



**Board of Administration Agenda**

**REGULAR MEETING**  
**TUESDAY, NOVEMBER 27, 2018**  
**TIME: 10:00 A.M.**

**MEETING LOCATION:**  
LACERS Ken Spiker Boardroom  
202 West First Street, Suite 500  
Los Angeles, California 90012-4401

Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. Due to difficulties in securing Sign Language Interpreters, five or more business days' notice is strongly recommended. For additional information, please contact: Board of Administration Office at (213) 473-7169.

President:	Cynthia M. Ruiz
Vice President:	Elizabeth L. Greenwood
Commissioners:	Elizabeth Lee Sandra Lee Nilza R. Serrano Sung Won Sohn Michael R. Wilkinson
Manager-Secretary:	Neil M. Guglielmo
Executive Assistant:	Ani Ghokassian
Legal Counsel:	City Attorney's Office Retirement Benefits Division

- I. PUBLIC COMMENTS ON MATTERS WITHIN THE BOARD'S JURISDICTION
- II. [APPROVAL OF MINUTES FOR REGULAR BOARD MEETING OF NOVEMBER 13, 2018 AND POSSIBLE BOARD ACTION](#)
- III. BOARD PRESIDENT VERBAL REPORT
- IV. GENERAL MANAGER VERBAL REPORT
  - A. REPORT ON DEPARTMENT OPERATIONS
  - B. UPCOMING AGENDA ITEMS
- V. CONSENT AGENDA
  - A. [BENEFITS PAYMENTS APPROVED BY GENERAL MANAGER](#)
  - B. [MARKETING CESSATION NOTIFICATION](#)

VI. COMMITTEE REPORT(S)

- A. BENEFITS ADMINISTRATION COMMITTEE VERBAL REPORT ON THE MEETING OF NOVEMBER 27, 2018
- B. [AUDIT COMMITTEE AND INTERNAL AUDIT CHARTER UPDATES AND POSSIBLE BOARD ACTION](#)

VII. BENEFITS ADMINISTRATION

- A. [PROPOSED 2019 HEALTHCARE PREMIUM RATES FOR LAFPP MEMBERS AND POSSIBLE BOARD ACTION](#)

VIII. INVESTMENTS

- A. CHIEF INVESTMENT OFFICER VERBAL REPORT
- B. [PRESENTATION BY NEPC, LLC OF THE PORTFOLIO PERFORMANCE REVIEW REPORT FOR THE QUARTER ENDING SEPTEMBER 30, 2018](#)
- C. [PRESENTATION BY LACERA REGARDING PRINCIPLES FOR RESPONSIBLE INVESTING \(PRI\)](#)

IX. OTHER BUSINESS

- X. NEXT MEETING: The next Regular meeting of the Board is scheduled for Tuesday, December 11, 2018 at 10:00 a.m. in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

XI. ADJOURNMENT

MINUTES OF THE REGULAR MEETING  
**BOARD OF ADMINISTRATION**  
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

LACERS Ken Spiker Boardroom  
202 West First Street, Fifth Floor  
Los Angeles, California

November 13, 2018

10:18 a.m.

**Agenda of: Nov. 27, 2018**

**Item No: II**

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PRESENT:	President:	Cynthia M. Ruiz
	Vice President:	(arrived at 10:18 a.m.) Elizabeth L. Greenwood
	Commissioners:	Nilza R. Serrano Michael R. Wilkinson
	Manager-Secretary:	Neil M. Guglielmo
	Executive Assistant:	Ani Ghoukassian
	Legal Counsel:	Anya Freedman
ABSENT:	Commissioners:	Elizabeth Lee Sandra Lee Sung Won Sohn

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*The Items in the Minutes are numbered to correspond with the Agenda.*

Due to the lack of a quorum at the beginning of the meeting, President Ruiz proceeded to unofficially begin the Regular Board Meeting at 10:07 a.m. with Items III and IX.

*Items III and IX were taken out of order*

III

BOARD PRESIDENT VERBAL REPORT – President Ruiz sent her condolences to Commissioner Elizabeth Lee on the passing of her mother-in-law. President Ruiz discussed the following items:

- She as well as Commissioners Greenwood and Serrano will be partnering as individuals with other female trustees in support of International Day for the Elimination of Violence against Women on November 25, 2018.
- President Ruiz thanked the Commissioners for their service and asked that they be more strategic on education. She directed an Executive Leadership Team to include Neil M. Guglielmo, Lita Payne, and Rod June, meet with each Commissioner to discuss an education plan.

## IX

### GENERAL MANAGER VERBAL REPORT

- A. REPORT ON DEPARTMENT OPERATIONS – Neil M. Guglielmo, General Manager, discussed the following items:
- LACERS Holiday Party to be held on December 13, 2018. All Commissioners are invited to attend.
  - Thanked City Attorney for their assistance with the 115 Trust being approved by the Mayor and City Council.
  - Making good progress while meeting with staff on the Strategic Plan.
  - Attended DWP Educational Off-Site. Asked the Board if they would like LACERS to host an educational symposium.
- B. UPCOMING AGENDA ITEMS – Neil M. Guglielmo, General Manager, stated the Comprehensive Annual Financial Report (CAFR) will be presented to the Board at the December 11, 2018 Board Meeting.

Vice President Greenwood arrived at 10:18 a.m. at which time the quorum was met. President Ruiz called the Regular Meeting to order at 10:18 a.m.

## I

PUBLIC COMMENTS ON MATTERS WITHIN THE BOARD'S JURISDICTION – President Ruiz asked if there were any persons who wished to speak on matters within the Board's jurisdiction, to which there was no response and no public comment cards were received. President Ruiz stated an email from Giovanna De La Rosa to Rod June, Chief Investment Officer, be added to the record as a public comment.

## II

APPROVAL OF MINUTES FOR SPECIAL BOARD MEETING OF OCTOBER 16, 2018 AND REGULAR BOARD MEETING OF OCTOBER 23, 2018 AND POSSIBLE BOARD ACTION – A motion to approve the Special Board Meeting minutes of October 16, 2018 and Regular Board Meeting minutes of October 23, 2018 was moved by Vice President Elizabeth Greenwood, seconded by Commissioner Wilkinson, and adopted by the following vote: Ayes, Commissioners Serrano, Wilkinson, Vice President Greenwood and President Ruiz -4; Nays, None.

## IV

### BOARD/DEPARTMENT ADMINISTRATION

- A. ACTUARIAL VALUATIONS AS OF JUNE 30, 2018 INCLUDING PROPOSED CITY CONTRIBUTION RATES FOR FISCAL YEAR 2019-20 AND POSSIBLE BOARD ACTION – Todd Bouey, Assistant General Manager, Dale Wong-Nguyen, Chief Benefits Analyst, and Paul Angelo, Actuary with Segal Consulting (via conference line) presented this item to the Board.

After further discussion, Commissioner Wilkinson moved approval, seconded by Vice President Greenwood, and adopted by the following vote: Ayes, Commissioners Serrano, Wilkinson, Vice President Greenwood and President Ruiz -4; Nays, None.

President Ruiz adjourned the Regular Meeting at 10:35 a.m. to convene in Closed Session.

V

DISABILITY RETIREMENT APPLICATION(S)

- A. CLOSED SESSION PURSUANT TO GOVERNMENT CODE SECTION 54957(b) TO CONSIDER THE DISABILITY RETIREMENT APPLICATION OF BELARMINA CARRERA AND POSSIBLE BOARD ACTION**

VI

LEGAL/LITIGATION

- A. CLOSED SESSION PURSUANT TO GOVERNMENT CODE SECTION 54956.9 (D)(4) TO CONFER WITH AND RECEIVE ADVICE FROM LEGAL COUNSEL REGARDING PENDING LITIGATION (ONE CASE) AND POSSIBLE BOARD ACTION**

VII

INVESTMENTS

- A. CLOSED SESSION PURSUANT TO GOVERNMENT CODE SECTION 54956.81 TO CONSIDER THE PURCHASE OF ONE (1) PARTICULAR, SPECIFIC REAL ESTATE INVESTMENT AND POSSIBLE BOARD ACTION**

President Ruiz reconvened the Regular Meeting at 11:24 a.m. and announced that during Closed Session the Board unanimously approved the Disability Retirement Application of Belarmina Carrera, conferred with legal counsel, and considered a real estate investment item.

*Items VII-B, VII-C, and VII-D were taken out of order.*

- D. PRESENTATION BY PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI) REGARDING SIGNATORY MEMBERSHIP** – Ophir Bruck, US Network Manager with Principles for Responsible Investment, presented this item to the Board. After further discussion, the Board thanked Mr. Bruck for the information.

Vice President Greenwood left the Regular Meeting at 11:57 a.m. and there no longer was a quorum at the meeting.

- C. PRESENTATION BY CLEARBRIDGE INVESTMENTS, LLC REGARDING ESG INVESTING** – Mary Jane McQuillen, Managing Director, Portfolio Manager and Vinay Nadkarni, Managing Director, with ClearBridge Investments, presented this item to the Board. After further discussion, the Board thanked Mr. McQuillen and Mr. Nadkarni for the information.

Commissioner Wilkinson left the Regular Meeting at 12:23 p.m.

- B. CHIEF INVESTMENT OFFICER VERBAL REPORT – Rod June, Chief Investment Officer, reported on the portfolio value, \$17.038 Billion as of November 9, 2018. Mr. June stated that Ron Aubert, Investment Officer I is attending the SACRS Conference at Indian Wells, CA. He stated that the Pension Real Estate Association (PREA) is seeking an endorsement from LACERS. An informational packet was provided to the Board and public. Mr. June introduced the new Administrative Intern in Investments, Savatha Yem. Mr. Yem is an MBA student at Cal State Long Beach and will be graduating next May. Mr. June stated they still have an opening for a college intern and they are currently looking at applications to fill the spot. Commissioner Serrano asked staff to speak to PREA representative in order to add Cal State Los Angeles to their list of institutions for internships.

VIII

COMMITTEE REPORT(S)

- A. AUDIT COMMITTEE AND INTERNAL AUDIT CHARTER UPDATES AND POSSIBLE BOARD ACTION – Continued to the next Regular Board Meeting due to the lack of quorum.

X

CONSENT AGENDA

- A. BENEFITS PAYMENTS APPROVED BY GENERAL MANAGER – Continued to the next Regular Board Meeting due to the lack of quorum.
- B. MARKETING CESSATION NOTIFICATION – Continued to the next Regular Board Meeting due to the lack of quorum.

XI

OTHER BUSINESS – There was no other business.

XII

NEXT MEETING: The next Regular meeting of the Board is scheduled for Tuesday, November 27, 2018 at 10:00 a.m. in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

XIII

ADJOURNMENT – The Regular Meeting adjourned at 11:57 a.m. due to the lack of a quorum and discussion ended at 12:31 p.m.

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Cynthia M. Ruiz  
President

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Neil M. Guglielmo  
Manager-Secretary

## BENEFIT PAYMENTS APPROVED BY GENERAL MANAGER: ITEM V-A

Pursuant to the authority delegated to the General Manager under Board Rule GMA 1, General Manager Authorization, adopted by the Board of Administration on June 14, 2016, the following benefit payments have been approved by the General Manager:

### SERVICE RETIREMENTS

<u>Member Name</u>	<u>Service</u>	<u>Department</u>	<u>Classification</u>
Agravante, Mercyrose A	10	Office of Finance	Accounting Clerk
Aguilar, Feliciano	21	Dept. of Airports	Window Cleaner/Airport
Aguirre, David Clemente	34	Police Dept.	Ch Security Officer
Alecxih, Lu L	23	Dept. of Airports	Sr Admin Clerk
Alfaro, Andres C	17	Dept. of Transportation	Asst Signal Sys Elect
Alonzo Lundgren, May Mia	31	PW - Methods Standards	Sr Systems Analyst
Ayala, Alvaro	15	Dept. of Airports	Custodian Airport
Baker, Steven F	31	Harbor Dept.	Sr Personnel Analyst
Beasley, Michelle A	35	Dept. of Airports	Airport Police Ofcr
Beh, Richard G	19	Dept. of Airports	Build Operating Engr
Bergeson, Robert R	25	Employee Relations Board	Exec Dir Empl Rel Board
Bergner, William Richard	18	Police Dept. - Civilian	Polygraph Examiner
Bowers, Wendell L	35	Dept. of Animal Svcs.	Sr Animal Cntrl Ofcr
Buising, Armando B	12	Dept. of Transportation	Accountant
Canada, Maria Christine	12	Police Dept. - Officers	Police Officer
Castillo, Carlos E	10	Harbor Dept.	Carpenter
Chiu, Rafael Hoo	17	PW - Sanitation	Env Compliance Insp
Cooksey, Laron L	30	GSD - Standards	Drill Rig Operator
Cordova, Danny	10	PW - Sanitation	W/Wtr Trmt Oper
Coroalles, Tony	2	Dept. of Rec. & Parks	Asst Gen Mgr Rec & Pks
Cuevas, Santiago	34	Dept. of Rec. & Parks	Sr Recreation Dir
Davis, James Allen	32	Harbor Dept.	Harbor Engineer
Desir, Stanley	23	Dept. of Aging	Management Analyst
Díaz, Isidro	15	GSD - Public Bldgs.	Vocational Worker
Drew, Debra A	34	GSD - Bldg. Svcs.	Sr Administrative Clerk
Eason, Tafalla Nefertari	24	ITA	Sr Administrative Clerk
Evans, Harold L	38	Dept. of Airports	Airport Police Sgt
Firoozabadi, Charlie Rajabi	26	ITA	Commun Engrg Assoc
Flemings, Cheryl R	38	Fire Dept. - Civilian	Payroll Supervisor
Francisco, Fernando C	17	Police Dept. - Civilian	Sr Administrative Clerk
Garcia, Ruben Michael	34	Police Dept. - Civilian	Sr Administrative Clerk
Garcia, Tomas	6	Dept. of Rec. & Parks 2	Special Prog Asst
Gerhardt, Newton Wentworth	19	Dept. of Bldg. & Safety	Sr Build Mech Inspectr
Gosden, Susan M	34	LA Housing Dept.	Sr Mgmt Analyst
Grierson, Phyllis A	30	Dept. of R&P Full-Time	Sr Recreation Dir

Halverson, William D	30 Dept. of Transportation	Sr Mgmt Analyst
Harris, Benjamin	15 Police Dept. - Civilian	Police Service Rep
Hayes, June Marie	29 Dept. of Transportation	Traf Officer
Hayes, Susan Leigh	16 Personnel Dept.	Background Investgr
Hernandez, Manolito Domingo	15 Police Dept. - Civilian	Detention Officer
Hinojosa, Sergio	34 Dept. of Rec. & Parks	Sandblast Operator
Holloway, Lisa L	34 Dept. of Airports	Exec Admin Asst
Howard, Ronald J	22 Dept. of Rec. & Parks	Gardener Caretaker
Jenoure, Heather Patricia	33 ITA	Info System Mgr
Jessop, Ernest K	36 PW - Sanitation	Equipment Supervisor
Joe, Minsoo	31 Police Dept. - Civilian	Pr Clerk Police
Johnson, Richard	27 ITA	Sr Computer Operator
Kim, Yoon O	30 PW - Contract Admin	Sr Constr Inspector
Koutris, Anthony G	20 City Attorney's Office	Deputy City Atty
Lechuga, Margaret	16 City Attorney's Office	Legal Clerk
Lee, Tony C	40 PW - Engineering	Architect
Levitan, Diane	19 Personnel Dept.	Occupational Psychol
Lopez, Carlos	30 Police Dept. - Civilian	Municipal Police Sergeant
Lopez, Carlos E	28 PW - Engineering	Survey Party Chief
Lugo, Luis M	25 PW - St. Maint. - General	St Svcs Supvr
Lujan, Teresa	34 City Attorney's Office	Deputy City Atty
Maclellan, James William	25 Harbor Dept.	Dir Of Port Mrktng
Maiberger, Kevin	16 Police Dept. - Civilian	Police Service Rep
Mellon, Louis L	28 Dept. of Rec. & Parks	Sr Recreation Dir
Menard, Judy A	7 Dept. of Airports	Airport Guide
Messano, Neil A	30 Controller's Office	Fiscal Systems Spec
Miranda, Gaspar	7 Dept. of Rec. & Parks 2	Special Prog Asst
Mustafa, Johnnetta Renee	38 GSD - Prima Project	Sr Systems Analyst
Nava, Jose D	35 PW - St. Maint. - General	Cement Finisher
Nguyen, Christine	18 City Admin Officer	Sr Administrative Clerk
Nobregas, Barbara H	34 Fire & Police Pensions	Management Analyst
Novak, Patricia R	52 Dept. of Bldg. & Safety	Administrative Clerk
Obacz, Reid F	34 GSD - Bldg. Svcs.	Sr Electrician
Okimoto, Keiji	55 PW - Engineering	Structrl Engrg Assc
Paragas, Elsa P	33 Harbor Dept.	Real Estate Assoc
Parker, Carol Ann	25 PW - Sanitation	Environmental Spec
Pasos, John	17 PW - Resurf & Reconstr	Cement Finisher
Patterson, Dale Mark	3 GSD - Printing Revolving	Dup Mach Operator
Peltier, Steven	29 Dept. of Airports	Security Officer
Perez, Daniel	32 Dept. of Airports	Pr Constr Inspector
Power, Robert K	32 GSD - Fleet Services	Heavy Duty Equip Mech
Ramirez, Judith A	32 Office of Finance	Tax Complnce Ofcr
Rara, Rolando B	30 Dept. of Transportation	Transp Engrg Aide
Reynolds, Rufus Joseph	29 Dept. of Airports	Custodian Supervisor
Rinaldi, Francesco	31 PW - Contract Admin	Ch Constr Inspector

Rincon, Santos R	30 Dept. of Rec. & Parks	Gardener Caretaker
Rios, Lisa Margarita	30 Police Dept. - Civilian	Police Service Rep
Rivera, Mariana M	32 Fire Dept. - Civilian	Sr Mgmt Analyst
Ruiz, Angel	31 Police Dept. - Civilian	Security Officer
Rush, Leslie M	33 Office of Finance	Tax Complnce Ofcr
Sarmiento, Ellen A	36 City Attorney's Office	Sr Asst City Atty
Schwebke, Rickie L	18 GSD - Fleet Services	Equipmnt Mechanic
Sinohue, David	36 Dept. of Transportation	Traf Pnt Sign Post
Smith, Shannon Elaine	22 Police Dept. - Civilian	Sr Admin Clerk
Sogules, Bob Irigha	25 Police Dept. - Civilian	Sr Systems Analyst
Stillinger, Jeffrey Eugene	35 PW - Sanitation	W/Wtr Trmt Oper
Strother, David Sherwood	35 Library Dept.	Administrative Clerk
Telles, Michael A	22 Dept. of Airports	Airport Police Sgt
Tesfai, Fessehaie	32 PW - Engineering	Civil Engrg Assoc
Tinniste, Eric	30 Dept. of Airports	Instrument Mech - Airport
Van Vuren, Linda A	14 Fire Dept. - Civilian	Senior Clerk Typist
Vaughn, Neil Andrew	18 Controller's Office	Fiscal Systems Spec
Villanueva, Laura Nagahama	31 PW - Engineering	Sr Administrative Clerk
Vinson, Nelson S	26 Dept. of Transportation	Internal Auditor
Vizcarra, Maria C	20 Dept. of Airports	Building Repairer
Wade, Mario V	32 Dept. of Airports	Airport Police Ofcr
Watson, Mark Charles	31 Dept. of Transportation	Traf Officer
Watts, Larklyn Lazette	31 Police Dept. - Civilian	Forensic Prnt Spec
Wesdy, Theodore	30 Dept. of Bldg. & Safety	Safety Engr Elevators
Wolf, Maria D	7 Dept. of Airports	Airport Guide
Woods, David Eugene	10 GSD - Fleet Services	Heavy Duty Equip Mech
Yee, Victor K	31 GSD - Finance Projects	Ch Management Analyst
Zenner, Robert Leroy	26 PW - Sanitation	Maint & Constr Helper

BENEFIT PAYMENTS APPROVED BY GENERAL MANAGER: ITEM V-A

Pursuant to the authority delegated to the General Manager under Board Rule GMA 1, General Manager Authorization, adopted by the Board of Administration on June 14, 2016, the following benefit payments have been approved by the General Manager:

Approved Death Benefit Payments

Deceased

Beneficiary/Payee

TIER 1

Arevalo, Carlos A

Maria B Arevalo for the payment of the Burial Allowance

Austin, Georgia L

Jacqueline Garner for the payment of the Accrued But Unpaid Continuanace Allowance

Baldwin, Birdie C

Adeline Alexander for the payment of the Accrued But Unpaid Continuanace Allowance

Barabasz, Eugene R

Ellen R Barabasz for the payment of the Accrued But Unpaid Vested Retirement Allowance Burial Allowance

Bornson, Ingvar N

Yayoko Bornson for the payment of the Accrued But Unpaid Service Retirement Allowance Burial Allowance

Bosarreyes, Ubaldino

Melvin A Bosarreyes for the payment of the Burial Allowance

Brooks, Harold  
(Deceased Active)

Kevin Brooks for the payment of the  
Accumulated Contributions

Broom, Doris

Jacklon Broom for the payment of the  
Accrued But Unpaid Continuance Allowance

Buffaloe, Ronald Everett

Sandra E Buffaloe for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Burdette, Odis T

Lois A Burdette for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Campbell, Alan D  
(Deceased Active)

William Andrew Sollars for the payment of the  
Service Retirement Survivorship Allowance

Carlisle Pearl, Yolanda D  
(Deceased Active)

Leonard Pearl for the payment of the  
Accumulated Contributions

Texanna Carlisle for the payment of the  
Accumulated Contributions

Collins, Geraldine

Felix J Collins for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Cook, Esther K

William E Cook for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Cook, Hurley S                      Carstella Cook for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Cox, Henry J                         Ricardo Cox for the payment of the  
Accrued But Unpaid Continuance Allowance

Craig, Thomas J                    James P C Craig for the payment of the  
Accrued But Unpaid Continuance Allowance

Dantzler, Alex                      Reola Maxine Dantzler for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Davidson, Michael J                Lillian N Kirsch for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

William Kirsch for the payment of the  
Accrued But Unpaid Service Retirement Allowance

De Grandis Grant, Kathy         Denise Lee Brown for the payment of the  
May                                      Burial Allowance

Glenn C Grant for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Escajeda, Roberto R                Maria D Escajeda for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Escandon, Ignacio A

Elizabeth Escandon for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Sophie Vargas for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Evans, Michael F

Delores Evans for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Falcis, Luisita G

Erwin G Falcis for the payment of the  
Accrued But Unpaid Continuanace Allowance

Famous, Vernon Lee

Glenn Belton for the payment of the  
Burial Allowance

Farrell, Christine

Justine Martino for the payment of the  
Accrued But Unpaid Disability Continuanace Allowance

Frasier, Molly

Myra Krause for the payment of the  
Accrued But Unpaid Continuanace Allowance

Gonzalez, Flor

Alice Gonzalez for the payment of the  
Accrued But Unpaid Service Retirement Allowance

Dolores Garcia for the payment of the  
Burial Allowance



Hongo, Louise T Eldon N Hongo for the payment of the  
Accrued But Unpaid Service Retirement Allowance

Imp, Andrew R Sau Doan Imp for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Keisner, Larry G Brian Keisner for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Lai, Christophe Catherine S Lai for the payment of the  
Accrued But Unpaid Service Retirement Allowance

Laurich, Joseph A Lindsay R Laurich for the payment of the  
Burial Allowance

Locatelli, William Robert Locatelli for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Lopez, Joshua O Maria Cruz Lopez for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Lopez, Mary Ann C  
(Deceased Active)

Richard J Lopez for the payment of the  
Accumulated Contributions

Ronald Lopez for the payment of the  
Accumulated Contributions

Sandra Tobin for the payment of the  
Accumulated Contributions

Machunis, Charlene T

Mary K Machunis for the payment of the  
Accrued But Unpaid Continuance Allowance

Macon, Ronald C

Boris Macon for the payment of the  
Burial Allowance

Madison, Agnes F

Arthur Madison for the payment of the  
Burial Allowance

Mauleon, Carmelita G

Ramon Mauleon for the payment of the  
Accrued But Unpaid Continuance Allowance

Meglierino, Charles

Chris Meglierino for the payment of the  
Accrued But Unpaid Vested Retirement Allowance  
Burial Allowance

Miller, A D

Toney Miller for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Montoya, Patricia R

Robin Atkins for the payment of the  
Accrued But Unpaid Service Retirement Allowance

Nadalsky, Margie	Karen Lee Nadalsky for the payment of the Accrued But Unpaid Continuance Allowance
	Sharon Dee Monroe for the payment of the Accrued But Unpaid Continuance Allowance
Navarro, Phillip T (Deceased Active)	Phillip Thomas Navarro for the payment of the Limited Pension
Nonno, James A	Barbara Nonno for the payment of the Accrued But Unpaid Service Retirement Allowance Burial Allowance
Obrymski, Paul T	Peggy A Obrymski for the payment of the Accrued But Unpaid Service Retirement Allowance Burial Allowance
Overton, Stephen Edward	Linda Lou Overton for the payment of the Accrued But Unpaid Service Retirement Allowance Burial Allowance
Parker, Dorothy N	Lynn Diane Krause for the payment of the Accrued But Unpaid Continuance Allowance
Perez, Jorge F	Astrid Ruelas Franquez for the payment of the Burial Allowance
Prada, Alfredo	Maria E Prada for the payment of the Accrued But Unpaid Disability Retirement Allowance Burial Allowance

Reed, John L	Denise E Reed for the payment of the Accrued But Unpaid Disability Retirement Allowance Burial Allowance
Reitzel, Joan M	Joan M Reitzel Revocable Trust for the payment of the Accrued But Unpaid Service Retirement Allowance Burial Allowance
Rocha, Eduardo P	Gerardo L Rocha for the payment of the Burial Allowance
Rojo, Rosalia (Deceased Active)	Maria Del Pilar Votion for the payment of the Accumulated Contributions  Priscilla Irene Votion for the payment of the Accumulated Contributions
Rosendahl, William Joseph	Hedi El Kholti for the payment of the Accrued But Unpaid Disability Retirement Allowance Unused Contributions
Sanchez, Gilbert	Connie Sanchez for the payment of the Accrued But Unpaid Service Retirement Allowance  Gilbert Sanchez for the payment of the Accrued But Unpaid Service Retirement Allowance  John Sanchez for the payment of the Accrued But Unpaid Service Retirement Allowance
Sasaki, Hiroyuki H	Katherine Sasaki for the payment of the Accrued But Unpaid Disability Retirement Allowance Burial Allowance

Savone, Ivonne D                      Raymond Terrell Bagley for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Unused Contributions

Scates, Lucy                              Allen Scates for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Shimabukuro, Robert                      Lark Shimabukuro Krug for the payment of the  
Accrued But Unpaid Continuance Allowance

Spencer, Craig W                      Lori A Hewitt for the payment of the  
Accrued But Unpaid Service Retirement Allowance

Ronald Frank Spencer for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Stover, Maggie L                      Daryl R Stover for the payment of the  
Accrued But Unpaid Continuance Allowance

Valerie D Stover for the payment of the  
Accrued But Unpaid Continuance Allowance

Streicher, Selma                      Sondra Ben Na Eim for the payment of the  
Burial Allowance

Sugita, Akira                              Akira Sugita Living Trust for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Tack, Martin Leroy

Cheryl D Tack for the payment of the  
Burial Allowance

Tidwell, William S

Rebecca L Tidwell for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Tosti, Glenda J

Michael S Tosti for the payment of the  
Accrued But Unpaid Vested Retirement Allowance  
Burial Allowance

Trammell, Olysee

Michael W Trammell for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Otis Trammell for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Tammy Trammell- Howlett for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Turner, Julia E

Betty R Norman for the payment of the  
Accrued But Unpaid Service Retirement Allowance

Valencia, Arsenio C

Lucita S Valencia for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Walters, James R

Julie Andrews for the payment of the  
Accrued But Unpaid Disability Retirement Allowance  
Burial Allowance

Webb, Russell E

Leshia M Lee Webb for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Wikstrom, Edwin A

Edwin A Wikstrom for the payment of the  
Accrued But Unpaid Service Retirement Allowance  
Burial Allowance

Woodard, Betty A

Marcus B Woodard for the payment of the  
Accrued But Unpaid Continuance Allowance

**TIER 3**

None



Agenda of: **NOVEMBER 27, 2018**

Item No: **V-B**

## **MARKETING CESSATION REPORT NOTIFICATION TO THE BOARD**

The Board's Marketing Cessation Policy was adopted in order to prevent and avoid the appearance of undue influence on the Board or any of its Members in the award of investment related and other service contracts. Pursuant to this Policy, this notification procedure has been developed to ensure that Board Members and staff are regularly apprised of firms for which there shall be no direct marketing discussions about the contract or the process to award it; or for contracts in consideration of renewal, no discussions regarding the renewal of the existing contract.

Firms listed in Attachments 1 and 2 are subject to limited communications with Board Members and staff pursuant to the Policy and will appear and remain on the list, along with the status, from the first publicized intention to contract for services through the award of the contract. Lists of current LACERS contracts are on file in the Board office and are available upon request.

Attachments: 1) Contracts Under Consideration for Renewal  
2) Active RFPs and RFQs

**CONTRACTS UNDER CONSIDERATION FOR RENEWAL**

NO.	VENDOR / CONSULTANT	DESCRIPTION	INCEPTION DATE	EXPIRATION DATE	MARKETING CESSATION STATUS	RESTRICTED PERIOD*	
						START	END
<b>RETIREMENT SERVICES</b>							
1	Frasco Investigative Services	Investigative Services	9/1/2014	8/31/2018	Board approved renewal on 8/14/2018; Contract under review for execution.	5/31/2018	11/30/2018
2	TruView BSI LLC	Investigative Services	Pending	Pending	Board awarded new contract on 8/14/2018; Contract under review for execution.	5/31/2018	11/30/2018
<b>ADMINISTRATIVE SERVICES</b>							
3	Travers Cresa	Real Estate Services	Pending	Pending	Board awarded new contract on 11/28/2017; Contract under review for execution.	10/1/2017	11/30/2018
<b>CITY ATTORNEY</b>							
4	Reed Smith	Outside Tax Counsel	Pending	Pending	Board awarded new contract on 9/11/2018; Contract under review for execution.	6/27/2018	12/11/2018
5	Ice Miller	Outside Tax Counsel	Pending	Pending	Board awarded new contract on 9/11/2018; Contract under review for execution.	6/27/2017	12/11/2018

HEALTH BENEFITS ADMINISTRATION							
6	Anthem 2019	Medical HMO & PPO	1/1/2019	12/31/2019	Board approved on 8/28/2018; Contract under review for execution.	9/30/2018	3/31/2019
7	Kaiser 2019	Medical HMO	1/1/2019	12/31/2019	Board approved on 8/28/2018; Contract under review for execution.	9/30/2018	3/31/2019
8	SCAN 2019	Medical HMO	1/1/2019	12/31/2019	Board approved on 8/28/2018; Contract under review for execution.	9/30/2018	3/31/2019
9	UnitedHealthcare 2019	Medical HMO	1/1/2019	12/31/2019	Board approved on 8/28/2018; Contract under review for execution.	9/30/2018	3/31/2019
10	Delta Dental 2019	Dental PPO and HMO	1/1/2019	12/31/2019	Board approved on 8/28/2018; Contract under review for execution.	9/30/2018	3/31/2019
11	Anthem Blue View Vision 2019	Vision Services Contract	1/1/2019	12/31/2019	Board approved on 8/28/2018; Contract under review for execution.	9/30/2018	3/31/2019

**\*RESTRICTED PERIOD**

**Start Date** - The estimated start date of the restricted period is three (3) months prior to the expiration date of the current contract. No entertainment or gifts of any kind should be accepted from the restricted source as of this date. Firms intending to participate in the Request for Proposal process are also subject to restricted marketing and communications.

**End Date** - The estimated end date of the restricted period is three (3) months following the expiration date of the current contract. For investment-related contracts, the estimated end date is normally six (6) months following the expiration of the current contract. For health carrier contracts, the estimated end date is normally one (1) year following the expiration of the current contract. Estimated dates are based on contract negotiation periods from prior years.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM  
 CONTRACTS LIST FOR THE NOVEMBER 13, 2018 BOARD MEETING

**ACTIVE RFPs AND RFQs\***

NO.	DESCRIPTION	MARKETING CESSATION STATUS AND VENDOR RESPONSES
<b>INVESTMENTS</b>		
1	Investigative Services	<b>RFP Release Date:</b> April 4, 2018
		<b>Submission Deadline:</b> April 26, 2018
		<b>Status:</b> Board awarded contracts to TruView BSI, LLC and Frasco.
		<b>List of Respondents:</b> Digistream Investigations, Frasco, G4S Compliance & Investigations, TruView BSI, LLC
2	Outside Tax Counsel	<b>RFP Release Date:</b> June 27, 2018
		<b>Submission Deadline:</b> July 20, 2018
		<b>Status:</b> Board awarded contracts to Reed Smith, LLP and Ice Miller, LLP.
		<b>List of Respondents:</b> Best Best & Krieger, Attorneys At Law, Ice Miller, LLP, Kutak Rock, and Reed Smith, LLP

\* RESTRICTED PERIOD FOR REQUEST FOR PROPOSAL OR REQUEST FOR QUALIFICATIONS:

**Start Date** - The restricted period commences on the day the Request for Proposal is released.

**End Date** - The restricted period ends on the day the contract is executed.



***Report to Board of Administration***

From: Audit Committee  
Elizabeth Lee, Chairperson  
Michael R. Wilkinson  
Sung Won Sohn

Agenda of: **NOVEMBER 27, 2018**

ITEM: **VI - B**

**SUBJECT: AUDIT COMMITTEE AND INTERNAL AUDIT CHARTER UPDATES AND POSSIBLE BOARD ACTION**

Recommendation:

That the Board approve the proposed changes to Internal Audit Charter (Attachment 1); and reaffirm the current Audit Committee Charter (Attachment 5).

Discussion:

On October 23rd, 2018, the Audit Committee considered staff's recommended changes to the Internal Audit Charter. Committee members provided feedback, requested minor changes and approved the updates. Staff is not recommending any changes to the Audit Committee Charter at this time. The Committee recommends Board's approval of these charters.

*Internal Audit Charter*

The International Standards for the Professional Practice of Internal Auditing (IIA Standards) require that the purpose, authority and responsibility of an internal audit function be formally defined in an internal audit charter, and approved by the organization's board.

On November 12, 2013, the Board adopted the initial Internal Audit and Audit Committee charters. The charters were developed to closely align with professional auditing standards and model charters issued by the Association of Public Pension Fund Auditors (APPFA). LACERS' Internal Audit Charter institutionalizes the internal audit function within LACERS, including the nature of its reporting relationship to the Board; define the scope of internal audit activities; and authorize access to records, personnel, and physical properties relevant to the performance of audit engagements.

As part of Internal Audit's periodic review of the charters, staff noted that, in March 2017, the Institute of Internal Auditors issued a "Supplemental Guidance / Model Internal Audit Activity Charter" (Attachment 4) to illustrate common practices typically set out in an internal audit activity charter. Based on a review of this guide, staff proposes changes to Internal Audit's mission, scope and standards of professional practice, as indicated in Attachment 1. A clean version of the charter incorporating the proposed changes is also attached (Attachment 2). The proposed changes would

make these sections of the Internal Audit Charter consistent with the new language in the supplemental guidance.

