,272,272	\$850,636	\$15,421,636

StanCERA Value Added Analysis - Total Equities and Fixed Income

7/1/2016

thru

6/30/2017

		Portfolio Averages			Dollar Returns			
	Assets Managed	Uninvested Assets	Invested Assets	<u>Manager</u>	<u>Benchmark</u>	Excess	Fees	Value Added
Total StanCERA Value Added - Equities and Fixed Income	\$1,671,762,369	\$25,405,995	\$1,646,356,373	\$250,954,241	\$212,877,419	\$38,076,822	\$5,133,302	\$32,943,520

StanCERA Investment Fee Summary - Total Portfolio Level

STANCERA			Fiscal	Year to Date	,						
1			7/1/2016	thru	6/30/2017						
			Fee	s In Dollars				Annualized Fees	in Basis	Points	
	Average AUM	Managerial	<u>Performance</u>	<u>Other</u>	<u>Custodial</u>	<u>Total</u>	<u>Managerial</u>	<u>Performance</u>	<u>Other</u>	<u>Custodial</u>	<u>Total</u>
Total StanCERA Portfolio	\$1,858,777,434	\$7,284,083	\$1,175,765	\$894,786	\$338,391	\$9,693,024	39.3	6.3	4.8	1.8	52.3
Fees By Asset Class											
	Average AUM	Managerial	<u>Performance</u>	Other	Custodial	<u>Total</u>	Managerial	<u>Performance</u>	Other	Custodial	Total
Domestic Equity	\$789,574,048	\$2,347,358	\$0	\$0	\$127,981	\$2,475,339	29.8	0.0	0.0	1.6	31.5
Domestic Fixed Income	\$508,916,045	\$819,446	\$0	\$0	\$31,190	\$850,636	16.2	0.0	0.0	0.6	16.8
International Equity	\$375,556,527	\$942,145	\$721,927	\$0	\$157,432	\$1,821,504	25.2	19.3	0.0	4.2	48.7
Alternatives	\$93,472,689	\$1,851,453	\$435,177	\$793,086	\$9,767	\$3,089,483	198.8	46.7	85.1	1.0	331.7
Real Assets	\$91,258,125	\$1,323,681	\$18,661	\$101,700	\$12,021	\$1,456,063	145.5	2.1	11.2	1.3	160.1
Fees By Investment Discretion											
	Average AUM	Managerial	<u>Performance</u>	<u>Other</u>	<u>Custodial</u>	<u>Total</u>	<u>Managerial</u>	<u>Performance</u>	<u>Other</u>	Custodial	<u>Total</u>
Active	\$1,530,106,582	\$7,181,444	\$1,175,765	\$894,786	\$325,119	\$9,577,114	47.1	7.7	5.9	2.1	62.8
Passive	\$328,670,853	\$102,639	\$0	\$0	\$13,271	\$115,910	3.1	0.0	0.0	0.4	3.5
					Fees By Inve	estment Style					
	Average AUM	Managerial	Performance	Other	Custodial	Total	Managerial	Performance	Other	Custodial	<u>Total</u>
Large Cap Value	\$300,240,905	\$385,021	\$0	\$0	\$16,566	\$401,587	12.9	0.0	0.0	0.6	13.4
Small Cap Value	\$96,748,250	\$732,274	\$0	\$0	\$40,653	\$772,927	75.9	0.0	0.0	4.2	80.2
Large Cap Growth	\$224,061,906	\$630,854	\$0	\$0	\$15,607	\$646,461	28.3	0.0	0.0	0.7	29.0
Small Cap Growth	\$74,394,799	\$565,747	\$0	\$0	\$51,641	\$617,388	76.3	0.0	0.0	7.0	83.3
Core Fixed Income	\$508,916,045	\$819,446	\$0	\$0	\$31,190	\$850,636	16.2	0.0	0.0	0.6	16.8
Value Added Real Estate	\$48,920,285	\$592,286	\$18,661	\$0	\$7,035	\$617,983	121.5	3.8	0.0	1.4	126.8
Core Real Estate	\$30,771,830	\$28,141	\$0	\$0	\$2,638	\$30,779	9.2	0.0	0.0	0.9	10.0
Private Credit	\$93,472,689	\$1,851,453	\$435,177	\$793,086	\$9,767	\$3,089,483	198.8	46.7	85.1	1.0	331.7
Infrastructure	\$11,566,011	\$703,254	\$0	\$101,700	\$2,347	\$807,301	610.1	0.0	88.2	2.0	700.4
Domestic Core Equity	\$94,128,188	\$33,462	\$0	\$0	\$3,514	\$36,976	3.6	0.0	0.0	0.4	3.9
International Core Equity	\$375,556,527	\$942,145	\$721,927	\$0	\$157,432	\$1,821,504	25.2	19.3	0.0	4.2	48.7



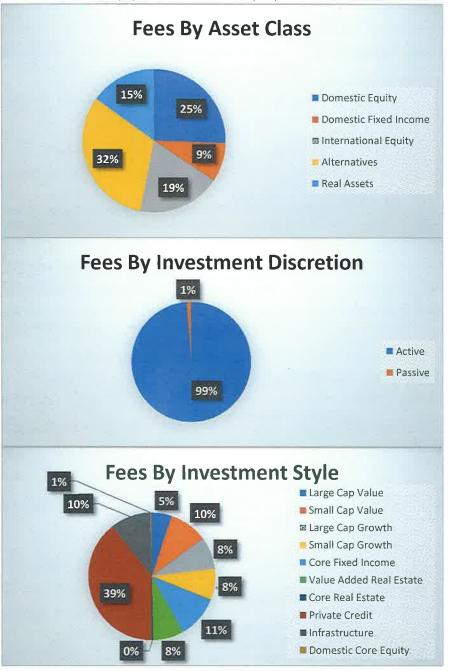
Investment Fees By Type

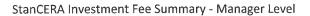
7/1/2016 thru 6/30/2017

Asset Class	<u>Fees</u>
Domestic Equity	\$2,475,339
Domestic Fixed Income	\$850,636
International Equity	\$1,821,504
Alternatives	\$3,089,483
Real Assets	\$1,456,063
Total	\$9,693,024

Investment Discretion	<u>Fees</u>
Active	\$9,577,114
Passive	<u>\$115,910</u>
Total	\$9,693,024

<u>Investment Style</u>	<u>Fees</u>
Large Cap Value	\$401,587
Small Cap Value	\$772,927
Large Cap Growth	\$646,461
Small Cap Growth	\$617,388
Core Fixed Income	\$850,636
Value Added Real Estate	\$617,983
Core Real Estate	\$30,779
Private Credit	\$3,089,483
Infrastructure	\$807,301
Domestic Core Equity	\$36,976
International Core Equity	\$1,821,504
Total	\$9,693,024





STANCERA

7/1/2016 thru 6/30/2017

			Fees in Dollars			Fees in Annualized Basis Points						
Mngr_ID	Manager Name	Average AUM	<u>Management</u>	<u>Performance</u>	Other	Custodial	Total	<u>Management</u>	<u>Performance</u>	<u>Other</u>	Custodial	<u>Total</u>
1	Dodge Cox Equity	\$189,752,986	\$362,775	\$0	\$0	\$12,886	\$375,661	19.2	0.0	0.0	0.7	19.9
2	PIMCO	\$116,132,588	\$384,153	\$0	\$0	\$10,405	\$394,557	33.2	0.0	0.0	0.9	34.1
4	Bernzott	\$12,662,973	\$92,570	\$0	\$0	\$5,229	\$97,800	73.4	0.0	0.0	4.1	77.5
5	Eudaimonia	\$2,284,251	\$7,553	\$0	\$0	\$6,624	\$14,177	33.2	0.0	0.0	29.1	62.3
7	Jackson Square	\$130,778,990	\$612,063	\$0	\$0	\$12,168	\$624,231	47.0	0.0	0.0	0.9	47.9
8	LSV	\$188,635,092	\$472,104	\$606,034	\$0	\$100,266	\$1,178,404	25.1	32.2	0.0	5.3	62.7
9	Dodge Cox Fixed Income	\$392,783,457	\$435,293	\$0	\$0	\$20,785	\$456,078	11.1	0.0	0.0	0.5	11.7
10	Fidelity	\$186,921,435	\$470,041	\$115,893	\$0	\$57,166	\$643,100	25.2	6.2	0.0	3.1	34.5
11	Blackrock Value	\$110,487,919	\$22,245	\$0	\$0	\$3,680	\$25,926	2.0	0.0	0.0	0.3	2.4
12	Blackrock Growth	\$93,282,916	\$18,791	\$0	\$0	\$3,439	\$22,230	2.0	0.0	0.0	0.4	2.4
13	Raven Asset-Based Opportunity Fund I L.P.	\$18,138,820	\$330,988	\$0	\$283,829	\$2,998	\$617,815	183.1	0.0	157.0	1.7	341.8
14	BNYM S&P	\$94,128,188	\$33,462	\$0	\$0	\$3,514	\$36,976	3.6	0.0	0.0	0.4	3.9
15	White Oak Pinnacle Fund L.P.	\$36,784,020	\$381,104	\$434,902	\$87,845	\$2,604	\$906,454	104.0	118.6	24.0	0.7	247.3
16	Medley Opportunity Fund II L.P.	\$25,260,914	\$265,567	\$275	\$142,245	\$2,440	\$410,527	105.5	0.1	56.5	1.0	163.1
17	Blackrock US Real Estate	\$30,771,830	\$28,141	\$0	\$0	\$2,638	\$30,779	9.2	0.0	0.0	0.9	10.0
18	Greenfield GAP VII Management Fund, L.L.C	\$13,188,352	\$225,000	\$0	\$0	\$2,302	\$227,302	171.2	0.0	0.0	1.8	172.9
19	AMI	\$20,425,183	\$158,237	\$0	\$0	\$6,298	\$164,534	77.7	0.0	0.0	3.1	80.8
20	CastleArk	\$12,719,185	\$97,235	\$0	\$0	\$15,406	\$112,641	76.7	0.0	0.0	12.2	88.9
21	Lee Munder	\$12,894,308	\$98,149	\$0	\$0	\$15,982	\$114,131	76.4	0.0	0.0	12.4	88.8
22	Rice Hall	\$26,071,871	\$204,574	\$0	\$0	\$7,331	\$211,905	78.7	0.0	0.0	2.8	81.6
25	Channing	\$21,782,558	\$159,732	\$0	\$0	\$8,102	\$167,834	73.6	0.0	0.0	3.7	77.3
26	Inview	\$21,183,410	\$153,633	\$0	\$0	\$5,429	\$159,061	72.8	0.0	0.0	2.6	75.3
27	Keeley	\$11,959,074	\$87,527	\$0	\$0	\$5,625	\$93,152	73.4	0.0	0.0	4.7	78.2
28	Pacific Ridge	\$16,332,216	\$144,673	\$0	\$0	\$8,699	\$153,372	88.9	0.0	0.0	5.3	94.2
29	Walthausen	\$12,828,019	\$94,138	\$0	\$0	\$7,569	\$101,708	73.6	0.0	0.0	5.9	79.6
30	Morgan Stanley Prime Property Fund, L.L.C	\$16,912,759	\$140,131	\$18,661	\$0	\$2,343	\$161,135	83.1	11.1	0.0	1.4	95.6
31	American Realty Advisors Fund	\$18,819,173	\$227,155	\$0	\$0	\$2,390	\$229,545	121.1	0.0	0.0	1.3	122.4
32	North Haven Infrastructure II GP LP	\$11,566,011	\$703,254	\$0	\$101,700	\$2,347	\$807,301	610.1	0.0	88.2	2.0	700.4
33	Raven Asset-Based Opportunity Fund III L.P.	\$13,288,936	\$873,794	\$0	\$279,167	\$1,726	\$1,154,687	659.8	0.0	210.8	1.3	871.9
Total		\$1,858,777,434	\$7,284,083	\$1,175,765	\$894,786	\$338,391	\$9,693,024	39.3	6.3	4.8	1.8	52.3

American Realty Advisors Fund Auxiliary Reporting as of 6/30/2017



Original Commitment:	\$30,000,000
Investment Start Date:	12/15/2014
Commitment Period End Date:	Open End
Total Paid In Capital:	\$20,571,700
Total Distributed Capital:	\$2,029,728
Current Capital Balance:	\$22,166,437
Management Fee:	1.20%
Carried Interest:	20.0%
Hurdle Rate:	10.0%
Target Net Returns:	11% - 13%
Max. Potential Fees Paid on Uncommitted Capital:	Only on Invested Capital
Vintage Year:	2009

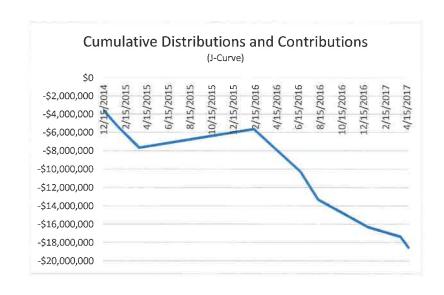
Performance Measurements Since Inception

Net IRR Since Investment Start Date:	13.43%
Investment Multiple (TVPI):	\$1.18
Realization Multiple (DPI):	\$0.10
Residual Value Paid In Multiple (RVPI):	\$1.08
Paid In Capital Multiple (PIC):	68.6%

Fee Analysis Since Inception

<u>Fee Type</u>	<u>Fee</u>
Offering Costs	\$54
Management Fee	\$382,685

Total Fees \$382,739





Greenfield GAP VII Management Fund, L.L.C Auxiliary Reporting as of 6/30/2017



Original Commitment:	\$15,000,000
Investment Start Date:	7/8/2014
Commitment Period End Date:	12/1/2017
Total Paid In Capital:	\$14,699,505
Total Distributed Capital:	\$4,926,871
Current Capital Balance:	\$13,769,010
Management Fee:	1.50%
Carried Interest:	20.0%
Hurdle Rate:	8.0%
Target Net Returns:	13.0%
Max. Potential Fees Paid on Uncommitted Capital:	\$1,900
Vintage Year:	2011

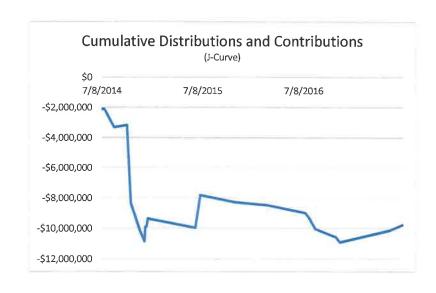
Performance Measurements Since Inception

Net IRR Since Investment Start Date:	13.80%
Investment Multiple (TVPI):	\$1.27
Realization Multiple (DPI):	\$0.34
Residual Value Paid In Multiple (RVPI):	\$0.94
Paid In Capital Multiple (PIC):	98.0%

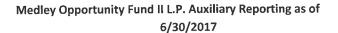
Fee Analysis Since Inception

<u>Fee Type</u>	<u>Fee</u>
Management Fee	\$796,747

Total Fees \$796,747









Original Commitment:	\$30,000,000
Investment Start Date:	5/16/2013
Commitment Period End Date:	Period Over
Total Paid In Capital:	\$33,346,007
Total Distributed Capital:	\$15,774,893
Current Capital Balance:	\$23,423,544
Management Fee:	1.50%
Carried Interest:	20.0%
Hurdle Rate:	8.0%
Target Net Returns:	13.6% - 16%
Vintage Year:	2011

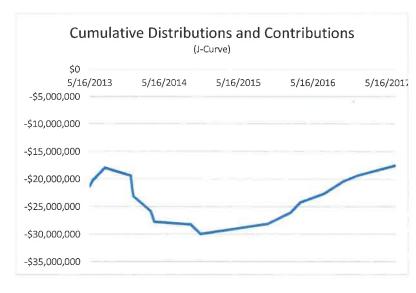
Performance Measurements Since Inception

Net IRR Since Investment Start Date:	5.28%
Investment Multiple (TVPI):	\$1.18
Realization Multiple (DPI):	\$0.47
Residual Value Paid In Multiple (RVPI):	\$0.70
Paid In Capital Multiple (PIC):	1.11

Fee Analysis Since Inception

<u>Fee Type</u>	<u>Fee</u>
Management Fee	\$2,079,871
Partnership Operations	\$480,355
Incentive Allocation	\$273
Other Expense	\$252,518

Total Fees	\$2,813,017





North Haven Infrastructure II GP LP Auxiliary Reporting as of 6/30/2017



Original Commitment:	\$50,000,000
Investment Start Date:	5/19/2015
Commitment Period End Date:	9/1/2019
Total Paid In Capital:	\$21,934,339
Total Distributed Capital:	\$2,989,515
Current Capital Balance:	\$19,932,000
Management Fee:	1.35%
Incentive Allocation:	20.0%
Hurdle Rate:	8.0%
Target Net Returns:	10.5% - 13.5%
Max. Potential Fees Paid on Uncommitted Capital:	\$822,606
Vintage Year:	2015