### *Audit Committee Charter*

The Audit Committee assists the Board in fulfilling its fiduciary oversight responsibility to members and other stakeholders relating to LACERS' financial statements, and the legal compliance, ethics programs and other related risks, as established by the Board. Much like the internal audit charter, the Audit Committee Charter (Attachment 5) was developed to align them with IIA standards and APPFA's "Model Audit Committee Charter" (Attachment 6). Staff has reviewed the current Audit Committee Charter and determined that no new changes are needed at this time. Staff is requesting that the Board reaffirm the current Audit Committee Charter.

### *Strategic Impact Statement*

Internal Audit and Audit Committee assist the Board in meeting its Governance Goal to "uphold good governance practices which affirm transparency, accountability and fiduciary duty," by providing an independent and objective assessment of the effectiveness of risk management, internal control, and governance processes.

This report was prepared by Rahoof "Wally" Oyewole, Departmental Audit Manager, Internal Audit Section.

RO

- Attachments:
- 1) Proposed LACERS Internal Audit Charter (Redline Version)
  - 2) Proposed LACERS Internal Audit Charter (Clean Version)
  - 3) APPFA Model Internal Audit Department Charter
  - 4) IIA Supplemental Guidance – Model Internal Audit Activity Charter Issued March 2017
  - 5) LACERS' Current Audit Committee Charter – No Changes Proposed
  - 6) APPFA Model Audit Committee Charter

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

**Internal Audit Charter**

*Adopted by the Board: November 12, 2013; Revised: November 13, 2018*

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**I. PURPOSE**

The purpose of this Charter is to formally define LACERS' internal audit function's purpose, authority, and responsibility. The internal audit charter establishes the internal audit function's position within LACERS including the nature of the Departmental Audit Manager's (or DAM) functional reporting relationship with the Board; authorizes access to records, personnel, and physical properties relevant to the performance of engagements; and defines the scope of internal audit activities. This Charter shall be reviewed annually and updated as necessary.

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**II. MISSION**

The Mission of the Internal Audit Section is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight. ~~provide independent, objective assurance, and consulting services designed to add value and improve LACERS' operations. Internal Audit helps~~ ~~It is to assist~~ LACERS in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and internal control, ~~and governance processes, by:~~

- ~~• Providing a wide range of quality, independent internal auditing services for the Executive Management and the Board, and consulting services for management;~~
- ~~• Performing independent assessments of the risk management systems, internal controls, and operating efficiency, guided by professional standards and using innovative approaches;~~
- ~~• Supporting LACERS' efforts to achieve its objectives through independent auditing and consulting services; and~~
- ~~• Maintaining a dynamic, team-oriented environment that encourages personal and professional growth, and challenges and rewards internal audit staff for reaching full potential and excelling;~~

Commented [OR1]: Mission revised to be consistent with Supplemental Guidance Model Internal Audit Activity Charter issued by the Institute of Internal Auditor (IIA) in March 2017.

**III. OBJECTIVES AND SCOPE**

Assurance Objectives: The objectives of the Internal Audit Section's assurance services are to provide independent assurance to the Board, the Audit Committee, and LACERS' Executive Management that LACERS' assets are safeguarded, operating efficiency is enhanced, and compliance is maintained within prescribed laws, Board Rules, and management policies. Assurance objectives include independent assessment of LACERS' governance, risk management, and control processes.

Consulting Objectives: The objectives of the Internal Audit Section's consulting services, the nature and scope of which are agreed with management, are to provide management with assessments and advice for improving LACERS' governance, risk management and control without the Internal Audit Section assuming management responsibility. For example, consulting services may provide assessments and advice on the front-end projects so that risks can be identified, managed, and internal controls can be designed.

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

Scope: The scope of internal audit activities encompasses, but is not limited to, objective examinations of evidence for the purpose of providing independent assessments to the LACERS' Board, Audit Committee, management, and outside parties on the adequacy and effectiveness of governance, risk management, and control processes for LACERS. Internal audit assessments include evaluating whether:

- Risks relating to the achievement of LACERS' strategic objectives are appropriately identified and managed;
- The actions of LACERS' officers, directors, employees, and contractors are in compliance with Board's policies, procedures, and applicable laws, regulations, and governance standards;
- The results of operations or programs are consistent with established goals and objectives;
- Operations or programs are being carried out effectively and efficiently;
- Established processes and systems enable compliance with the policies, procedures, laws, and regulations that could significantly impact Plan;
- Information and the means used to identify, measure, analyze, classify, and report such information are reliable and have integrity;
- Resources and assets are acquired economically, used efficiently, and protected adequately;

The scope of work of the Internal Audit Section is to determine whether LACERS' network of risk management, internal control, and governance processes, as designed and represented by management, is adequate and functioning in a manner to ensure:

Programs are operating within the highest fiduciary standards and are directed toward the requirements defined in Federal and State law, the Charter of the City of Los Angeles, the Administrative Code of the City of Los Angeles, Board Rules, and LACERS' policies and procedures;

Processes and practices are consistent with industry best practices, using the best public and private examples as benchmarks;

Significant legislative and regulatory issues impacting LACERS are recognized and addressed appropriately;

Operations and processes are consistent with established missions, objectives, and goals;

Operations and processes are being carried out as planned;

Existing policies are appropriate and updated;

Employee data is appropriately reported to LACERS;

Significant financial, managerial, and operating information is accurate, reliable, and timely;

Resources are acquired economically, used efficiently, and adequately protected;

Quality service and continuous improvement are fostered in LACERS control processes;

Contractors are meeting the objectives of the contracts, while in conformance with applicable laws, regulations, policies, procedures, and best practices; and

**Commented [OR2]:** Language and specific components revised to be consistent with Supplemental Guidance Model Internal Audit Activity Charter issued by the Institute of Internal Auditor (IIA) in March 2017.

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

~~Specific programs, operations, and processes are review at the request of management of the Board.~~

Opportunities for improving member service, management of risks, internal control, governance, and the organization's effectiveness and image may be identified during audits. This information will be communicated to management and the Audit Committee as appropriate.

## IV. AUTHORITY

~~This Charter establishes LACERS' internal audit function. The~~ Internal Audit Section reports functionally to the Board through its Audit Committee, and administratively to the General Manager. The Audit Committee advises on the appointment, replacement, or dismissal of the Departmental Audit Manager (DAM) in consultation with the General Manager as appointing authority.

**Commented [OR3]:** Internal Audit is now an established function within the Department

The DAM is responsible for managing the Internal Audit Section and preparing an audit plan. The Audit Committee reviews and recommends the approval of the annual audit plan to the Board. The DAM shall periodically inform the Audit Committee regarding the status of the audit plan and changes needed. The DAM is authorized to allocate internal audit resources, set project frequencies, select audit subjects, determine scopes of work, and apply the techniques necessary to accomplish the audit objectives. The DAM is authorized to hire (within budgetary constraints), retain, train, and develop internal audit staff to achieve the internal audit objectives as stated in this Charter.

The DAM and other Internal Audit staff are not authorized to perform operational duties for LACERS and/or its contractors. LACERS Internal Audit staff is not authorized to initiate or approve accounting transactions external to the Internal Audit Section. Internal Audit Section staff is not authorized to direct the activities of any LACERS employee not employed in the Internal Audit Section, except to the extent such employees have been assigned appropriately to auditing teams or to otherwise assist the internal auditors.

## V. ACCESS

The Departmental Audit Manager and designated audit staff, as appropriate, are granted authority for full, free, and unrestricted access to all of LACERS' functions, records, files and information systems, personnel, contractors, physical properties, and any other item relevant to the function, process or unit under review. All LACERS' contracts with vendors shall contain language enabling the internal auditors, other auditors, and specialists to have access to relevant records and information. All LACERS employees are required to assist the staff of the Internal Audit Section in fulfilling its audit functions and fiduciary duties.

The DAM shall have free and unrestricted access to the Chairperson of the Audit Committee and Members, ~~and~~ the President, Vice President, and Members of the Board of Administration. The DAM shall also have free and unrestricted access to the General

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

Manager, other executive management, and all personnel, contractors and vendors, members, retirees, and beneficiaries of LACERS.

Staff of the Internal Audit Section shall handle documents and information given to them in the same prudent and confidential manner as by those employees normally accountable for them. The DAM shall ensure that the Internal Audit staff is instructed in the handling and safeguarding of confidential information.

**VI. INDEPENDENCE**

Organizational Placement: To provide for the independence for the Internal Audit Section, its personnel report to the ~~Departmental Audit Manager~~, who in turn reports functionally to the Board and administratively to the General Manager. By reporting functionally to the Board, the DAM is able to maintain independence and objectivity in planning and executing internal audit activities. The Board supports internal audit's role by maintaining internal audit's independence, and by recognizing and promoting internal audit as a value-added activity.

Professional Standards Independence: The Audit Committee recognizes that professional independence requires that the auditors have knowledge of operations and appropriate expertise in the subject matter that is being audited. Therefore, the DAM will include as part of the reports to the Audit Committee, a regular report regarding internal audit personnel, including their qualifications, certifications, and development. The DAM shall periodically discuss standards of professional audit independence with the Audit Committee. The standards of independence used as benchmarks shall be those indicated in the Professional Standards section of this document.

Potential Impairment of Independence: The DAM should discuss any potential issues regarding impairment of independence and/or conflicts of interest and their mitigation(s) with the Audit Committee, as necessary. If objectivity is impaired in fact or in appearance, the details of the impairment should be disclosed to the General Manager and the Audit Committee. The nature of the disclosure will depend on the impairment. Each Internal Audit Section staff member (including the DAM) shall be required to annually certify to the Audit Committee that he/she has no actual or perceived conflicts of interest that would impair their objectivity or independence. The form for such certification is attached to this charter, and may be revised by the DAM with approval of the Audit Committee ~~as needed.~~ ~~at any time.~~

**VII. RESPONSIBILITIES AND ACCOUNTABILITY**

The Departmental Audit Manager is responsible for the following in order to meet the mission, objectives, and scope of this Charter and the Internal Audit Section:

1. Select, train, develop, and retain a competent Internal Audit staff who collectively have the abilities, knowledge, skills, experience, expertise, and professional certifications necessary to accomplish the mission, objectives, and scope of this Charter, subject to the General Manager's approval and budgetary considerations. Provide opportunity and

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

support for staff obtaining professional training, professional examinations, and professional certifications.

2. Establish policies for conducting and directing internal audit activities, and technical and administrative functions according to LACERS' policies and direction provided by the Audit Committee and the Board, and professional standards described in Section VIII.
3. Perform an annual operational risk assessment. Develop and implement a flexible annual audit plan (audit plan) using an appropriate risk-based methodology, including any risks or concerns identified by management, and submit the audit plan to the Audit Committee for review and approval. The audit plan will include some unassigned hours in order to provide flexibility for changing conditions. Performance of the audit plan will be periodically reviewed and reported to the Audit Committee. The audit plan may be updated, if necessary.
4. Perform independent analyses of significant operations to evaluate the adequacy and effectiveness of existing systems of internal control and the quality of performance (economy, efficiency, and effectiveness) in carrying out LACERS' business objectives.
5. Coordinate with audit clients to finalize recommendations for improvement and identify implementation timelines. Internal Audit staff shall consider costs and benefits while formulating and discussing its recommendations.
6. Establish and maintain a follow-up system to monitor the disposition of results communicated to management and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.
7. Issue periodic reports to management and the Audit Committee and management summarizing results of assurance and consulting services. Any management letters issued should also be reported to the Audit Committee.
- ~~8.~~ At least every three years, assess whether the purpose, authority, and responsibility, as defined in this Charter, continue to be adequate to enable the Internal Audit Section to accomplish its mission, objectives, and scope. The result of this assessment should be communicated to the Audit Committee.
- ~~8.~~
9. Implement a quality assurance and improvement program. Obtain an external assessment no less frequently than every five years as required by the International Standards for the Professional Practice of Internal Auditing. Conduct periodic internal quality assurance and ongoing quality procedures. Results of the quality assurance and improvement program should be reported to the Audit Committee.
10. Lead the process for selecting the external audit firms. Coordinate/manage the contract(s) with any external audit firms and evaluate their performance. Report to the Audit Committee on all activities and associated cost of work performed by the external audit firms.

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

11. Consider the scope of work of the external auditors and regulators, as appropriate, for the purpose of providing optimal audit coverage to LACERS at a reasonable overall cost
12. Act as the primary point of contact for handling all matters related to audits, examinations, investigations, or inquiries by other City entities, State or Federal agencies. Keep the Audit Committee and/or the General Manager informed as appropriate.
13. Evaluate annually the quality of the annual financial report and suggest improvements in the presentation and disclosure.
14. Consult with LACERS management, as appropriate, regarding potential policy and procedural changes.
15. As appropriate, provide consulting services to management that add value and improve the organization's governance, risk management, and control processes without assuming management responsibility.
16. Participate in professional audit organizations by attending meetings, joining the governing boards, presenting speeches and papers, and networking with other professionals. Network with internal audit staff of other public pension systems to learn and exchange best practices information. Participate in other professional organizations related to LACERS' mission. These may include, but are not limited to, organizations involved with benefits, investments, and accounting.
17. Periodically review LACERS' fraud and ethics policies.
18. Assist in the investigation of significant suspected fraudulent activities within LACERS and notify the General Manager, the Audit Committee, and other executives, as appropriate, of the results.
19. Inform the Audit Committee of significant risk exposures and control issues including fraud risks, governance issues, and other significant matters.
20. Inform the Audit Committee of emerging trends and successful practices in internal auditing.
21. Attend all Audit Committee meetings and ensure the attendance of additional audit staff and attendance by auditees as appropriate.

**VIII. PROFESSIONAL STANDARDS**

The Internal Audit Section will govern itself by adherence to the mandatory elements of The Institute of Internal Auditors' International Professional Practices Framework, including the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, the International Standards for the Professional Practice of Internal Auditing, and the Definition of Internal Auditing, shall adhere to the International Standards for the Professional Practice of Internal Auditing (ISPPA) and to the Code of Ethics, both as promulgated by the Institute

## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

~~of Internal Auditors (IIA), current version of which is attached to this Internal Audit Charter.~~ Internal Audit Section shall also obtain guidance from professional standards of other relevant professional organizations including, but not limited to, the following:

- Information Systems Auditing Standards, Guidelines, and Procedures, and the Code of Professional Ethics of the Information Systems Audit and Control Association (ISACA);
- Public Company Accounting Oversight Board (PCAOB) auditing standards, as applicable;
- American Institute of Certified Public Accountants (AICPA) Professional Standards and Code of Ethics, as applicable;
- Generally Accepted Government Auditing Standards (GAGAS) from the United States General Accounting Office, as applicable; and
- Other professional standards, such as those of the Institute of Management Accountants (IMA) and the Association of Certified Fraud Examiners (ACFE), as applicable.

**Commented [OR4]:** Revised to reflect the new language in the Supplemental guidance

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#### IX. RELATIONSHIP TO THE RISK MANAGEMENT AND INTERNAL CONTROLS PROGRAMS

The Board has overall responsibility for ensuring that risks are managed. In practice, the Board delegates to management the operation and implementation of the risk management system. The Internal Audit Section's role is to provide an independent and objective assurance on the effectiveness of the risk management system.

Management is responsible for implementing the system of internal control. The Internal Audit Section is responsible to provide an independent and objective assurance that the internal control system is operating effectively.

#### X. PROCUREMENT

The Departmental Audit Manager occasionally may need to obtain expertise of persons outside of the Internal Audit Section. This expertise may be obtained within LACERS through appropriate arrangements with management. When obtaining this expertise, care must be taken to avoid conflicts of interest within LACERS that could damage the quality of the audit work performed and/or conclusions obtained.

Expertise may also be obtained from outside LACERS through contracts. In such cases, the DAM needs to obtain sufficient information regarding the scope of work of the external service provider to ensure the scope of work is adequate for the purposes of the internal audit activity. The DAM must document the scope of work, professional standards to be used, deliverables, deadlines, and other matters in an engagement letter or contract. The Audit Committee should be informed of the use of an external service provider.

#### XI. RELATIONSHIP TO PREVENTION, DETECTION, AND CORRECTION ACTIVITIES

ARTICLE I. BOARD GOVERNANCE STATEMENT

Section 3.0 DUTIES AND RESPONSIBILITIES

—Because LACERS recognizes that it is more expensive to detect and correct problems after the fact than it is to prevent them in the initial stages of a project, the Internal Audit Section will strive to participate in the initial stages of major projects so that risks can be managed appropriately and internal controls instituted in the design phase in order to prevent problems and minimize costs.

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## ARTICLE I. BOARD GOVERNANCE STATEMENT

## Section 3.0 DUTIES AND RESPONSIBILITIES

**Auditor Annual Independence Certification**

**DIRECTIONS:** Each auditor must complete this Evaluation form in its entirety. The purpose of this form is for individual auditor and LACERS Internal Audit management to consider all circumstances relative to internal audit projects, in order to identify and address any potential threats to independence by applying appropriate safeguards or controls.

In all matters relating to audit work, LACERS Internal Audit (IAS), and individual auditors must be independent, in compliance with Sections 1100, 1120 and 1130 of the International Standards for the Professional Practice of Internal Auditing (ISPPA). Auditors should avoid situations that could lead reasonable and informed third parties to conclude that the auditors are not independent and thus are not capable of exercising objective and impartial judgment on all issues associated with conducting the audit and reporting on audit work. Auditors should evaluate these considerations during the course of their audits and immediately report any potential or actual threats.

**Threat Consideration:** To be completed by all audit staff **annually**:

<b>Threat Categories:</b> Complete the following, considering the threat as a broad category that could potentially influence your independence.	<b>Yes</b>	<b>No</b>
<b>Self-interest threat</b> – Do you have a direct or indirect financial or other interest that will inappropriately influence your judgment or behavior?		
<b>Self-review threat</b> – Will any of the anticipated audit work put you in a position to audit the work, services, or judgments you previously performed during a non-auditing (consulting) service?		
<b>Familiarity threat</b> – Do you have any relationship with LACERS management or personnel, or personnel of LACERS contractors/consultants which may impact your ability to be objective as LACERS Internal Audit staff?		
<b>Undue influence threat</b> – Are you experiencing pressure from management, LACERS Staff or external parties, which will impact your ability or make independent and objective judgments on internal audit projects?		
<b>Management participation threat</b> – Have you taken on a management or any other role which has or will result in performing management functions for any unit within LACERS? If so, please list the unit(s) _____		
<b>Relationship</b> – Do you have any official, professional, financial, or personal relationship with anyone that might limit the extent of inquiry or disclosure, or weaken audit findings in any way?		
<b>Accounting</b> – During the past year, have you approved invoices, payrolls, claims, or other proposed payments for any unit within LACERS? During the past year, did you maintain any part of the official accounting records for LACERS?		
<b>Conflict of Interest or Secondary Employment</b> – Are you or have you been in a conflict of interest position or engaged in any secondary employment activities which may impact your ability, in any way, to perform internal audit projects?		
<b>Other Threat:</b> Is there any other relevant potential threat which may impact your independence or perception regarding any audit? (If so, disclose here. If you are not sure, discuss it with the Departmental Audit Manager.)		

ARTICLE I. BOARD GOVERNANCE STATEMENT

**Section 3.0 DUTIES AND RESPONSIBILITIES**

**Auditor Annual Independence Certification**

**Safeguard Consideration:** If “yes” is marked in any boxes above, please complete the following section:

Potential Threat	Recommended Safeguard to mitigate Threat (and is risk reduced to an acceptable level?)	Departmental Audit Manager only: Does the safeguard eliminate or reduce the threat to an acceptable level?
<i>Ex. Accounting – I previously worked in the Fiscal Section, but I only handled the accounts payable.</i>	<i>I don't believe this is an unacceptable risk, as I don't manage or work in investment accounting or other areas within Fiscal Section, and I left about six months ago.</i>	<i>No. To avoid the perception of impairment, auditor is not approved to participate in audit projects relating to the Fiscal Section.</i>

**Acknowledgement:** (initial after each statement)

**Comply with ISPPIA:** I understand that I have a duty and obligation to ensure audit work is performed in full accordance with ISPPIA. In conducting my work, I have the obligation to immediately report any conditions or situations which may compromise compliance with any ISPPIA to the Departmental Audit Manager (DAM). \_\_\_\_\_

**Remain Independent:** I have been advised that during the course of any audit, if any personal, external, or organizational impairments or potential threats arise that may affect my ability to do the work and report findings impartially, I will notify the DAM promptly. Further, I will assess ongoing threats, identify potential safeguards, and engage the DAM in remedying any situations which may give rise to even the perception of bias or conditions which may impact the integrity of any audit work. \_\_\_\_\_

**Policies and Procedures:** I have been informed and am familiar with the policies and procedures of IAS, regarding independence and objectivity. I am also familiar with the requirements of the 2012 ISPPIA. \_\_\_\_\_

**Obligation to Report:** I understand that I have an obligation to report any instance or information regarding an actual or potential impairment by any auditor in IAS to the DAM. \_\_\_\_\_

**Direct Access to Audit Committee Chair:** If for any reason I am uncomfortable discussing any of the foregoing matters with the DAM, I understand that I am expected to discuss the matter with the Audit Committee Chairperson. \_\_\_\_\_

I certify that all the included information is complete and accurate and reflects my best ability to provide clear, detailed information regarding any activity or condition which may impair or to be perceived to impair independence and/or objectivity.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (print): \_\_\_\_\_

**Departmental Audit Manager Review and Approval:**

<p><u>Overall Assessment:</u></p> <p>_____</p> <p><u>Restrictions:</u></p> <p>_____</p>
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Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Section 3.0 DUTIES AND RESPONSIBILITIES****Internal Audit Charter**

*Adopted by the Board: November 12, 2013; Revised: November 13, 2018*

**I. PURPOSE**

The purpose of this Charter is to formally define LACERS' internal audit function's purpose, authority, and responsibility. The internal audit charter establishes the internal audit function's position within LACERS including the nature of the Departmental Audit Manager's (or DAM) functional reporting relationship with the Board; authorizes access to records, personnel, and physical properties relevant to the performance of engagements; and defines the scope of internal audit activities. This Charter shall be reviewed annually and updated as necessary.

**II. MISSION**

The Mission of the Internal Audit Section is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight. Internal Audit helps LACERS accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes.

**III. OBJECTIVES AND SCOPE**

Assurance Objectives: The objectives of the Internal Audit Section's assurance services are to provide independent assurance to the Board, the Audit Committee, and LACERS' Executive Management that LACERS' assets are safeguarded, operating efficiency is enhanced, and compliance is maintained within prescribed laws, Board Rules, and management policies. Assurance objectives include independent assessment of LACERS' governance, risk management, and control processes.

Consulting Objectives: The objectives of the Internal Audit Section's consulting services, the nature and scope of which are agreed with management, are to provide management with assessments and advice for improving LACERS' governance, risk management and control without the Internal Audit Section assuming management responsibility. For example, consulting services may provide assessments and advice on the front-end projects so that risks can be identified, managed, and internal controls can be designed.

Scope: The scope of internal audit activities encompasses, but is not limited to, objective examinations of evidence for the purpose of providing independent assessments to the LACERS' Board, Audit Committee, management, and outside parties on the adequacy and effectiveness of governance, risk management, and control processes for LACERS. Internal audit assessments include evaluating whether:

- Risks relating to the achievement of LACERS' strategic objectives are appropriately identified and managed;

**Section 3.0 DUTIES AND RESPONSIBILITIES**

- The actions of LACERS' officers, directors, employees, and contractors are in compliance with Board's policies, procedures, and applicable laws, regulations, and governance standards;
- The results of operations or programs are consistent with established goals and objectives;
- Operations or programs are being carried out effectively and efficiently;
- Established processes and systems enable compliance with the policies, procedures, laws, and regulations that could significantly impact Plan;
- Information and the means used to identify, measure, analyze, classify, and report such information are reliable and have integrity;
- Resources and assets are acquired economically, used efficiently, and protected adequately;

Opportunities for improving member service, management of risks, internal control, governance, and the organization's effectiveness and image may be identified during audits. This information will be communicated to management and the Audit Committee as appropriate.

**IV. AUTHORITY**

The Internal Audit Section reports functionally to the Board through its Audit Committee, and administratively to the General Manager. The Audit Committee advises on the appointment, replacement, or dismissal of the Departmental Audit Manager (DAM) in consultation with the General Manager as appointing authority.

The DAM is responsible for managing the Internal Audit Section and preparing an audit plan. The Audit Committee reviews and recommends the approval of the annual audit plan to the Board. The DAM shall periodically inform the Audit Committee regarding the status of the audit plan and changes needed. The DAM is authorized to allocate internal audit resources, set project frequencies, select audit subjects, determine scopes of work, and apply the techniques necessary to accomplish the audit objectives. The DAM is authorized to hire (within budgetary constraints), retain, train, and develop internal audit staff to achieve the internal audit objectives as stated in this Charter.

The DAM and other Internal Audit staff are not authorized to perform operational duties for LACERS and/or its contractors. LACERS Internal Audit staff is not authorized to initiate or approve accounting transactions external to the Internal Audit Section. Internal Audit Section staff is not authorized to direct the activities of any LACERS employee not employed in the Internal Audit Section, except to the extent such employees have been assigned appropriately to auditing teams or to otherwise assist the internal auditors.

**Section 3.0 DUTIES AND RESPONSIBILITIES****V. ACCESS**

The Departmental Audit Manager and designated audit staff, as appropriate, are granted authority for full, free, and unrestricted access to all of LACERS' functions, records, files and information systems, personnel, contractors, physical properties, and any other item relevant to the function, process or unit under review. All LACERS' contracts with vendors shall contain language enabling the internal auditors, other auditors, and specialists to have access to relevant records and information. All LACERS employees are required to assist the staff of the Internal Audit Section in fulfilling its audit functions and fiduciary duties.

The DAM shall have free and unrestricted access to the Chairperson of the Audit Committee and Members, the President, Vice President, and Members of the Board of Administration. The DAM shall also have free and unrestricted access to the General Manager, other executive management, and all personnel, contractors and vendors, members, retirees, and beneficiaries of LACERS.

Staff of the Internal Audit Section shall handle documents and information given to them in the same prudent and confidential manner as by those employees normally accountable for them. The DAM shall ensure that the Internal Audit staff is instructed in the handling and safeguarding of confidential information.

**VI. INDEPENDENCE**

Organizational Placement: To provide for the independence for the Internal Audit Section, its personnel report to the Departmental Audit Manager, who in turn reports functionally to the Board and administratively to the General Manager. By reporting functionally to the Board, the DAM is able to maintain independence and objectivity in planning and executing internal audit activities. The Board supports internal audit's role by maintaining internal audit's independence, and by recognizing and promoting internal audit as a value-added activity.

Professional Standards Independence: The Audit Committee recognizes that professional independence requires that the auditors have knowledge of operations and appropriate expertise in the subject matter that is being audited. Therefore, the DAM will include as part of the reports to the Audit Committee, a regular report regarding internal audit personnel, including their qualifications, certifications, and development. The DAM shall periodically discuss standards of professional audit independence with the Audit Committee. The standards of independence used as benchmarks shall be those indicated in the Professional Standards section of this document.

Potential Impairment of Independence: The DAM should discuss any potential issues regarding impairment of independence and/or conflicts of interest and their mitigation(s) with the Audit Committee, as necessary. If objectivity is impaired in fact or in appearance, the details of the impairment should be disclosed to the General Manager and the Audit Committee. The nature of the disclosure will depend on the impairment. Each Internal Audit Section staff member (including the DAM) shall be required to annually certify to the Audit Committee that he/she has no actual or perceived conflicts of interest that would impair their

**Section 3.0 DUTIES AND RESPONSIBILITIES**

objectivity or independence. The form for such certification is attached to this charter, and may be revised by the DAM with approval of the Audit Committee as needed.

**VII. RESPONSIBILITIES AND ACCOUNTABILITY**

The Departmental Audit Manager is responsible for the following in order to meet the mission, objectives, and scope of this Charter and the Internal Audit Section:

1. Select, train, develop, and retain a competent Internal Audit staff who collectively have the abilities, knowledge, skills, experience, expertise, and professional certifications necessary to accomplish the mission, objectives, and scope of this Charter, subject to the General Manager's approval and budgetary considerations. Provide opportunity and support for staff obtaining professional training, professional examinations, and professional certifications.
2. Establish policies for conducting and directing internal audit activities, and technical and administrative functions according to LACERS' policies and direction provided by the Audit Committee and the Board, and professional standards described in Section VIII.
3. Perform an annual operational risk assessment. Develop and implement a flexible annual audit plan (audit plan) using an appropriate risk-based methodology, including any risks or concerns identified by management, and submit the audit plan to the Audit Committee for review and approval. The audit plan will include some unassigned hours in order to provide flexibility for changing conditions. Performance of the audit plan will be periodically reviewed and reported to the Audit Committee. The audit plan may be updated, if necessary.
4. Perform independent analyses of significant operations to evaluate the adequacy and effectiveness of existing systems of internal control and the quality of performance (economy, efficiency, and effectiveness) in carrying out LACERS' business objectives.
5. Coordinate with audit clients to finalize recommendations for improvement and identify implementation timelines. Internal Audit staff shall consider costs and benefits while formulating and discussing its recommendations.
6. Establish and maintain a follow-up system to monitor the disposition of results communicated to management and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.
7. Issue periodic reports to management and the Audit Committee and management summarizing results of assurance and consulting services. Any management letters issued should also be reported to the Audit Committee.
8. At least every three years, assess whether the purpose, authority, and responsibility, as defined in this Charter, continue to be adequate to enable the Internal Audit Section to accomplish its mission, objectives, and scope. The result of this assessment should be communicated to the Audit Committee.

**Section 3.0 DUTIES AND RESPONSIBILITIES**

9. Implement a quality assurance and improvement program. Obtain an external assessment no less frequently than every five years as required by the International Standards for the Professional Practice of Internal Auditing. Conduct periodic internal quality assurance and ongoing quality procedures. Results of the quality assurance and improvement program should be reported to the Audit Committee.
10. Lead the process for selecting the external audit firms. Coordinate/manage the contract(s) with any external audit firms and evaluate their performance. Report to the Audit Committee on all activities and associated cost of work performed by the external audit firms.
11. Consider the scope of work of the external auditors and regulators, as appropriate, for the purpose of providing optimal audit coverage to LACERS at a reasonable overall cost
12. Act as the primary point of contact for handling all matters related to audits, examinations, investigations, or inquiries by other City entities, State or Federal agencies. Keep the Audit Committee and/or the General Manager informed as appropriate.
13. Evaluate annually the quality of the annual financial report and suggest improvements in the presentation and disclosure.
14. Consult with LACERS management, as appropriate, regarding potential policy and procedural changes.
15. As appropriate, provide consulting services to management that add value and improve the organization's governance, risk management, and control processes without assuming management responsibility.
16. Participate in professional audit organizations by attending meetings, joining the governing boards, presenting speeches and papers, and networking with other professionals. Network with internal audit staff of other public pension systems to learn and exchange best practices information. Participate in other professional organizations related to LACERS' mission. These may include, but are not limited to, organizations involved with benefits, investments, and accounting.
17. Periodically review LACERS' fraud and ethics policies.
18. Assist in the investigation of significant suspected fraudulent activities within LACERS and notify the General Manager, the Audit Committee, and other executives, as appropriate, of the results.
19. Inform the Audit Committee of significant risk exposures and control issues including fraud risks, governance issues, and other significant matters.
20. Inform the Audit Committee of emerging trends and successful practices in internal auditing.

**Section 3.0 DUTIES AND RESPONSIBILITIES**

21. Attend all Audit Committee meetings and ensure the attendance of additional audit staff and attendance by auditees as appropriate.

**VIII. PROFESSIONAL STANDARDS**

The Internal Audit Section will govern itself by adherence to the mandatory elements of The Institute of Internal Auditors' International Professional Practices Framework, including the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, the International Standards for the Professional Practice of Internal Auditing, and the Definition of Internal Auditing. Internal Audit Section shall also obtain guidance from professional standards of other relevant professional organizations including, but not limited to, the following:

- Information Systems Auditing Standards, Guidelines, and Procedures, and the Code of Professional Ethics of the Information Systems Audit and Control Association (ISACA);
- Public Company Accounting Oversight Board (PCAOB) auditing standards, as applicable;
- American Institute of Certified Public Accountants (AICPA) Professional Standards and Code of Ethics, as applicable;
- Generally Accepted Government Auditing Standards (GAGAS) from the United States General Accounting Office, as applicable; and
- Other professional standards, such as those of the Institute of Management Accountants (IMA) and the Association of Certified Fraud Examiners (ACFE), as applicable.

**IX. RELATIONSHIP TO THE RISK MANAGEMENT AND INTERNAL CONTROLS PROGRAMS**

The Board has overall responsibility for ensuring that risks are managed. In practice, the Board delegates to management the operation and implementation of the risk management system. The Internal Audit Section's role is to provide an independent and objective assurance on the effectiveness of the risk management system.

Management is responsible for implementing the system of internal control. The Internal Audit Section is responsible to provide an independent and objective assurance that the internal control system is operating effectively.

**X. PROCUREMENT**

The Departmental Audit Manager occasionally may need to obtain expertise of persons outside of the Internal Audit Section. This expertise may be obtained within LACERS through appropriate arrangements with management. When obtaining this expertise, care must be taken to avoid conflicts of interest within LACERS that could damage the quality of the audit work performed and/or conclusions obtained.

Expertise may also be obtained from outside LACERS through contracts. In such cases, the DAM needs to obtain sufficient information regarding the scope of work of the external service provider to ensure the scope of work is adequate for the purposes of the internal

**Section 3.0 DUTIES AND RESPONSIBILITIES**

audit activity. The DAM must document the scope of work, professional standards to be used, deliverables, deadlines, and other matters in an engagement letter or contract. The Audit Committee should be informed of the use of an external service provider.

**XI. RELATIONSHIP TO PREVENTION, DETECTION, AND CORRECTION ACTIVITIES**

Because LACERS recognizes that it is more expensive to detect and correct problems after the fact than it is to prevent them in the initial stages of a project, the Internal Audit Section will strive to participate in the initial stages of major projects so that risks can be managed appropriately and internal controls instituted in the design phase in order to prevent problems and minimize costs.

## Section 3.0 DUTIES AND RESPONSIBILITIES

**Auditor Annual Independence Certification**

**DIRECTIONS:** Each auditor must complete this Evaluation form in its entirety. The purpose of this form is for individual auditor and LACERS Internal Audit management to consider all circumstances relative to internal audit projects, in order to identify and address any potential threats to independence by applying appropriate safeguards or controls.

In all matters relating to audit work, LACERS Internal Audit (IAS), and individual auditors must be independent, in compliance with Sections 1100, 1120 and 1130 of the International Standards for the Professional Practice of Internal Auditing (ISPPA). Auditors should avoid situations that could lead reasonable and informed third parties to conclude that the auditors are not independent and thus are not capable of exercising objective and impartial judgment on all issues associated with conducting the audit and reporting on audit work. Auditors should evaluate these considerations during the course of their audits and immediately report any potential or actual threats.

**Threat Consideration:** To be completed by all audit staff **annually**:

<b>Threat Categories:</b> Complete the following, considering the threat as a broad category that could potentially influence your independence.	<b>Yes</b>	<b>No</b>
<b>Self-interest threat</b> – Do you have a direct or indirect financial or other interest that will inappropriately influence your judgment or behavior?		
<b>Self-review threat</b> – Will any of the anticipated audit work put you in a position to audit the work, services, or judgments you previously performed during a non-auditing (consulting) service?		
<b>Familiarity threat</b> – Do you have any relationship with LACERS management or personnel, or personnel of LACERS contractors/consultants which may impact your ability to be objective as LACERS Internal Audit staff?		
<b>Undue influence threat</b> – Are you experiencing pressure from management, LACERS Staff or external parties, which will impact your ability or make independent and objective judgments on internal audit projects?		
<b>Management participation threat</b> – Have you taken on a management or any other role which has or will result in performing management functions for any unit within LACERS? If so, please list the unit(s) _____		
<b>Relationship</b> – Do you have any official, professional, financial, or personal relationship with anyone that might limit the extent of inquiry or disclosure, or weaken audit findings in any way?		
<b>Accounting</b> – During the past year, have you approved invoices, payrolls, claims, or other proposed payments for any unit within LACERS? During the past year, did you maintain any part of the official accounting records for LACERS?		
<b>Conflict of Interest or Secondary Employment</b> – Are you or have you been in a conflict of interest position or engaged in any secondary employment activities which may impact your ability, in any way, to perform internal audit projects?		
<b>Other Threat:</b> Is there any other relevant potential threat which may impact your independence or perception regarding any audit? (If so, disclose here. If you are not sure, discuss it with the Departmental Audit Manager.)		