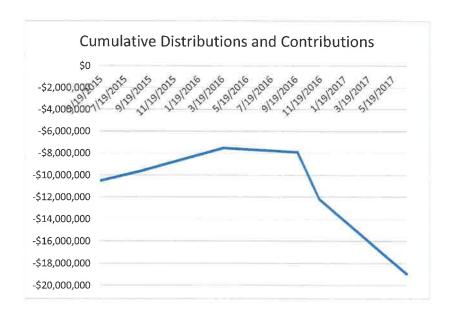
Performance Measurements Since Inception

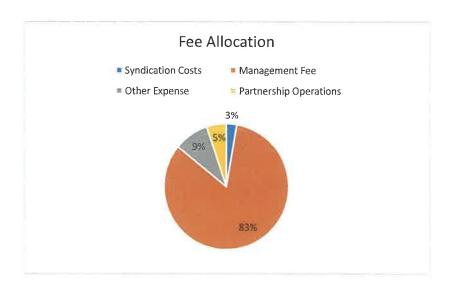
Net IRR Since Investment Start Date:	4.58%
Investment Multiple (TVPI):	\$1.05
Realization Multiple (DPI):	\$0.14
Residual Value Paid In Multiple (RVPI):	\$0.91
Paid In Capital Multiple (PIC):	43.9%

Fee Analysis Since Inception

<u>Fee Type</u>	<u>Fee</u>
Syndication Costs	\$65,425
Management Fee	\$2,015,574
Other Expense	\$218,614
Partnership Operations	\$123,499

Total Fees	\$2,423,112
Total Lees	72,423,112







Morgan Stanley Prime Property Fund, L.L.C Auxiliary Reporting as of 6/30/2017

Original Commitment:	\$15,000,000
Investment Start Date:	10/1/2015
Commitment Period End Date:	Open End
Total Paid In Capital:	\$15,000,000
Total Distributed Capital:	\$0
Current Capital Balance:	\$17,599,725
Management Fee:	0.84%
Incentive Allocation:	Max 0.35%
Hurdle Rate:	Formula Based
Target Net Returns:	7.8%
Max. Potential Fees Paid on Uncommitted Capital:	N/A
Vintage Year:	1973

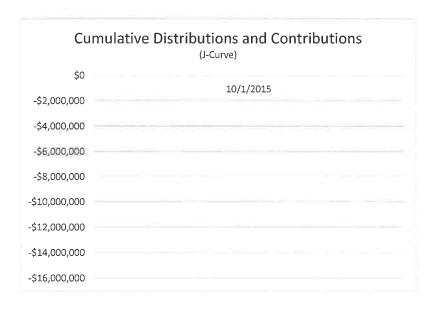
Performance Measurements Since Inception

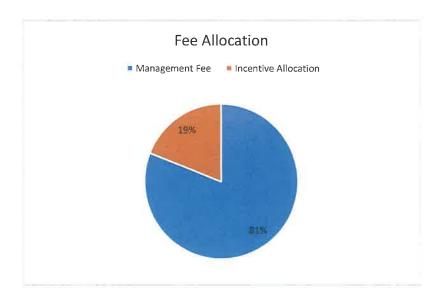
Net IRR Since Investment Start Date:	9.58%
Investment Multiple (TVPI):	\$1.17
Realization Multiple (DPI):	\$0.00
Residual Value Paid In Multiple (RVPI):	\$1.17
Paid In Capital Multiple (PIC):	100.0%

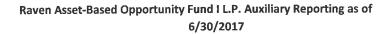
Fee Analysis Since Inception

Fee Type	<u>Fee</u>
Management Fee	\$237,188
Incentive Allocation	\$55,625

Total Fees \$292,814









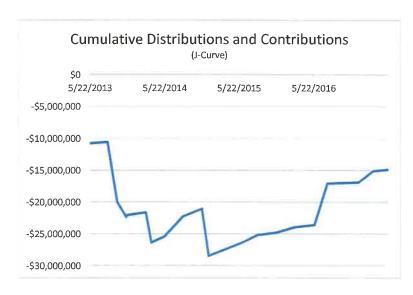
Original Commitment:	\$40,000,000
Investment Start Date:	5/22/2013
Commitment Period End Date:	Period Over
Total Paid In Capital:	\$34,668,305
Total Distributed Capital:	\$19,789,319
Current Capital Balance:	\$15,643,963
Management Fee:	1.75%
Carried Interest:	12.5%
Hurdle Rate:	8.0%
Target Net Returns:	13% - 17%
Vintage Year:	2012

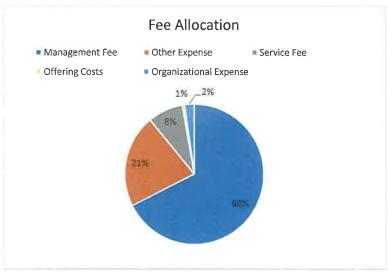
Performance Measurements Since Inception

Net IRR Since Investment Start Date:	0.85%
Investment Multiple (TVPI):	\$1.02
Realization Multiple (DPI):	\$0.57
Residual Value Paid In Multiple (RVPI):	\$0.45
Paid In Capital Multiple (PIC):	0.87

Fee Analysis Since Inception

ree Analysis Since inception	
Fee Type	<u>Fee</u>
Management Fee	\$2,800,982
Other Expense	\$892,909
Service Fee	\$339,601
Offering Costs	\$22,211
Organizational Expense	\$92,275
Total Fees	\$4,147,978







Raven Asset-Based Opportunity Fund III L.P. Auxiliary Reporting as of 6/30/2017

Original Commitment:	\$50,000,000
Investment Start Date:	7/6/2015
Commitment Period End Date:	9/1/2019
Total Paid In Capital:	\$24,440,684
Total Distributed Capital:	\$4,836,320
Current Capital Balance:	\$18,059,272
Management Fee:	1.75%
Carried Interest:	15.0%
Hurdle Rate:	8.0%
Target Net Returns:	15.0%
Max. Potential Fees Paid on Uncommitted Capital:	\$1,899,726
Vintage Year:	2015

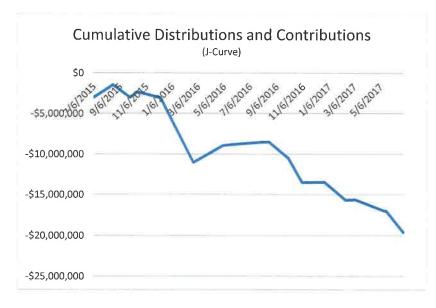
Performance Measurements Since Inception

Net IRR Since Investment Start Date:	-8.67%
Investment Multiple (TVPI):	\$0.94
Realization Multiple (DPI):	\$0.20
Residual Value Paid In Multiple (RVPI):	\$0.74
Paid In Capital Multiple (PIC):	0.49

Fee Analysis Since Inception

<u>Fee Type</u>	<u>Fee</u>
Management Fee	\$1,754,794
Other Expense	\$508,546
Organizational Expense	\$4,341

Total Fees \$2,267,681





White Oak Pinnacle Fund L.P. Auxiliary Reporting as of 6/30/2017



Original Commitment:	\$40,000,000
Investment Start Date:	8/2/2013
Commitment Period End Date:	Period Over
Total Paid In Capital:	\$55,317,719
Total Distributed Capital:	\$28,425,868
Current Capital Balance:	\$35,694,100
Management Fee:	1.50%
Carried Interest:	20.0%
Hurdle Rate:	7.5%
Target Net Returns:	12.0%
Vintage Year:	2012

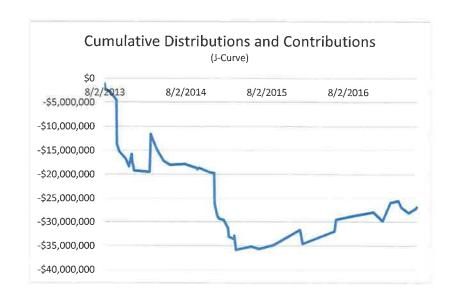
Performance Measurements Since Inception

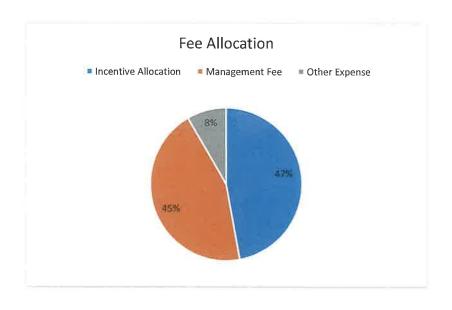
Net IRR Since Investment Start Date:	7.85%
Investment Multiple (TVPI):	\$1.16
Realization Multiple (DPI):	\$0.51
Residual Value Paid In Multiple (RVPI):	\$0.65
Paid In Capital Multiple (PIC):	1.38

Fee Analysis Since Inception

<u>Fee Type</u>	<u>Fee</u>
Incentive Allocation	\$2,200,564
Management Fee	\$2,078,145
Other Expense	\$391,093

Total Fees \$4,669,802







Cash Flow Report

July 2016 through June 2017

Beginning Cash Balance*	\$10,025,135
Cash Flow In	
Sales of Investments	\$34,150,000
Plan Sponsor Contributions	\$62,698,413
Employee Contributions	\$25,062,146
Employee Buybacks	\$135,421
Interest Income	\$0
Rental Income	\$52,343
Commission Recapture	\$0
Litigation Recovery	<u>\$0</u>
Total Cash Flow In	\$122,098,323
Cash Flow Out	
Retirement Benefits	\$113,149,642
StanCERA Payroll	\$1,511,850
Operations Expense	\$714,286
Pension Software	\$681,599
Fixed Asset Purchases	\$103,149
Member Refunds	\$2,216,068
Post Retirement Death Benefits	\$314,271
Burial Allowances	\$320,000
Retiree Death - Return of Contributions	\$196,450
Investment Consultant Fees	\$283,849
Actuarial Fees	\$150,946
Custodial Fees	\$431,856
Audit Fees	\$50,186
Legal Fees	\$403,843
Other Fees	<u>\$24,907</u>
Total Cash Flow Out	\$120,552,901
Ending Cash Balance	\$11,570,557
Change in Cash Balance	\$1,545,422

^{*} Prior end balances may not always equal current beginning balance due to subsequent refinement of data

Stanislaus County Employees' Retirement Association



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September 26, 2017

Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: Functionally Focused Portfolio (FFP) Update

II. ITEM NUMBER: 6.b.

III. ITEM TYPE: Information/Discussion

IV. STAFF RECOMMENDATION: None

V. ANALYSIS: On July 1st, StanCERA funded its Functionally Focused Portfolio. The portfolio invests in high grade corporate and treasury bonds that throw off specificed amounts of cash at the end of each month to cover the Organizational shortfalls. Shortfalls are defined as benefit payments plus administrative expenses, less employer and employee contributions. Currently, \$100 million is invested in this strategy of which \$83.5 million cash flow matches the next 7 years of Organizational shortfalls and the rest is invested in a duration-matched portfolio covering the year 8 shortfall (this amount will most likely be used next year to replenish the shortfalls paid out this year).

In late July, the fund received its first shortfall payment from Insight Investments. This amount along with employer and employee contributions received in July funded August benefit payments and administrative expenses. As the program evolves over the next several months and staff is able to gather data on actual administrative expenses paid, the value of the program can be readily determined. The following charts are as of August 31, 2017 and give information on the 7-year shortfall portfolio:

Asset Allocation Exposure		
CASH	1%	783,162
CORPORATE	90%	74,776,583
TRSY/AGCY	9%	7,912,669
TOTAL	100%	83,472,414

Ra	atings Expo	osure
AAA	17%	13,853,284
AA	20%	16,667,419
Α	49%	40,878,035
BBB	14%	11,290,514
CASH	1%	783,162
TOTAL	100%	83,472,414
Portfolio Average		A1

Corporate Subsector Exposure					
Energy	8%	6,798,561			
Industrials	8%	6,620,622			
Consumer Non-Cyclical	13%	10,514,618			
TMT	10%	8,475,978			
Utilities	14%	12,043,919			
Financials	30%	24,765,926			
Consumer Cylical	7%	5,556,959			
TRSY/AGCY	9%	7,912,669			
Cash	1%	783,162			
TOTAL	100%	83,472,414			

- 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:

Rick Santos, Executive Director

Natalie Elliott, Interim Fiscal Services Manager



Stanislaus County Employees' Retirement Association

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September 26, 2017

Retirement Board Agenda Item

TO: Retirement Board

FROM: Kellie Gomes, Executive Board Secretary

I. SUBJECT: 2017 Due Diligence Trip Summary

II. ITEM NUMBER: 6.c.

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS:

On August 24, 2017 Trustee O'Neal along with Rick Santos, Executive Director and Kellie Gomes, Executive Board Secretary traveled to ARA/American Reality in Los Angles, Ca Below is a summary of the visit.

The Committee met with ARA | American Realty Advisors at their new location at 515 S Flower St, 49th Floor, Los Angeles, California. We were met by Jay Butterfield, Executive Managing Director who facilitated our visit. We were joined by several of the firms Leadership Team including the Chairman and Chief Executive Officer, Stanley lezman and Kirk Helgeson, Chief Investment Officer as well as others Senior Management . We started our day with a firm update and tour of the new building. An overview of the assets under mangagement and growth was provided. We gained an overview of the investment committee, management structure and over sight as well as Risk Management and Fiduciary Responsibilities, Chris Macke, Managing Director, Research & Stratagem provided an out look on the current market. There was discussion which provided detailed insight on the Core and Value Add strategies and the process used to select investment property as well as insight on the strategies that are implemented to manage these types of investments. Active asset management is a critical role in the Value Add Strategy funds. We were given several case study's that that demonstrated how the investment philosophy is put to work as well as the due diligence that goes into the management of an investment. Our team was very pleased with the knowledge we gained on our current investments as well as the potenial for future investmentswith ARA. The level of transparency and insight was appreciated by our team.

Fund Metrics as of June 30, 2017

Investment Start date: 12/15/2014

Total Paid in Capital: \$20,571,700 Total Distributed Capital: \$2,029,728 Current Capital Balance: \$22,166,437

Net IRR Since Investment Start Date: 13.43% Investment Multiple (TVPI): \$1.18

Conclusion:

The Committee feels that there are no reasons to question whether StanCERA would again reinvest with this firm today and in the future.

Retirement Board – September 26, 2017 2017 Due Diligence Trip Summary Page 2

VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective I: Invest StanCERA assets in such a way that efficiently maximizes the ability to meet current and future benefit obligations while balancing the need for contribution stability and sustainability

VIII. ADMINISTRATIVE BUDGET IMPACT: None

Kellie Gomes, Executive Board Assistant

Rick Santos, Executive Director

StanCERA Investment Program 12-Month Workplan

	Time
September, 2017	0:35
Flash report and 12-month workplan	0:05
Real Estate education; launch search(es)	0:30
October, 2017	0:35
Flash report and 12-month workplan	0:05
Private markets 2nd session	0:30
November, 2017	1:05
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30
Present search for Real Estate mandate(s)	0:30
December, 2017	0:35
Flash report and 12-month workplan	0:05
Private markets continuation	0:30
January, 2018	1:05
Flash report and 12-month workplan	0:05
Finalists for Real Estate mandate(s)	1:00
February, 2018	1:05
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30
Private markets final	0:30
March, 2018	0:25
Flash report and 12-month workplan	0:05
Annual review of FFP with updated capital market assumptions	0:20
April, 2018	1:05
Flash report and 12-month workplan	0:05
Cash overlay education and search authorization	0:30
Annual review of IPS and updated asset allocation table	0:30
May, 2018	1:05
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30
Transition management education and search authorization	0:30



StanCERA Investment Program 12-Month Workplan

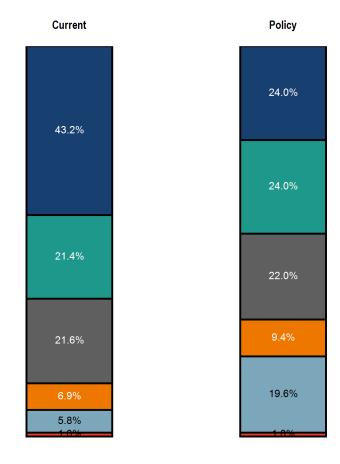
	Time
June, 2018	0:35
Flash report and 12-month workplan	0:05
Cash overlay search presentation & selection	0:30
July, 2018	0:35
Flash report and 12-month workplan	0:05
Transition management search presentation & selection	0:30
August, 2018	0:35
Flash report and 12-month workplan	0:05
Quarterly investment performance report	0:30