**Section 3.0 DUTIES AND RESPONSIBILITIES**

### Auditor Annual Independence Certification

**Safeguard Consideration:** If “yes” is marked in any boxes above, please complete the following section:

Potential Threat	Recommended Safeguard to mitigate Threat (and is risk reduced to an acceptable level?)	Departmental Audit Manager only: Does the safeguard eliminate or reduce the threat to an acceptable level?
<i>Ex. Accounting – I previously worked in the Fiscal Section, but I only handled the accounts payable.</i>	<i>I don't believe this is an unacceptable risk, as I don't manage or work in investment accounting or other areas within Fiscal Section, and I left about six months ago.</i>	<i>No. To avoid the perception of impairment, auditor is not approved to participate in audit projects relating to the Fiscal Section.</i>

**Acknowledgement:** (initial after each statement)

**Comply with ISPPIA:** I understand that I have a duty and obligation to ensure audit work is performed in full accordance with ISPPIA. In conducting my work, I have the obligation to immediately report any conditions or situations which may compromise compliance with any ISPPIA to the Departmental Audit Manager (DAM). \_\_\_\_\_

**Remain Independent:** I have been advised that during the course of any audit, if any personal, external, or organizational impairments or potential threats arise that may affect my ability to do the work and report findings impartially, I will notify the DAM promptly. Further, I will assess ongoing threats, identify potential safeguards, and engage the DAM in remedying any situations which may give rise to even the perception of bias or conditions which may impact the integrity of any audit work. \_\_\_\_\_

**Policies and Procedures:** I have been informed and am familiar with the policies and procedures of IAS, regarding independence and objectivity. I am also familiar with the requirements of the 2012 ISPPIA. \_\_\_\_\_

**Obligation to Report:** I understand that I have an obligation to report any instance or information regarding an actual or potential impairment by any auditor in IAS to the DAM. \_\_\_\_\_

**Direct Access to Audit Committee Chair:** If for any reason I am uncomfortable discussing any of the foregoing matters with the DAM, I understand that I am expected to discuss the matter with the Audit Committee Chairperson. \_\_\_\_\_

I certify that all the included information is complete and accurate and reflects my best ability to provide clear, detailed information regarding any activity or condition which may impair or to be perceived to impair independence and/or objectivity.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (print): \_\_\_\_\_

**Departmental Audit Manager Review and Approval:**

Overall Assessment:  
\_\_\_\_\_

Restrictions:  
\_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# **Model Internal Audit Department Charter**

Revised February 2013

Endorsed by:  
Association of Public Pension Fund Auditors, Inc.  
A Project of the Best Practices Committee

## TABLE OF CONTENTS

Foreword .....	1
I. Mission.....	2
II. Objectives and Scope .....	3-4
III. Authority.....	5
IV. Access .....	6
V. Independence .....	7
VI. Responsibilities and Accountability .....	8-9
VII. Professional Standards & Guidance.....	10
VIII. Relationship to Risk Management and Internal Control Programs .....	11
IX. Procurement of Outside Expertise .....	12
X. Signature Page .....	13
References.....	14

## FOREWORD

The following Model Internal Audit Department Charter (IAD Charter) captures many of the best practices used at the present time, February 2013. This IAD Charter may not encompass all activities that might be appropriate to a particular internal audit department, nor are all activities identified in this IAD Charter relevant to every internal audit department. Accordingly, this IAD Charter should be tailored to each internal audit department's needs and governing rules. Moreover, as applicable laws, rules, and customs change, this IAD Charter should be updated.

Endorsement by the Association of Public Pension Fund Auditors, Inc. (APPFA) means that the document is intended as a starting point of reference and as a guide to public pension funds in developing and/or revising their internal audit department charters. To the extent that a public pension fund has unique circumstances, different applications and modifications of the example passages may be desirable.

The first version of this publication was completed in August 2004 and was updated in February 2013. The update was completed by the following members of the APPFA Best Practices Committee:

Florida Rivera-Alsing, Chair	State Board of Administration of Florida
Ryan Babin	Louisiana State Employees Retirement System
Jenine Gregory	Ontario Municipal Employees Retirement System
Janet Harris	Public School Retirement System of Missouri
Amen Tam	Ontario Municipal Employees Retirement System
Toni Voglino	Maryland State Retirement and Pension System

The February 2013 version of this publication was approved by the APPFA Board in May 2013.

## I. MISSION

The mission of the Internal Audit Department (IAD) is to provide independent, objective assurance, and consulting services designed to add value and improve the organization's operations. The IAD helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes.<sup>1</sup> The IAD:

- Provides a wide range of quality independent internal auditing services for the Audit Committee and executive management and consulting services for management.
- Performs independent assessments of the systems of risk management, internal controls and operating efficiency, guided by professional standards and using innovative approaches.
- Supports the organization's efforts to achieve its objectives through independent assurance and consulting services.
- Maintains a dynamic, team-oriented environment that encourages personal and professional growth, and challenges and rewards internal audit staff for excellence and reaching their full potential.

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<sup>1</sup> Source: International Standards for the Professional Practice of Internal Auditing issued by The Institute of Internal Auditors, Inc.,

## II. OBJECTIVES AND SCOPE

### A. Assurance Objectives

The objectives of the IAD's assurance services are to provide independent assurance to the Board of Trustees (Board), Audit Committee, and management that the organization's assets are safeguarded, operating efficiency is enhanced, and compliance is maintained with prescribed laws, and the organization's policies. Assurance objectives include independent assessment of the organization's governance, risk management, and control processes.

### B. Consulting Objectives

The objectives of the IAD's consulting services, the nature and scope are agreed with management, are to provide assessments and advice for improving the organization's governance, risk management, and control without the IAD assuming management responsibility. In particular, the consulting objectives are to provide assessments and advice at the beginning of a project so that risks may be identified, managed, and internal controls may be designed adequately.

### C. Scope

The scope of work of the IAD is to determine whether the organization's network of risk management, internal control, and governance processes, as designed and represented by management, is adequate and functioning to ensure:

- Programs are operating within fiduciary standards and are in compliance with laws, regulations, ordinances, policies, and procedures.
- Risks are appropriately identified and managed.
- Programs and processes are consistent with industry best practices, using the best public and private examples as benchmarks.
- Operations, processes, and programs are consistent with established missions, objectives and goals and whether they are being carried out as planned.
- Existing policies and procedures are appropriate and updated.
- Significant financial, managerial, and operating information is accurate, reliable, and timely.
- Resources are acquired economically, used efficiently, and adequately protected.

- Quality and continuous improvement are fostered in the organization's control process.
- Employers appropriately enroll employees, accurately report employee earnings, and appropriately report other employee data.
- Significant legislative or regulatory issues impacting the organization are recognized and addressed appropriately.

Opportunities for improving member service, management of risks, internal control, governance, and the organization's effectiveness and image may be identified during audits. This information will be communicated to the Audit Committee and to appropriate levels of management.

### III. AUTHORITY

The internal audit function of this organization is established by state statutes XXXX, and enabled by regulations YYYY. The IAD is established by this organization pursuant to these applicable laws and regulations, customs of corporate governance, and best practices. This IAD Charter and all future amendments are to be approved by the Audit Committee through a majority vote. This IAD Charter shall be reviewed at least annually and updated as necessary.

The Chief Audit Executive (CAE) reports functionally to the Audit Committee and reports administratively to the Chief Executive Officer (CEO). The CAE is hired, evaluated, retained, and terminated by the Audit Committee. The Audit Committee will seek input from the CEO in making its selection.

The CAE is delegated the authority to manage the IAD. The CAE is authorized to allocate resources, set project frequencies, select audit subjects, determine scope of work, and apply the techniques necessary to accomplish the audit objectives. The CAE is authorized to hire, retain, train, and terminate internal audit staff, when necessary, to achieve the objectives of the IAD.

The CAE and internal audit staff are not authorized to perform operational duties for the organization and/or its affiliates and contractors. IAD staff is not authorized to:

- Initiate or approve accounting transactions external to the IAD.
- Direct the activities of any organization employee not employed by the IAD, except to the extent such employees have been appropriately assigned to auditing teams or to otherwise assist the internal auditors.

## IV. ACCESS

The CAE and designated audit staff, as appropriate, shall have full, free, and unrestricted access to all of the organizations' functions, records, files and information systems, personnel, contractors, physical properties, rental locations, and any other item relevant to the function, process, or department under review. All contracts with vendors shall contain the organization's standard audit language enabling the organization's internal auditors, other auditors and specialists to have access to relevant records and information. All of the employees of the organization are required to assist the staff of the IAD in fulfilling their function.

The CAE shall have free and unrestricted access to the Chair, members of the Audit Committee, and Board of Trustees. The CAE shall also have free and unrestricted access to the CEO, other executives, management, all personnel, contractors, vendors, employers, members, retirees and beneficiaries of the organization.

Documents and information given to the IAD shall be handled in the same prudent and confidential manner as by those employees normally accountable for them. The CAE shall ensure that internal audit staff is adequately coached in the handling and safeguarding of confidential information.

## V. INDEPENDENCE

### A. *Organizational Placement*

To provide for the independence of the IAD, its personnel report to the CAE, who in turn reports functionally to the Audit Committee and administratively to the CEO. The CAE shall freely discuss audit policies, audit findings and recommendations, audit follow-up, issues, and other matters as necessary.

### B. *Professional Standards of Independence*

The Audit Committee recognizes that professional independence requires that the internal auditors have knowledge of operations and appropriate expertise in the subject matter that is being audited. Therefore, the CAE will report to the Audit Committee the qualifications, certifications, and training requirements of the internal audit staff. The CAE shall periodically discuss standards of professional audit independence with the Audit Committee. The standards of independence used as benchmarks will be those of the organizations mentioned in Section VII of this document.

### C. *Impairment of Independence*

The CAE should discuss any potential issues regarding impairment of independence and/or conflicts of interest and their mitigation(s) with the Audit Committee, as necessary. If objectivity or independence is impaired in fact or appearance, the details of the impairment should be disclosed to the appropriate parties. The nature of the disclosure will depend on the impairment. The IAD should annually certify to the Audit Committee they have no actual or perceived conflicts of interest that would impair their objectivity or independence.

## VI. RESPONSIBILITIES AND ACCOUNTABILITY

The CAE is responsible for the following in order to meet the mission, objectives, and scope of this Charter and the IAD.

1. Select, train, develop, and retain a competent internal audit staff who collectively has the abilities, knowledge, skills, experience, expertise and professional certifications necessary to accomplish the mission, objectives and scope of this Charter. Provide opportunity and support for staff obtaining professional training, examinations, and certifications.
2. Establish policies for conducting IAD activities according to the organization's policies, direction provided by the Audit Committee, and professional standards described in Section VII.
3. Perform an annual risk assessment. Develop and implement a flexible annual audit plan (audit plan) using an appropriate risk-based methodology, including any risks or concerns identified by management, and submit the audit plan to the Audit Committee for review and approval. The audit plan will include some unassigned hours in order to provide flexibility for changing conditions. Performance of the audit plan will be periodically reviewed and reported to the Audit Committee. The audit plan may be updated, if necessary.
4. Prepare a budget that is complementary to the implementation of the audit plan.
5. Perform independent analyses of significant operations to evaluate the adequacy and effectiveness of existing systems of internal control and the quality of performance (economy, efficiency, and effectiveness) in carrying out its business objectives.
6. Establish and maintain a follow-up system to monitor the disposition of results communicated to management and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action.
7. Issue periodic reports to the Audit Committee and management summarizing results of assurance and consulting services. Any management letters issued should also be reported to the Audit Committee.
8. Assess periodically whether the purpose, authority, and responsibility, as defined in this IAD Charter, continue to be adequate to enable the IAD to accomplish its mission, objectives, and scope. The result of this periodic assessment should be communicated to the Audit Committee and the CEO.
9. Implement a quality assurance and improvement program. Obtain an external assessment no less frequently than every five years [*International Standards for the*

*Professional Practice of Internal Auditing*] or every three years [*Generally Accepted Government Auditing Standards*], as appropriate. Conduct periodic internal quality assurance and ongoing quality procedures. Results of the quality assurance and improvement program should be reported to the Audit Committee.

10. Lead/participate in the selection of external audit firms. Coordinate/manage the contract(s) with any external audit firms and evaluate their performance. Report to the Audit Committee on all activities and associated cost of work performed by the external audit firms.
11. Consider the scope of work of the external auditors and regulators, as appropriate, for the purpose of providing optimal audit coverage to the organization at a reasonable overall cost.
12. Act as the primary point of contact for handling all matters related to audits, examinations, investigations or inquiries of the state auditor or other appropriate state or federal auditors.
13. As appropriate, provide consulting services to management that add value and improve the organization's governance, risk management, and control processes without assuming management responsibility.
14. Assist in the investigation of suspected fraudulent activities within the organization and notify the Audit Committee, the CEO and other Executives, as appropriate, of the results.
15. Inform the Audit Committee of significant risk exposures and control issues including fraud risks, governance issues and other significant matters.
16. Inform the Audit Committee of emerging trends and successful practices in internal auditing.
17. Attend all Audit Committee meetings, and ensure attendance of additional audit staff and auditees, as appropriate.

## VII. PROFESSIONAL STANDARDS & GUIDANCE

The IAD shall follow the professional standards of relevant professional organizations. The IAD should consider professional guidance published by these organizations. These professional standards and guidance include, but are not limited to, the following:

- The Institute of Internal Auditors mandatory guidance which includes the International Standards for the Professional Practice of Internal Auditing, Code of Ethics, and Definition of Internal Auditing. The current versions of these documents are part of this IAD Charter and are appended thereto.
- IS Auditing Standards, Guidelines, and Procedures, and the Code of Professional Ethics of the ISACA. The Control Objectives for Information Technology will be used as a reference. The current versions of these documents are part of this Charter and are appended thereto.
- Professional Standards and Code of Ethics of the American Institute of Certified Public Accountants, as applicable.
- Generally Accepted Government Auditing Standards from the United States General Accountability Office, as applicable.
- Public Company Accounting Oversight Board (PCAOB) auditing standards, as applicable.
- Other professional standards, such as those of the Institute of Management Accountants (IMA) and the Association of Certified Fraud Examiners (ACFE), as applicable.
- Other professional guidance such as The Institute of Internal Auditors Practice Advisories, Practice Guides, and Position Papers.

## VIII. RELATIONSHIP TO RISK MANAGEMENT AND INTERNAL CONTROL PROGRAMS

The Board has overall responsibility for ensuring that risks are managed. In practice, the Board delegates to management the operation and implementation of the risk management system. The IAD's role is to provide an independent and objective assurance on the effectiveness of the risk management system.

Management is responsible for implementing a system of internal control. The IAD's role is to provide an independent and objective assurance that the internal control system is operating effectively.

## IX. PROCUREMENT OF OUTSIDE EXPERTISE

The CAE may occasionally need to obtain the expertise of persons outside of the IAD. When the CAE intends to use and rely on the work of a person outside the IAD, the CAE needs to consider the competence, independence, and objectivity of the person.

Expertise may be obtained within the organization through appropriate arrangements with management. When obtaining this expertise within the organization, care must be taken to avoid conflicts of interest that could damage the quality of the audit work performed and/or conclusions obtained.

Expertise may also be obtained from outside the organization. In such cases, the CAE needs to obtain sufficient information regarding the scope of work of the external service provider to ensure the scope of work is adequate for the purposes of the internal audit activity. The CAE must document the scope of work, professional standards to be used, deliverables, deadlines, and other matters in an engagement letter or contract. The Audit Committee should be informed about the use of an external service provider.

## XI. SIGNATURE PAGE

This IAD Charter was adopted by the Audit Committee on (date), and approved by the Board. This IAD Charter is effective this day and is hereby signed by the following persons who have authority and responsibilities under this Charter.

_____	_____	_____	_____
Chair, Audit Committee	Date	Chair, Board of Trustees	Date
_____	_____	_____	_____
Chief Audit Executive	Date	Chief Executive Officer	Date

## REFERENCES

The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.

The Institute of Internal Auditors' Model Internal Audit Activity Charter.

IIA Position Paper: The Role of Internal Auditing in Enterprise-Wide Risk Management.

Internal Audit Charter of the various public pension fund systems who are members of APPFA.



PO Box 16064 • Columbus, OH 43216-6064  
[www.appfa.org](http://www.appfa.org)



International Professional  
Practices Framework

# Supplemental Guidance

## Model Internal Audit Activity Charter

The Model Internal Audit Activity Charter is designed to illustrate common practices typically set out in an internal audit activity charter. The generic nature of this draft is intended to encourage customization.

The document may not reflect all legal or regulatory requirements that exist in the every jurisdiction. Additionally, stakeholder expectations may influence the inclusion or deletion of certain practices.

In drafting an internal audit activity charter, the chief audit executive should exercise care to customize the charter, including replacing bracketed, blue text with language that accurately reflects the user's situation.

## Purpose and Mission

The purpose of [name of organization]'s internal audit [department/activity] is to provide independent, objective assurance and consulting services designed to add value and improve [name of organization]'s operations. The mission of internal audit is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight. The internal audit [department/activity] helps [name of organization] accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes.

## Standards for the Professional Practice of Internal Auditing

The internal audit [department/activity] will govern itself by adherence to the mandatory elements of The Institute of Internal Auditors' International Professional Practices Framework, including the Core Principles for the Professional Practice of Internal Auditing, the Code of Ethics, the *International Standards for the Professional Practice of Internal Auditing*, and the Definition of Internal Auditing. The chief audit executive will report periodically to senior management and the [board/audit committee/supervisory committee] regarding the internal audit [department/activity]'s conformance to the Code of Ethics and the *Standards*.

## Authority

The chief audit executive will report functionally to the [board/audit committee/supervisory committee] and administratively (i.e., day-to-day operations) to the [chief executive officer]. To establish, maintain, and assure that [name of organization]'s internal audit [department/activity] has sufficient authority to fulfill its duties, the [board/audit committee/supervisory committee] will:

- Approve the internal audit [department/activity]'s charter.
- Approve the risk-based internal audit plan.
- Approve the internal audit [department/activity]'s budget and resource plan.
- Receive communications from the chief audit executive on the internal audit [department/activity]'s performance relative to its plan and other matters.
- Approve decisions regarding the appointment and removal of the chief audit executive.
- Approve the remuneration of the chief audit executive.
- Make appropriate inquiries of management and the chief audit executive to determine whether there is inappropriate scope or resource limitations.

The chief audit executive will have unrestricted access to, and communicate and interact directly with, the [board/audit committee/supervisory committee], including in private meetings without management present.

The [board/audit committee/supervisory committee] authorizes the internal audit [department/activity] to:

- Have full, free, and unrestricted access to all functions, records, property, and personnel pertinent to carrying out any engagement, subject to accountability for confidentiality and safeguarding of records and information.
- Allocate resources, set frequencies, select subjects, determine scopes of work, apply techniques required to accomplish audit objectives, and issue reports.
- Obtain assistance from the necessary personnel of [name of organization], as well as other specialized services from within or outside [name of organization], in order to complete the engagement.

### Independence and Objectivity

The chief audit executive will ensure that the internal audit [department/activity] remains free from all conditions that threaten the ability of internal auditors to carry out their responsibilities in an unbiased manner, including matters of audit selection, scope, procedures, frequency, timing, and report content. If the chief audit executive determines that independence or objectivity may be impaired in fact or appearance, the details of impairment will be disclosed to appropriate parties.

Internal auditors will maintain an unbiased mental attitude that allows them to perform engagements objectively and in such a manner that they believe in their work product, that no quality compromises are made, and that they do not subordinate their judgment on audit matters to others.

Internal auditors will have no direct operational responsibility or authority over any of the activities audited. Accordingly, internal auditors will not implement internal controls, develop procedures, install systems, prepare records, or engage in any other activity that may impair their judgment, including:

- Assessing specific operations for which they had responsibility within the previous year.
- Performing any operational duties for [name of organization] or its affiliates.
- Initiating or approving transactions external to the internal audit [activity/department].



- Directing the activities of any [name of organization] employee not employed by the internal audit [department/activity], except to the extent that such employees have been appropriately assigned to auditing teams or to otherwise assist internal auditors.

Where the chief audit executive has or is expected to have roles and/or responsibilities that fall outside of internal auditing, safeguards will be established to limit impairments to independence or objectivity.

Internal auditors will:

- Disclose any impairment of independence or objectivity, in fact or appearance, to appropriate parties.
- Exhibit professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined.
- Make balanced assessments of all available and relevant facts and circumstances.
- Take necessary precautions to avoid being unduly influenced by their own interests or by others in forming judgments.

The chief audit executive will confirm to the [board/audit committee/supervisory committee], at least annually, the organizational independence of the internal audit [department/activity].

The chief audit executive will disclose to the [board/audit committee/supervisory committee] any interference and related implications in determining the scope of internal auditing, performing work, and/or communicating results.

### Scope of Internal Audit Activities

The scope of internal audit activities encompasses, but is not limited to, objective examinations of evidence for the purpose of providing independent assessments to the [board/audit committee/supervisory committee], management, and outside parties on the adequacy and effectiveness of governance, risk management, and control processes for [name of organization]. Internal audit assessments include evaluating whether:

- Risks relating to the achievement of [name of organization]'s strategic objectives are appropriately identified and managed.
- The actions of [name of organization]'s officers, directors, employees, and contractors are in compliance with [name of organization]'s policies, procedures, and applicable laws, regulations, and governance standards.
- The results of operations or programs are consistent with established goals and objectives.



- Operations or programs are being carried out effectively and efficiently.
- Established processes and systems enable compliance with the policies, procedures, laws, and regulations that could significantly impact [name of organization].
- Information and the means used to identify, measure, analyze, classify, and report such information are reliable and have integrity.
- Resources and assets are acquired economically, used efficiently, and protected adequately.

The chief audit executive will report periodically to senior management and the [board/audit committee/supervisory committee] regarding:

- The internal audit [department/activity]'s purpose, authority, and responsibility.
- The internal audit [department/activity]'s plan and performance relative to its plan.
- The internal audit [department/activity]'s conformance with The IIA's Code of Ethics and *Standards*, and action plans to address any significant conformance issues.
- Significant risk exposures and control issues, including fraud risks, governance issues, and other matters requiring the attention of, or requested by, the [board/audit committee/supervisory committee].
- Results of audit engagements or other activities.
- Resource requirements.
- Any response to risk by management that may be unacceptable to [name of organization].

The chief audit executive also coordinates activities, where possible, and considers relying upon the work of other internal and external assurance and consulting service providers as needed. The internal audit [department/activity] may perform advisory and related client service activities, the nature and scope of which will be agreed with the client, provided the internal audit [department/activity] does not assume management responsibility.

Opportunities for improving the efficiency of governance, risk management, and control processes may be identified during engagements. These opportunities will be communicated to the appropriate level of management.

## Responsibility

The chief audit executive has the responsibility to:

- Submit, at least annually, to senior management and the [board/audit committee/supervisory committee] a risk-based internal audit plan for review and approval.



- Communicate to senior management and the [board/audit committee/supervisory committee] the impact of resource limitations on the internal audit plan.
- Review and adjust the internal audit plan, as necessary, in response to changes in [name of organization]'s business, risks, operations, programs, systems, and controls.
- Communicate to senior management and the [board/audit committee/supervisory committee] any significant interim changes to the internal audit plan.
- Ensure each engagement of the internal audit plan is executed, including the establishment of objectives and scope, the assignment of appropriate and adequately supervised resources, the documentation of work programs and testing results, and the communication of engagement results with applicable conclusions and recommendations to appropriate parties.
- Follow up on engagement findings and corrective actions, and report periodically to senior management and the [board/audit committee/supervisory committee] any corrective actions not effectively implemented.
- Ensure the principles of integrity, objectivity, confidentiality, and competency are applied and upheld.
- Ensure the internal audit [department/activity] collectively possesses or obtains the knowledge, skills, and other competencies needed to meet the requirements of the internal audit charter.
- Ensure trends and emerging issues that could impact [name of organization] are considered and communicated to senior management and the [board/audit committee/supervisory committee] as appropriate.
- Ensure emerging trends and successful practices in internal auditing are considered.
- Establish and ensure adherence to policies and procedures designed to guide the internal audit [department/activity].
- Ensure adherence to [name of organization]'s relevant policies and procedures, unless such policies and procedures conflict with the internal audit charter. Any such conflicts will be resolved or otherwise communicated to senior management and the [board/audit committee/supervisory committee].
- Ensure conformance of the internal audit [department/activity] with the *Standards*, with the following qualifications:
  - If the internal audit [department/activity] is prohibited by law or regulation from conformance with certain parts of the *Standards*, the chief audit executive will ensure appropriate disclosures and will ensure conformance with all other parts of the *Standards*.
  - If the *Standards* are used in conjunction with requirements issued by [other authoritative bodies], the chief audit executive will ensure that the internal audit [department/activity] conforms with the *Standards*, even if the internal audit [department/activity] also conforms with the more restrictive requirements of [other authoritative bodies].

## Quality Assurance and Improvement Program

The internal audit [department/activity] will maintain a quality assurance and improvement program that covers all aspects of the internal audit [department/activity]. The program will include an evaluation of the internal audit [department/activity]'s conformance with the *Standards* and an evaluation of whether internal auditors apply The IIA's Code of Ethics. The program will also assess the efficiency and effectiveness of the internal audit [department/activity] and identify opportunities for improvement.

The chief audit executive will communicate to senior management and the [board/audit committee/supervisory committee] on the internal audit [department/activity]'s quality assurance and improvement program, including results of internal assessments (both ongoing and periodic) and external assessments conducted at least once every five years by a qualified, independent assessor or assessment team from outside [name of organization].

## Approval/Signatures

---

Chief Audit Executive

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Date

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[Board/Audit Committee/Supervisory Committee] Chair

---

Date

---

[Chief Executive Officer]

---

Date





## About The IIA

The Institute of Internal Auditors (IIA) is the internal audit profession's most widely recognized advocate, educator, and provider of standards, guidance, and certifications. Established in 1941, The IIA today serves more than 190,000 members from more than 170 countries and territories. The association's global headquarters are in Lake Mary, Fla., USA. For more information, visit [www.globaliia.org](http://www.globaliia.org).

## About Supplemental Guidance

Supplemental Guidance is part of The IIA's International Professional Practices Framework (IPPF) and provides additional recommended (nonmandatory) guidance for conducting internal audit activities. While supporting the *International Standards for the Professional Practice of Internal Auditing*, Supplemental Guidance is not intended to directly link to achievement of conformance with the *Standards*. It is intended instead to address topical areas, as well as sector-specific issues, and it includes detailed processes and procedures. This guidance is endorsed by The IIA through formal review and approval processes.

For other authoritative guidance materials provided by The IIA, please visit our website at [www.globaliia.org/standards-guidance](http://www.globaliia.org/standards-guidance) or [www.theiia.org/guidance](http://www.theiia.org/guidance).

## Disclaimer

The IIA publishes this document for informational and educational purposes. This guidance material is not intended to provide definitive answers to specific individual circumstances and, as such, is only intended to be used as a guide. The IIA recommends that you always seek independent expert advice relating directly to any specific situation. The IIA accepts no responsibility for anyone placing sole reliance on this guidance.

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March 17

**Section 3.0 DUTIES AND RESPONSIBILITIES****Audit Committee Charter**

*Revised Committee Name Adopted: September 10, 2013; Revised Charter Adopted: November 12, 2013;  
Revised: September 23, 2014; Reaffirmed: November 13, 2018*

**I. PURPOSE/ROLE**

The Committee will provide assistance to the Board in fulfilling its fiduciary oversight responsibility to the participants, the City of Los Angeles, the investment community, and others relating to LACERS' financial statements, and the legal compliance, ethics programs and other related risks, as established by the Board. In so doing, it is the responsibility of the Committee, with approval of the Board, to maintain free and open communication between the Committee, independent auditors, the internal auditors, and management of LACERS. In discharging its oversight role, the Committee is empowered to investigate any matter brought to its attention with access to all books, records, facilities, and personnel of LACERS.

**II. AUTHORITY**

The Committee has the authority to direct the Departmental Audit Manager (DAM), external auditors, or consultants to conduct an audit, review, and/or investigation into any matters within the Committee's scope of responsibility. It is empowered to:

- Seek any information it requires from LACERS staff or external parties, all of whom are directed by the Board to cooperate with the Committee's request.
- Appoint, compensate, and oversee the work of all public accounting firms employed by LACERS.
- Resolve any disagreements between LACERS management and the internal or external auditors regarding financial reporting, actuarial audits, or other related matters.
- Retain independent counsel, accountants, or others to advise or assist the Committee in the performance of its responsibilities.
- Approve the consultants, or others retained by the organization to assist in the conduct of an audit, review, and/or special investigation.
- Meet with management, external and internal auditors, or outside counsel as necessary.

**III. COMPOSITION OF COMMITTEE**

The Committee shall consist of three LACERS Board Members. All members shall be appointed by the LACERS Board President. The LACERS Board President shall appoint a Committee Chair.

The Committee Chair is responsible for setting the agendas for each Committee Meeting. The Chair shall take as an agenda item any matter referred by the LACERS Board. The Chair shall also take as an agenda item any matter submitted by two or more members of the Committee.

**IV. FREQUENCY OF MEETINGS**

*The Committee shall meet no less than four times during the calendar year, or more often as needed. Meetings will be conducted in accordance with open meeting and other applicable laws. Meeting agendas, along with appropriate briefing materials, will be prepared and provided in advance to Committee members and other required attendees. Minutes of the meeting will be prepared and approved by the Committee.*

**Section 3.0 DUTIES AND RESPONSIBILITIES**

*Meeting notices, agendas, and materials will be provided to interested parties in conformance with applicable laws, regulations, customs, and practices. The Committee may invite members of management, external auditors, internal auditors, or other third parties, to attend meetings and provide pertinent information, as the Committee deems appropriate to carry out its responsibilities. The DAM shall support the Committee's activities and ensure appropriate staff and others are available to assist it. The DAM shall review minutes, draft reports, perform research, and render other types of assistance as reasonably requested by the Committee.*

**V. DUTIES AND RESPONSIBILITIES**

The primary responsibility of the Committee is to oversee LACERS' financial reporting process on behalf of the Board and to report the results of its activities to the Board. Management is responsible for preparing LACERS' financial statements, and the independent auditors are responsible for auditing those financial statements. The Committee is responsible for understanding risks affecting LACERS' operations and monitoring how management implements controls to minimize those risks.

The Committee, in carrying out its responsibilities, believes its policies and procedures should remain flexible in order to best react to changing conditions and circumstances. The Committee will take the appropriate actions to set the overall "tone" for quality financial reporting, sound business risk practices, and ethical behavior.

The following are specific responsibilities with respect to LACERS' financial statements, internal controls, internal and external auditors, and compliance with laws and regulations.

**A. Financial Reporting**

- Review significant accounting and reporting issues, including complex or unusual transactions, and recent professional and regulatory pronouncements, and understand their impact on the financial statements.
- Review with management and the external auditors the results of the audit, significant adjustments or revisions to the financial statements, including any difficulties encountered.
- Inquire as to the external auditors' independent judgment about the appropriateness, not just the acceptability, or the accounting principles adopted by the organization and clarity of financial disclosures.
- Review LACERS' annual financial statements and any financial reports related to LACERS submitted to any governmental body; consider whether they are complete, consistent with information known to the Committee, and reflect appropriate accounting principles.
- Review the responsiveness and timeliness of management's actions to address findings and recommendations that resulted from the financial statement audit.
- Review with management and the external auditors all matters required to be communicated to the Committee under general accepted auditing standards.

**Section 3.0 DUTIES AND RESPONSIBILITIES**

- Review with the City Attorney-Retirement Division the status of legal matters that may have an effect on the financial statements.
- Review, in consultation with the external auditors and the DAM, the integrity of the organization's financial reporting processes.

**B. *Risk Control and Management***

- Review the adequacy of policies and practices designed to avoid or mitigate risks related to benefits administration, investments, and general operations.
- Review the effectiveness of the LACERS' system for assessing, monitoring, and controlling significant risks or exposures.
- Review LACERS systems of internal accounting and financial controls whenever a significant change occurs.
- Review controls over LACERS' information systems, including security access and program change controls as well as contingency plans on an annual basis.
- Review annually the internal control reports of LACERS custodian (Service Organization Control Report) and of the City of Los Angeles management letter.
- Review and forward to the Board all internal and external auditors' significant findings and recommendations, including the management response thereto.
- Make recommendations to the Board for retention of actuarial audit services or other specialized audit services, including review of staff reports pertaining to such services.

**C. *Internal Control***

- Consider the effectiveness of the LACERS' internal control system, including information technology security and control.
- Understand the scope of internal and external auditors' review of LACERS' internal control over financial reporting, and obtain reports on significant findings and recommendations, together with management's response.

**D. *Internal Audit***

- Approve the LACERS' internal audit charter, and any revisions to the charter as needed.
- Advise on the appointment, replacement, or dismissal of the DAM in consultation with the General Manager as appointing authority.
- Review and recommend to the Board, the approval of a risk-based internal annual audit plan and all major changes to the plan. In consultation with the General Manager, review the DAM's performance relative to such plan.
- Ensure that internal auditors have full, free, and unrestricted access to all functions, documents, information, systems, contractors, consultants, and LACERS' personnel.

**Section 3.0 DUTIES AND RESPONSIBILITIES**

- Review all internal audit reports, and bring to the attention of the Board any audit issues the Committee determines significant and appropriate for consideration by the Board.
- Obtain and review the quality assurance report for the Internal Audit Section at least once every five years. Review for any concerns noted.
- Delegate to the DAM the oversight and management of the contracts of all public accounting firms hired by LACERS.
- Designate the DAM as the primary point of contact for handling all matters related to audits, examinations, investigations, or inquiries of the City Controller auditors, state and other federal agencies. The DAM will keep the Committee and/or the General Manager informed as appropriate.

*E. Engagement of External Auditors*

- Obtain a clear understanding with management that the independent auditors are ultimately accountable to the Board and the Committee as representatives of LACERS participants. As appropriate, the Committee will recommend to the Board the appointment, retention, or discharge of the external auditors with input from the DAM, the General Manager, and other parties as appropriate.
- Approve all audit and non-audit services to be performed by the external auditors.
- Review the independent auditors' proposed overall scope and approach, including coordination of efforts with internal audit.
- Discuss with management and the independent auditors the adequacy and effectiveness of the accounting and financial controls, including LACERS system to monitor and manage business risk and legal and ethical compliance programs.
- Review and confirm the independence of the external auditors by obtaining a list of all payments to the external auditors (itemizing payments for audit, other attestation projects, and non-audit services provided) and statements from the auditors on relationships between the auditors and any LACERS staff, and discussing these relationships with the auditors.
- Prove guidelines and mechanisms so that no Committee member or LACERS' staff shall improperly influence the external auditors.
- Review with management and the independent auditor the financial statements of LACERS Comprehensive Annual Financial Report.

*F. Compliance*

- Review the effectiveness of the LACERS' system for monitoring compliance with laws, regulations, contracts, policies, and the results of management's investigation and follow-up (including disciplinary action) of any instances of noncompliance.