Total Fund Flash Report (Net of Fees) - Preliminary

Period Ending: August 31, 2017

	Market Value	% of Portfolio	1 Mo	YTD	Fiscal YTD
Total Fund	2,010,803,211	100.0	0.0	9.4	1.7
Policy Index			0.3	9.0	2.1
US Equity	869,265,757	43.2	-0.3	10.4	1.6
US Equity Blended			0.0	10.3	1.7
Russell 3000			0.2	11.2	2.1
Northern Trust Russell 1000	30,000,753	1.5			
Russell 1000					
Mellon S&P 500	88,274,509	4.4	0.3	11.9	2.3
S&P 500			0.3	11.9	2.4
BlackRock Russell 1000 Growth	107,339,527	5.3	1.8	19.2	4.5
Russell 1000 Growth			1.8	19.2	4.5
Jackson Square	151,738,508	7.5	2.0	21.8	6.4
Russell 1000 Growth			1.8	19.2	4.5
BlackRock Russell 1000 Value	117,654,683	5.9	-1.1	4.9	0.2
Russell 1000 Value			-1.2	4.8	0.1
Dodge & Cox-Equity	208,293,380	10.4	-1.1	7.5	0.7
Russell 1000 Value			-1.2	4.8	0.1
Legato Capital	61,762,081	3.1	-3.8	5.3	-4.0
Russell 2000 Growth			-0.1	10.8	0.7
Capital Prospects	104,202,317	5.2	-0.6	3.1	-0.4
Russell 2000 Value			-2.5	-1.3	-1.8
International Equity	431,213,865	21.4	0.1	18.5	3.2
MSCI ACWI ex USA Gross			0.5	19.4	4.3
LSV Asset Mgt	219,173,321	10.9	0.4	18.8	3.8
MSCI ACWI ex USA Gross			0.5	19.4	4.3
Fidelity	212,040,544	10.5	-0.2	18.1	2.6
MSCI ACWI ex USA Gross			0.5	19.4	4.3
US Fixed Income	435,292,651	21.6	0.5	4.1	1.2
BBgBarc US Aggregate TR			0.9	3.6	1.3
Dodge & Cox-Fixed	744,418	0.0	14.6	19.9	16.4
BBgBarc US Aggregate TR			0.9	3.6	1.3
PIMCO	386,050	0.0	-0.5	2.2	-0.1
BBgBarc US Aggregate TR			0.9	3.6	1.3
Insight	97,112,729	4.8	0.4		0.7
BBgBarc US Govt/Credit 1-5 Yr. TR			0.3		0.7

	Current	%	Policy	%
Domestic Equity	\$869,265,757	43.2%	\$482,592,771	24.0%
International Equity	\$431,213,865	21.4%	\$482,592,771	24.0%
Domestic Fixed Income	\$435,292,651	21.6%	\$442,376,706	22.0%
Real Estate	\$138,069,600	6.9%	\$189,015,502	9.4%
Alternatives	\$116,706,268	5.8%	\$394,117,429	19.6%
Cash and Equivalents	\$20,255,070	1.0%	\$20,108,032	1.0%
Total	\$2,010,803,211	100.0%	\$2,010,803,211	100.0%

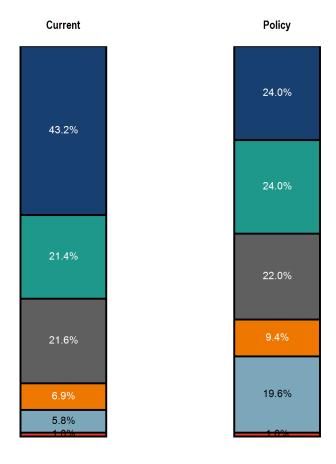


Policy Index (7/1/2017): 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 3% BBgBarc US Treasury 7-10 Yr, 7.7% NCREIF Property, 1.7% NCREIF Property +2%, 0.6% CPI +5%, 5% BBgBarc US High Yield +2%, 14% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 1% Citi 1 Month T-Bills. All data is preliminary.



	Market Value	% of Portfolio	1 Mo	YTD	Fiscal YTD
DFA	277,865,569	13.8	0.3		
BofA Merrill Lynch US Corp & Gov 1-5 Yrs			0.3		
Northern Trust Intermediate Gov't Bond	44,032,290	2.2	0.6		
BBgBarc US Govt/Credit Int TR			0.6		
Northern Trust Long Term Gov't Bond	15,151,596	0.8	3.4		
BBgBarc US Govt/Credit Long TR			2.2		
Real Estate	138,069,600	6.9	-0.5	4.7	0.9
DJ US Select RESI			-0.8	1.5	0.1
Prime Property Fund	17,599,725	0.9	0.0	4.2	0.0
NCREIF-ODCE			0.0	3.5	0.0
American Strategic Value Realty	22,166,437	1.1	0.0	5.3	0.0
NCREIF Property Index			0.0	3.3	0.0
BlackRock US Real Estate	84,769,756	4.2	-0.8	1.4	0.1
DJ US Select RESI TR USD			-0.8	1.5	0.1
Greenfield Gap	13,533,683	0.7			
Direct Lending	96,774,705	4.8			
Medley Capital	23,423,544	1.2			
Raven Capital	15,643,963	0.8			
Raven Opportunity III	22,136,200	1.1			
White Oak Pinnacle	35,570,998	1.8			
Infrastructure	19,931,563	1.0			
MS Infrastructure Partners II	19,931,563	1.0			
Cash Account	20,255,070	1.0	0.1	0.7	0.1

Total	\$2,010,803,211	100.0%	\$2,010,803,211	100.0%
Cash and Equivalents	\$20,255,070	1.0%	\$20,108,032	1.0%
Alternatives	\$116,706,268	5.8%	\$394,117,429	19.6%
Real Estate	\$138,069,600	6.9%	\$189,015,502	9.4%
Domestic Fixed Income	\$435,292,651	21.6%	\$442,376,706	22.0%
International Equity	\$431,213,865	21.4%	\$482,592,771	24.0%
Domestic Equity	\$869,265,757	43.2%	\$482,592,771	24.0%
	Current	%	Policy	%



Policy Index (7/1/2017): 18.5% Russell 1000, 5.5% Russell 2000, 24% MSCI ACWI ex-USA, 19% BBgBarc US Gov't/Credit 1-3 Yr, 3% BBgBarc US Treasury 7-10 Yr, 7.7% NCREIF Property, 1.7% NCREIF Property +2%, 0.6% CPI +5%, 5% BBgBarc US High Yield +2%, 14% 60% MSCI ACWI / 40% BBgBarc Global Aggregate, 1% Citi 1 Month T-Bills. Cash Account includes cash held at Northern Trust for all closed end funds and cash held by BlackRock. All data is preliminary.



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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.









SEPTEMBER 26, 2017

Real assets outlook for StanCERA

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Executive summary



Executive summary

The long-term asset allocation approved by the Board has a target allocation to value-add real estate of 5.0% (~\$100mm) and an allocation to core real estate of 5.0% (~\$100mm).

As of August 31st, the Plan had allocations to core (1.6%), value-add (1.1%), and REIT (4.2%) strategies totaling approximately \$138mm.

This session is to inform our approach to increasing the real estate exposure in the Plan. To fulfill the asset allocation while maintaining sufficient liquidity, the Plan would need to reduce its exposure to REITs and increase its allocation to core and value-add. Also worth noting is the relative attractiveness of real estate debt, which may be an appropriate alternative to core real estate.

<u>Proposal</u>: The Board authorize Verus to conduct a search for appropriate value-add real estate strategies and/or a search for appropriate real estate debt strategies.

Real estate environment



Real estate performance – Recent history

- Core real estate has seen an extended period of outsized returns. From 2010 to 2015, core real estate generated six consecutive years of 10-14% annual returns following the global financial crisis. In 2016, returns moderated to a more normal level as the NCREIF Property Index returned 8%. The recent trend in performance has been slowing, but remains positive.
- Correlation between GDP growth and core real estate returns has historically been very high. A slow but steady recovery has
 created a positive environment for real estate fundamentals without leading to excessive new supply overheating the market.
- Some of the best non-core real estate vintage years occur during recessionary years (2001-2003 and 2008-2009) as market dislocations create attractive entry valuations.
- Late stage vintage years for non-core have historically been the most challenged (1998-1999) and (2005-2007).

NCREIF RETURNS



VINTAGE YEAR RETURN (%) - NON CORE REAL ESTATE



Source: Cambridge Associates, as of 9/30/16

REAL ESTATE AND THE BUSINESS CYCLE



Source: NCREIF, Bloomberg, as of 3/31/17



Source: NCREIF, as of 12/31/16

Real estate fundamentals

- Real estate fundamentals remain generally healthy across the board. Vacancy rates continue to decline in most property types.
 Multifamily is the only exception, which has seen a slight uptick in vacancy after being the earliest sector to recover. This move has been influenced by an increase in prices and some pockets of strong new supply.
- Cap rates continue to move in a steady downward trend and now sit at historic lows. The spread versus the 10-year Treasury yield remains moderate however, providing a slight cushion against rising interest rates. This was recently tested when the 10-year yield rose from 1.5% to 2.4% after the presidential election, yet cap rates remained flat. Capital continues to flow into the asset class as investors seek sources of high quality income and U.S. dollar-denominated assets.
- Net operating income (NOI) growth has remained strong above 5% in the first quarter for all property types. Multifamily NOI has come down from above 10% growth, while industrial properties have seen the strongest improvement.

VACANCY BY PROPERTY TYPE



Source: NCREIF, as of 3/31/17

CAP RATE SPREADS



Source: FRED, NCREIF, as of 3/31/17

4-QTR ROLLING NOI GROWTH (%) BY PROPERTY TYPE



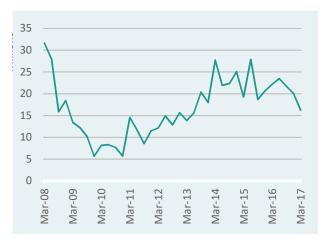
Source: NCREIF, as of 3/31/17



Real estate fundamentals – Commercial

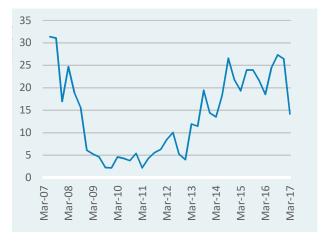
- New supply has remained moderate throughout this cycle and has even started to come down over the last several years for office, industrial and retail. Current levels are well below peak and remain below historical averages.
- Tighter lending standards have continued post-financial crisis. More stringent regulations on tier-one capital requirements for banks and insurance companies have kept new supply in check.
- Much of the new supply has occurred in primary and gateway markets and been heavily concentrated in urban markets that have experienced the most job growth.

NEW DEVELOPMENT - OFFICE (MM SQ. FT)



Source: JPMorgan, CoStar

NEW DEVELOPMENT - INDUSTRIAL (MM SQ. FT)



Source: JPMorgan, Dodge Construction

NEW DEVELOPMENT -RETAIL (MM SQ. FT)



Source: JPMorgan, CoStar



Real estate fundamentals – Multifamily

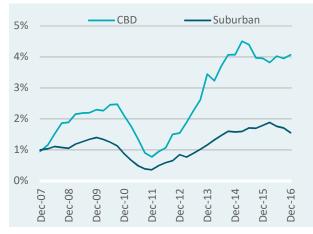
- Multifamily is one area of the real estate market where there has been significant new supply. New apartment supply has
 reached prior peak levels. Multifamily was the first sector to recover after the financial crisis as homeownership rates
 declined and job growth increased.
- The majority of new supply has been in high-end apartments and Central Business Districts (CBD). New developments in suburban markets remain between 1-2% of total stock.
- Because of the new supply coming on-line in downtown and luxury markets, rental growth rates have declined. Due to the spread in growth rates between downtown and suburban markets, opportunities may still exist in higher growth, transitoriented suburban markets. However, we continue to be cautious with lower quality secondary markets.

ANNUAL APARTMENT PERMITS (EX NY)



Source: Bureau of Census, JPMorgan, as of 2/28/17

APARTMENT SUPPLY AS A SHARE OF STOCK



Source: JPMorgan, Axiometrics, as of 12/31/17

APARTMENT RENT GROWTH (YOY)



Source: JPMorgan, Axiometrics, as of 3/31/17



Real estate fundraising

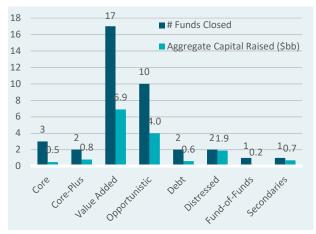
- Aggregate capital raised by closed-end funds has increased over the last several years, although it flattened a bit in 2016. The
 number of funds that have been raised declined slightly, which has led to larger average fund sizes.
- Core real estate queues have come down dramatically over the last 12 months. Competition from foreign capital remains strong, however, as many sovereign funds view U.S. core real estate as a high quality income proxy for fixed income.
- Dry powder in the closed-end fund space (heavily weighted towards non-core real estate) has risen to all time highs. The bulk of this capital continues to favor North American real estate strategies.
- Fundraising in Q1 (a combined \$15bb) was down from the first quarter of 2016 (\$26bb) and well below Q4 2016 (\$32bb). The majority of fund raising was through value-add strategies.

HISTORICAL PRIVATE REAL ESTATE CLOSED-END FUNDRAISING



Source: Pregin, as of 4/30/17

2016 PRIVATE REAL ESTATE CLOSED-END FUNDRAISING BY STRATEGY



Source: Pregin, as of 4/30/17

DRY POWDER BY REGION - CLOSED-END FUNDS



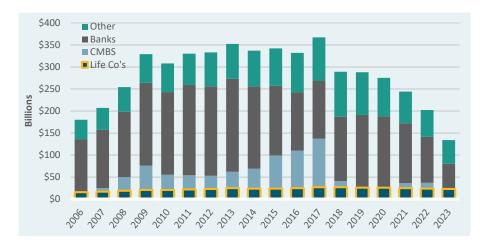
Source: Pregin, as of 4/30/17



Real estate debt

- Over the last several years, due to regulatory pressures for risk retention (Dodd-Frank) and increased capital requirements for "High Volatility Commercial Real Estate Loans" or HVCRE loans, traditional sources of lending from banks and insurance companies has declined, allowing private capital sources to step in and garner a premium for providing capital.
- Real estate transaction volumes have remained healthy and there will be a continued need for debt refinancing over the next several years.
- The potential returns for providing mezzanine loans on core-plus and light transitional assets or leveraged returns on senior whole loans on stable assets appear to offer a favorable risk versus return tradeoff in comparison to real estate equity.
- These loans are typically floating rate and tied to a premium over LIBOR, which provides some protection against rising interest rates.

WALL OF DEBT MATURITIES



LENDING PREMIUMS

	Stable Asset Whole Loans	Transitional Asset Whole Loans	Lower Risk Mezzanine	Transitional Asset Mezzanine & Preferred Equity	Developmental Asset Mezzanine & Preferred Equity
Capital Stack	0 - 70%	0 - 85%	50-85%	65-90%	65 - 90%
	LTV	LTV	LTV	LTC	LTC
Duration	2-5 Years	2-5 Years	2-7 Years	2-4 Years	2-4 Years
Typical Lending	LIBOR +	LIBOR +	LIBOR +	LIBOR +	LIBOR +
Spreads	2.75 - 4.0%	3.0 - 5.5%	6 - 7%	7 - 8.5%	10 - 15%

Source: Invesco, CIM Group, Brookfield



Source: Seeking Alpha

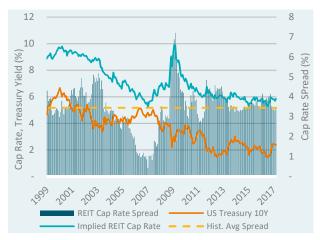
REITs

- REITs have broadly benefitted from the overall strength of the real estate market, however REITs have underperformed broader equities over the last year. A rise in interest rates and increased economic growth expectations led to a rotation away from yieldoriented assets.
- Valuations currently appear fair on a number of metrics. Implied cap rate spreads relative to Treasuries look fairly valued compared to history.
- REITs also appear fairly valued relative to equities as measured by the adjusted funds from operations (AFFO) multiple in comparison to the S&P 500 forward P/E.
- REITs can provide liquid exposure to real estate with the following caveats: high sensitivity to equity market volatility over shorter holding periods, higher leverage and higher exposures to non-core sectors such as hotels, self storage, for-rent residential, etc.
- Verus recommends utilizing active management in REITs with managers that have significant private real estate expertise.

PERFORMANCE VS. S&P 500 (1-YEAR ROLLING)



YIELDS (VS. TREASURIES)



Source: JPMorgan, as of 3/31/17

VALUATION (VS. EQUITIES)



Source: JPMorgan, as of 3/31/17



Source: MPI

Real estate summary

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Core	Fundamentals remain strong, however valuations are getting expensive, especially for high quality assets in gateway markets.	 New supply could increase ahead of current projections and outpace demand. A sharp rise in interest rates could lead to increased cap rates, hurting values. A general economic slowdown would drastically impact demand for real estate. 	Steady, but slow growth could lead to a longer than normal cycle, as we have not seen the level of overheating and new construction that typically occurs near the end of a cycle.	Neutral/ Positive
Value-Add	Heavy demand for high quality core real estate assets has been a tailwind for value-add strategies, as the completed project are often core real estate buyers.	 Slowing demand for core real estate could lead to fewer buyers of value-add assets. Any decline in demand due to an economic slowdown would likely impact renovation and lease-up strategies. Increased capital moving up the risk spectrum could lead to increased competition. 	A flat to positive environment for core real estate should be a good environment for value-add. Increased capital raising in the space will lead to additional competition however, squeezing returns.	Neutral
Opportunistic	The strong recovery in the commercial real estate market has led to fewer distressed opportunities available for opportunistic funds, especially in the U.S. Lending standards remain tight for new construction opportunities, pressuring returns.	 A turn in the market might dramatically affect the performance of investments with a long time horizon, such as construction or complex distressed situations. Increased capital moving up the risk spectrum could lead to increased competition. 	Fewer distressed opportunities should continue to put downward pressure on returns. We would caution against broad development strategies at this point in the cycle.	Negative
Debt	Traditional lenders, such as banks and insurance companies have reduced lending to commercial real estate, creating a need for capital.	 Changes in regulations, such as the elimination or loosening of Dodd-Frank, could possibly lead to a re-emergence of banks and insurance companies in lending, increasing competition and reducing potential returns. 	The risk-return profile for commercial real estate loan origination, both senior loans and mezzanine loans, appears to be favorable compared to core real estate. These strategies can be implemented in both open end and closed end fund structures.	Positive