**Section 3.0 DUTIES AND RESPONSIBILITIES**

- Review the findings of any examinations by regulatory agencies, any auditor observations related to compliance, and the responsiveness and timeliness of management's actions to address the findings/observations.
- Review the process for communicating and monitoring compliance with the code of ethics, code of conduct, and fraud policies.
- Obtain regular updates from management and the City Attorney's Retirement Division regarding compliance matters.

**G. *Special Investigations and Whistleblower Mechanism***

- Institute and oversee special investigations as needed.
- Assess and, if appropriate, oversee the creation and maintenance of an appropriate whistleblower mechanism for reporting any fraud, noncompliance, and/or inappropriate activities.
- As appropriate, recommend to the Board the retention of accountants or other specialists to advise the Committee and the Board or assist in the conduct of an investigation.

**H. *Other Responsibilities***

- Regularly report to the Board about Committee activities, issues, and related recommendations.
- Provide an open avenue of communication between internal auditors, the external auditors, and the Board.
- Review any other reports that LACERS issues that relate to Committee responsibilities.

**VI. CHARTER REVIEW**

The Committee and the Board will review this Charter at least every three years to ensure it remains appropriate. The Committee will recommend any changes to the Board for review and approval. The Board may adjust the Charter at any time.



# Model Audit Committee Charter

Revised February 2013

Endorsed by:  
Association of Public Pension Fund Auditors, Inc.  
A Project of the Best Practices Committee

## TABLE OF CONTENTS

Foreword .....	1
I. Purpose.....	2
II. Authority.....	3
III. Composition.....	4
IV. Meetings.....	5
V. Responsibilities .....	6-10
A. Financial Reporting.....	6
B. Risk Management.....	6
C. Internal Control .....	7
D. Internal Audit .....	7
E. Engagement of External Auditors .....	8
F. Compliance .....	9
G. Special Investigations and Whistleblower Mechanism .....	9
H. Other Responsibilities .....	9
VI. Signature Page .....	11
References.....	12

## FOREWORD

The following Model Audit Committee Charter (Model AC Charter) captures many of the best practices used at the present time, February 2013. This Model AC Charter may not encompass all activities considered appropriate to a particular audit committee, nor are all activities identified in this Model AC Charter relevant to every audit committee. Accordingly, this Model AC Charter should be tailored to each audit committee's needs and governing rules. Moreover, as applicable laws, rules, and customs change, the audit committee charter should be updated.

Endorsement by the Association of Public Pension Fund Auditors, Inc. (APPFA) means that this document is intended as a starting point of reference and as a guide to public pension funds in formulating or revising their audit committee charters. To the extent that a public pension fund has unique circumstances, different applications and modifications of the example passages may be desirable.

The first version of this publication was completed in July 2003 and was updated in February 2013. The update was completed by the following members of the Best Practices Committee.

Florida Rivera-Alsing, Chair	State Board of Administration of Florida
Ryan Babin	Louisiana State Employees Retirement System
Janet Harris	Public School Retirement System of Missouri
Amen Tam	Ontario Municipal Employees Retirement System
Toni Voglino	Maryland State Retirement and Pension System

The February 2013 version of this publication was approved by the APPFA Board in May 2013.

## I. PURPOSE

The purpose of the Audit Committee (Committee) is to assist the Board of Trustees (the Board) in fulfilling its fiduciary oversight responsibilities in the areas of:

- Financial Reporting,
- Risk Management,
- Internal Control,
- Internal Audit,
- Engagement of External Auditors,
- Compliance, and
- Special Investigations and Whistleblower Mechanism

## II. AUTHORITY

The Committee has the authority to direct the Chief Audit Executive (CAE), external auditors, or consultants to conduct an audit, review, and/or investigation into any matters within the Committee's scope of responsibility. It is empowered to:

- Seek any information it requires from employees – all of whom are directed by the Board to cooperate with the Committee's requests – external auditors, consultants, and external parties.
- Appoint, compensate, and oversee the work of all public accounting firms employed by the organization.
- Resolve any disagreements between management and the external auditors regarding financial reporting.
- Retain independent counsel, accountants, or others to advise or assist the Committee in the performance of its responsibilities.
- Approve the consultants, or others retained by the organization to assist in the conduct of an audit, review, and/or a special investigation.
- Meet with management, external and internal auditors, or outside counsel as necessary.

### III. COMPOSITION

The Committee will consist of at least three, and no more than seven, members of the Board. The Board, or its nominating committee, will appoint Committee members and the Committee chair. Members of the Committee shall serve until the next such appointment of the Board or until their successors have been duly elected and qualified. The members of the Committee may be removed, with or without cause, by a majority vote of the Board.

Each Committee member will be independent and will complete an annual independence statement. Each Committee member will have professional experience and expertise in at least one of the following fields: institutional investing, risk management, accounting, auditing, or information technology. All members of the Committee shall have a working familiarity with basic finance and accounting practices. At least one member of the Committee shall be designated as the "financial expert," as defined by applicable legislation and regulation. Committee members shall have other qualifications as the Board determines appropriate.

## IV. MEETINGS

The Committee shall meet at least four times a year, with authority to convene additional meetings, as circumstances require. All Committee members are expected to attend each meeting, in person or via tele- or video-conference. Meetings will be conducted in accordance with open meeting and other applicable laws. Meeting agendas, along with appropriate briefing materials, will be prepared and provided in advance to Committee members and other required attendees. Minutes of the meeting will be prepared and approved by the Committee.

Meeting notices, agendas, and materials will be provided to interested parties in conformance with applicable laws, regulations, customs, and practices. The Committee may invite members of management, external auditors, internal auditors, or other third parties, to attend meetings and provide pertinent information, as the Committee deems appropriate to carry out its responsibilities. All members of the Board may attend the meetings of the Committee but may not vote if not a member of the Committee.

To foster open communication, the Committee shall, at least annually, meet separately with the CAE and the external auditors to discuss any matters that the Committee believes should be discussed privately.*{Note: Subject to open meeting laws.}* In addition, the Committee should annually meet with the external auditors to review the organization's financial statements.

## V. RESPONSIBILITIES

The Committee will carry out the following responsibilities:

### A. *Financial Reporting*

- Obtain information and/or training to enhance the Committee's understanding of the organization's financial reports and the related financial reporting processes.
- Review significant accounting and reporting issues, including complex or unusual transactions, and recent professional and regulatory pronouncements, and understand their impact on the financial statements.
- Review with management and the external auditors the results of the audit, significant adjustments or revisions to the financial statements, including any difficulties encountered.
- Inquire as to the external auditors' independent judgment about the appropriateness, not just the acceptability, of the accounting principles adopted by the organization and clarity of financial disclosures.
- Review the annual financial statements and any financial reports submitted to any governmental body; consider whether they are complete, consistent with information known to the Committee, and reflect appropriate accounting principles.
- Review the responsiveness and timeliness of management's actions to address findings and recommendations that resulted from the financial statement audit.
- Review with management and the external auditors all matters required to be communicated to the Committee under generally accepted auditing standards.
- Review with the General Counsel the status of legal matters that may have an effect on the financial statements.
- Review, in consultation with the external auditors and the CAE, the integrity of the organization's financial reporting processes.

### B. *Risk Management*

- Obtain information and/or training to enhance the Committee's understanding of the organization's risks and the related risk management processes.
- Review the adequacy of the organization's policy on risk management.
- Review the effectiveness of the organization's system for assessing, monitoring, and controlling significant risks or exposures.

- Review management's reports on risks and related risks mitigations.
- Hire outside experts and consultants in risk management as necessary.

### ***C. Internal Control***

- Obtain information and/or training to enhance the Committee's understanding of the organization's internal control system.
- Consider the effectiveness of the organization's internal control system, including information technology security and control.
- Understand the scope of the external auditors' review of the organization's internal control over financial reporting.
- Review internal and external auditors' significant findings and recommendations, together with management's responses.
- Ensure that contracts with external service providers contain appropriate record-keeping and audit language.

### ***D. Internal Audit***

- Obtain information and/or training to enhance the Committee's understanding of the internal audit function.
- Review and approve the Internal Audit Department Charter annually.
- Review and confirm, through organizational structure and/or by other means, the independence of the internal audit function annually.
- Concur in the appointment, replacement, or dismissal of the CAE.
- Review the performance of the CAE and the internal audit function periodically and concur with the annual compensation and salary adjustment of the CAE.
- Ensure that internal auditors have full, free, and unrestricted access to all functions, documents, information, systems, contractors, consultants, and personnel in the organization.
- Review and approve the internal audit function's staffing plan and budget.
- Review and approve the risk-based internal audit annual plan.
- Receive and review all internal audit reports.

- Review the responsiveness and timeliness of management's follow-up activities pertaining to all reported findings and recommendations.
- Bring to the attention of the Board any audit issues the Committee determines significant and appropriate for consideration by the Board.
- On a regular basis, meet separately with the CAE to discuss any matters that the Committee or internal audit believes should be discussed privately. *{Subject to open meeting laws.}*
- Obtain and review the quality assurance report for the Internal Audit Department at least once every five years. Review for any concerns noted.
- Delegate to the CAE the oversight and management of the contracts of all public accounting firms hired by the organization.
- Designate the CAE as the primary point of contact for handling all matters related to audits, examinations, investigations or inquiries of the state auditor, and other state or federal agencies.

#### ***E. Engagement of External Auditors***

- Obtain information and/or training to enhance the Committee's understanding of the organization's financial statements audit and the role of external auditors.
- Approve the appointment, retention, or discharge of the external auditors. Obtain input from the CAE, management, and other parties as appropriate.
- Approve all audit and non-audit services to be performed by the external auditors.
- Review the external auditors' proposed audit scope and approach, including the coordination of efforts with internal audit.
- Review and confirm the independence of the external auditors by obtaining statements from the auditors on relationships between the auditors and the organization for all audit and non-audit services.
- On a regular basis, meet separately with the external auditors to discuss any matters that the Committee or auditors believe should be discussed privately. *{Note: Subject to open meeting laws.}*
- Provide guidelines and mechanisms so that no Committee member or organization staff shall improperly influence the external auditors.

- Obtain and review annually a list of all payments to the external auditors. The list should separately disclose the payment for the financial statements audit, other attestation projects, and non-audit services provided.
- Obtain and review the peer review report for the external audit firms on a periodic basis. Review for any concerns noted.

#### ***F. Compliance***

- Review the effectiveness of the organization's system for monitoring compliance with laws, regulations, contracts, and policies and the results of management's investigation and follow-up (including disciplinary action) of any instances of noncompliance.
- Review the findings of any examinations by regulatory agencies, any auditor observations related to compliance, and the responsiveness and timeliness of management's actions to address the findings/observations.
- Review the process for communicating and monitoring compliance with the code of ethics, code of conduct, and fraud policies.
- Obtain regular updates from management and organization legal counsel regarding compliance matters.

#### ***G. Special Investigations and Whistleblower Mechanism***

- Institute and oversee special investigations, as needed.
- Ensure the creation and maintenance of an appropriate whistleblower mechanism for reporting any fraud, noncompliance, and/or inappropriate activities.
- Retain independent counsel, accountants, or other specialists to advise the Committee or assist in the conduct of an investigation.

#### ***H. Other Responsibilities***

- Report at least annually to the Board the Committee's activities, audit issues, and related recommendations.
- Confirm annually that all responsibilities outlined in this Model AC Charter have been carried out.
- Review and assess annually the adequacy of this Model AC Charter; request Board approval for proposed changes, and ensure appropriate disclosure as may be required by law or regulation.

- Evaluate annually the Committee's and individual member's performance and report the results of the evaluation to the Board.
- Provide an open avenue of communication between the internal auditors, external auditors, management, and the Board.
- Perform other activities related to this Model AC Charter as requested by the Board.

## VI. SIGNATURE PAGE

This Model AC Charter was adopted by the Committee on (date) and approved by the Board. This Model AC Charter is effective this day and is hereby signed by the following persons who have authority and responsibilities under this Charter.

\_\_\_\_\_

Chair, Audit Committee

\_\_\_\_\_

Date

\_\_\_\_\_

Chair, Board of Trustees

\_\_\_\_\_

Date

## REFERENCES

The Institute of Internal Auditors' Model Audit Committee Charter

Audit Committee Charter of the various public pension fund systems who are members of APPFA



PO Box 16064 • Columbus, OH 43216-6064  
[www.appfa.org](http://www.appfa.org)



# LACERS

LOS ANGELES CITY EMPLOYEES'  
RETIREMENT SYSTEM



## Report to Board of Administration

Agenda of: **NOVEMBER 27, 2018**

*Neil M. Guglielmo*  
From: Neil M. Guglielmo, General Manager

ITEM: **VII - A**

**SUBJECT: PROPOSED 2019 HEALTHCARE PREMIUM RATES FOR LAFPP MEMBERS AND POSSIBLE BOARD ACTION**

### Recommendation

That the Board approve premiums for LAFPP Members enrolled in LACERS UnitedHealthcare Medicare Advantage plan subgroup.

### Discussion

Prior to 1999, the Personnel Department administered retiree group health plans for LACERS retirees which were also available to Los Angeles Fire and Police Pensions (LAFPP) retired members. In 1999, when LACERS took over administration of retiree group health plans for our Members, health plan subgroups were created to allow retired sworn members of LAFPP that were enrolled in one of the Personnel Department's retiree health plans to continue their coverage under a LACERS plan as a retiree. Currently, there are 33 LAFPP Members left in these subgroups. LAFPP administers the subgroup enrollment and makes direct payment of premiums to the associated health plan carrier.

On August 28, 2018, the Board approved the 2019 LACERS health plan premiums. Because Anthem Blue Cross PPO; Kaiser Permanente HMO; and UnitedHealthcare (UHC) Medicare Advantage CA, NV, and AZ offered premium reductions, the Board approved accepting the final cost changes offered by the health plan carriers, while holding the 2019 premium rates at the 2018 amounts and using the difference to create a reserve to help offset future premium spikes and smooth the medical cost trend rate.

Of the health plans with premiums containing a reserve component, only UHC has an LAFPP subgroup, of which there are eight people enrolled. Discussions were held with LAFPP regarding the 2019 premiums and it was agreed that their members would pay a premium without the reserve component because it could create a tax issue for them. As such, staff is recommending that the Board approve the following 2019 premiums for LAFPP members enrolled in the UHC LAFPP subgroup:

- Single-party: \$250.55
- Two-party: \$501.10

- Family: \$751.65

This report was prepared by Alex Rabrenovich, Chief Benefits Analyst, Health Benefits Administration and Communications Division.

NMG:AR:ar

Attachment: Proposed Resolution

ATTACHMENT

LACERS UNITEDHEALTHCARE LAFPP SUBGROUP PREMIUMS  
FOR PLAN YEAR 2019

PROPOSED RESOLUTION

WHEREAS, the Los Angeles Administrative Code establishes that the Los Angeles City Employees' Retirement System (LACERS) provide health and welfare programs for retired employees and their eligible dependents;

WHEREAS, Los Angeles Administrative Code Section 4.1100 states that the Board shall contract for suitable plans for LACERS retired Members and Los Angeles Fire and Police Pensions (LAFPP) retired Members who were enrolled in a health plan administered by the Personnel Department on December 31, 1999;

WHEREAS, in 1999, when LACERS took over from the Personnel Department the administration of retiree group health plans for its Members, health plan subgroups were created to allow retired sworn members of Los Angeles Fire and Police Pensions LAFPP that were enrolled in one of the Personnel Department's retiree health plans to continue their coverage under a LACERS plan as a retiree;

WHEREAS, on August 28, 2018, the Board approved the 2019 LACERS health plan premiums, some of which contained a premium reserve component to help offset future premium spikes and smooth the medical cost trend rate;

WHEREAS, the LACERS UnitedHealthcare (UHC) plan has an LAFPP subgroup, of which currently, there are eight people enrolled, and its 2019 premiums contain a premium reserve component;

WHEREAS, discussions were held with LAFPP regarding the 2019 premiums and it was agreed that their members would pay a premium without the reserve component;

WHEREAS, on November 27, 2018, the Board of Administration approved staff's recommendation to establish UHC LAFPP subgroup premiums without the premium reserve component;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Administration hereby adopts the following 2019 premiums for LAFPP members enrolled in the UHC LAFPP subgroup:

- Single-party: \$250.55
- Two-party: \$501.10
- Family: \$751.65

November 27, 2018

# PORTFOLIO PERFORMANCE REVIEW

## LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Quarter Ending September 30, 2018

November 27, 2018



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

# TABLE OF CONTENTS

	<u>Tab</u>
<b>Executive Summary</b>	<b>1</b>
<b>Market Outlook</b>	<b>2</b>
<b>Asset Class Policy Overview</b>	<b>3</b>
<b>Performance Overview</b>	<b>4</b>
<b>U.S. Equity Performance</b>	<b>5</b>
<b>Non-U.S. Equity Performance</b>	<b>6</b>
<b>Core Fixed Income Performance</b>	<b>7</b>
<b>Credit Opportunities Performance</b>	<b>8</b>
<b>Real Assets Performance</b>	<b>9</b>
<b>Appendix</b>	
<b>U.S. Equity Manager Performance</b>	<b>10</b>
<b>Non-U.S. Manager Performance</b>	<b>11</b>
<b>Core Fixed Income Manager Performance</b>	<b>12</b>
<b>Credit Opportunities Manager Performance</b>	<b>13</b>
<b>Real Assets Manager Performance</b>	<b>14</b>
<b>Market Environment</b>	<b>15</b>
<b>Definitions</b>	<b>16</b>
<b>Disclosures</b>	<b>17</b>



# EXECUTIVE SUMMARY

NEPC, LLC

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# EXECUTIVE SUMMARY

## Q3 Market Summary

Macro			Equity			Credit			Real Assets		
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
0.7%	-4.0	20 bps	7.7%	1.4%	-1.1%	0.0%	2.4%	1.9%	-1.2%	-4.8%	0.7%

## LACERS Investment Summary (Gross of Fees)

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	15 Yrs	Rank	Inception	Inception Date
LACERS Master Trust	\$17,773,157,100	2.58%	43	3.59%	69	7.76%	53	10.31%	53	8.08%	23	8.19%	32	8.00%	8	8.34%	Oct-94
Policy Index		3.12%	17	3.50%	71	7.67%	56	10.77%	16	7.84%	58	8.17%	34	7.78%	36	8.27%	Oct-94
InvestorForce Public DB \$5-50B Gross Median		2.39%		4.17%		7.84%		10.31%		8.02%		7.90%		7.66%		7.96%	Oct-94

- LACERS 2018 investment results have been largely driven by the continued strength in US equity markets, supported by strong macroeconomic data and a tight labor market**
  - US equity composite returned 11.0% YTD, but private equity (+13.7%) has also been a strong contributor
- Non-US markets have trended lower in 2018 amid slowing growth, ongoing currency weakness and trade tensions**
  - Emerging markets equity composite in particular weighed on results after declining 7.5% YTD
- Rising rates have weighed on treasury bonds, however, high yield and bank loans have performed well**
  - LACERS' core bond and credit opportunities composites returned -1.4% and +0.3%, respectively, in 2018



# MARKET OUTLOOK

NEPC, LLC

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# PERFORMANCE OVERVIEW

## Q3 Market Summary

Macro			Equity			Credit			Real Assets		
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
											
0.7%	-4.0	20 bps	7.7%	1.4%	-1.1%	0.0%	2.4%	1.9%	-1.2%	-4.8%	0.7%

- **US equities increased during the quarter, supported by strong macroeconomic data and a tight labor market**
- **Emerging market equities broadly declined with ongoing currency weakness and trade tensions weighing on sentiment**
- **The Federal Reserve hiked rates for the third time this year and is expected to hike rates again in December**

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM Emerging Market Bond Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



# MACRO PERFORMANCE OVERVIEW

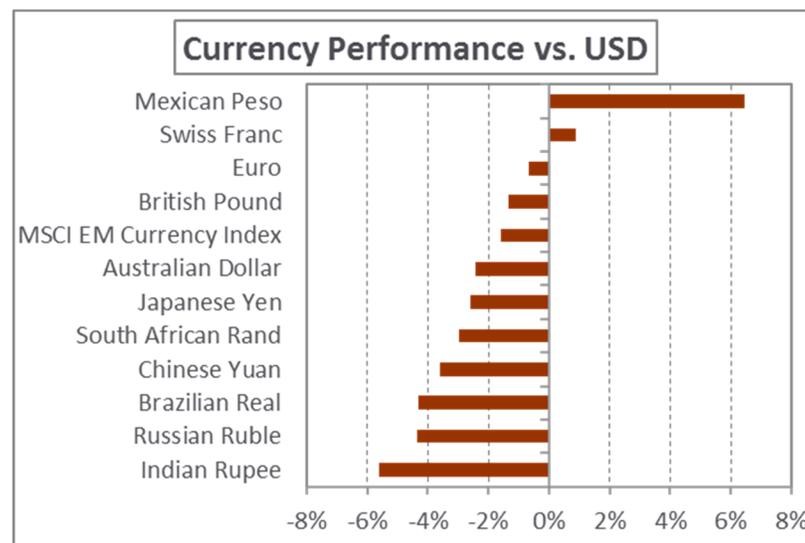
## Q3 Macro Market Summary

- The global growth outlook remains in tact, despite trade policy issues
- Global bond yields increased as central banks transition toward tighter monetary policy
- Higher rates in the US supported the dollar – adding further pressure to emerging market currencies

Central Banks	Current Rate	CPI YOY	Notes from the Quarter
Federal Reserve	2.00% - 2.25%	2.7%	The Fed increased its benchmark interest rate to 2.00% - 2.25% in September and is expected to hike rates one more time in 2018
European Central Bank	0.0%	2.1%	The ECB maintained its current benchmark interest rate, but continues its plan to scale back its QE Program
Bank of Japan	-0.1%	1.3%	The BoJ will continue its ultra-easy QE program with inflation remaining well below target

	Yield 06/30/18	Yield 09/30/18	Δ
US 10-Yr	2.86%	3.06%	0.20%
US 30-Yr	2.99%	3.21%	0.22%
US Real 10-Yr	0.74%	0.92%	0.18%
German 10-Yr	0.30%	0.47%	0.17%
Japan 10-Yr	0.04%	0.13%	0.09%
China 10-Yr	3.48%	3.63%	0.15%
EM Local Debt	6.59%	6.62%	0.03%

Source: Bloomberg



Source: Bloomberg



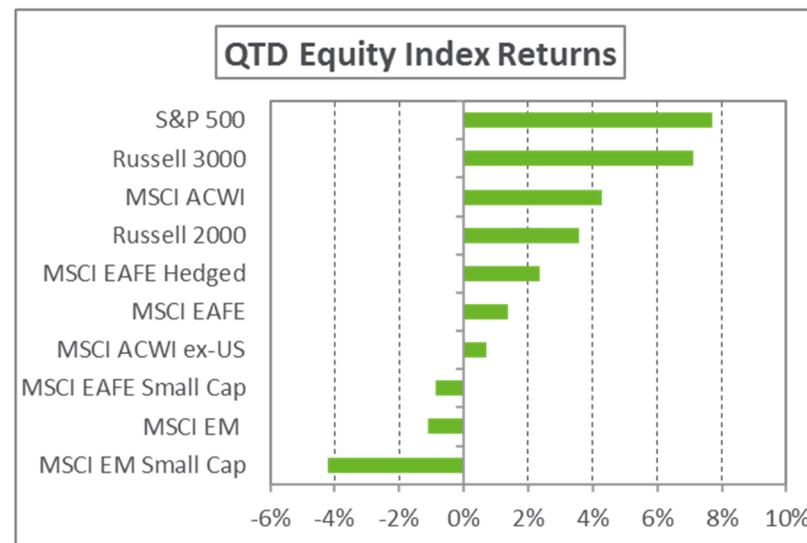
# EQUITY PERFORMANCE OVERVIEW

## Q3 Equity Market Summary

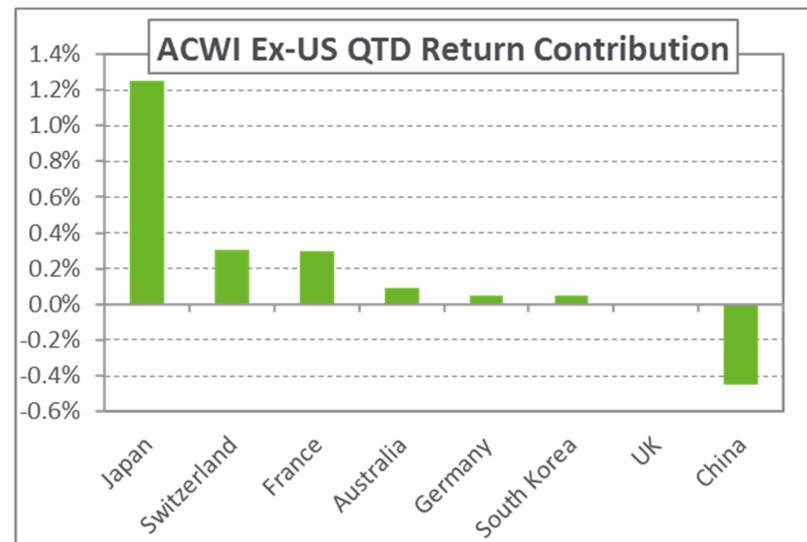
- **Strong economic data and positive sentiment helped US equities to outperform global equities**
- **Trade-sensitive economies disproportionately declined as escalating trade tensions and currency weakness weighed on returns**

Russell 3000 QTD Sector Return Contribution	
Information Technology	1.7%
Consumer Discretionary	0.3%
Financials	0.5%
Industrials	1.4%
Consumer Staples	0.0%
Energy	0.4%
Materials	0.0%
Health Care	0.5%
Real Estate	0.6%
Communication Services	-1.0%
Utilities	0.1%

Source: Russell, Bloomberg



Source: MSCI, Russell, S&P, Bloomberg



Source: MSCI, Bloomberg. QTD top country contributors to index return



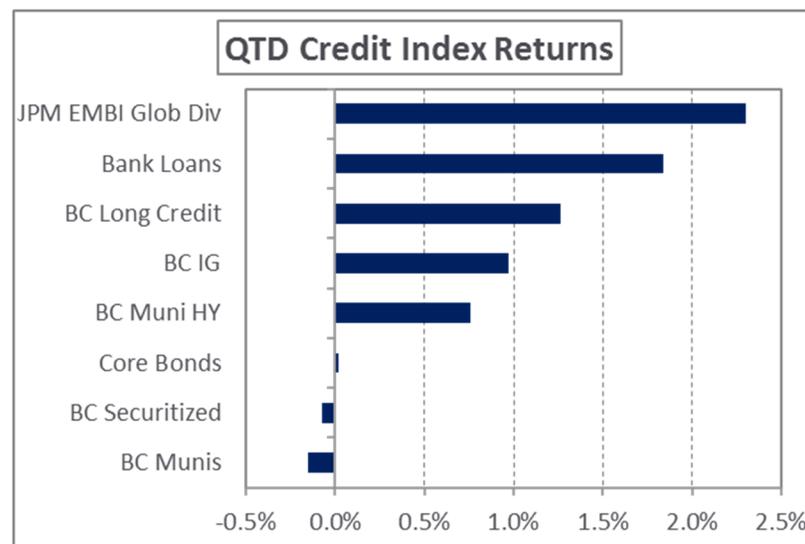
# CREDIT PERFORMANCE OVERVIEW

## Q3 Credit Market Summary

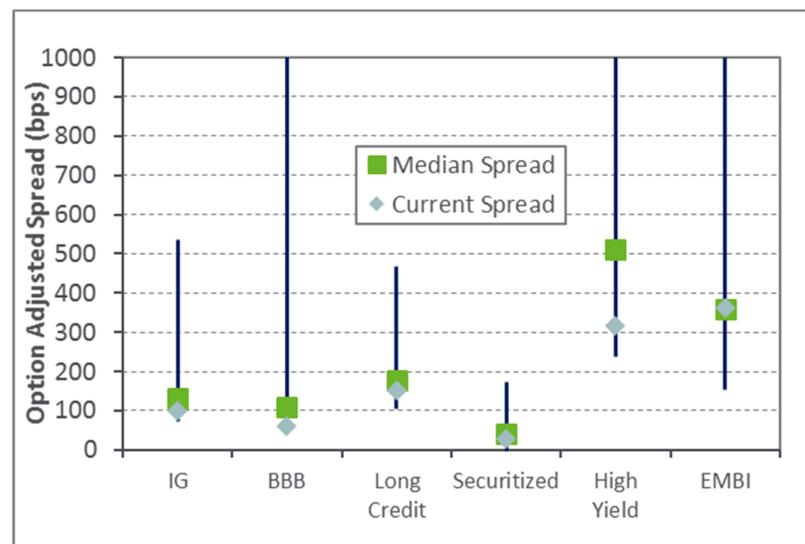
- **Credit spreads broadly declined and remain below medians in most areas of the credit market**
- **Dollar-denominated emerging market debt increased by 2.3% as spreads tightened**

Credit Spread (Basis Points)	06/30/18	09/30/18	\Delta
BC IG Credit	116	100	-16
BC Long Credit	174	153	-21
BC Securitized	28	28	0
BC High Yield	363	316	-47
Muni HY	253	198	-55
JPM EMBI	388	362	-26
Bank Loans - Libor	303	281	-22

Source: Barclays, Merrill Lynch, JPM, Bloomberg, NEPC



Source: Barclays, JPM, S&P, Bloomberg



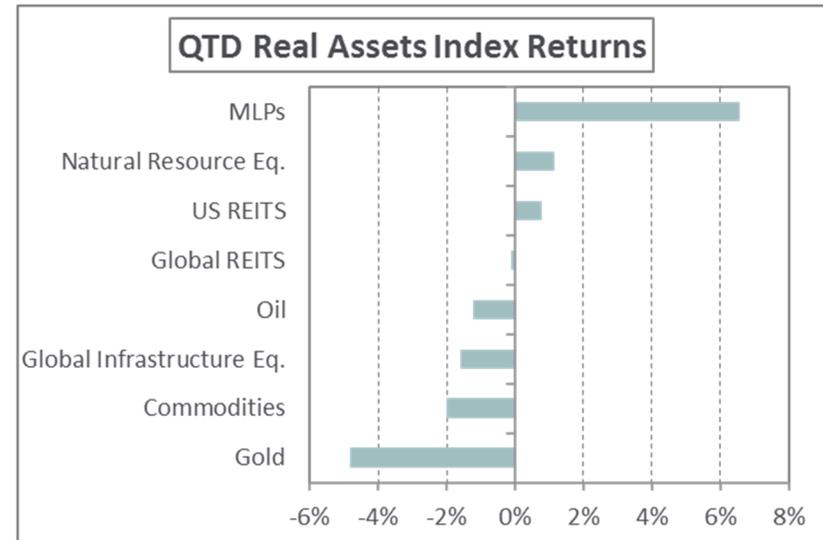
Source: Barclays, JPM, S&P, Bloomberg; as of 01/31/2000



# REAL ASSETS PERFORMANCE OVERVIEW

## Q3 Real Assets Market Summary

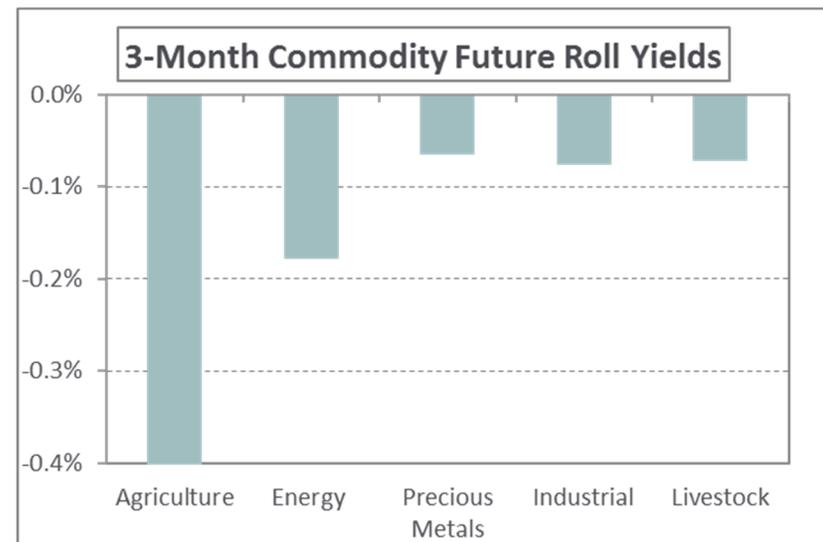
- **Oil declined 1.2% for the quarter, but is up 41.8% for the year**
- **Agricultural commodities declined substantially due to robust supply and trade war-related concerns**
- **MLP's increased 6.6%, supported by rising commodity prices and ongoing industry simplification**



Source: S&P, NAREIT, Alerian, Bloomberg

Real Asset Yields	06/30/18	09/30/18
MLPs	8.1%	8.0%
Core Real Estate	4.2%	4.4%
US REITs	4.4%	4.2%
Global REITs	3.7%	3.7%
Global Infrastructure Equities	4.4%	4.5%
Natural Resource Equities	3.5%	3.5%
US 10-Yr Breakeven Inflation	2.1%	2.1%
Commodity Index Roll Yield	0.1%	-1.2%

Source: NCREIF, Alerian, NAREIT, S&P, Bloomberg



Source: Bloomberg, NEPC Calculated as of 09/28/2018



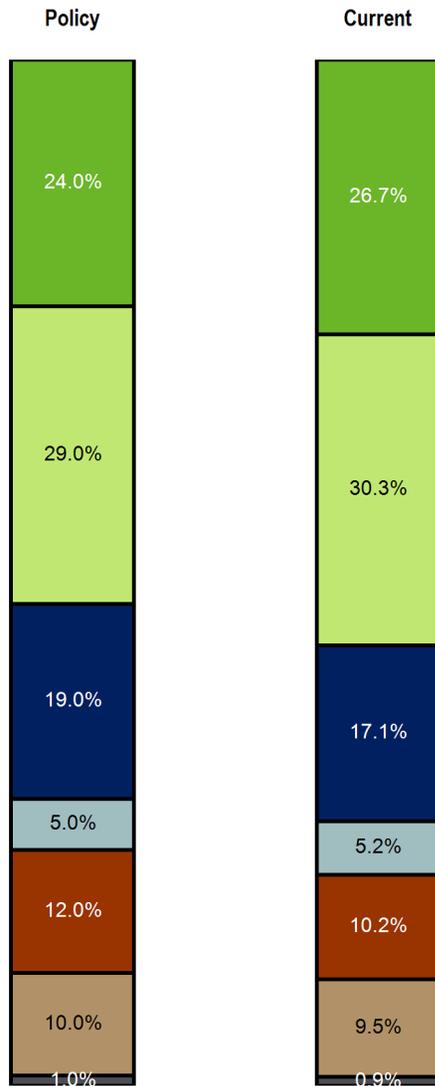
# ASSET CLASS POLICY OVERVIEW

NEPC, LLC

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# Los Angeles City Employees' Retirement System

## TOTAL FUND ASSET ALLOCATION VS. POLICY



Asset Allocation vs. Target						
	Current	Policy	Current Difference*	Policy Range	Within Range	
U.S. Equity	\$4,746,787,640	24.00%	26.71%	2.71%	19.00% - 29.00%	Yes
Non-US Equity	\$5,387,281,503	29.00%	30.31%	1.31%	24.00% - 34.00%	Yes
Core Fixed Income	\$3,047,726,713	19.00%	17.15%	-1.85%	15.00% - 22.00%	Yes
Credit Opportunities	\$927,728,179	5.00%	5.22%	0.22%	0.00% - 10.00%	Yes
Private Equity	\$1,815,136,023	12.00%	10.21%	-1.79%		Yes
Real Assets	\$1,692,613,101	10.00%	9.52%	-0.48%	7.00% - 13.00%	Yes
Cash	\$155,883,942	1.00%	0.88%	-0.12%	0.00% - 2.00%	Yes
<b>Total</b>	<b>\$17,773,157,100</b>	<b>100.00%</b>	<b>100.00%</b>			

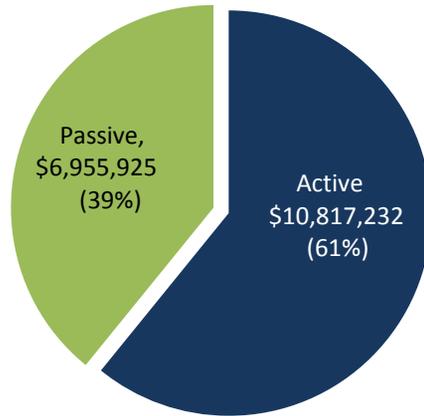
\*Difference between Policy and Current Allocation



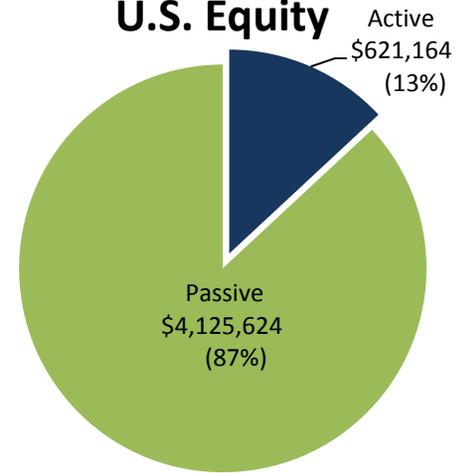
# ACTIVE VS. PASSIVE MANAGER BREAKDOWN

Note: Market values shown in millions \$(000).