Infrastructure environment

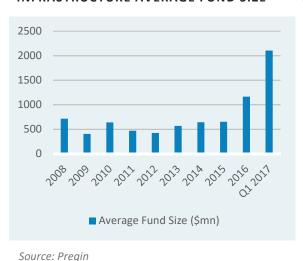


Infrastructure

- Infrastructure encompasses a suite of investment strategies across a subset of particular industries. While there is not one definition for what can be included within infrastructure, we focus on the power generation, transportation, midstream energy, telecom and utility sectors. Listed and unlisted infrastructure funds will invest across these sectors, or in some cases specialize in one or two particular industries.
- Unlisted infrastructure has grown dramatically in the last 5-7 years as investors sought assets that could provide a more attractive yield relative to fixed income, and the potential for inflation protection.
- Low interest rates and a competitive market drove deal valuations to historically high levels. Listed infrastructure is trading around

- 10.5x EBITDA with a 2.5% growth rate. It appears that the market is leveling off, reflecting an awareness that valuations are rich.
- There is a lot of speculation in the marketplace around the Trump administration's impact on the infrastructure market. Given the political realities of passing legislation with a deeply divided Congress, we are not putting a lot of stock into large infrastructure projects being developed by the government. The one area where there has been notable changes is within the make-up of the FERC (Federal Energy Regulatory Commission) board. FERC regulates midstream pipeline development and power transmission and generation. The new board headed by Trump nominees is viewed to be friendlier to the midstream and power companies and should spur new developments in those markets.

INFRASTRUCTURE AVERAGE FUND SIZE



LISTED INFRASTRUCTURE VALUATIONS/GROWTH



Source: Capital IQ

MEDIAN NET MULTIPLE RETURNS FOR INFRASTRUCTURE BY VINTAGE YEAR



Source: Cambridge Associates



Infrastructure (continued)

- We remain favorable towards value-add relative to core infrastructure as the risk/reward looks more attractive today. Interest rate sensitivity is generally lower in value-add infrastructure and pricing levels, though elevated, are below comparable core valuations. Within value-add we focus on sector specialists or teams with a track record of successful project development.
- Relative to regulated power, which is trading at a premium to historical valuations, merchant power generation is trading at a discount given the pricing dynamics in that market. Low natural gas prices, along with the disruption of renewables has driven commodity power prices lower, significantly reducing cash flow and impairing balance sheets across the industry. Though we are cautious given the number of unknowns, there could be some

VALUATIONS ON REGULATED UTILITY POWER

Average price/earnings (P/E) trading multiples for select US regulated utilities (on FY2 consensus earnings-per-share (EPS) estimates, 2008-Q3 2016) 20x my my market 16x 12x 8x Average: 14.3x Max: 18.2x Min: 8.8x 2011 2012 2013 2014 2015

- attractive deals in the merchant market with financial stress and lack of IPP competition for deals.
- Midstream energy has been the best performing and most attractive industry within infrastructure for years. There continues to be a need in unconventional basins (Appalachian and Permian, in particular) for additional processing and transportation infrastructure. That said, the MLP market is healthier today than it was a year ago and large amounts of private capital raised over the last 2-3 years has contributed to a competitive market. Midstream deals increasingly favor the E&P drillers as MLPs and PE-backed teams compete for volume and acreage dedication. We continue to look for opportunities in midstream energy with a focus on nimble management teams.

VALUATIONS ON MERCHANT POWER

Average enterprise value/earnings before interest, taxes, depreciation and amortization (EV/EBITDA) trading multiples for select IPPs

(on FY2 consensus EBITDA estimates, 2013-Q3 2016)

12x

9x

6x

Average: 8.7x
Max: 10.2x
Min: 7.1x

0x

Sep
Sep
Sep
Sep
Sep
2013
Sep
Sep
Sep
2016

Source: E&Y



Source: E&Y

Appendix



Real assets outlook summary

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Private Real Estate	Fundamentals remain strong, however valuations are getting expensive, especially for high quality core assets in gateway markets.	 New supply could increase ahead of current projections and outpace demand. A sharp rise in interest rates could lead to increased cap rates, hurting values. A general economic slowdown would drastically impact demand for real estate. 	We remain broadly favorable on real estate given continued strong fundamentals, low new supply and favorable interest rate environment. Given we are potentially late in the cycle, we would recommend remaining cautious with the use of leverage, excess illiquidity, lower quality assets or strategies that will take a long time horizon to execute such as complex distress or construction.	Positive
REITs	REITs have benefitted from the overall strength of the real estate markets, however REITs have underperformed broader equities in 2016 and early 2017. In Q1 U.S. REITs were hurt by a spike in interest rates and increased economic growth expectations led to a rotation away from yield-oriented assets.	 Rising interest rates can have a negative effect on REITs and all yield-sensitive assets over short time periods. REITs will be sensitive to economic decline and general equity market volatility. 	While we are broadly favorable on real estate, we remain neutral on REITs given current valuations appear fair. REITs can provide liquid exposure to real estate with the following caveats: high sensitivity to equity market volatility over shorter holding periods, higher leverage and higher exposures to non-core sectors such as hotels, self storage, for-rent residential, etc.	Neutral
Commodities	Commodities futures have had lackluster performance over the last decade. An upward sloping futures curve for most of the last decade has created a headwind for the asset class. Contributing factors also include slowing global GDP growth, low global inflation and pockets of oversupply across most commodity complexes.	 Key risks would be decreasing inflation expectations, general economic weakness (especially in emerging markets) or a further overhang in supply. 	Overall, commodities futures curves have been flattening, creating a more positive environment. Global inflation expectations have been rising moderately. Expected returns over the long run for this asset class remain low and are typically used as an inflation hedge rather than a portfolio return enhancer.	Neutral
TIPS	Low nominal interest rates combined with low to moderate inflation has led to a depressed return environment for TIPS.	 Decreasing inflation expectations or rising nominal interest rates would be a headwind to TIPS. Continued low rates create a high cost of carry. 	While inflation expectations have been trending modestly upward, low current yields and modest inflation expectations has led to other real assets offering higher total return potential than TIPS.	Negative



Real assets outlook summary (continued)

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Infrastructure	Infrastructure markets are trading at elevated levels as global interest rates remain low. With U.S. central bank policy diverging from European and Asian counterparts, it will be interesting to follow how yield-oriented investments manage the shift. European infrastructure appears to still have an accommodative central bank to buoy valuations. The U.S. core infrastructure market may face headwinds as rising Treasury yields push discount rates higher.	 Rising interest rates in the U.S. market could present a headwind to infrastructure returns. Valuations and a highly competitive market in core infrastructure remains a risk. 	We remain negative on core infrastructure given valuation concerns. We do think opportunities exist within pockets of the value-add universe. We generally like teams with a particular sector expertise and with a strong development track record and pipeline.	Neutral
Private Natural Resources	Oil prices remain range-bound in the \$45-55 area. Assuming demand remains stable and growth expectations are met, we would expect higher prices in the next few years as higher cost producers are pulled back into the market to meet global demand. There is more uncertainty around gas prices given the abundance of low cost gas in the Appalachian region and as more associated gas is produced from oilier drilling operations. We are more selective within the metals and minerals space as oversupply continues to present headwinds to a number of commodities.	 Too much capital chasing deals results in undisciplined capital deployment. Demand growth below expectations resulting in lower prices for longer. Speculative drilling programs driven by an abundance of capital offsets supply cuts by OPEC. 	Interesting opportunities in upstream energy, primarily onshore North America. Current supply/demand dynamics favor a higher oil price longer-term. Mining opportunities exist for similar reasons as oil but more difficult to find attractive GPs. We have favored structured equity/debt vehicles within the mining sector.	Positive
MLPs	A stabilization in the price of oil led to a rebound in MLP performance since early 2016. Oil trading in the \$45-\$55 range is sufficient to support growth in midstream energy projects. Total rig counts have doubled over the last twelve months.	 A further pullback in energy prices would limit potential growth opportunities in the sector and hurt valuations. 	MLPs are currently providing a healthy 7% dividend yield and distribution growth has declined, but still positive at around 3%. A pro-growth policy administration should provide a tailwind.	Neutral