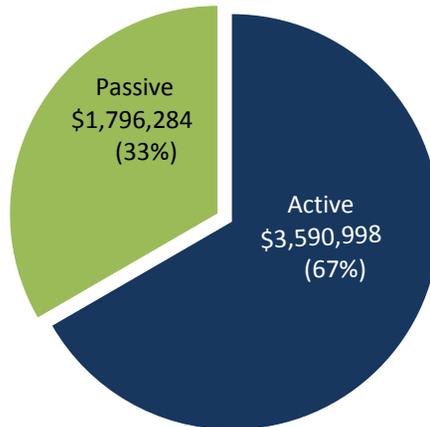
## Total Fund



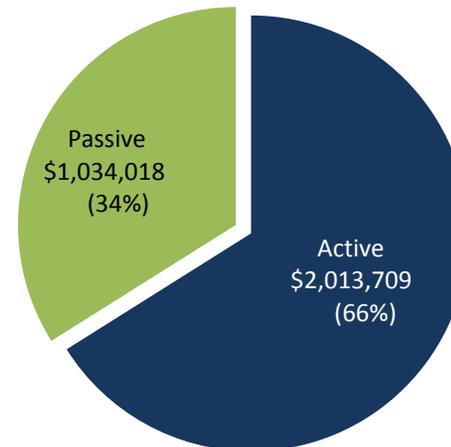
## U.S. Equity



## Non-U.S. Equity



## Core Fixed Income



- Of the Total Fund, LACERS allocated 61% to active managers and 39% to passive managers.

- Credit Opportunities, Private Equity, and Real Assets programs are active and therefore are not shown.



# PERFORMANCE OVERVIEW

NEPC, LLC

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# TOTAL FUND PERFORMANCE SUMMARY (GROSS OF FEES)

	Market Value	3 Mo Rank	YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank	15 Yrs Rank	Inception	Inception Date							
<b>LACERS Master Trust</b>	<b>\$17,773,157,100</b>	<b>2.58%</b>	<b>43</b>	<b>3.59%</b>	<b>69</b>	<b>7.76%</b>	<b>53</b>	<b>10.31%</b>	<b>53</b>	<b>8.08%</b>	<b>23</b>	<b>8.19%</b>	<b>32</b>	<b>8.00%</b>	<b>8</b>	<b>8.34%</b>	<b>Oct-94</b>
Policy Index		3.12%	17	3.50%	71	7.67%	56	10.77%	16	7.84%	58	8.17%	34	7.78%	36	8.27%	Oct-94
InvestorForce Public DB \$5-50B Gross Median		2.39%		4.17%		7.84%		10.31%		8.02%		7.90%		7.66%		7.96%	Oct-94

Over the past five years, the Fund returned 8.08% per year, outperforming the policy index by 0.24% and ranked in the 23<sup>rd</sup> percentile in the InvestorForce Public Funds \$5 Billion- \$50 Billion universe. The Fund's volatility was 5.86% ranking in the 69<sup>th</sup> percentile over this period. The Fund's risk-adjusted performance, as measured by the Sharpe Ratio, ranks in the 50<sup>th</sup> percentile in its peer group.

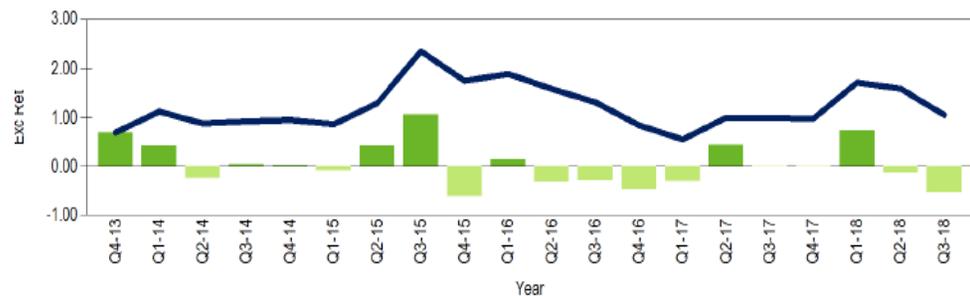
Over the past three years, the Fund returned 10.31% per year, underperforming the policy index by 0.46% and ranked in the 53<sup>rd</sup> percentile in its peer group. The Fund's volatility ranks in the 58<sup>th</sup> percentile resulting in a three-year Sharpe Ratio of 1.72, ranking in the 61<sup>st</sup> percentile.

In the one year ended September 30, 2018, the Fund experienced a net investment gain of \$1.29 billion, which includes a net investment gain of \$447.4 million during the third calendar quarter. Assets increased from \$16.7 billion twelve months ago to \$17.8 billion on September 30, 2018. The Fund returned 7.76%, outperforming the policy index by 0.09% and ranked in the 53<sup>rd</sup> percentile in its peer group.

All asset classes were within policy range as of September 30, 2018.

*The InvestorForce Public Funds \$5 Billion- \$50 Billion Universe contains 20 observations for the period ending September 30, 2018.*

## Quarterly and Cumulative Excess Performance



## 5 Years Ending September 30, 2018

	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
LACERS Master Trust	8.08%	23	5.86%	69	1.29	50	2.15	17
Policy Index	7.84%	58	6.49%	94	1.13	83	1.75	65
InvestorForce Public DB \$5-50B Gross Median	8.02%	--	5.75%	--	1.29	--	1.90	--

## 3 Years Ending September 30, 2018

	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
LACERS Master Trust	10.31%	53	5.48%	58	1.72	61	2.50	27
Policy Index	10.77%	16	6.22%	99	1.59	81	2.24	54
InvestorForce Public DB \$5-50B Gross Median	10.31%	--	5.34%	--	1.77	--	2.28	--



## Los Angeles City Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>LACERS Master Trust</b>	<b>17,773,157,100</b>	<b>100.00</b>	<b>2.58</b>	<b>3.59</b>	<b>7.76</b>	<b>10.31</b>	<b>8.08</b>	<b>8.19</b>	<b>8.34</b>	<b>Oct-94</b>
<i>Policy Index</i>			<u>3.12</u>	<u>3.50</u>	<u>7.67</u>	<u>10.77</u>	<u>7.84</u>	<u>8.17</u>	<u>8.27</u>	<i>Oct-94</i>
Over/Under			-0.54	0.09	0.09	-0.46	0.24	0.02	0.07	
<b>U.S. Equity</b>	<b>4,746,787,640</b>	<b>26.71</b>	<b>7.02</b>	<b>11.00</b>	<b>17.73</b>	<b>17.08</b>	<b>13.48</b>	<b>12.13</b>	<b>10.78</b>	<b>Oct-94</b>
<i>U.S. Equity Blend</i>			<u>7.12</u>	<u>10.57</u>	<u>17.58</u>	<u>17.07</u>	<u>13.46</u>	<u>12.01</u>	<u>9.65</u>	<i>Oct-94</i>
Over/Under			-0.10	0.43	0.15	0.01	0.02	0.12	1.13	
<b>Non-U.S. Equity</b>	<b>5,387,281,503</b>	<b>30.31</b>	<b>0.14</b>	<b>-2.28</b>	<b>3.21</b>	<b>11.20</b>	<b>5.56</b>	<b>6.58</b>	<b>7.16</b>	<b>Aug-01</b>
<i>MSCI ACWI ex USA</i>			<u>0.71</u>	<u>-3.09</u>	<u>1.76</u>	<u>9.97</u>	<u>4.12</u>	<u>5.18</u>	<u>6.26</u>	<i>Aug-01</i>
Over/Under			-0.57	0.81	1.45	1.23	1.44	1.40	0.90	
<b>Core Fixed Income</b>	<b>3,047,726,713</b>	<b>17.15</b>	<b>0.19</b>	<b>-1.44</b>	<b>-0.99</b>	<b>1.85</b>	<b>2.66</b>		<b>2.54</b>	<b>Jul-12</b>
<i>Core Fixed Income Blend</i>			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>	<u>2.16</u>		<u>1.86</u>	<i>Jul-12</i>
Over/Under			0.17	0.16	0.23	0.54	0.50		0.68	
<b>Credit Opportunities</b>	<b>927,728,179</b>	<b>5.22</b>	<b>1.97</b>	<b>0.32</b>	<b>1.46</b>	<b>7.05</b>	<b>5.12</b>		<b>5.33</b>	<b>Jun-13</b>
<i>Credit Opportunities Blend</i>			<u>2.38</u>	<u>0.59</u>	<u>1.31</u>	<u>7.43</u>	<u>5.43</u>		<u>5.62</u>	<i>Jun-13</i>
Over/Under			-0.41	-0.27	0.15	-0.38	-0.31		-0.29	
<b>Real Assets</b>	<b>1,692,613,101</b>	<b>9.52</b>	<b>0.42</b>	<b>2.84</b>	<b>4.85</b>	<b>6.18</b>	<b>7.40</b>	<b>0.21</b>	<b>6.30</b>	<b>Nov-94</b>
<i>CPI + 5% (Unadjusted)</i>			<u>1.41</u>	<u>6.21</u>	<u>7.38</u>	<u>7.08</u>	<u>6.58</u>	<u>6.51</u>	<u>7.32</u>	<i>Nov-94</i>
Over/Under			-0.99	-3.37	-2.53	-0.90	0.82	-6.30	-1.02	
<b>Public Real Assets</b>	<b>907,972,870</b>	<b>5.11</b>	<b>-0.81</b>	<b>-0.73</b>	<b>1.41</b>	<b>2.94</b>			<b>0.85</b>	<b>Jun-14</b>
<i>Public Real Assets Blend</i>			<u>-0.17</u>	<u>0.05</u>	<u>1.92</u>	<u>2.77</u>			<u>-1.32</u>	<i>Jun-14</i>
Over/Under			-0.64	-0.78	-0.51	0.17			2.17	
<b>Private Real Estate</b>	<b>764,186,280</b>	<b>4.30</b>	<b>1.82</b>	<b>6.61</b>	<b>8.55</b>	<b>9.31</b>	<b>10.46</b>	<b>1.63</b>	<b>6.92</b>	<b>Oct-94</b>
<i>Real Estate Blend</i>			<u>2.29</u>	<u>7.11</u>	<u>9.54</u>	<u>9.66</u>	<u>11.46</u>	<u>7.47</u>	<u>9.97</u>	<i>Oct-94</i>
Over/Under			-0.47	-0.50	-0.99	-0.35	-1.00	-5.84	-3.05	
<b>Private Equity</b>	<b>1,815,136,023</b>	<b>10.21</b>	<b>5.01</b>	<b>13.65</b>	<b>16.71</b>	<b>11.14</b>	<b>12.29</b>	<b>10.09</b>	<b>10.53</b>	<b>Nov-95</b>
<i>Private Equity Blend</i>			<u>7.90</u>	<u>13.02</u>	<u>21.06</u>	<u>20.54</u>	<u>16.83</u>	<u>15.76</u>	<u>13.29</u>	<i>Nov-95</i>
Over/Under			-2.89	0.63	-4.35	-9.40	-4.54	-5.67	-2.76	
<b>Cash</b>	<b>155,883,942</b>	<b>0.88</b>								



Note - See appendix for blended benchmark definitions.

## Los Angeles City Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>LACERS Master Trust</b>	<b>17,773,157,100</b>	<b>100.00</b>	<b>2.54</b>	<b>3.45</b>	<b>7.56</b>	<b>10.11</b>	<b>7.89</b>	<b>7.99</b>		<b>Oct-94</b>
Policy Index			<u>3.12</u>	<u>3.50</u>	<u>7.67</u>	<u>10.77</u>	<u>7.84</u>	<u>8.17</u>		Oct-94
Over/Under			-0.58	-0.05	-0.11	-0.66	0.05	-0.18		
<b>U.S. Equity</b>	<b>4,746,787,640</b>	<b>26.71</b>	<b>7.00</b>	<b>10.95</b>	<b>17.66</b>	<b>16.99</b>	<b>13.36</b>	<b>11.95</b>		<b>Oct-94</b>
U.S. Equity Blend			<u>7.12</u>	<u>10.57</u>	<u>17.58</u>	<u>17.07</u>	<u>13.46</u>	<u>12.01</u>		Oct-94
Over/Under			-0.12	0.38	0.08	-0.08	-0.10	-0.06		
<b>Non-U.S. Equity</b>	<b>5,387,281,503</b>	<b>30.31</b>	<b>0.04</b>	<b>-2.56</b>	<b>2.82</b>	<b>10.80</b>	<b>5.21</b>	<b>6.22</b>	<b>6.79</b>	<b>Aug-01</b>
MSCI ACWI ex USA			<u>0.71</u>	<u>-3.09</u>	<u>1.76</u>	<u>9.97</u>	<u>4.12</u>	<u>5.18</u>	<u>6.26</u>	Aug-01
Over/Under			-0.67	0.53	1.06	0.83	1.09	1.04	0.53	
<b>Core Fixed Income</b>	<b>3,047,726,713</b>	<b>17.15</b>	<b>0.17</b>	<b>-1.51</b>	<b>-1.08</b>	<b>1.75</b>	<b>2.55</b>		<b>2.42</b>	<b>Jul-12</b>
Core Fixed Income Blend			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>	<u>2.16</u>		<u>1.86</u>	Jul-12
Over/Under			0.15	0.09	0.14	0.44	0.39		0.56	
<b>Credit Opportunities</b>	<b>927,728,179</b>	<b>5.22</b>	<b>1.90</b>	<b>0.08</b>	<b>1.13</b>	<b>6.66</b>	<b>4.76</b>		<b>4.98</b>	<b>Jun-13</b>
Credit Opportunities Blend			<u>2.38</u>	<u>0.59</u>	<u>1.31</u>	<u>7.43</u>	<u>5.43</u>		<u>5.62</u>	Jun-13
Over/Under			-0.48	-0.51	-0.18	-0.77	-0.67		-0.64	
<b>Real Assets</b>	<b>1,692,613,101</b>	<b>9.52</b>	<b>0.38</b>	<b>2.72</b>	<b>4.69</b>	<b>6.00</b>	<b>7.24</b>	<b>0.08</b>		<b>Nov-94</b>
CPI + 5% (Unadjusted)			<u>1.41</u>	<u>6.21</u>	<u>7.38</u>	<u>7.08</u>	<u>6.58</u>	<u>6.51</u>		Nov-94
Over/Under			-1.03	-3.49	-2.69	-1.08	0.66	-6.43		
<b>Public Real Assets</b>	<b>907,972,870</b>	<b>5.11</b>	<b>-0.87</b>	<b>-0.92</b>	<b>1.15</b>	<b>2.68</b>			<b>0.65</b>	<b>Jun-14</b>
Public Real Assets Blend			<u>-0.17</u>	<u>0.05</u>	<u>1.92</u>	<u>2.77</u>			<u>-1.32</u>	Jun-14
Over/Under			-0.70	-0.97	-0.77	-0.09			1.97	
<b>Private Real Estate</b>	<b>764,186,280</b>	<b>4.30</b>	<b>1.80</b>	<b>6.56</b>	<b>8.48</b>	<b>9.22</b>	<b>10.35</b>	<b>1.52</b>		<b>Oct-94</b>
Real Estate Blend			<u>2.29</u>	<u>7.11</u>	<u>9.54</u>	<u>9.66</u>	<u>11.46</u>	<u>7.47</u>		Oct-94
Over/Under			-0.49	-0.55	-1.06	-0.44	-1.11	-5.95		
<b>Private Equity</b>	<b>1,815,136,023</b>	<b>10.21</b>	<b>5.01</b>	<b>13.65</b>	<b>16.72</b>	<b>11.15</b>	<b>12.30</b>	<b>10.09</b>		<b>Nov-95</b>
Private Equity Blend			<u>7.90</u>	<u>13.02</u>	<u>21.06</u>	<u>20.54</u>	<u>16.83</u>	<u>15.76</u>		Nov-95
Over/Under			-2.89	0.63	-4.34	-9.39	-4.53	-5.67		
<b>Cash</b>	<b>155,883,942</b>	<b>0.88</b>								



Note - See appendix for blended benchmark definitions.

## Los Angeles City Employees' Retirement System

# TOTAL FUND RISK STATISTICS (NET)

### 3 Years Ending September 30, 2018

	% of Total MV (%)	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Annualized Alpha Jensen (%)	Rank	Information Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
LACERS Master Trust	100.00%	10.11%	56	5.49%	59	0.57%	52	-0.66	--	2.42	38	1.01%	52
U.S. Equity	26.71%	16.99%	24	9.46%	50	-0.32%	35	-0.12	--	2.21	54	0.66%	11
Non-U.S. Equity	30.31%	10.80%	30	10.65%	62	1.07%	32	0.72	12	1.82	27	1.16%	14
Developed ex-U.S.	22.98%	10.24%	51	10.18%	38	1.54%	42	0.65	34	1.65	34	1.55%	34
Emerging Markets	7.33%	12.36%	8	14.70%	99	-0.31%	29	0.00	8	1.68	15	0.97%	1
Core Fixed Income	17.15%	1.75%	82	2.56%	55	0.46%	76	0.83	44	0.45	76	0.52%	24
Credit Opportunities	5.22%	6.66%	--	4.55%	--	-0.48%	--	-0.76	--	2.25	--	1.02%	--
Real Assets	9.52%	6.00%	--	2.15%	--	0.41%	--	-0.52	--	10.22	--	2.07%	--
Public Real Assets	5.11%	2.68%	--	4.02%	--	0.34%	--	-0.05	--	1.06	--	1.93%	--
Private Real Estate	4.30%	9.22%	8	1.89%	31	10.56%	2	-0.09	--	28.28	60	4.82%	93
Private Equity	10.21%	11.15%	67	4.06%	12	10.52%	38	-0.92	--	11.46	50	10.25%	82

### 5 Years Ending September 30, 2018

	% of Total MV (%)	Annualized Return (%)	Rank	Annualized Standard Deviation	Rank	Annualized Alpha Jensen (%)	Rank	Information Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
LACERS Master Trust	100.00%	7.89%	56	5.86%	69	0.81%	41	0.06	73	2.04	34	0.98%	49
U.S. Equity	26.71%	13.36%	17	9.76%	48	-0.22%	21	-0.16	--	2.02	31	0.66%	14
Non-U.S. Equity	30.31%	5.21%	37	10.90%	53	1.21%	28	0.82	7	0.74	30	1.33%	16
Developed ex-U.S.	22.98%	5.43%	42	10.55%	23	1.22%	42	0.70	34	0.78	42	1.46%	34
Emerging Markets	7.33%	3.00%	36	15.14%	99	-0.69%	50	-0.36	--	0.29	43	1.70%	15
Core Fixed Income	17.15%	2.55%	67	2.60%	57	0.48%	69	0.69	43	1.20	67	0.56%	29
Real Assets	9.52%	7.24%	--	2.21%	--	5.12%	--	0.28	--	15.45	--	2.31%	--
Private Real Estate	4.30%	10.35%	40	1.89%	21	12.17%	3	-0.20	--	33.23	53	5.58%	96
Private Equity	10.21%	12.30%	82	4.29%	13	11.45%	54	-0.44	--	13.12	44	10.38%	74

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



# PRIVATE MARKETS PERFORMANCE AS OF JUNE 30, 2018

Private Equity	10 Year IRR	Since Inception IRR	Since Inception Multiple
Aggregate Portfolio	9.7%	11.3%	1.55x
Core Portfolio	10.2%	11.8%	1.58x
Specialized Portfolio	2.8%	2.1%	1.12x
Russell 3000 + 300 bps	13.2%	12.0%	N/A

Real Estate	10 Year Return (Net)	Since Inception Return (Net)
Total Portfolio (TWR) <sup>1</sup>	0.98%	5.98%
NFI-ODCE + 80 basis points (TWR)	5.13%	7.15%

Note: The Total Value to Paid-In Ratio (TVPI) is a multiple that relates the current value of the private equity portfolio plus all distributions received to date with the total amount of capital contributed.

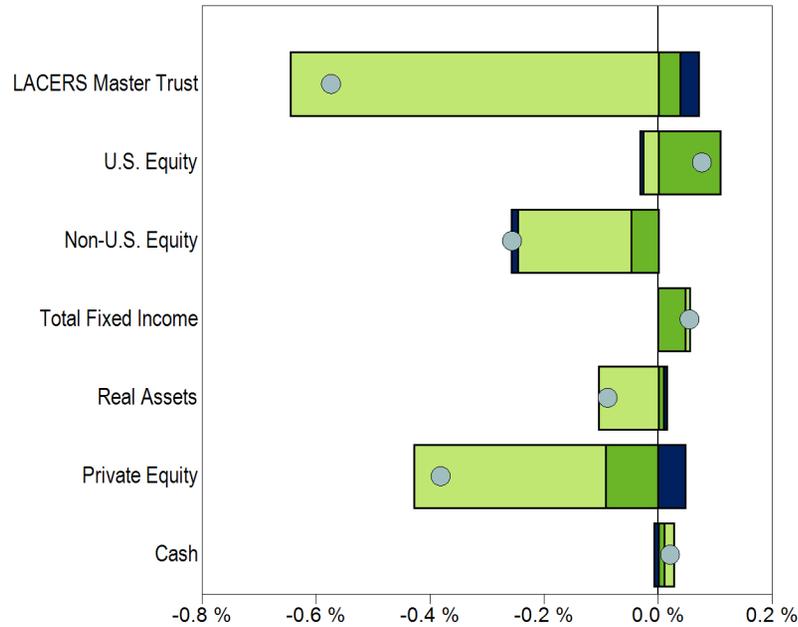
1 - IRR is not available for the Real Estate portfolio and therefore only time weighted returns (TWR) are reported.



# Los Angeles City Employees' Retirement System

## TOTAL FUND ATTRIBUTION ANALYSIS (NET)

### Attribution Effects 3 Months Ending September 30, 2018



■ Allocation Effect  
■ Selection Effect  
■ Interaction Effects  
● Total Effect

### Attribution Summary 3 Months Ending September 30, 2018

	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
U.S. Equity	24.00%	7.00%	7.12%	-0.12%	-0.03%	0.11%	0.00%	0.08%
Non-U.S. Equity	29.00%	0.04%	0.71%	-0.66%	-0.20%	-0.05%	-0.01%	-0.26%
Total Fixed Income	24.00%	0.54%	0.51%	0.03%	0.01%	0.05%	0.00%	0.06%
Real Assets	10.00%	0.38%	1.41%	-1.02%	-0.10%	0.01%	0.00%	-0.09%
Private Equity	12.00%	5.01%	7.90%	-2.89%	-0.34%	-0.09%	0.05%	-0.38%
Cash	1.00%	2.04%	0.49%	1.54%	0.02%	0.01%	-0.01%	0.02%
<b>Total</b>	<b>100.00%</b>	<b>2.54%</b>	<b>3.12%</b>	<b>-0.57%</b>	<b>-0.64%</b>	<b>0.04%</b>	<b>0.03%</b>	<b>-0.57%</b>

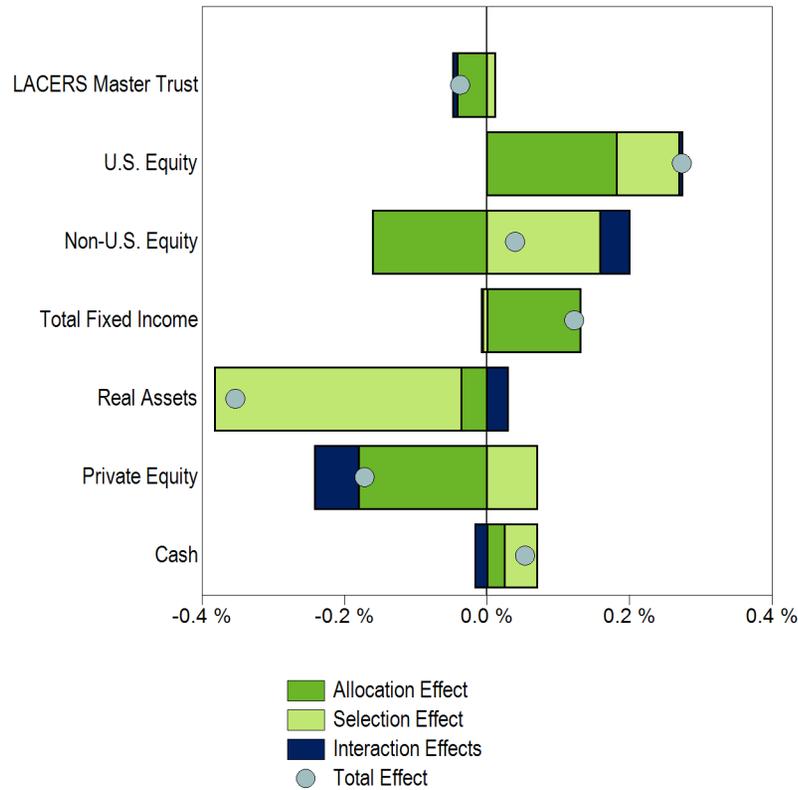
Wtd. = Weighted



# Los Angeles City Employees' Retirement System

## TOTAL FUND ATTRIBUTION ANALYSIS (NET)

### Attribution Effects YTD Ending September 30, 2018



Attribution Summary YTD Ending September 30, 2018								
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
U.S. Equity	24.00%	10.95%	10.57%	0.38%	0.09%	0.18%	0.00%	0.27%
Non-U.S. Equity	29.00%	-2.56%	-3.09%	0.53%	0.16%	-0.16%	0.04%	0.04%
Total Fixed Income	24.00%	-1.15%	-1.14%	-0.02%	-0.01%	0.13%	0.00%	0.12%
Real Assets	10.00%	2.72%	6.21%	-3.49%	-0.34%	-0.04%	0.03%	-0.35%
Private Equity	12.00%	13.65%	13.02%	0.63%	0.07%	-0.18%	-0.06%	-0.17%
Cash	1.00%	5.83%	1.34%	4.50%	0.04%	0.02%	-0.02%	0.05%
<b>Total</b>	<b>100.00%</b>	<b>3.46%</b>	<b>3.50%</b>	<b>-0.04%</b>	<b>0.01%</b>	<b>-0.04%</b>	<b>-0.01%</b>	<b>-0.04%</b>

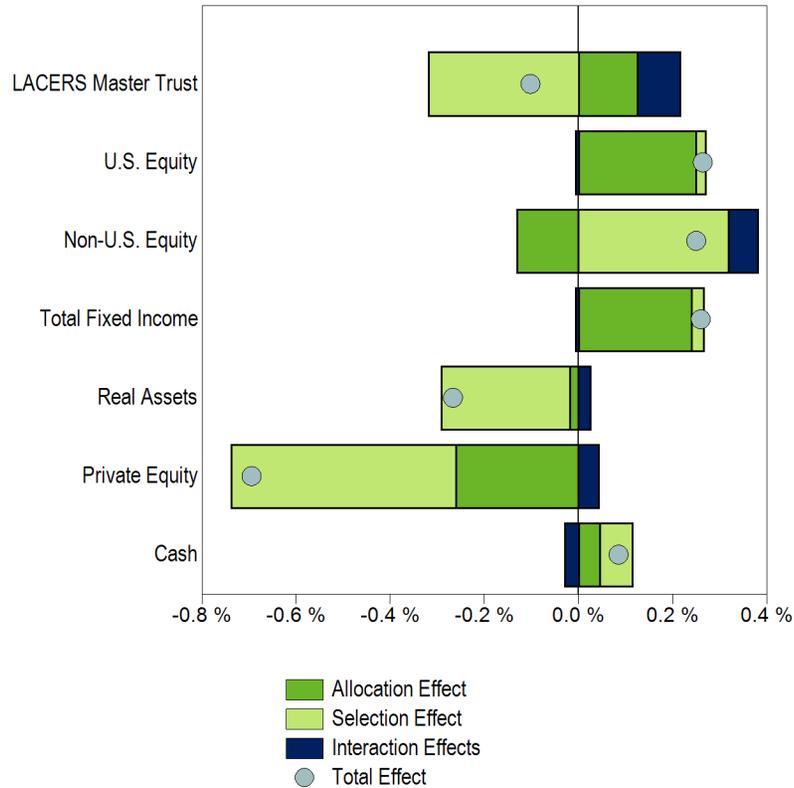
Wtd. = Weighted



# Los Angeles City Employees' Retirement System

## TOTAL FUND ATTRIBUTION ANALYSIS (NET)

**Attribution Effects**  
1 Year Ending September 30, 2018



Attribution Summary								
1 Year Ending September 30, 2018								
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
U.S. Equity	24.00%	17.66%	17.58%	0.08%	0.02%	0.25%	0.00%	0.26%
Non-U.S. Equity	29.00%	2.82%	1.76%	1.06%	0.32%	-0.13%	0.06%	0.25%
Total Fixed Income	24.00%	-0.59%	-0.69%	0.10%	0.02%	0.24%	0.00%	0.26%
Real Assets	10.00%	4.69%	7.38%	-2.70%	-0.27%	-0.02%	0.02%	-0.27%
Private Equity	12.00%	16.72%	21.06%	-4.34%	-0.48%	-0.26%	0.04%	-0.69%
Cash	1.00%	8.24%	1.64%	6.60%	0.07%	0.05%	-0.03%	0.09%
<b>Total</b>	<b>100.00%</b>	<b>7.57%</b>	<b>7.67%</b>	<b>-0.10%</b>	<b>-0.32%</b>	<b>0.13%</b>	<b>0.09%</b>	<b>-0.10%</b>

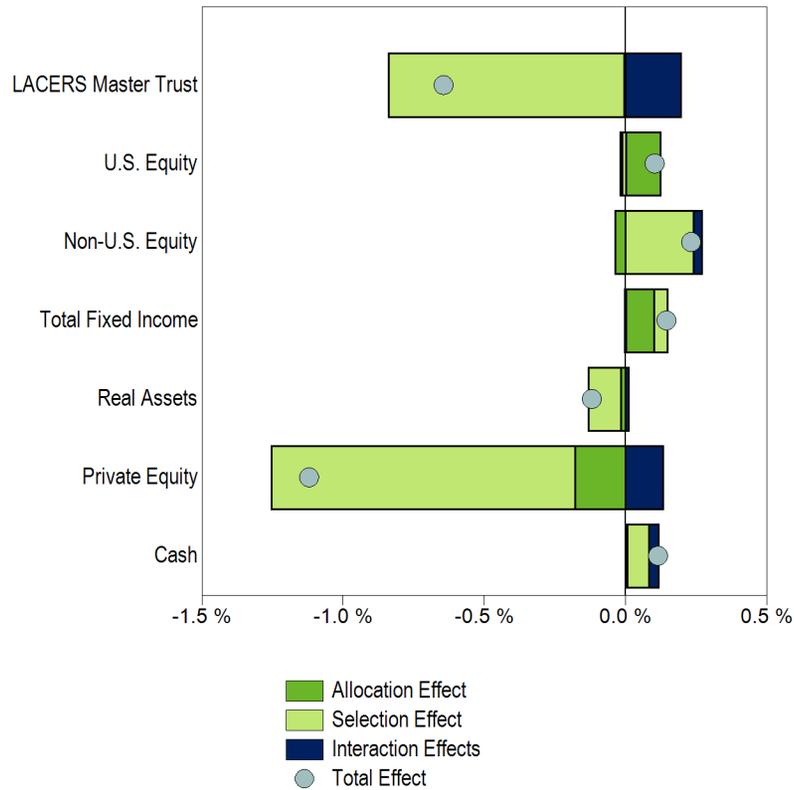
Wtd. = Weighted



# Los Angeles City Employees' Retirement System

## TOTAL FUND ATTRIBUTION ANALYSIS (NET)

### Attribution Effects 3 Years Ending September 30, 2018

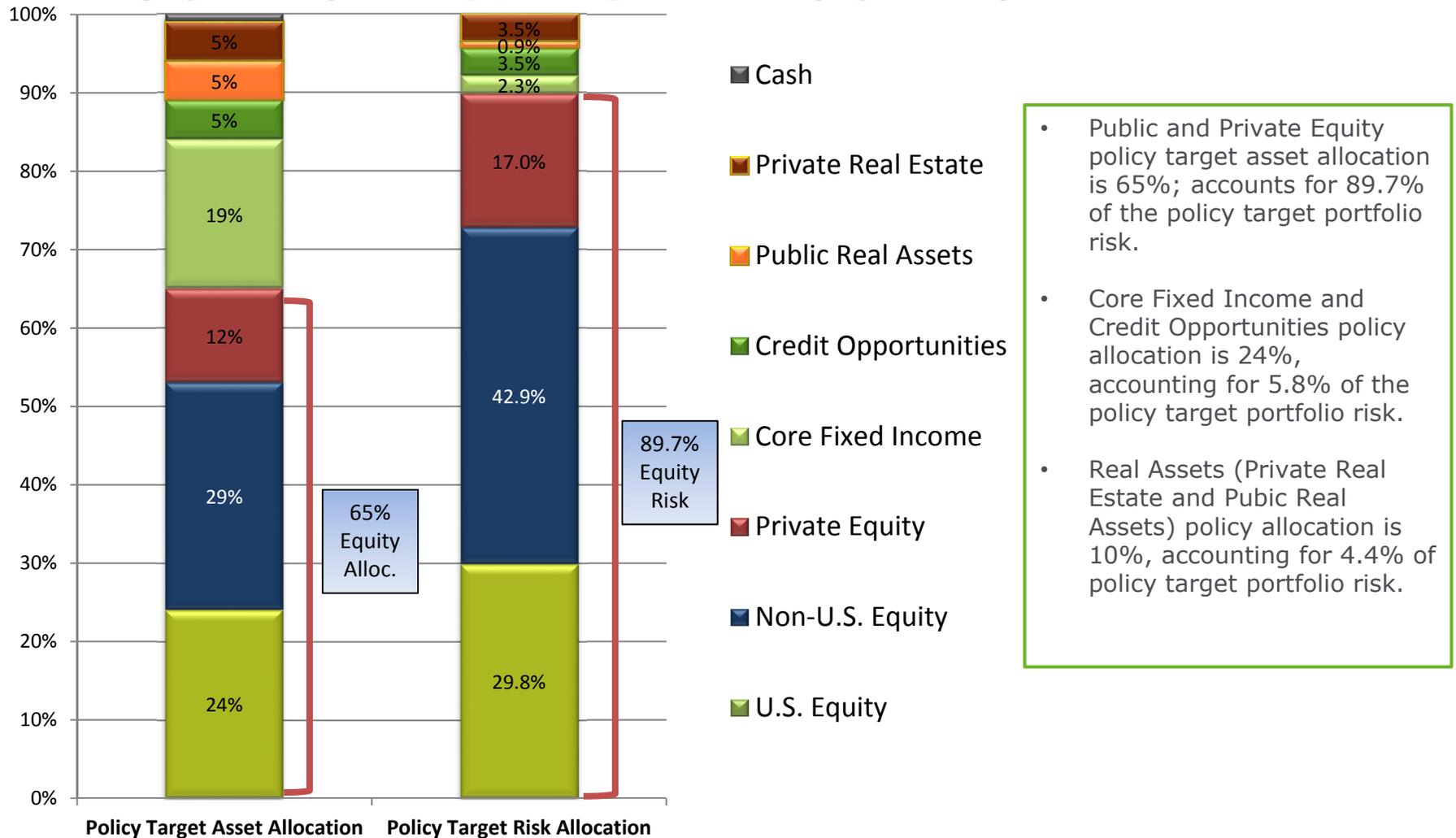


Attribution Summary 3 Years Ending September 30, 2018								
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
U.S. Equity	24.00%	16.99%	17.07%	-0.08%	-0.01%	0.12%	0.00%	0.10%
Non-U.S. Equity	29.00%	10.80%	9.97%	0.83%	0.24%	-0.04%	0.03%	0.23%
Total Fixed Income	24.00%	2.76%	2.57%	0.19%	0.05%	0.10%	0.00%	0.14%
Real Assets	10.00%	6.00%	7.08%	-1.08%	-0.11%	-0.02%	0.01%	-0.12%
Private Equity	12.00%	11.15%	20.54%	-9.39%	-1.07%	-0.18%	0.13%	-1.12%
Cash	1.00%	8.19%	0.86%	7.33%	0.08%	0.01%	0.03%	0.12%
<b>Total</b>	<b>100.00%</b>	<b>10.13%</b>	<b>10.77%</b>	<b>-0.64%</b>	<b>-0.83%</b>	<b>-0.01%</b>	<b>0.19%</b>	<b>-0.64%</b>

Wtd. = Weighted



# TOTAL FUND RISK ALLOCATION – ASSET ALLOCATION VS. RISK ALLOCATION



- Public and Private Equity policy target asset allocation is 65%; accounts for 89.7% of the policy target portfolio risk.
- Core Fixed Income and Credit Opportunities policy allocation is 24%, accounting for 5.8% of the policy target portfolio risk.
- Real Assets (Private Real Estate and Public Real Assets) policy allocation is 10%, accounting for 4.4% of policy target portfolio risk.

Note: Policy Target Asset Allocation does not reflect the new target asset allocation adopted on April 24, 2018.



# PUBLIC MARKETS RISK BUDGET COMPARISON AS OF SEPTEMBER 30, 2018

Public Markets Asset Class	Target Risk Budget	Actual 3 Yr Tracking Error
U.S. Equity	0.50%	0.66%
Non-U.S. Equity	1.20%	1.16%
Core Fixed Income	1.00%	0.52%
Credit Opportunities	1.50%	1.02%
Public Real Assets*	3.00%	1.93%

- Current LACERS public market asset class composite tracking error statistics are compared to asset class target risk budgets to ensure active risks are within expectations.
- Risk budgets are to be evaluated over three-year periods, at minimum, to reflect a full market cycle.
- All equity public markets asset classes are within an appropriately narrow range of their respective risk budgets.
- Both Core Fixed Income and Credit Opportunities have exhibited lower than expected active risk.
- The LACERS Public Real Assets composite is not at its target strategy allocation.

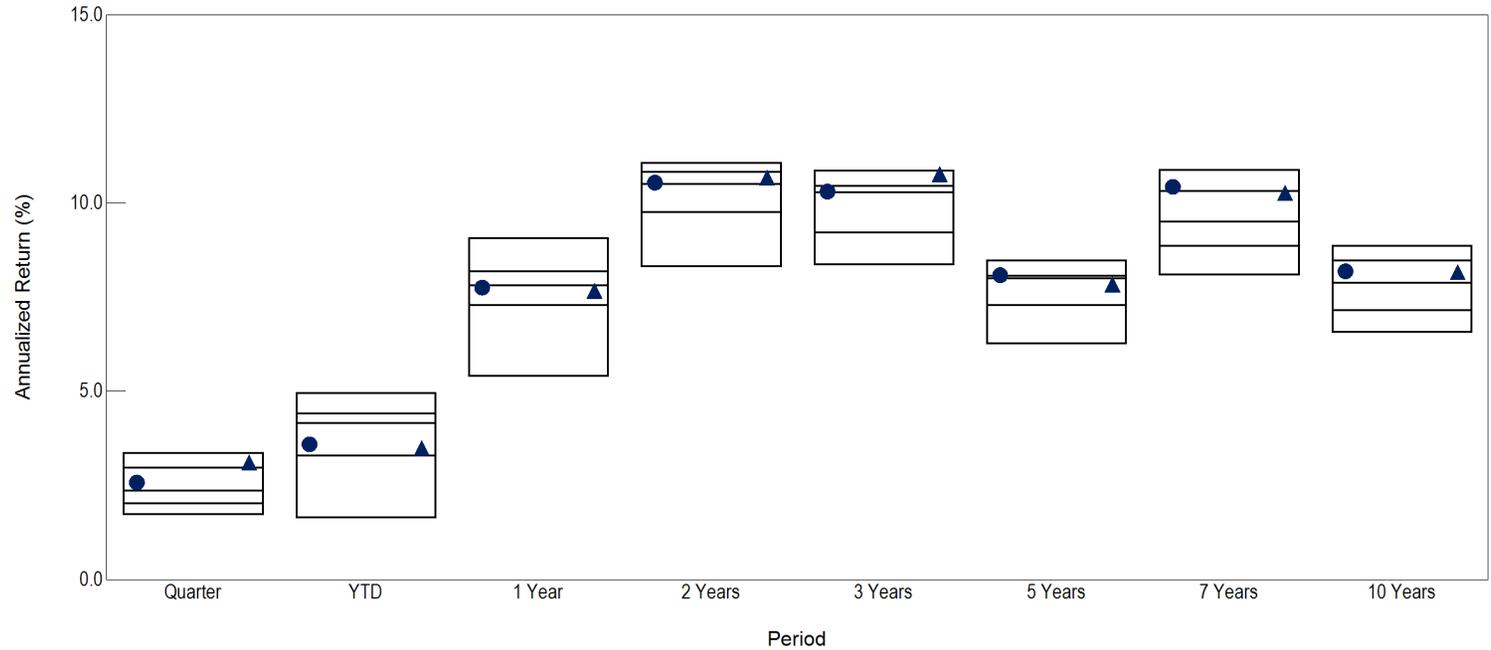
*Note: The new Target Risk Budget was approved by the Board of Directors on August 14, 2018 and is not reflected in the chart.*

\* The benchmark for the Public Real Assets composite is a custom policy benchmark that is comprised of the target weights of the public real asset components. The public real asset benchmark weights are 60% TIPS, 20% Commodities, 10% REITs, and 10% MLPs.



# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

LACERS Master Trust vs. InvestorForce Public DB \$5-50B Gross



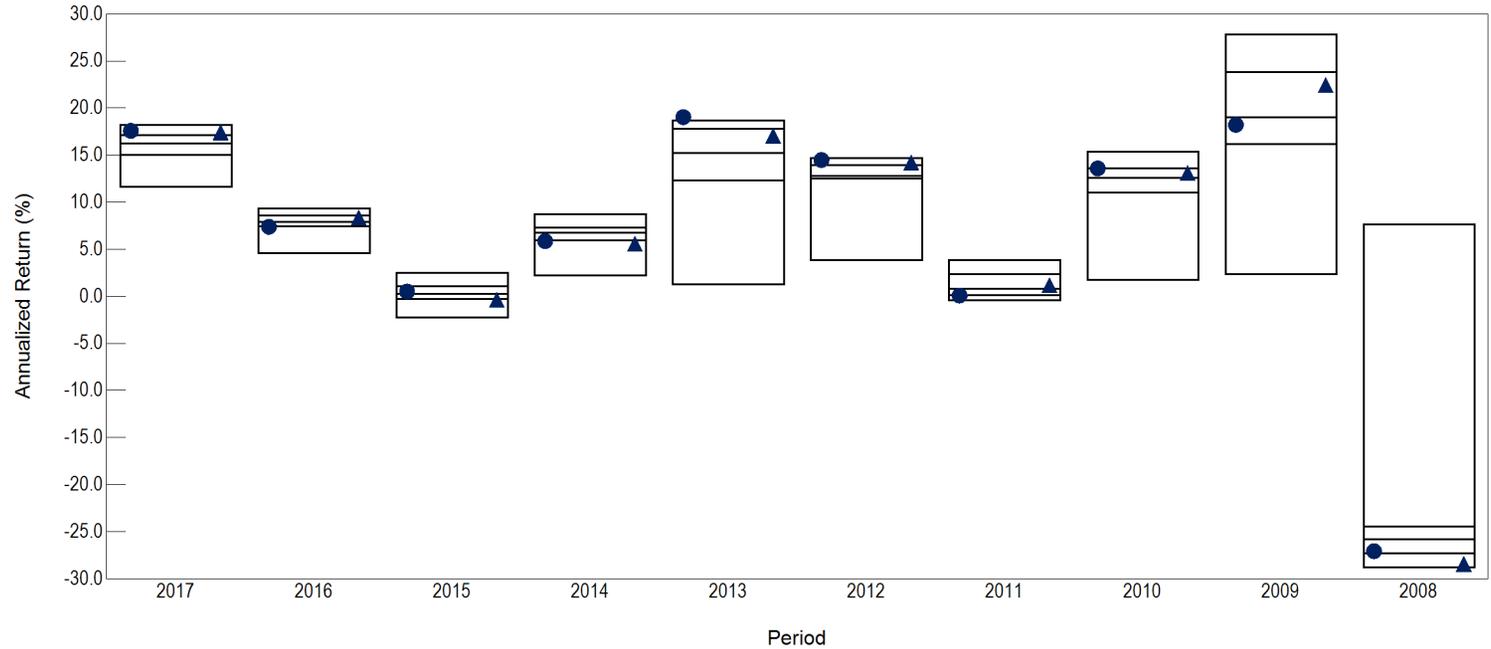
	Return (Rank)															
5th Percentile	3.37	4.95	9.06	11.07	10.87	8.48	10.87	8.86	3.37	4.95	9.06	11.07	10.87	8.48	10.87	8.86
25th Percentile	3.00	4.42	8.21	10.84	10.48	8.08	10.34	8.49	3.00	4.42	8.21	10.84	10.48	8.08	10.34	8.49
Median	2.39	4.17	7.84	10.52	10.31	8.02	9.52	7.90	2.39	4.17	7.84	10.52	10.31	8.02	9.52	7.90
75th Percentile	2.05	3.31	7.30	9.79	9.24	7.30	8.88	7.17	2.05	3.31	7.30	9.79	9.24	7.30	8.88	7.17
95th Percentile	1.76	1.67	5.43	8.34	8.40	6.30	8.12	6.60	1.76	1.67	5.43	8.34	8.40	6.30	8.12	6.60
# of Portfolios	20	20	20	20	20	19	18	17	20	20	20	20	20	19	18	17
● LACERS Master Trust	2.58	(43)	3.59	(69)	7.76	(53)	10.54	(48)	10.31	(53)	8.08	(23)	10.43	(24)	8.19	(32)
▲ Policy Index	3.12	(17)	3.50	(71)	7.67	(56)	10.68	(31)	10.77	(16)	7.84	(58)	10.27	(27)	8.17	(34)



# Los Angeles City Employees' Retirement System

## TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

LACERS Master Trust vs. InvestorForce Public DB \$5-50B Gross



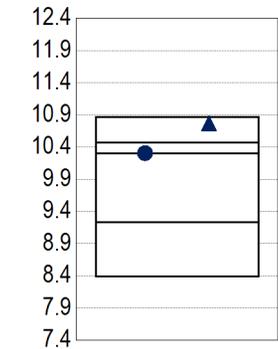
	Return (Rank)																			
5th Percentile	18.21	9.30	2.50	8.72	18.69	14.65	3.83	15.32	27.83	7.63										
25th Percentile	17.15	8.68	1.12	7.38	17.86	14.01	2.41	13.67	23.91	-24.40										
Median	16.29	7.99	0.35	6.79	15.31	12.83	0.86	12.66	19.07	-25.72										
75th Percentile	15.05	7.51	-0.24	6.04	12.36	12.58	0.21	11.06	16.24	-27.23										
95th Percentile	11.68	4.65	-2.20	2.25	1.36	3.92	-0.37	1.83	2.42	-28.75										
# of Portfolios	46	30	24	24	23	16	16	15	15	15										
● LACERS Master Trust	17.57	(12)	7.38	(78)	0.49	(41)	5.85	(81)	19.03	(4)	14.47	(7)	0.08	(89)	13.58	(29)	18.21	(67)	-27.07	(68)
▲ Policy Index	17.41	(14)	8.35	(41)	-0.39	(77)	5.58	(87)	17.06	(31)	14.23	(21)	1.17	(44)	13.11	(34)	22.44	(38)	-28.43	(94)



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

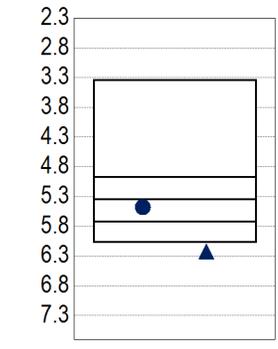
## LACERS Master Trust vs. InvestorForce Public DB \$5-50B Gross 3 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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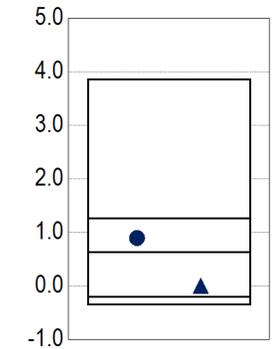
● LACERS Master Trust	Value	10.31
	Rank	53
▲ Policy Index	Value	10.77
	Rank	16

Universe	
5th %tile	10.87
25th %tile	10.48
Median	10.31
75th %tile	9.24
95th %tile	8.40



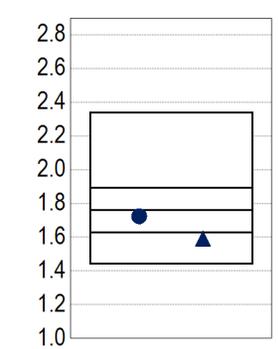
● LACERS Master Trust	Value	5.48
	Rank	58
▲ Policy Index	Value	6.22
	Rank	99

Universe	
5th %tile	3.34
25th %tile	4.96
Median	5.34
75th %tile	5.71
95th %tile	6.06



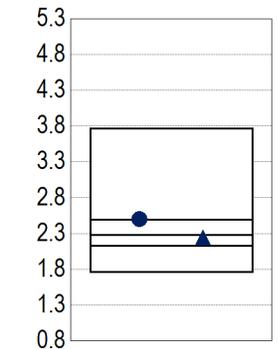
● LACERS Master Trust	Value	0.89
	Rank	45
▲ Policy Index	Value	0.00
	Rank	67

Universe	
5th %tile	3.86
25th %tile	1.28
Median	0.64
75th %tile	-0.20
95th %tile	-0.33



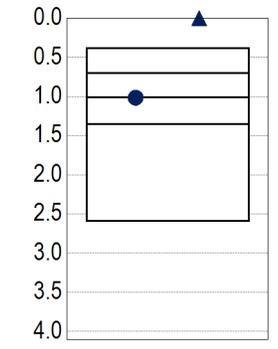
● LACERS Master Trust	Value	1.72
	Rank	61
▲ Policy Index	Value	1.59
	Rank	81

Universe	
5th %tile	2.34
25th %tile	1.90
Median	1.77
75th %tile	1.63
95th %tile	1.45



● LACERS Master Trust	Value	2.50
	Rank	27
▲ Policy Index	Value	2.24
	Rank	54

Universe	
5th %tile	3.77
25th %tile	2.50
Median	2.28
75th %tile	2.14
95th %tile	1.77



● LACERS Master Trust	Value	1.02
	Rank	56
▲ Policy Index	Value	0.00
	Rank	1

Universe	
5th %tile	0.38
25th %tile	0.69
Median	1.01
75th %tile	1.35
95th %tile	2.58

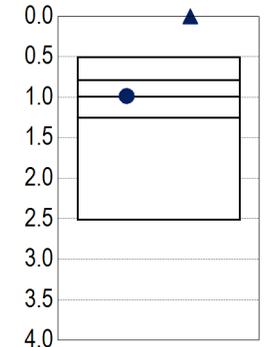
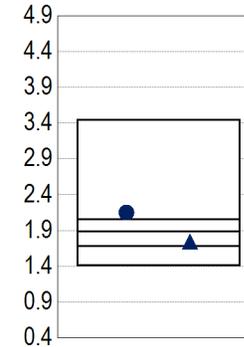
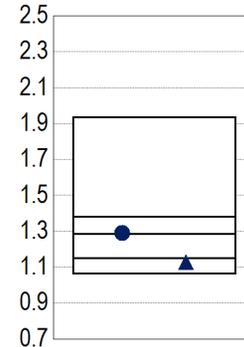
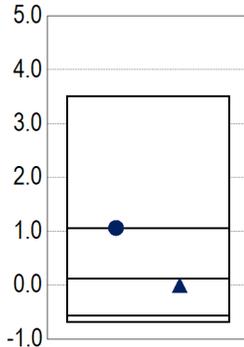
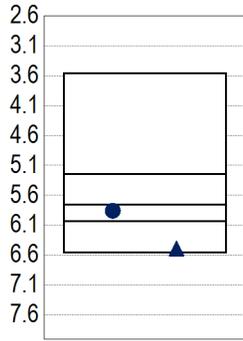
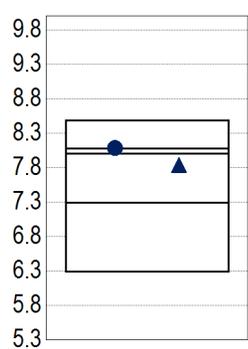
Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

## LACERS Master Trust vs. InvestorForce Public DB \$5-50B Gross 5 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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● LACERS Master Trust  
Value 8.08  
Rank 23

▲ Policy Index  
Value 7.84  
Rank 58

● LACERS Master Trust  
Value 5.86  
Rank 69

▲ Policy Index  
Value 6.49  
Rank 94

● LACERS Master Trust  
Value 1.06  
Rank 38

▲ Policy Index  
Value 0.00  
Rank 65

● LACERS Master Trust  
Value 1.29  
Rank 50

▲ Policy Index  
Value 1.13  
Rank 83

● LACERS Master Trust  
Value 2.15  
Rank 17

▲ Policy Index  
Value 1.75  
Rank 65

● LACERS Master Trust  
Value 0.99  
Rank 51

▲ Policy Index  
Value 0.00  
Rank 1

Universe

5th %tile	8.48
25th %tile	8.08
Median	8.02
75th %tile	7.30
95th %tile	6.30

Universe

5th %tile	3.56
25th %tile	5.23
Median	5.75
75th %tile	6.03
95th %tile	6.55

Universe

5th %tile	3.51
25th %tile	1.06
Median	0.14
75th %tile	-0.56
95th %tile	-0.68

Universe

5th %tile	1.93
25th %tile	1.38
Median	1.29
75th %tile	1.15
95th %tile	1.07

Universe

5th %tile	3.45
25th %tile	2.07
Median	1.90
75th %tile	1.69
95th %tile	1.42

Universe

5th %tile	0.50
25th %tile	0.78
Median	0.99
75th %tile	1.25
95th %tile	2.51

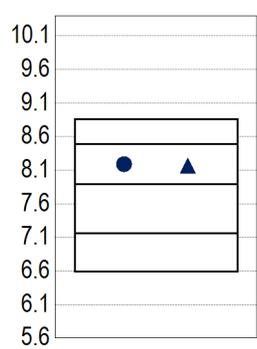
Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

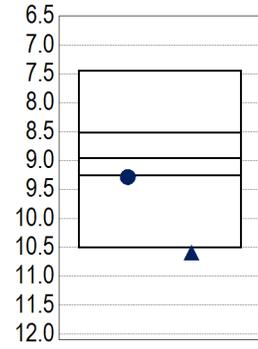
## LACERS Master Trust vs. InvestorForce Public DB \$5-50B Gross 10 Years

Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Sharpe Ratio	Sortino Ratio Risk Free	Tracking Error
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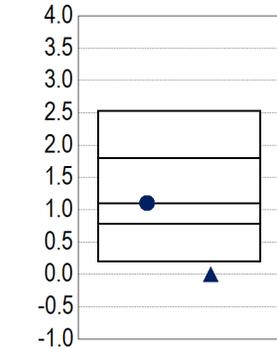
● LACERS Master Trust	Value	8.19
	Rank	32
▲ Policy Index	Value	8.17
	Rank	34

Universe	
5th %tile	8.86
25th %tile	8.49
Median	7.90
75th %tile	7.17
95th %tile	6.60



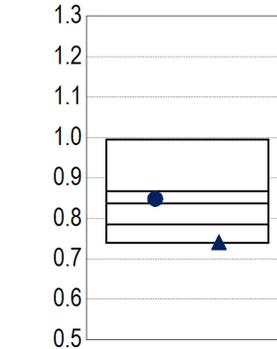
● LACERS Master Trust	Value	9.29
	Rank	76
▲ Policy Index	Value	10.59
	Rank	97

Universe	
5th %tile	7.45
25th %tile	8.50
Median	8.94
75th %tile	9.25
95th %tile	10.49



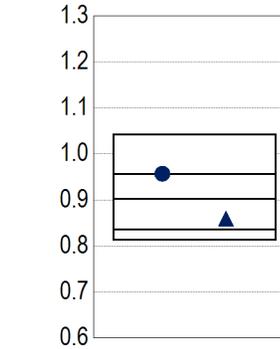
● LACERS Master Trust	Value	1.10
	Rank	51
▲ Policy Index	Value	0.00
	Rank	99

Universe	
5th %tile	2.52
25th %tile	1.81
Median	1.10
75th %tile	0.80
95th %tile	0.21



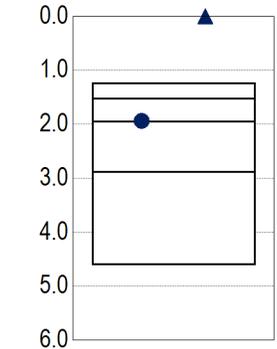
● LACERS Master Trust	Value	0.85
	Rank	40
▲ Policy Index	Value	0.74
	Rank	95

Universe	
5th %tile	0.99
25th %tile	0.87
Median	0.84
75th %tile	0.79
95th %tile	0.74



● LACERS Master Trust	Value	0.96
	Rank	32
▲ Policy Index	Value	0.86
	Rank	67

Universe	
5th %tile	1.04
25th %tile	0.96
Median	0.90
75th %tile	0.84
95th %tile	0.81



● LACERS Master Trust	Value	1.94
	Rank	50
▲ Policy Index	Value	0.00
	Rank	1

Universe	
5th %tile	1.24
25th %tile	1.52
Median	1.94
75th %tile	2.87
95th %tile	4.58

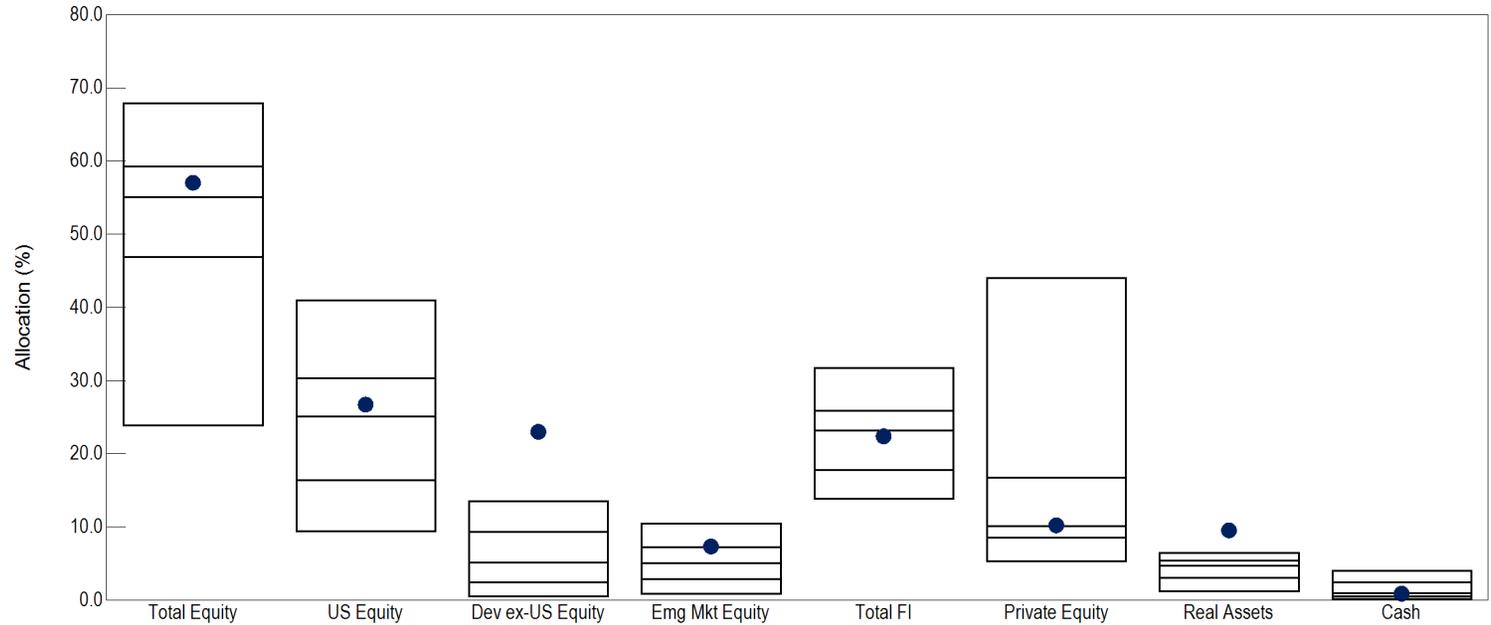
Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.



# Los Angeles City Employees' Retirement System

## TOTAL FUND ALLOCATION VS. PEER UNIVERSE

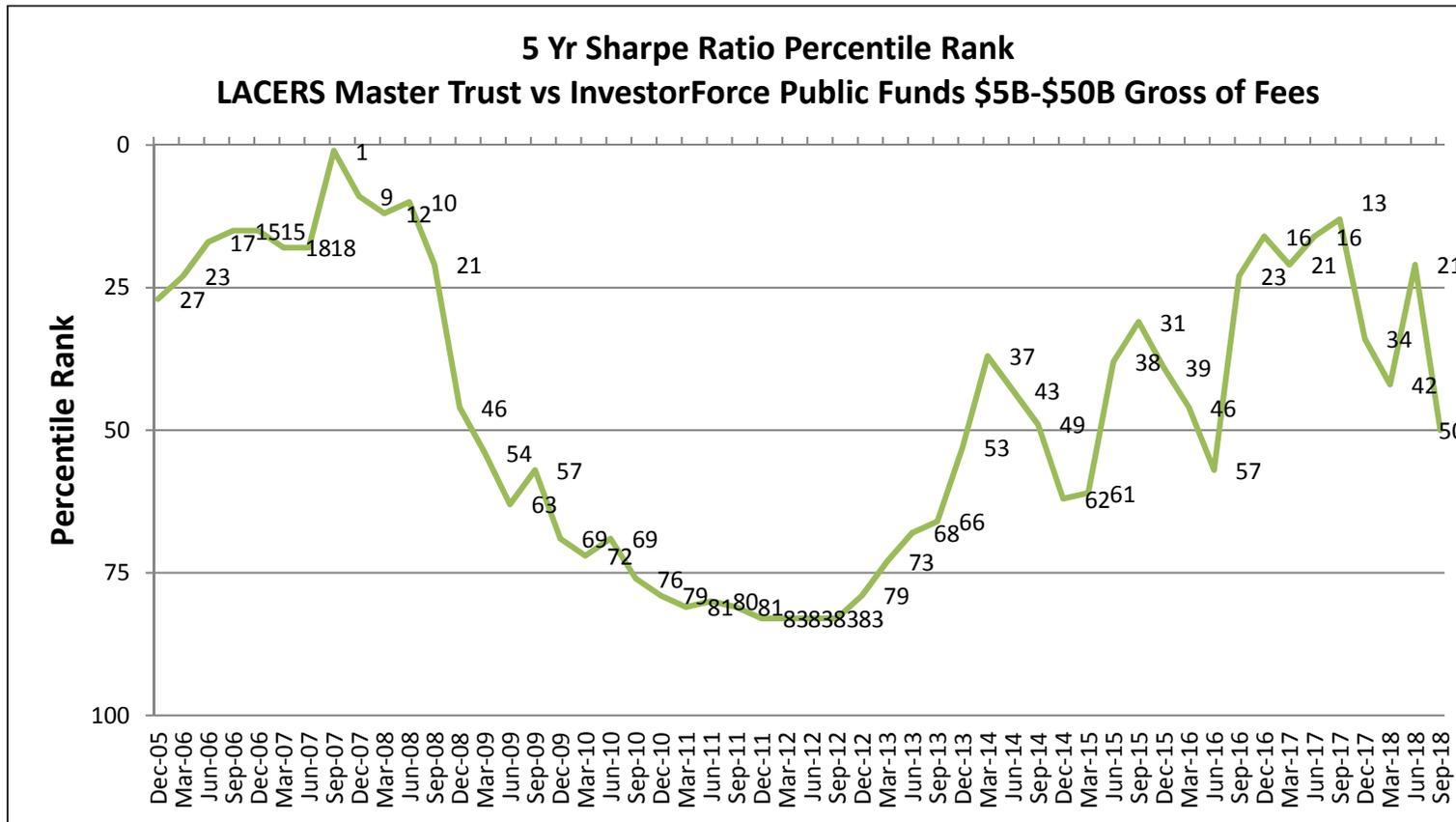
Total Plan Allocation vs. InvestorForce Public DB \$5-50B Gross



	Allocation (Rank)															
5th Percentile	67.84	40.91	13.52	10.41	31.69	43.99	6.43	4.03								
25th Percentile	59.35	30.37	9.36	7.33	25.98	16.85	5.45	2.49								
Median	55.12	25.17	5.25	5.11	23.22	10.21	4.82	1.04								
75th Percentile	46.93	16.46	2.54	2.93	17.84	8.65	3.12	0.64								
95th Percentile	23.97	9.50	0.64	0.92	13.89	5.41	1.32	0.22								
# of Portfolios	17	16	6	9	18	11	8	17								
● LACERS Master Trust	57.02	(38)	26.71	(41)	22.98	(1)	7.33	(26)	22.37	(56)	10.21	(50)	9.52	(1)	0.88	(69)



# HISTORICAL RISK ADJUSTED RETURN UNIVERSE COMPARISON



- Total Plan ranks in the 50<sup>th</sup> percentile versus other large public plans on a Sharpe Ratio basis.
  - Overweight to non-U.S. equities with contributed positively to Sharpe Ratio rank.
  - Use of passive investment strategies within U.S. Equity has contributed to the overall Sharpe Ratio rank (higher than median).
  - Core Fixed Income contributed negatively to Sharpe Ratio rank.