Real assets outlook summary (continued)

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Timberland	Timber markets in North America remain challenged. Southeastern U.S. timber markets faced supply/demand headwinds in saw timber and pulp markets. Northeastern hardwood has been a relatively attractive timber market, though prices have fallen recently on lower demand from China, but finding scalable transactions has been difficult. The few transactions that take place in the U.S. timber market happen primarily in the Southeast which is the market with the least attractive fundamentals.	 Despite several years of disappointing returns within timber, we see the risks within the asset class as outweighing any potential return. Markets outside the U.S. tend to face currency and political risk which has resulted in disappointing returns for many investors. 	Currently viewed as expensive. Not a good near term entry point.	Negative
Farmland	Farmland prices in the Midwest leveled off after 2014 but remain too expensive for the income and return potential. We are selectively looking at permanent crop deals but broadly they trade well above historical valuations.	 Similar to timber markets, we have concerns around valuations. The income potential within farmland is more attractive than timber and the global growth in food is a more compelling macro trend than pulp and paper but we remain bearish on the sector, in general. 	Currently viewed as expensive. Selectively looking at agriculture business investments where crop and land are a component of the return.	Negative



Glossary of terms

Adjusted Funds From Operations (AFFO): A measurement which is helpful in analyzing real estate investment trusts (REITs). The AFFO typically equals the trust's funds from operations (FFO) but is adjusted for ongoing capital expenditures which are necessary for upkeep of the REIT's assets.

Capitalization Rates: The rate of return of a real estate investment, which is calculated by dividing the property's net operating income by the property's purchase price.

Core Real Estate: This category of real estate will include a preponderance of stabilized properties. Core real estate should achieve relatively high income returns and exhibit relatively low volatility. Core real estate funds tend to use less leverage.

Consumer Price Index (CPI): A measure of purchasing power and inflation that takes the average prices of a basket of consumer goods and services, such as food, medical care, and transportation, and compares the same basket of goods in terms of prices to the same period in a previous year. Changes in CPI are used to assess price changes associated with the cost of living.

Dry Powder: Investment reserves raised by investment funds to cover future obligations or to purchase assets in the future.

GDP: The total value of all services and goods produced within a country's borders, for a given time period. This calculation includes both private and public consumption, government expenditures, investments, along with total exports net of total imports.

Internal Rate of Return (IRR): the IRR is the discount rate that equates the present value of cash outflows (investment) with the present value of cash inflows (return of capital). IRR is often referred to as a dollar-weighted rate of return that accounts for the timing of cash inflows and outflows.

Master Limited Partnerships (MLPs): A limited partnership structure which is publicly traded on an exchange. MLPs combine the tax benefits of a limited partnership with the liquidity of publicly traded securities. To qualify as an MLP, the entity must generate 90% of its income from the production, processing and transportation of oil, natural gas and coal.

Net Operating Income (NOI): A calculation which is used to analyze real estate investments that generate income. NOI is the property's annual income generated by operations after deducting all expenses incurred from those operations. The growth rate in NOI is a common metric used in determining the health of a property.

Opportunistic Real Estate: An opportunistic fund is one that includes preponderantly non-core assets. The fund as a whole is expected to derive most of its return from property appreciation which may result in significantly volatile returns. These funds may employ a variety of tools such as development, significant leasing risk and potentially high leverage.

Real Estate Investment Trusts (REITs): A REIT is a company that owns and operates commercial real estate properties. REITs can be publicly traded or privately held. There are two main type of REITs: Equity REITs which generate income from the operation of properties, and Mortgage REITs, which invest in mortgages or mortgage securities.

Timber Investment Management Organizations (TIMOs): A management group that invests in timberland assets for institutional investors. TIMOs will purchase, manage and sell various timberland properties on behalf of investors.

Treasury Inflation Protected Securities (TIPS): A treasury bond that is adjusted to eliminate the effects of inflation on interest and principal payments, as measured by the Consumer Price Index (CPI). TIPS are issued in terms of five, ten and twenty years and are auctioned twice per year.

Value-Added Real Estate: A value-added real estate fund often holds a combination of core assets and other assets characterized by less dependable cash flows. These strategies are likely to have moderate lease exposure and employ moderate leverage. Consequentially, these strategies seek significant returns from property appreciation and typically exhibit moderate volatility.

Vacancy Rates: The vacancy rate is calculated as the total number of unoccupied units of a property divided by the total units of the property, at a particular point in time.

Vintage Year: Represents the year the first capital call or portfolio company investment was made.



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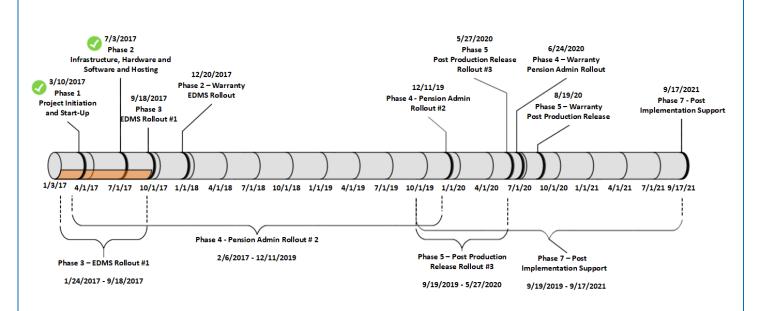




PAS IMPLEMENTATION LINEA BI-WEEKLY STATUS UPDATE



SPONSOR: Rick Santos Report Date: 09-08-2017



Baseline 12/01/2016

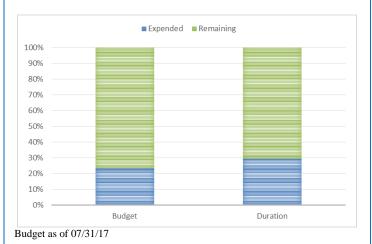
STATUS

Risks & Issues:

Two previous project risks were closed during this period.

- 1. Resignation of the current StanCERA IT
 Administrator (Reed Love) mitigated through
 arrangements with SBT and an outside IT
 consultant.
- StanCERA random sampling of backfile converted images for QA may pose a risk. – The QA project was previously completed

No new high-level risks have been identified.



Accomplishments:

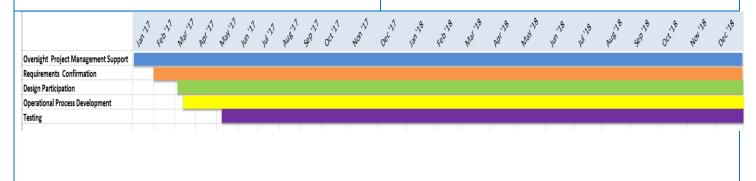
- ➤ Began working with StanCERA to develop a business process document detailing new document processing procedures following imaging go-live.
- Coordinated UAT testing associated with the Imaging UAT period, compiled results, and documented all system bugs as PIRs.
- Coordinated and assisted with imaging scanner demonstrations and provided support to StanCERA SMEs throughout the UAT process.

Upcoming:

- ➤ Work with StanCERA and Tegrit to complete any retesting work and make any final configuration changes to Imaging prior to implementation.
- > Provide support to StanCERA and Tegrit during and after Imaging implementation day.
- Facilitate decisions regarding processing of StanCERA's new back file and handling of paper documents following Imaging implementation.
- Complete development of the business process document detailing new document processing procedures following imaging go-live.

Ongoing Project Contributions

- Facilitate weekly Project Manager's meetings and create meeting minutes.
- ➤ Facilitate monthly Steering Committee Meetings and create meeting minutes.
- Participate in Tegrit work sessions, review meeting minutes, and compile resulting decision logs and action items.
- Regularly review action items for follow up and completion.
- Review and hold group review sessions for BSRD deliverables made by Tegrit.
- Track requirements, as discussed in work sessions and BSRDs, using the RTM and meet with StanCERA PM to update requirements confirmation.
- Manage and participate in system testing efforts, including review of test scripts, compiling of results, input of PIRs, and tracking of issue resolution.





SACRS VOTING PROXY FORM

The following are authorized by the County Retirement Board to vote on behalf of the County Retirement System at the apcoming SACRS Conference (if you have more than one alternate, please attach the list of alternates in priority order):		
	_ Voting Delegate	
	_ Alternate Voting Delegate	
These delegates were approved by the Retirement	Board on//	
The person authorized to fill out this form on beha	lf of the Retirement Board:	
Signature:		
Print Name:		
Position:		
Date:		
Please send your system's voting proxy by October 1, 20	017 to:	
SACRS Attn: Sulema H. Peterson, SACRS Admir 1415 L Street, Suite 1000 Sacramento, CA 95814	nistrator	
E-mail: sacrs@sacrs.org		