# U.S. EQUITY

NEPC, LLC

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## Los Angeles City Employees' Retirement System

# U.S. EQUITY (GROSS)

	Market Value (\$)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>U.S. Equity</b>	<b>4,746,787,640</b>	<b>7.02</b>	<b>11.00</b>	<b>17.73</b>	<b>17.08</b>	<b>13.48</b>	<b>12.13</b>	<b>10.78</b>	<b>Oct-94</b>
U.S. Equity Blend		<u>7.12</u>	<u>10.57</u>	<u>17.58</u>	<u>17.07</u>	<u>13.46</u>	<u>12.01</u>	<u>9.65</u>	Oct-94
Over/Under		-0.10	0.43	0.15	0.01	0.02	0.12	1.13	
Aronson, Johnson & Ortiz	191,021,751	4.56	3.70	11.45	11.93	10.22	10.39	8.92	Oct-01
Russell 1000 Value		<u>5.70</u>	<u>3.92</u>	<u>9.45</u>	<u>13.55</u>	<u>10.72</u>	<u>9.79</u>	<u>8.10</u>	Oct-01
Over/Under		-1.14	-0.22	2.00	-1.62	-0.50	0.60	0.82	
Rhumblin Advisors Russell 2000	285,985,393	3.60	11.54	15.24	17.07			10.42	Apr-15
Russell 2000		<u>3.58</u>	<u>11.51</u>	<u>15.24</u>	<u>17.12</u>			<u>10.56</u>	Apr-15
Over/Under		0.02	0.03	0.00	-0.05			-0.14	
Rhumblin Advisors Russell 2000 Growth <sup>1</sup>	149,965,195	5.56	15.78	21.05	17.92			12.35	Jan-15
Russell 2000 Growth		<u>5.52</u>	<u>15.76</u>	<u>21.06</u>	<u>17.98</u>			<u>12.44</u>	Jan-15
Over/Under		0.04	0.02	-0.01	-0.06			-0.09	
Rhumblin Advisors Russell 2000 Value <sup>1</sup>	113,797,062	1.60	7.12	9.28				20.46	Mar-16
Russell 2000 Value		<u>1.60</u>	<u>7.14</u>	<u>9.33</u>				<u>20.55</u>	Mar-16
Over/Under		0.00	-0.02	-0.05				-0.09	
EAM Investors	143,676,355	13.49	31.73	36.86	20.43			20.43	Sep-15
Russell 2000 Growth		<u>5.52</u>	<u>15.76</u>	<u>21.06</u>	<u>17.98</u>			<u>17.98</u>	Sep-15
Over/Under		7.97	15.97	15.80	2.45			2.45	
PanAgora	126,838,693	-0.14	5.91	7.53	13.57	10.45	12.24	7.66	Feb-06
Russell 2000 Value		<u>1.60</u>	<u>7.14</u>	<u>9.33</u>	<u>16.12</u>	<u>9.92</u>	<u>9.52</u>	<u>7.27</u>	Feb-06
Over/Under		-1.74	-1.23	-1.80	-2.55	0.53	2.72	0.39	
Principal Global Investors	159,627,167	4.67	8.61	14.61	16.92			13.64	Aug-14
Russell MidCap		<u>5.00</u>	<u>7.46</u>	<u>13.98</u>	<u>14.52</u>			<u>10.54</u>	Aug-14
Over/Under		-0.33	1.15	0.63	2.40			3.10	
Rhumblin Advisors S&P 500	3,361,654,655	7.71	10.60	17.94	17.25	13.91	12.03	9.97	Feb-93
S&P 500		<u>7.71</u>	<u>10.56</u>	<u>17.91</u>	<u>17.31</u>	<u>13.95</u>	<u>11.97</u>	<u>9.80</u>	Feb-93
Over/Under		0.00	0.04	0.03	-0.06	-0.04	0.06	0.17	
Rhumblin Advisors Russell 1000 Growth <sup>1</sup>	214,221,367	9.17	17.08	26.27	20.46	16.52		17.41	Jun-13
Russell 1000 Growth		<u>9.17</u>	<u>17.09</u>	<u>26.30</u>	<u>20.55</u>	<u>16.58</u>		<u>17.47</u>	Jun-13
Over/Under		0.00	-0.01	-0.03	-0.09	-0.06		-0.06	

1- Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

- U.S. Equity Blend = Russell 3000 from 1/1/2000 to present; 33.75% S&P 500/ 35% Russell 1000 Value/ 12.50% Russell 1000 Growth/ 12.50% Russell 2000 Value/ 6.25% Russell 2000 Growth prior to

eA = eVestment Alliance



## Los Angeles City Employees' Retirement System

# U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>U.S. Equity</b>	<b>4,746,787,640</b>	<b>100.00</b>	<b>7.00</b>	<b>19</b>	<b>10.95</b>	<b>26</b>	<b>17.66</b>	<b>30</b>	<b>16.99</b>	<b>24</b>	<b>13.36</b>	<b>17</b>	<b>11.95</b>	<b>28</b>		<b>Oct-94</b>
<i>U.S. Equity Blend</i>			<u>7.12</u>	15	<u>10.57</u>	32	<u>17.58</u>	31	<u>17.07</u>	17	<u>13.46</u>	15	<u>12.01</u>	26		Oct-94
Over/Under			-0.12		0.38		0.08		-0.08		-0.10		-0.06			
<i>InvestorForce Public DB &gt; \$1 Billion US Equity Net Median</i>			6.63		10.05		16.92		16.51		12.99		11.60			Oct-94
Aronson, Johnson & Ortiz	191,021,751	4.02	4.49	72	3.48	67	11.14	50	11.61	88	9.89	67	10.08	53	8.63	Oct-01
<i>Russell 1000 Value</i>			<u>5.70</u>	47	<u>3.92</u>	62	<u>9.45</u>	64	<u>13.55</u>	57	<u>10.72</u>	52	<u>9.79</u>	60	<u>8.10</u>	Oct-01
Over/Under			-1.21		-0.44		1.69		-1.94		-0.83		0.29		0.53	
<i>eV US Large Cap Value Equity Net Median</i>			5.50		4.56		11.11		13.86		10.81		10.15		8.62	Oct-01
Rhumblin Advisors Russell 2000 <sup>1</sup>	285,985,393	6.02	3.59	50	11.54	42	15.23	44	17.06	41					10.41	Apr-15
<i>Russell 2000</i>			<u>3.58</u>	50	<u>11.51</u>	42	<u>15.24</u>	44	<u>17.12</u>	41					<u>10.56</u>	Apr-15
Over/Under			0.01		0.03		-0.01		-0.06						-0.15	
<i>eV US Small Cap Equity Net Median</i>			3.57		9.17		13.41		16.08						10.16	Apr-15
Rhumblin Advisors Russell 2000 Growth <sup>1</sup>	149,965,195	3.16	5.56	74	15.77	74	21.04	73	17.91	66					12.34	Jan-15
<i>Russell 2000 Growth</i>			<u>5.52</u>	75	<u>15.76</u>	74	<u>21.06</u>	73	<u>17.98</u>	65					<u>12.44</u>	Jan-15
Over/Under			0.04		0.01		-0.02		-0.07						-0.10	
<i>eV US Small Cap Growth Equity Net Median</i>			7.55		20.83		25.90		19.20						14.16	Jan-15
Rhumblin Advisors Russell 2000 Value <sup>1</sup>	113,797,062	2.40	1.59	46	7.12	31	9.28	40							20.46	Mar-16
<i>Russell 2000 Value</i>			<u>1.60</u>	45	<u>7.14</u>	31	<u>9.33</u>	40							<u>20.55</u>	Mar-16
Over/Under			-0.01		-0.02		-0.05								-0.09	
<i>eV US Small Cap Value Equity Net Median</i>			1.35		4.55		8.00								17.90	Mar-16

1- Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

- U.S. Equity Blend = Russell 3000 from 1/1/2000 to present; 33.75% S&P 500/ 35% Russell 1000 Value/ 12.50% Russell 1000 Growth/ 12.50% Russell 2000 Value/ 6.25% Russell 2000 Growth prior to

eA = eVestment Alliance



## Los Angeles City Employees' Retirement System

# U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
EAM Investors	143,676,355	3.03	13.32	2	31.08	5	35.96	6	19.59	20					19.59	Sep-15
<i>Russell 2000 Growth</i>			<u>5.52</u>	32	<u>15.76</u>	29	<u>21.06</u>	29	<u>17.98</u>	32					<u>17.98</u>	Sep-15
Over/Under			7.80		15.32		14.90		1.61						1.61	
<i>eV US Small Cap Equity Net Median</i>			3.57		9.17		13.41		16.08						16.08	Sep-15
PanAgora	126,838,693	2.67	-0.31	82	5.39	43	6.84	61	12.83	66	9.69	47	11.46	36	6.93	Feb-06
<i>Russell 2000 Value</i>			<u>1.60</u>	45	<u>7.14</u>	31	<u>9.33</u>	40	<u>16.12</u>	26	<u>9.92</u>	43	<u>9.52</u>	84	<u>7.27</u>	Feb-06
Over/Under			-1.91		-1.75		-2.49		-3.29		-0.23		1.94		-0.34	
<i>eV US Small Cap Value Equity Net Median</i>			1.35		4.55		8.00		14.11		9.51		10.74		8.23	Feb-06
Principal Global Investors <sup>1</sup>	159,627,167	3.36	4.57	52	8.30	45	14.19	48	16.46	22					13.23	Aug-14
<i>Russell MidCap</i>			<u>5.00</u>	48	<u>7.46</u>	48	<u>13.98</u>	49	<u>14.52</u>	46					<u>10.54</u>	Aug-14
Over/Under			-0.43		0.84		0.21		1.94						2.69	
<i>eV US Mid Cap Equity Net Median</i>			4.62		7.03		13.61		14.19						10.38	Aug-14
Rhumblin Advisors S&P 500	3,361,654,655	70.82	7.71	30	10.60	35	17.94	36	17.24	26	13.90	28	12.03	36	--	Feb-93
<i>S&amp;P 500</i>			<u>7.71</u>	29	<u>10.56</u>	35	<u>17.91</u>	36	<u>17.31</u>	26	<u>13.95</u>	27	<u>11.97</u>	38	<u>9.80</u>	Feb-93
Over/Under			0.00		0.04		0.03		-0.07		-0.05		0.06			
<i>eV US Large Cap Equity Net Median</i>			6.66		8.26		15.23		15.13		12.25		11.22		10.14	Feb-93
Rhumblin Advisors Russell 1000 Growth	214,221,367	4.51	9.17	21	17.07	45	26.27	35	20.45	19	16.51	15			17.40	Jun-13
<i>Russell 1000 Growth</i>			<u>9.17</u>	21	<u>17.09</u>	44	<u>26.30</u>	35	<u>20.55</u>	19	<u>16.58</u>	14			<u>17.47</u>	Jun-13
Over/Under			0.00		-0.02		-0.03		-0.10		-0.07				-0.07	
<i>eV US Large Cap Growth Equity Net Median</i>			7.84		16.30		23.89		18.60		15.00				16.31	Jun-13

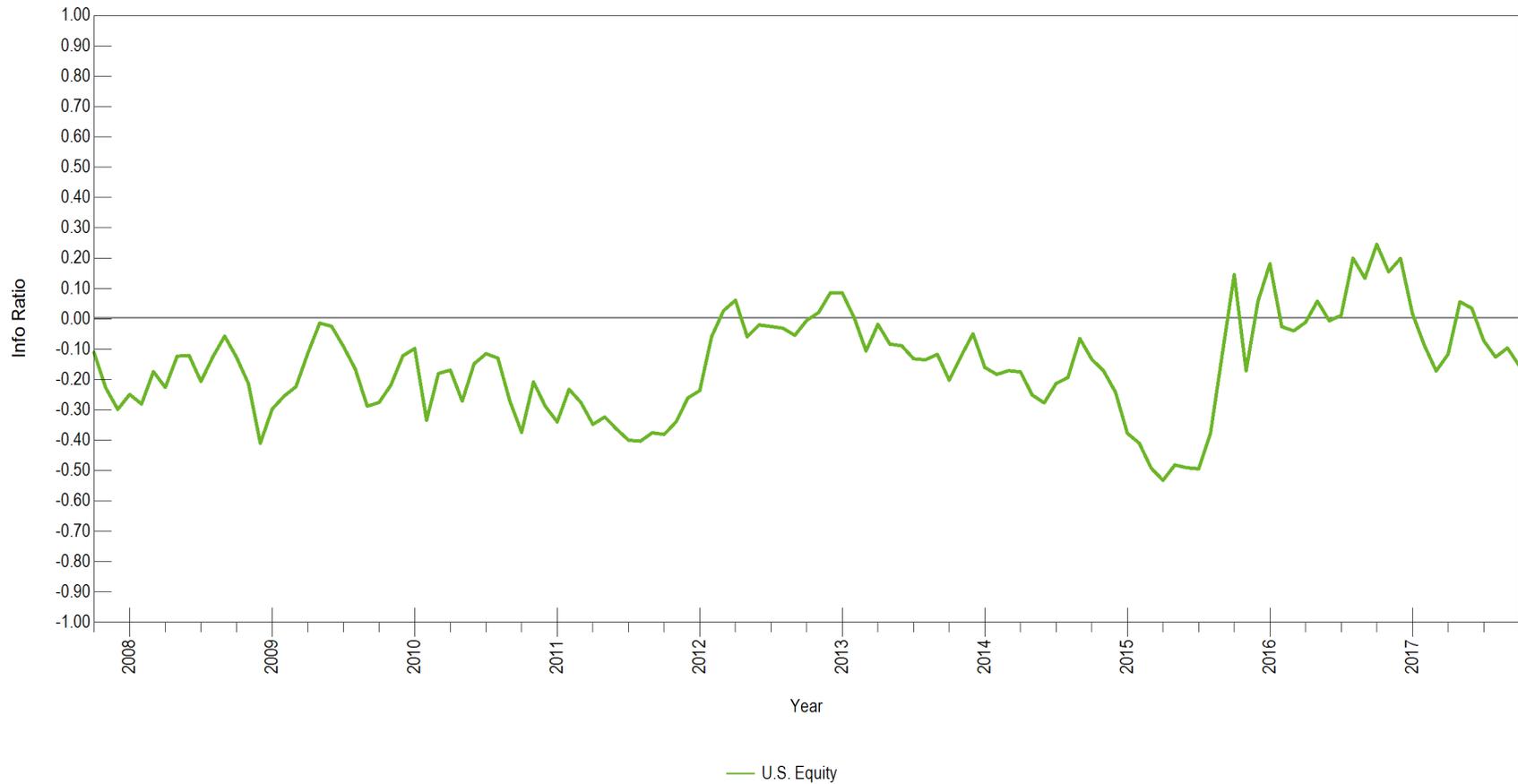
1- Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment Alliance



# U.S. EQUITY ROLLING 5 YEAR INFORMATION RATIO

Rolling 5 Year Information Ratio



\*Returns are net of fees.



# MANAGER REPORT CARD

U.S. Equity Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
AJO	Oct-01	Large Cap Value	x	x	✓	=	x	x	x	x	✓	449.7	On Watch since July 2016 due to performance.
Principal Global Investors	Jul-14	Mid Cap	x	x	✓	✓	✓	✓	N/A	N/A	✓	563.0	Performance compliant with LACERS' Manager Monitoring Policy
EAM Investors	Sep-15	Small Cap Growth	✓	✓	✓	✓	✓	✓	N/A	N/A	✓	501.2	LACERS' Manager Monitoring Policy requires at least 3 years of track record to evaluate performance
PanAgora	Feb-06	Small Cap Value	x	x	x	x	x	x	x	✓	x	647.8	On Watch since November 2018 due to performance.
Rhumblin (Passive)	Feb-93	S&P 500	=	✓	✓	✓	x	✓	x	✓	✓✓	100.9	Performance compliant with LACERS' Manager Monitoring Policy
Rhumblin (Passive)	Jun-13	R1000 Growth	=	✓	x	✓	x	✓	x	✓	x	8.8	Performance compliant with LACERS' Manager Monitoring Policy
Rhumblin (Passive)	Jun-15	R2000	✓	=	x	✓	x	✓	N/A	N/A	x	11.9	Performance compliant with LACERS' Manager Monitoring Policy
Rhumblin (Passive)	Jun-15	R2000 Growth	✓	x	x	x	x	x	N/A	N/A	x	5.9	Performance compliant with LACERS' Manager Monitoring Policy
Rhumblin (Passive)	Feb-16	R2000 Value	x	✓	x	✓	N/A	N/A	N/A	N/A	x	2.2	LACERS' Manager Monitoring Policy requires at least 3 years of track record to evaluate performance

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2017.
- \* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
x	Underperformed
=	Equal to
✓✓	Gross Return



# NON-U.S. EQUITY

NEPC, LLC

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## Los Angeles City Employees' Retirement System

# NON-U.S. EQUITY (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Non-U.S. Equity</b>	<b>5,387,281,503</b>	<b>100.00</b>	<b>0.14</b>	<b>-2.28</b>	<b>3.21</b>	<b>11.20</b>	<b>5.56</b>	<b>6.58</b>	<b>7.16</b>	<b>Aug-01</b>
MSCI ACWI ex USA			0.71	-3.09	1.76	9.97	4.12	5.18	6.26	Aug-01
Over/Under			-0.57	0.81	1.45	1.23	1.44	1.40	0.90	
<b>Developed ex-U.S.</b>	<b>4,085,098,473</b>	<b>75.83</b>	<b>0.60</b>	<b>-0.67</b>	<b>4.42</b>	<b>10.59</b>	<b>5.73</b>		<b>9.42</b>	<b>Jun-12</b>
MSCI EAFE			1.35	-1.43	2.74	9.23	4.42		8.26	Jun-12
Over/Under			-0.75	0.76	1.68	1.36	1.31		1.16	
AQR Capital <sup>1</sup>	372,054,520	6.91	-1.73	-4.06	1.50	11.24			6.79	Feb-14
MSCI EAFE Small Cap			-0.88	-2.19	3.73	12.39			6.47	Feb-14
Over/Under			-0.85	-1.87	-2.23	-1.15			0.32	
Barrow Hanley <sup>1</sup>	539,900,960	10.02	-0.95	-3.12	-0.47	8.64			3.40	Nov-13
MSCI EAFE Value			1.18	-3.49	-0.36	8.12			2.24	Nov-13
Over/Under			-2.13	0.37	-0.11	0.52			1.16	
Lazard Asset Management <sup>1</sup>	598,405,834	11.11	1.04	1.56	8.61	9.22			5.38	Nov-13
MSCI EAFE			1.35	-1.43	2.74	9.23			3.69	Nov-13
Over/Under			-0.31	2.99	5.87	-0.01			1.69	
MFS Institutional Advisors	599,476,425	11.13	2.64	3.66	10.39	13.84			7.27	Oct-13
MSCI World ex USA Growth NR USD			1.46	0.39	5.47	9.91			4.91	Oct-13
Over/Under			1.18	3.27	4.92	3.93			2.36	
Oberweis Asset Mgmt <sup>1</sup>	178,976,976	3.32	-2.45	-1.30	6.60	13.33			9.85	Jan-14
MSCI EAFE Small Cap			-0.88	-2.19	3.73	12.39			7.58	Jan-14
Over/Under			-1.57	0.89	2.87	0.94			2.27	
SSgA World ex US IMI	1,796,283,757	33.34	1.05	-1.15	3.30	10.17	5.05	6.04	5.90	Aug-93
MSCI World ex USA IMI NR USD <sup>2</sup>			0.98	-1.62	2.78	9.72	4.62	5.64	5.63	Aug-93
Over/Under			0.07	0.47	0.52	0.45	0.43	0.40	0.17	

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

2 Since inception index return sourced from SSgA.

eA = eVestment



# Los Angeles City Employees' Retirement System

## NON-U.S. EQUITY (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Emerging Markets</b>	<b>1,302,183,030</b>	<b>24.17</b>	<b>-1.26</b>	<b>-7.52</b>	<b>-0.85</b>	<b>12.94</b>	<b>3.61</b>		<b>4.25</b>	<b>Jun-12</b>
<i>MSCI Emerging Markets</i>			<i>-1.09</i>	<i>-7.68</i>	<i>-0.81</i>	<i>12.36</i>	<i>3.61</i>		<i>4.28</i>	<i>Jun-12</i>
Over/Under			<b>-0.17</b>	0.16	<b>-0.04</b>	0.58	0.00		<b>-0.03</b>	
Axiom Emerging Markets	422,928,577	7.85	-2.76	-8.94	-2.64	13.08			4.50	Mar-14
<i>MSCI Emerging Markets Growth NR USD</i>			<i>-5.38</i>	<i>-10.94</i>	<i>-3.89</i>	<i>13.03</i>			<i>4.96</i>	<i>Mar-14</i>
Over/Under			2.62	2.00	1.25	0.05			<b>-0.46</b>	
DFA Emerging Markets <sup>1</sup>	443,579,302	8.23	1.28	-6.01	1.51	14.17			1.19	Jul-14
<i>MSCI Emerging Markets Value NR USD</i>			<i>3.44</i>	<i>-4.28</i>	<i>2.27</i>	<i>11.55</i>			<i>0.20</i>	<i>Jul-14</i>
Over/Under			<b>-2.16</b>	<b>-1.73</b>	<b>-0.76</b>	2.62			0.99	
QMA Emerging Markets <sup>1</sup>	435,675,151	8.09	-2.22	-7.66	-1.41	11.83			4.30	Apr-14
<i>MSCI Emerging Markets</i>			<i>-1.09</i>	<i>-7.68</i>	<i>-0.81</i>	<i>12.36</i>			<i>3.70</i>	<i>Apr-14</i>
Over/Under			<b>-1.13</b>	0.02	<b>-0.60</b>	<b>-0.53</b>			0.60	

<sup>1</sup> Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment



# Los Angeles City Employees' Retirement System

## NON-U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Non-U.S. Equity</b>	<b>5,387,281,503</b>	<b>100.00</b>	<b>0.04</b>	<b>76</b>	<b>-2.56</b>	<b>41</b>	<b>2.82</b>	<b>24</b>	<b>10.80</b>	<b>30</b>	<b>5.21</b>	<b>37</b>	<b>6.22</b>	<b>36</b>	<b>6.79</b>	<b>Aug-01</b>
MSCI ACWI ex USA			<u>0.71</u>	47	<u>-3.09</u>	56	<u>1.76</u>	53	<u>9.97</u>	72	<u>4.12</u>	78	<u>5.18</u>	79	<u>6.26</u>	Aug-01
Over/Under			-0.67		0.53		1.06		0.83		1.09		1.04		0.53	
<b>Developed ex-U.S.</b>	<b>4,085,098,473</b>	<b>75.83</b>	<b>0.51</b>	<b>70</b>	<b>-0.92</b>	<b>39</b>	<b>4.08</b>	<b>24</b>	<b>10.24</b>	<b>51</b>	<b>5.43</b>	<b>42</b>			<b>9.13</b>	<b>Jun-12</b>
MSCI EAFE			<u>1.35</u>	20	<u>-1.43</u>	56	<u>2.74</u>	44	<u>9.23</u>	79	<u>4.42</u>	73			<u>8.26</u>	Jun-12
Over/Under			-0.84		0.51		1.34		1.01		1.01				0.87	
InvestorForce Public DB > \$1 Billion Dev Mkt ex-US Eq Net Median			0.97		-1.21		2.33		10.24		5.12				9.13	Jun-12
AQR Capital <sup>1</sup>	372,054,520	6.91	-1.93	67	-4.62	57	0.71	61	10.39	72					6.08	Feb-14
MSCI EAFE Small Cap			<u>-0.88</u>	48	<u>-2.19</u>	33	<u>3.73</u>	39	<u>12.39</u>	45					<u>6.47</u>	Feb-14
Over/Under			-1.05		-2.43		-3.02		-2.00						-0.39	
eV EAFE Small Cap Equity Net Median			-1.30		-3.56		1.41		12.28						6.88	Feb-14
Barrow Hanley <sup>1</sup>	539,900,960	10.02	-1.07	97	-3.49	56	-0.97	69	8.09	65					2.90	Nov-13
MSCI EAFE Value			<u>1.18</u>	39	<u>-3.49</u>	56	<u>-0.36</u>	60	<u>8.12</u>	63					<u>2.24</u>	Nov-13
Over/Under			-2.25		0.00		-0.61		-0.03						0.66	
eV EAFE Value Equity Net Median			0.67		-3.33		0.54		8.53						3.62	Nov-13
Lazard Asset Management <sup>1</sup>	598,405,834	11.11	0.91	46	1.17	19	8.06	10	8.65	67					4.83	Nov-13
MSCI EAFE			<u>1.35</u>	34	<u>-1.43</u>	43	<u>2.74</u>	46	<u>9.23</u>	55					<u>3.69</u>	Nov-13
Over/Under			-0.44		2.60		5.32		-0.58						1.14	
eV All EAFE Equity Net Median			0.77		-2.11		2.36		9.49						4.61	Nov-13
MFS Institutional Advisors	599,476,425	11.13	2.51	10	3.29	36	9.86	8	13.28	27					6.75	Oct-13
MSCI World ex USA Growth NR USD			<u>1.46</u>	15	<u>0.39</u>	74	<u>5.47</u>	49	<u>9.91</u>	67					<u>4.91</u>	Oct-13
Over/Under			1.05		2.90		4.39		3.37						1.84	
eV EAFE All Cap Growth Net Median			0.35		1.45		5.41		11.26						5.57	Oct-13

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

eA = eVestment



# Los Angeles City Employees' Retirement System

## NON-U.S. EQUITY (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Oberweis Asset Mgmt <sup>1</sup>	178,976,976	3.32	-2.65	78	-1.95	30	5.67	24	12.40	42					8.93	Jan-14
MSCI EAFE Small Cap			<u>-0.88</u>	48	<u>-2.19</u>	33	<u>3.73</u>	39	<u>12.39</u>	45					<u>7.58</u>	Jan-14
Over/Under			-1.77		0.24		1.94		0.01						1.35	
eV EAFE Small Cap Equity Net Median			-1.30		-3.56		1.41		12.28						7.91	Jan-14
SSgA World ex US IMI	1,796,283,757	33.34	1.05	43	-1.17	40	3.27	41	10.14	41	5.03	66	6.01	68		Aug-93
MSCI World ex USA IMI NR USD <sup>2</sup>			<u>0.98</u>	45	<u>-1.62</u>	46	<u>2.78</u>	46	<u>9.72</u>	49	<u>4.62</u>	74	<u>5.64</u>	78		Aug-93
Over/Under			0.07		0.45		0.49		0.42		0.41		0.37			
eV EAFE Core Equity Net Median			0.78		-1.85		2.44		9.61		5.67		6.50			Aug-93
<b>Emerging Markets</b>	<b>1,302,183,030</b>	<b>24.17</b>	<b>-1.37</b>	<b>63</b>	<b>-7.89</b>	<b>27</b>	<b>-1.37</b>	<b>20</b>	<b>12.36</b>	<b>8</b>	<b>3.00</b>	<b>36</b>			<b>3.61</b>	<b>Jun-12</b>
MSCI Emerging Markets			<u>-1.09</u>	56	<u>-7.68</u>	7	<u>-0.81</u>	7	<u>12.36</u>	8	<u>3.61</u>	2			<u>4.28</u>	Jun-12
Over/Under			-0.28		-0.21		-0.56		0.00		-0.61				-0.67	
InvestorForce Public DB > \$1 Billion Emg Mkt Eq Net Median			-1.08		-8.91		-3.68		9.58		2.74				3.22	Jun-12
Axiom Emerging Markets	422,928,577	7.85	-2.91	50	-9.42	49	-3.31	51	12.29	34					3.83	Mar-14
MSCI Emerging Markets Growth NR USD			<u>-5.38</u>	83	<u>-10.94</u>	68	<u>-3.89</u>	56	<u>13.03</u>	26					<u>4.96</u>	Mar-14
Over/Under			2.47		1.52		0.58		-0.74						-1.13	
eV Emg Mkts Equity Net Median			-3.00		-9.50		-3.20		11.19						3.61	Mar-14
DFA Emerging Markets <sup>1</sup>	443,579,302	8.23	1.17	11	-6.36	17	1.02	11	13.66	18					0.71	Jul-14
MSCI Emerging Markets Value NR USD			<u>3.44</u>	2	<u>-4.28</u>	8	<u>2.27</u>	8	<u>11.55</u>	43					<u>0.20</u>	Jul-14
Over/Under			-2.27		-2.08		-1.25		2.11						0.51	
eV Emg Mkts Equity Net Median			-3.00		-9.50		-3.20		11.19						2.05	Jul-14
QMA Emerging Markets <sup>1</sup>	435,675,151	8.09	-2.31	42	-7.96	31	-1.82	32	11.37	48					3.85	Apr-14
MSCI Emerging Markets			<u>-1.09</u>	29	<u>-7.68</u>	24	<u>-0.81</u>	26	<u>12.36</u>	33					<u>3.70</u>	Apr-14
Over/Under			-1.22		-0.28		-1.01		-0.99						0.15	
eV Emg Mkts Equity Net Median			-3.00		-9.50		-3.20		11.19						3.55	Apr-14

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

2 Since inception index return sourced from SSgA.

eA = eVestment



## Los Angeles City Employees' Retirement System

# NON-U.S. EQUITY COUNTRY ALLOCATION

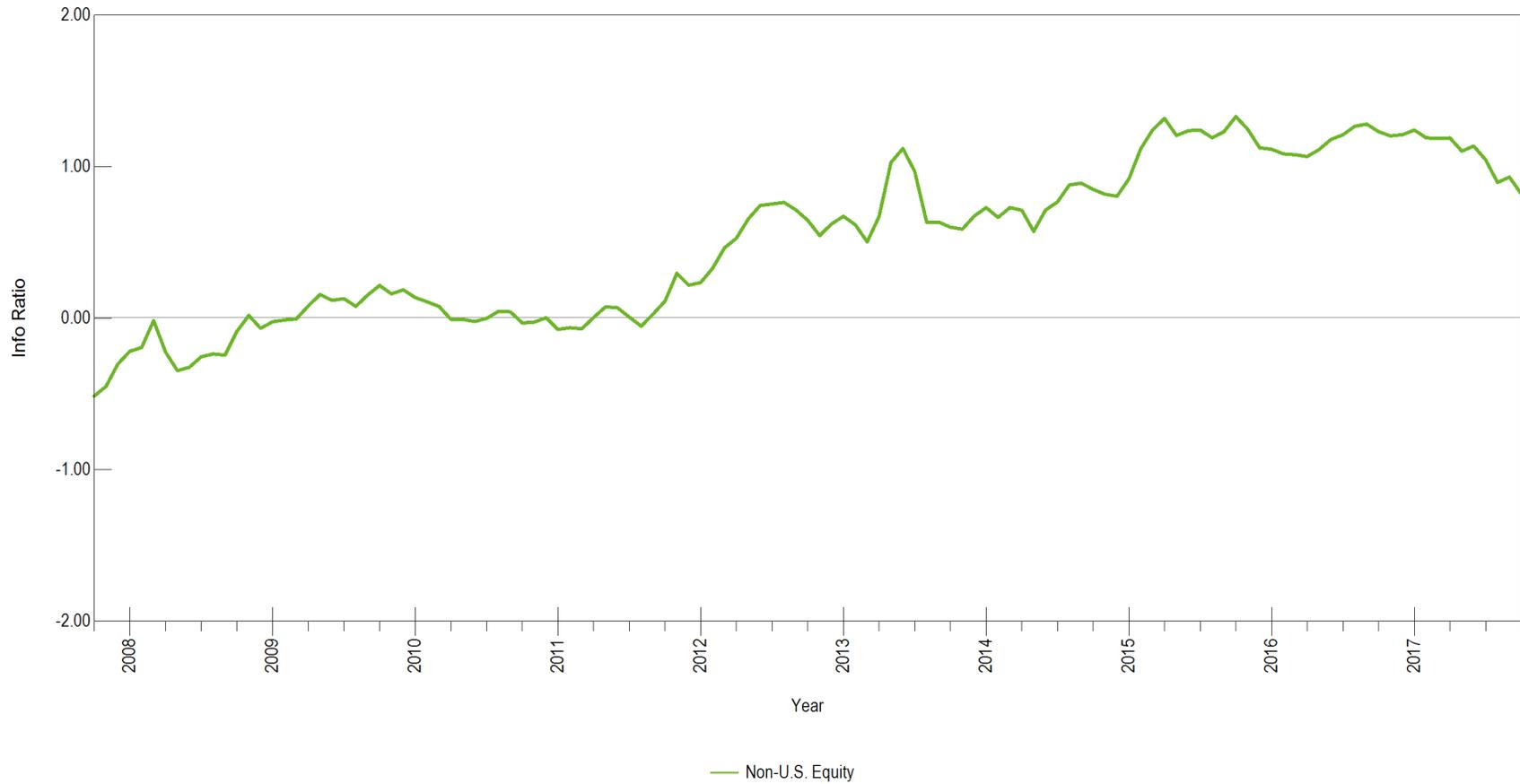
Versus MSCI ACWI ex USA - Quarter Ending September 30, 2018		
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Europe</b>		
Austria	0.2%	0.2%
Belgium	0.5%	0.7%
Bulgaria**	0.0%	0.0%
Croatia**	0.0%	0.0%
Czech Republic*	0.1%	0.0%
Denmark	1.4%	1.2%
Estonia**	0.0%	0.0%
Finland	1.3%	0.7%
France	8.6%	7.8%
Germany	6.9%	6.5%
Greece*	0.0%	0.1%
Hungary*	0.0%	0.1%
Ireland	0.8%	0.4%
Italy	2.0%	1.6%
Lithuania**	0.0%	0.0%
Luxembourg	0.3%	0.0%
Netherlands	3.1%	2.3%
Norway	1.0%	0.5%
Poland*	0.2%	0.3%
Portugal	0.1%	0.1%
Romania**	0.0%	0.0%
Russia*	0.7%	0.9%
Serbia**	0.0%	0.0%
Slovenia**	0.0%	0.0%
Spain	1.7%	2.1%
Sweden	2.1%	1.9%
Switzerland	5.5%	5.7%
United Kingdom	12.1%	12.1%
<b>Total-Europe</b>	<b>48.6%</b>	<b>45.1%</b>

Versus MSCI ACWI ex USA - Quarter Ending September 30, 2018		
	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Americas</b>		
Brazil*	1.2%	1.5%
Canada	4.8%	6.6%
Chile*	0.1%	0.3%
Colombia*	0.1%	0.1%
Mexico*	0.7%	0.8%
Peru*	0.1%	0.1%
United States	1.7%	0.0%
<b>Total-Americas</b>	<b>8.6%</b>	<b>9.4%</b>
<b>AsiaPacific</b>		
Australia	3.5%	4.6%
China*	3.8%	7.6%
Hong Kong	4.5%	2.4%
India*	1.8%	2.1%
Indonesia*	0.3%	0.5%
Japan	17.6%	16.7%
Korea*	2.4%	3.7%
Malaysia*	0.5%	0.6%
New Zealand	0.2%	0.1%
Philippines*	0.1%	0.2%
Singapore	1.5%	0.9%
Taiwan*	2.5%	3.0%
Thailand*	0.6%	0.6%
<b>Total-AsiaPacific</b>	<b>39.3%</b>	<b>43.0%</b>
<b>Other</b>		
Egypt*	0.1%	0.0%
Israel	0.4%	0.4%
Other Countries	0.1%	0.0%
Qatar*	0.1%	0.2%
South Africa*	0.8%	1.5%
Turkey*	0.1%	0.2%
United Arab Emirates*	0.0%	0.2%
<b>Total-Other</b>	<b>1.7%</b>	<b>2.5%</b>
<b>Totals</b>		
Developed	81.7%	75.4%
Emerging*	16.4%	24.6%
Other	0.1%	
Cash	1.9%	



# NON-U.S. EQUITY ROLLING 5 YEAR INFORMATION

Rolling 5 Year Information Ratio



\*Returns are net of fees



# MANAGER REPORT CARD

Non-U.S. Equity Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
Axiom International	Mar-14	Emerging Markets	✓	=	✓	✗	✗	✓	N/A	N/A	✗	1,866.9	Performance compliant with LACERS' Manager Monitoring Policy
Q.M.A.	Apr-14	Emerging Markets	✗	✓	✗	✓	✗	✓	N/A	N/A	✓	1,219.4	Performance compliant with LACERS' Manager Monitoring Policy
DFA Emerging Markets	Jul-14	Emerging Markets	✗	✓	✗	✓	✓	✓	N/A	N/A	✓	1,188.2	Performance compliant with LACERS' Manager Monitoring Policy
AQR	Feb-14	Non-U.S. Developed	✗	✗	✗	✗	✗	✗	N/A	N/A	✗	2,314.2	Performance compliant with LACERS' Manager Monitoring Policy
Oberweis Asset Mgt.	Jan-14	Non-U.S. Developed	✗	✗	✓	✓	✓	✓	N/A	N/A	✓	568.5	Performance compliant with LACERS' Manager Monitoring Policy
Barrow, Hanley, Mewhinney & Strauss	Nov-13	Non-U.S. Developed	✗	✗	✗	✗	✗	✗	N/A	N/A	✓	2,097.9	Performance compliant with LACERS' Manager Monitoring Policy
Lazard Asset Mgt.	Nov-13	Non-U.S. Developed	✗	✓	✓	✓	✗	✗	N/A	N/A	✓	2,467.4	Performance compliant with LACERS' Manager Monitoring Policy
MFS Institutional Advisors	Oct-13	Non-U.S. Developed	✓	✓	✓	✗	✓	✓	N/A	N/A	✓	2,313.6	Performance compliant with LACERS' Manager Monitoring Policy
SsgA (Passive)	Aug-93	Non-U.S. Developed	✓	✓	✓	✓	✓	✗	✓	✗	✓✓	368.9	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2017.
- \* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return



# CORE FIXED INCOME

NEPC, LLC

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## Los Angeles City Employees' Retirement System

# CORE FIXED INCOME (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Core Fixed Income</b>	<b>3,047,726,713</b>	<b>100.00</b>	<b>0.19</b>	<b>-1.44</b>	<b>-0.99</b>	<b>1.85</b>	<b>2.66</b>		<b>2.54</b>	<b>Jul-12</b>
Core Fixed Income Blend			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>	<u>2.16</u>		<u>1.86</u>	<u>Jul-12</u>
Over/Under			0.17	0.16	0.23	0.54	0.50		0.68	
Baird Advisors	257,150,448	8.44	0.32	-0.55	-0.58	1.62	2.15	4.26	4.10	Mar-05
BBgBarc US Govt/Credit Int TR			<u>0.21</u>	<u>-0.76</u>	<u>-0.96</u>	<u>0.91</u>	<u>1.52</u>	<u>3.22</u>	<u>3.43</u>	<u>Mar-05</u>
Over/Under			0.11	0.21	0.38	0.71	0.63	1.04	0.67	
LM Capital	299,697,930	9.83	0.48	-1.48	-0.94	1.98	2.70	4.80	4.38	Mar-05
Core Fixed Income Blend			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>	<u>2.16</u>	<u>3.68</u>	<u>3.77</u>	<u>Mar-05</u>
Over/Under			0.46	0.12	0.28	0.67	0.54	1.12	0.61	
Loomis Sayles	730,787,371	23.98	0.11	-1.30	-0.71	2.71	3.32	6.11	9.04	Jul-80
BC US Agg LACERS custom			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>	<u>2.16</u>	<u>4.01</u>	<u>7.55</u>	<u>Jul-80</u>
Over/Under			0.09	0.30	0.51	1.40	1.16	2.10	1.49	
Neuberger Berman	726,072,930	23.82	0.37	-1.66	-1.13	1.67	2.42	5.75	5.53	Sep-01
Core Fixed Income Blend			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>	<u>2.16</u>	<u>4.01</u>	<u>4.38</u>	<u>Sep-01</u>
Over/Under			0.35	-0.06	0.09	0.36	0.26	1.74	1.15	
SSgA U.S. Aggregate Bond <sup>1</sup>	1,034,018,033	33.93	0.02	-1.59	-1.22	1.32			1.77	Jul-14
BBgBarc US Aggregate TR			<u>0.02</u>	<u>-1.60</u>	<u>-1.22</u>	<u>1.31</u>			<u>1.75</u>	<u>Jul-14</u>
Over/Under			0.00	0.01	0.00	0.01			0.02	

<sup>1</sup> Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.  
BBgBarc = Bloomberg Barclays



## Los Angeles City Employees' Retirement System

# CORE FIXED INCOME (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Core Fixed Income</b>	<b>3,047,726,713</b>	<b>100.00</b>	<b>0.17</b>	<b>53</b>	<b>-1.51</b>	<b>78</b>	<b>-1.08</b>	<b>84</b>	<b>1.75</b>	<b>82</b>	<b>2.55</b>	<b>67</b>			<b>2.42</b>	<b>Jul-12</b>
Core Fixed Income Blend			<u>0.02</u>	75	<u>-1.60</u>	80	<u>-1.22</u>	87	<u>1.31</u>	98	<u>2.16</u>	84			<u>1.86</u>	Jul-12
Over/Under			0.15		0.09		0.14		0.44		0.39				0.56	
InvestorForce Public DB > \$1 Billion US Fixed Income Net Median			0.19		-1.20		-0.71		2.50		2.74				2.40	Jul-12
Baird Advisors	257,150,448	8.44	0.29	57	-0.64	47	-0.70	48	1.49	22	2.03	23	4.13	24	3.97	Mar-05
BBgBarc US Govt/Credit Int TR			<u>0.21</u>	78	<u>-0.76</u>	62	<u>-0.96</u>	84	<u>0.91</u>	72	<u>1.52</u>	71	<u>3.22</u>	76	<u>3.43</u>	Mar-05
Over/Under			0.08		0.12		0.26		0.58		0.51		0.91		0.54	
eV US Interm Duration Fixed Inc Net Median			0.32		-0.67		-0.74		1.10		1.62		3.50		3.68	Mar-05
LM Capital	299,697,930	9.83	0.46	11	-1.56	58	-1.04	48	1.87	27	2.58	30	4.66	29	4.23	Mar-05
Core Fixed Income Blend			<u>0.02</u>	77	<u>-1.60</u>	64	<u>-1.22</u>	66	<u>1.31</u>	70	<u>2.16</u>	67	<u>3.68</u>	84	<u>3.77</u>	Mar-05
Over/Under			0.44		0.04		0.18		0.56		0.42		0.98		0.46	
eV US Core Fixed Inc Net Median			0.14		-1.51		-1.06		1.57		2.31		4.34		4.13	Mar-05
Loomis Sayles	730,787,371	23.98	0.07	70	-1.40	40	-0.83	30	2.58	9	3.19	9	5.97	4		Jul-80
BC US Agg LACERS custom			<u>0.02</u>	77	<u>-1.60</u>	64	<u>-1.22</u>	66	<u>1.31</u>	70	<u>2.16</u>	67	<u>4.01</u>	66		Jul-80
Over/Under			0.05		0.20		0.39		1.27		1.03		1.96			
eV US Core Fixed Inc Net Median			0.14		-1.51		-1.06		1.57		2.31		4.34			Jul-80
Neuberger Berman	726,072,930	23.82	0.33	17	-1.77	78	-1.27	72	1.52	54	2.27	57	5.58	6	5.37	Sep-01
Core Fixed Income Blend			<u>0.02</u>	77	<u>-1.60</u>	64	<u>-1.22</u>	66	<u>1.31</u>	70	<u>2.16</u>	67	<u>4.01</u>	69	<u>4.38</u>	Sep-01
Over/Under			0.31		<b>-0.17</b>		<b>-0.05</b>		0.21		0.11		1.57		0.99	
eV US Core Fixed Inc Net Median			0.14		-1.51		-1.06		1.57		2.31		4.34		4.38	Sep-01
SSgA U.S. Aggregate Bond <sup>1</sup>	1,034,018,033	33.93	0.01	79	-1.62	65	-1.26	72	1.29	74					1.73	Jul-14
BBgBarc US Aggregate TR			<u>0.02</u>	77	<u>-1.60</u>	64	<u>-1.22</u>	66	<u>1.31</u>	70					<u>1.75</u>	Jul-14
Over/Under			<b>-0.01</b>		<b>-0.02</b>		<b>-0.04</b>		<b>-0.02</b>						<b>-0.02</b>	
eV US Core Fixed Inc Net Median			0.14		-1.51		-1.06		1.57						1.86	Jul-14

1 Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

BBgBarc = Bloomberg Barclays

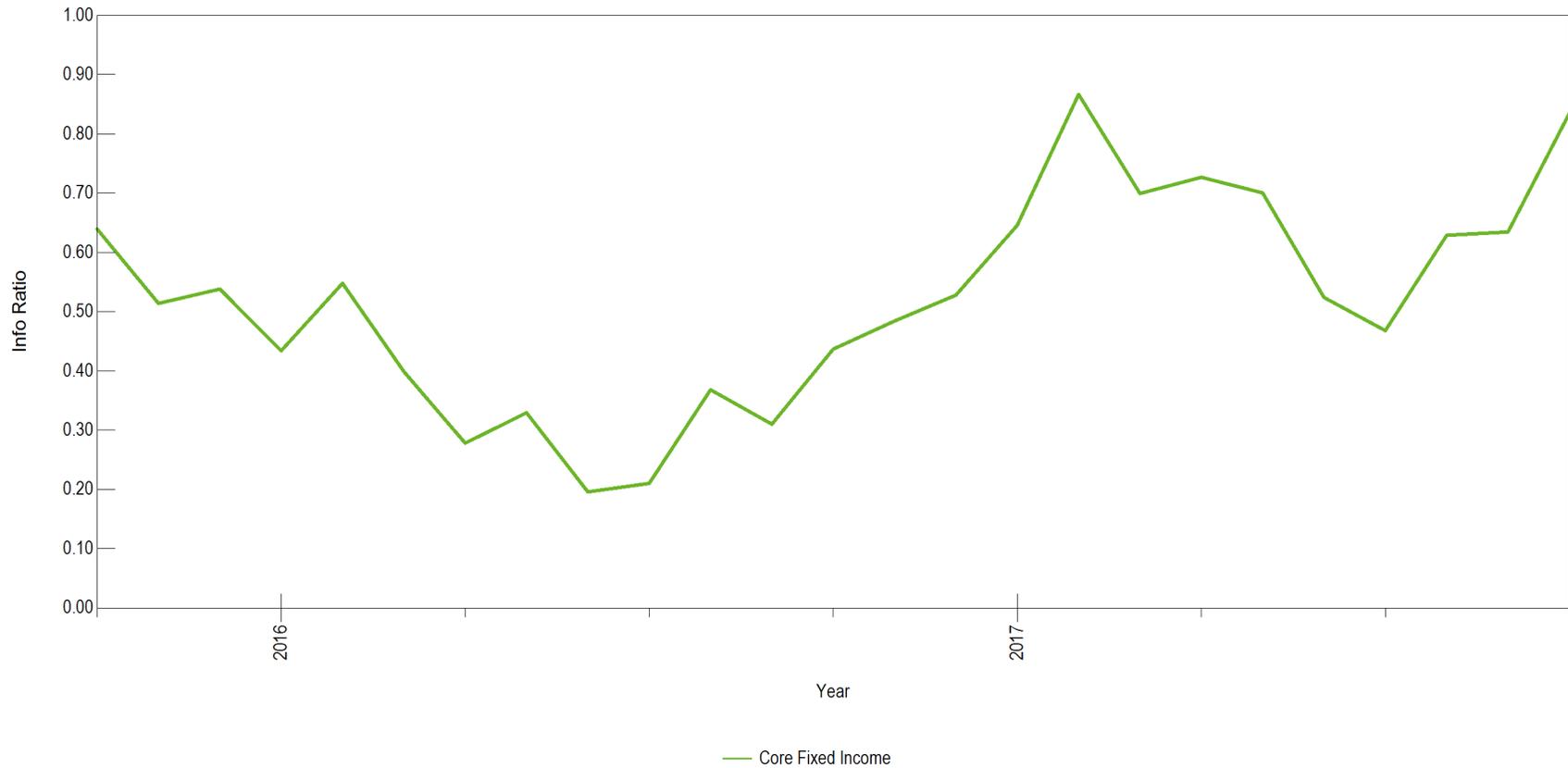
eV = eVestment



# Los Angeles City Employees' Retirement System

## CORE FIXED INCOME 3 YEAR INFORMATION RATIO

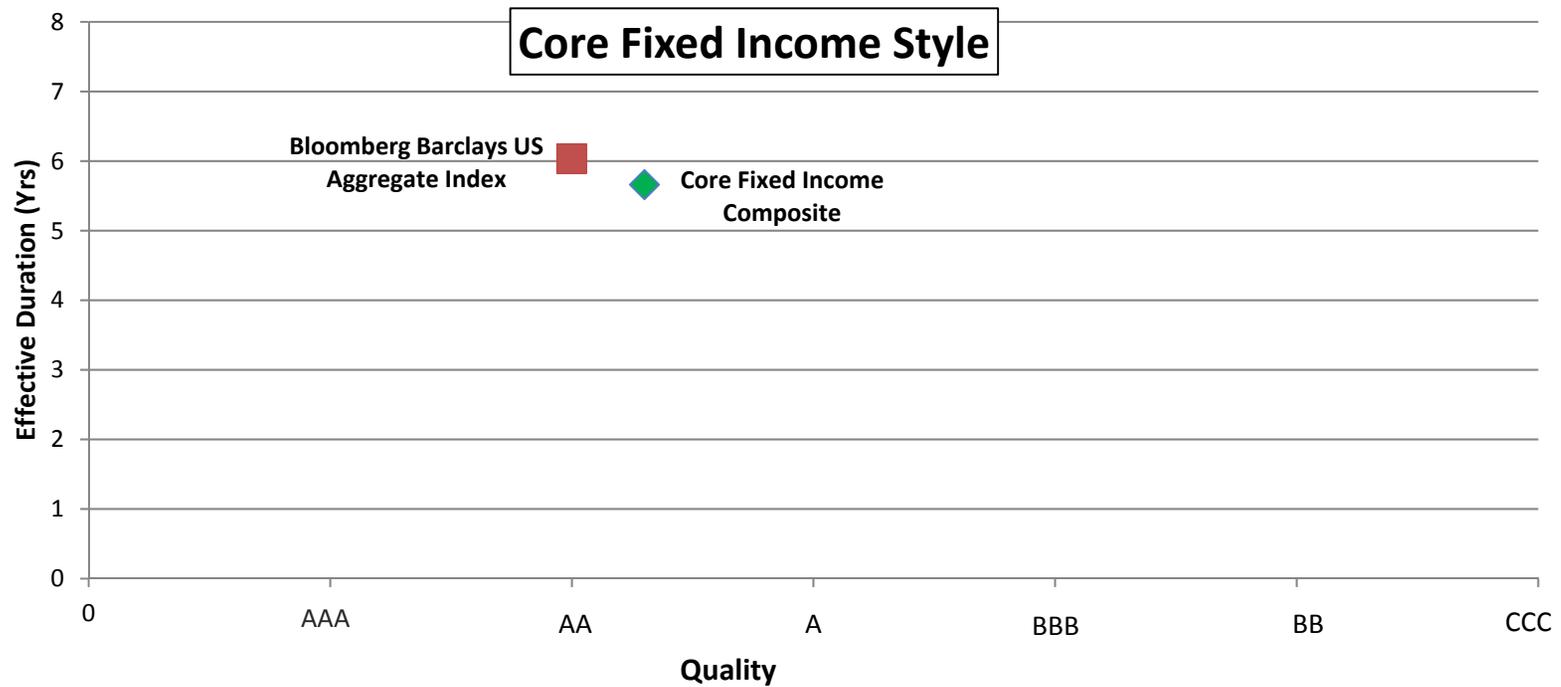
Rolling 3 Year Information Ratio



\*Returns are net of fees



# CORE FIXED INCOME STYLE ANALYSIS



- LACERS has a slightly lower duration (interest rate risk) than its benchmark.
- The Core Fixed Income Composite has slightly lower average quality rating than its benchmark.



# MANAGER REPORT CARD

Core Fixed Income Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe			
Neuberger Berman	Sep-01	Core	✓	✓	✗	✗	✓	✗	✓	✗	✓	1010.3	Performance compliant with LACERS' Manager Monitoring Policy
Loomis Sayles	Jul-80	Core	✓	✗	✓	✓	✓	✓	✓	✓	✓✓	863.0	Performance compliant with LACERS' Manager Monitoring Policy
Baird Advisors	Mar-05	Intermediate	✓	✗	✓	✓	✓	✓	✓	✓	✓	291.7	Performance compliant with LACERS' Manager Monitoring Policy
LM Capital Group	Mar-05	Core	✓	✓	✓	✓	✓	✓	✓	✓	✓✓	240.1	Performance compliant with LACERS' Manager Monitoring Policy
SSgA (Passive)	Jul-14	Core	✗	✗	✗	✗	✗	✗	N/A	N/A	✗	369.3	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2017.
- \* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return



# CREDIT OPPORTUNITIES

NEPC, LLC

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## Los Angeles City Employees' Retirement System

# CREDIT OPPORTUNITIES (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Credit Opportunities</b>	<b>927,728,179</b>	<b>100.00</b>	<b>1.97</b>	<b>0.32</b>	<b>1.46</b>	<b>7.05</b>	<b>5.12</b>		<b>5.33</b>	<b>Jun-13</b>
<i>Credit Opportunities Blend</i>			<u>2.38</u>	<u>0.59</u>	<u>1.31</u>	<u>7.43</u>	<u>5.43</u>		<u>5.62</u>	<i>Jun-13</i>
Over/Under			-0.41	-0.27	0.15	-0.38	-0.31		-0.29	
AEGON USA	389,864,384	42.02	2.17	2.61	3.25	8.07	5.99		6.09	Jun-13
<i>BBgBarc US High Yield 2% Issuer Cap TR</i>			<u>2.40</u>	<u>2.57</u>	<u>3.05</u>	<u>8.15</u>	<u>5.55</u>		<u>5.73</u>	<i>Jun-13</i>
Over/Under			-0.23	0.04	0.20	-0.08	0.44		0.36	
Prudential Emerging Markets	353,828,148	38.14	1.78	-3.59	-1.90	6.65			4.49	May-14
<i>JP Morgan EMBI Global Diversified</i>			<u>2.30</u>	<u>-3.04</u>	<u>-1.92</u>	<u>6.04</u>			<u>3.94</u>	<i>May-14</i>
Over/Under			-0.52	-0.55	0.02	0.61			0.55	
Bain Capital Senior Loan Fund, LP*	184,013,237	19.83	1.63	3.72	5.04	4.98			4.22	Jun-15
<i>Credit Suisse Leveraged Loans</i>			<u>1.93</u>	<u>4.36</u>	<u>5.58</u>	<u>5.43</u>			<u>4.60</u>	<i>Jun-15</i>
Over/Under			-0.30	-0.64	-0.54	-0.45			-0.38	

- Credit Opportunities Blend = 65% BBgBarc US High Yield 2% Issuer Cap TR / 35% JP Morgan EMBI Global Diversified 7/01/2014 to present; BBgBarc US High Yield 2% Issuer Cap TR prior to

eA = eVestment Alliance

BBgBarc = Bloomberg Barclays

\*Net of fee return since vehicle is commingled.



## Los Angeles City Employees' Retirement System

# CREDIT OPPORTUNITIES (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Credit Opportunities</b>	<b>927,728,179</b>	<b>100.00</b>	<b>1.90</b>		<b>0.08</b>		<b>1.13</b>		<b>6.66</b>		<b>4.76</b>				<b>4.98</b>	<b>Jun-13</b>
<i>Credit Opportunities Blend</i>			<u>2.38</u>		<u>0.59</u>		<u>1.31</u>		<u>7.43</u>		<u>5.43</u>				<u>5.62</u>	<i>Jun-13</i>
Over/Under			-0.48		-0.51		-0.18		-0.77		-0.67				-0.64	
AEGON USA	389,864,384	42.02	2.07	57	2.33	34	2.86	40	7.68	24	5.61	20			5.72	Jun-13
<i>BBgBarc US High Yield 2% Issuer Cap TR</i>			<u>2.40</u>	22	<u>2.57</u>	26	<u>3.05</u>	33	<u>8.15</u>	14	<u>5.55</u>	22			<u>5.73</u>	<i>Jun-13</i>
Over/Under			-0.33		-0.24		-0.19		-0.47		0.06				-0.01	
<i>eV US High Yield Fixed Inc Net Median</i>			2.14		1.97		2.60		6.90		4.88				5.04	<i>Jun-13</i>
Prudential Emerging Markets	353,828,148	38.14	1.69	23	-3.87	30	-2.28	25	6.19	44					4.10	May-14
<i>JP Morgan EMBI Global Diversified</i>			<u>2.30</u>	6	<u>-3.04</u>	22	<u>-1.92</u>	22	<u>6.04</u>	49					<u>3.94</u>	<i>May-14</i>
Over/Under			-0.61		-0.83		-0.36		0.15						0.16	
<i>eV Emg Mkt Fixed Inc Hedged Net Median</i>			1.05		-5.47		-4.71		5.89						1.92	<i>May-14</i>
Bain Capital Senior Loan Fund, LP	184,013,237	19.83	1.63	73	3.72	40	5.04	36	4.98	39					4.22	Jun-15
<i>Credit Suisse Leveraged Loans</i>			<u>1.93</u>	24	<u>4.36</u>	10	<u>5.58</u>	15	<u>5.43</u>	24					<u>4.60</u>	<i>Jun-15</i>
Over/Under			-0.30		-0.64		-0.54		-0.45						-0.38	
<i>eV US Float-Rate Bank Loan Fixed Inc Net Median</i>			1.76		3.68		4.79		4.76						4.14	<i>Jun-15</i>

- Credit Opportunities Blend = 65% BBgBarc US High Yield 2% Issuer Cap TR / 35% JP Morgan EMBI Global Diversified 7/01/2014 to present; BBgBarc US High Yield 2% Issuer Cap TR prior to

eA = eVestment Alliance

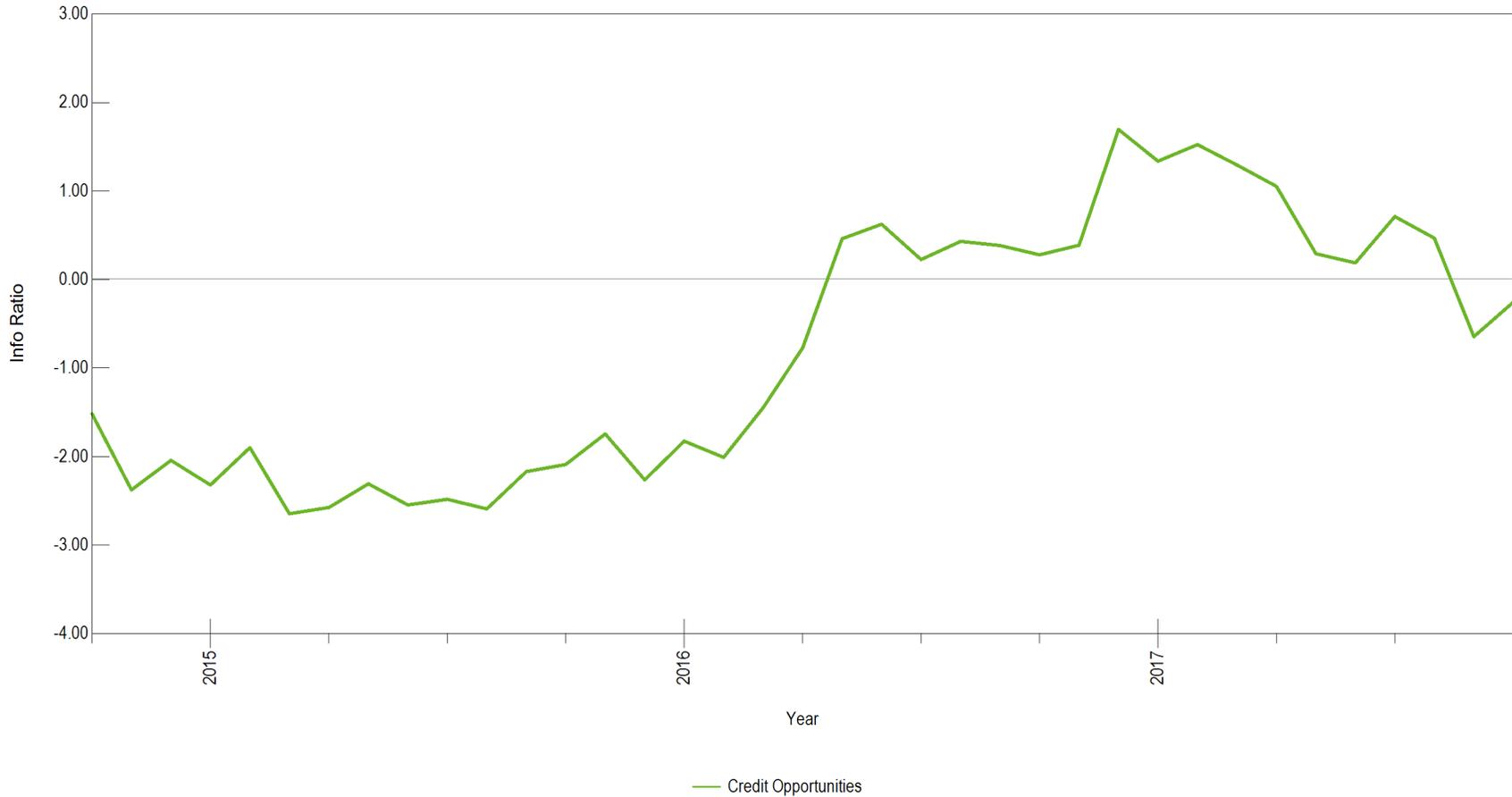
BBgBarc = Bloomberg Barclays



# Los Angeles City Employees' Retirement System

## CREDIT OPPORTUNITIES ROLLING 1 YEAR

Rolling 1 Year Information Ratio



\*Returns are net of fees



# MANAGER REPORT CARD

Credit Opportunities Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
AEGON USA	Jun-13	High Yield Bonds	x	x	x	✓	x	✓	✓	✓	x	781.6	Watch pursuant to LACERS' Manager Monitoring Policy for a period of one year ending October 5, 2019
Prudential	May-14	Emerging Market Debt	x	✓	x	✓	✓	✓	N/A	N/A	✓	1230.2	Performance compliant with LACERS' Manager Monitoring Policy
Bain	Jun-15	Bank Loans	x	x	x	✓	x	✓	N/A	N/A	x	330.0	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2017.
- \* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
x	Underperformed
=	Equal to
✓✓	Gross Return



# REAL ASSETS

NEPC, LLC

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## Los Angeles City Employees' Retirement System

# REAL ASSETS (GROSS)

	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Real Assets</b>	<b>1,692,613,101</b>	<b>100.00</b>	<b>0.42</b>	<b>2.84</b>	<b>4.85</b>	<b>6.18</b>	<b>7.40</b>	<b>0.21</b>	<b>6.30</b>	<b>Nov-94</b>
<i>CPI + 5% (Unadjusted)</i>			<u>1.41</u>	<u>6.21</u>	<u>7.38</u>	<u>7.08</u>	<u>6.58</u>	<u>6.51</u>	<u>7.32</u>	<i>Nov-94</i>
Over/Under			-0.99	-3.37	-2.53	-0.90	0.82	-6.30	-1.02	
<b>Public Real Assets</b>	<b>907,972,870</b>	<b>53.64</b>	<b>-0.81</b>	<b>-0.73</b>	<b>1.41</b>	<b>2.94</b>			<b>0.85</b>	<b>Jun-14</b>
<i>Public Real Assets Blend</i>			<u>-0.17</u>	<u>0.05</u>	<u>1.92</u>	<u>2.77</u>			<u>-1.32</u>	<i>Jun-14</i>
Over/Under			-0.64	-0.78	-0.51	0.17			2.17	
<b>TIPS</b>	<b>609,568,737</b>	<b>36.01</b>	<b>-0.93</b>	<b>-1.10</b>	<b>-0.03</b>	<b>1.94</b>			<b>0.62</b>	<b>Jul-14</b>
<i>BBgBarc US TIPS TR</i>			<u>-0.82</u>	<u>-0.84</u>	<u>0.41</u>	<u>2.04</u>			<u>0.75</u>	<i>Jul-14</i>
Over/Under			-0.11	-0.26	-0.44	-0.10			-0.13	
<i>DFA US TIPS<sup>1</sup></i>	<i>609,568,737</i>	<i>36.01</i>	<i>-0.93</i>	<i>-1.10</i>	<i>-0.03</i>	<i>2.10</i>			<i>0.79</i>	<i>Jul-14</i>
<i>BBgBarc US TIPS TR</i>			<u>-0.82</u>	<u>-0.84</u>	<u>0.41</u>	<u>2.04</u>			<u>0.75</u>	<i>Jul-14</i>
Over/Under			-0.11	-0.26	-0.44	0.06			0.04	
<b>REITS</b>	<b>126,522,109</b>	<b>7.47</b>	<b>1.14</b>	<b>2.42</b>	<b>6.14</b>	<b>9.72</b>			<b>6.81</b>	<b>Mar-15</b>
<i>FTSE NAREIT All Equity REIT</i>			<u>0.50</u>	<u>1.78</u>	<u>4.31</u>	<u>8.97</u>			<u>5.05</u>	<i>Mar-15</i>
Over/Under			0.64	0.64	1.83	0.75			1.76	
<i>CenterSquare US Real Estate<sup>1</sup></i>	<i>126,522,109</i>	<i>7.47</i>	<i>1.14</i>	<i>2.42</i>	<i>6.14</i>	<i>9.72</i>			<i>7.95</i>	<i>Apr-15</i>
<i>FTSE NAREIT All Equity REIT</i>			<u>0.50</u>	<u>1.78</u>	<u>4.31</u>	<u>8.97</u>			<u>6.75</u>	<i>Apr-15</i>
Over/Under			0.64	0.64	1.83	0.75			1.20	
<b>Commodities</b>	<b>171,882,024</b>	<b>10.15</b>	<b>-1.64</b>	<b>-1.08</b>	<b>3.76</b>	<b>0.81</b>			<b>-4.05</b>	<b>Jun-15</b>
<i>Bloomberg Commodity Index TR USD</i>			<u>-2.02</u>	<u>-2.03</u>	<u>2.59</u>	<u>-0.11</u>			<u>-4.80</u>	<i>Jun-15</i>
Over/Under			0.38	0.95	1.17	0.92			0.75	
<i>CoreCommodity Mgmt<sup>1</sup></i>	<i>171,882,024</i>	<i>10.15</i>	<i>-1.64</i>	<i>-1.08</i>	<i>3.76</i>	<i>0.81</i>			<i>-4.05</i>	<i>Jun-15</i>
<i>Bloomberg Commodity Index TR USD</i>			<u>-2.02</u>	<u>-2.03</u>	<u>2.59</u>	<u>-0.11</u>			<u>-4.80</u>	<i>Jun-15</i>
Over/Under			0.38	0.95	1.17	0.92			0.75	
<b>Private Real Estate</b>	<b>764,186,280</b>	<b>45.15</b>	<b>1.82</b>	<b>6.61</b>	<b>8.55</b>	<b>9.31</b>	<b>10.46</b>	<b>1.63</b>	<b>6.92</b>	<b>Oct-94</b>
<i>Real Estate Blend</i>			<u>2.29</u>	<u>7.11</u>	<u>9.54</u>	<u>9.66</u>	<u>11.46</u>	<u>7.47</u>	<u>9.97</u>	<i>Oct-94</i>
Over/Under			-0.47	-0.50	-0.99	-0.35	-1.00	-5.84	-3.05	
<b>Timber</b>	<b>20,453,951</b>	<b>1.21</b>	<b>-0.12</b>	<b>1.51</b>	<b>1.27</b>	<b>2.67</b>	<b>6.33</b>	<b>4.64</b>	<b>9.61</b>	<b>Sep-99</b>

<sup>1</sup> Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.

- Public Real Assets Custom Benchmark = 60% BBgBarc US TIPS TR / 20% Bloomberg Commodity Index TR USD / 10% Alerian MLP TR USD / 10% FTSE NAREIT All REIT

- Real Estate Blend = NCREIF-ODCE + 80bps 7/1/2014 to present; NCREIF Property Index 1 Qtr Lag plus 100bps 7/1/2012 - 6/30/2014; NCREIF Property Index prior to

eA = eVestment Alliance



## Los Angeles City Employees' Retirement System

# REAL ASSETS (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Real Assets</b>	<b>1,692,613,101</b>	<b>100.00</b>	<b>0.38</b>		<b>2.72</b>		<b>4.69</b>		<b>6.00</b>		<b>7.24</b>		<b>0.08</b>			<b>Nov-94</b>
<i>CPI + 5% (Unadjusted)</i>			<u>1.41</u>		<u>6.21</u>		<u>7.38</u>		<u>7.08</u>		<u>6.58</u>		<u>6.51</u>			Nov-94
Over/Under			-1.03		-3.49		-2.69		-1.08		0.66		-6.43			
<b>Public Real Assets</b>	<b>907,972,870</b>	<b>53.64</b>	<b>-0.87</b>		<b>-0.92</b>		<b>1.15</b>		<b>2.68</b>						<b>0.65</b>	<b>Jun-14</b>
<i>Public Real Assets Blend</i>			<u>-0.17</u>		<u>0.05</u>		<u>1.92</u>		<u>2.77</u>						<u>-1.32</u>	Jun-14
Over/Under			-0.70		-0.97		-0.77		-0.09						1.97	
<b>TIPS</b>	<b>609,568,737</b>	<b>36.01</b>	<b>-0.95</b>		<b>-1.14</b>		<b>-0.09</b>		<b>1.88</b>						<b>0.56</b>	<b>Jul-14</b>
<i>BBgBarc US TIPS TR</i>			<u>-0.82</u>		<u>-0.84</u>		<u>0.41</u>		<u>2.04</u>						<u>0.75</u>	Jul-14
Over/Under			-0.13		-0.30		-0.50		-0.16						-0.19	
<b>DFA US TIPS<sup>1</sup></b>	<b>609,568,737</b>	<b>36.01</b>	<b>-0.95</b>	91	<b>-1.14</b>	82	<b>-0.09</b>	96	<b>2.04</b>	46					<b>0.74</b>	<b>Jul-14</b>
<i>BBgBarc US TIPS TR</i>			<u>-0.82</u>	63	<u>-0.84</u>	45	<u>0.41</u>	40	<u>2.04</u>	47					<u>0.75</u>	Jul-14
Over/Under			-0.13		-0.30		-0.50		0.00						-0.01	
<i>eV US TIPS / Inflation Fixed Inc Net Median</i>			-0.74		-0.92		0.36		2.00						0.59	Jul-14
<b>REITS</b>	<b>126,522,109</b>	<b>7.47</b>	<b>1.05</b>		<b>2.08</b>		<b>5.67</b>		<b>9.21</b>						<b>6.36</b>	<b>Mar-15</b>
<i>FTSE NAREIT All Equity REIT</i>			<u>0.50</u>		<u>1.78</u>		<u>4.31</u>		<u>8.97</u>						<u>5.05</u>	Mar-15
Over/Under			0.55		0.30		1.36		0.24						1.31	
<b>CenterSquare US Real Estate<sup>1</sup></b>	<b>126,522,109</b>	<b>7.47</b>	<b>1.05</b>	38	<b>2.08</b>	35	<b>5.67</b>	18	<b>9.21</b>	14					<b>7.48</b>	<b>Apr-15</b>
<i>FTSE NAREIT All Equity REIT</i>			<u>0.50</u>	68	<u>1.78</u>	46	<u>4.31</u>	45	<u>8.97</u>	15					<u>6.75</u>	Apr-15
Over/Under			0.55		0.30		1.36		0.24						0.73	
<i>eV US REIT Net Median</i>			0.82		1.68		3.87		7.32						5.63	Apr-15
<b>Commodities</b>	<b>171,882,024</b>	<b>10.15</b>	<b>-1.84</b>		<b>-1.67</b>		<b>2.93</b>		<b>0.01</b>						<b>-4.77</b>	<b>Jun-15</b>
<i>Bloomberg Commodity Index TR USD</i>			<u>-2.02</u>		<u>-2.03</u>		<u>2.59</u>		<u>-0.11</u>						<u>-4.80</u>	Jun-15
Over/Under			0.18		0.36		0.34		0.12						0.03	
<b>CoreCommodity Mgmt<sup>1</sup></b>	<b>171,882,024</b>	<b>10.15</b>	<b>-1.84</b>		<b>-1.67</b>		<b>2.93</b>		<b>0.01</b>						<b>-4.77</b>	<b>Jun-15</b>
<i>Bloomberg Commodity Index TR USD</i>			<u>-2.02</u>		<u>-2.03</u>		<u>2.59</u>		<u>-0.11</u>						<u>-4.80</u>	Jun-15
Over/Under			0.18		0.36		0.34		0.12						0.03	

<sup>1</sup> Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance. No universe is available.

- Public Real Assets Custom Benchmark = 60% BBgBarc US TIPS TR / 20% Bloomberg Commodity Index TR USD / 10% Alerian MLP TR USD / 10% FTSE NAREIT All REIT

eA = eVestment Alliance



## Los Angeles City Employees' Retirement System

# REAL ASSETS (NET)

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Private Real Estate</b>	<b>764,186,280</b>	<b>45.15</b>	<b>1.80</b>	<b>54</b>	<b>6.56</b>	<b>40</b>	<b>8.48</b>	<b>44</b>	<b>9.22</b>	<b>8</b>	<b>10.35</b>	<b>40</b>	<b>1.52</b>	<b>99</b>		<b>Oct-94</b>
<i>Real Estate Blend</i>			<u>2.29</u>	28	<u>7.11</u>	3	<u>9.54</u>	5	<u>9.66</u>	7	<u>11.46</u>	6	<u>7.47</u>	11		Oct-94
<i>Over/Under</i>			-0.49		-0.55		-1.06		-0.44		-1.11		-5.95			
<i>InvestorForce Public DB Real Estate Priv Net Median</i>			1.86		5.88		8.08		8.71		9.92		4.63			Oct-94
<b>Timber</b>	<b>20,453,951</b>	<b>1.21</b>	<b>-0.12</b>		<b>1.51</b>		<b>1.27</b>		<b>2.67</b>		<b>6.32</b>		<b>4.60</b>			<b>Sep-99</b>

- Real Estate Blend = NCREIF-ODCE + 80bps 7/1/2014 to present; NCREIF Property Index 1 Qtr Lag plus 100bps 7/1/2012 - 6/30/2014; NCREIF Property Index prior to eA = eVestment Alliance



# MANAGER REPORT CARD

Real Assets Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid \$ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
DFA	Jul-14	U.S. TIPS	x	x	x	x	=	✓	N/A	N/A	x	194.6	Performance compliant with LACERS' Manager Monitoring Policy
CenterSquare	Apr-15	REITS	✓	✓	✓	✓	✓	✓	N/A	N/A	✓	399.8	Performance compliant with LACERS' Manager Monitoring Policy
CoreCommodity Mgt.	Jul-15	Commodities	✓	N/A	✓	N/A	✓	N/A	N/A	N/A	✓	860.4	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2017.
- \* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
x	Underperformed
=	Equal to
✓✓	Gross Return



# APPENDIX

NEPC, LLC

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# U.S. EQUITY MANAGER PERFORMANCE

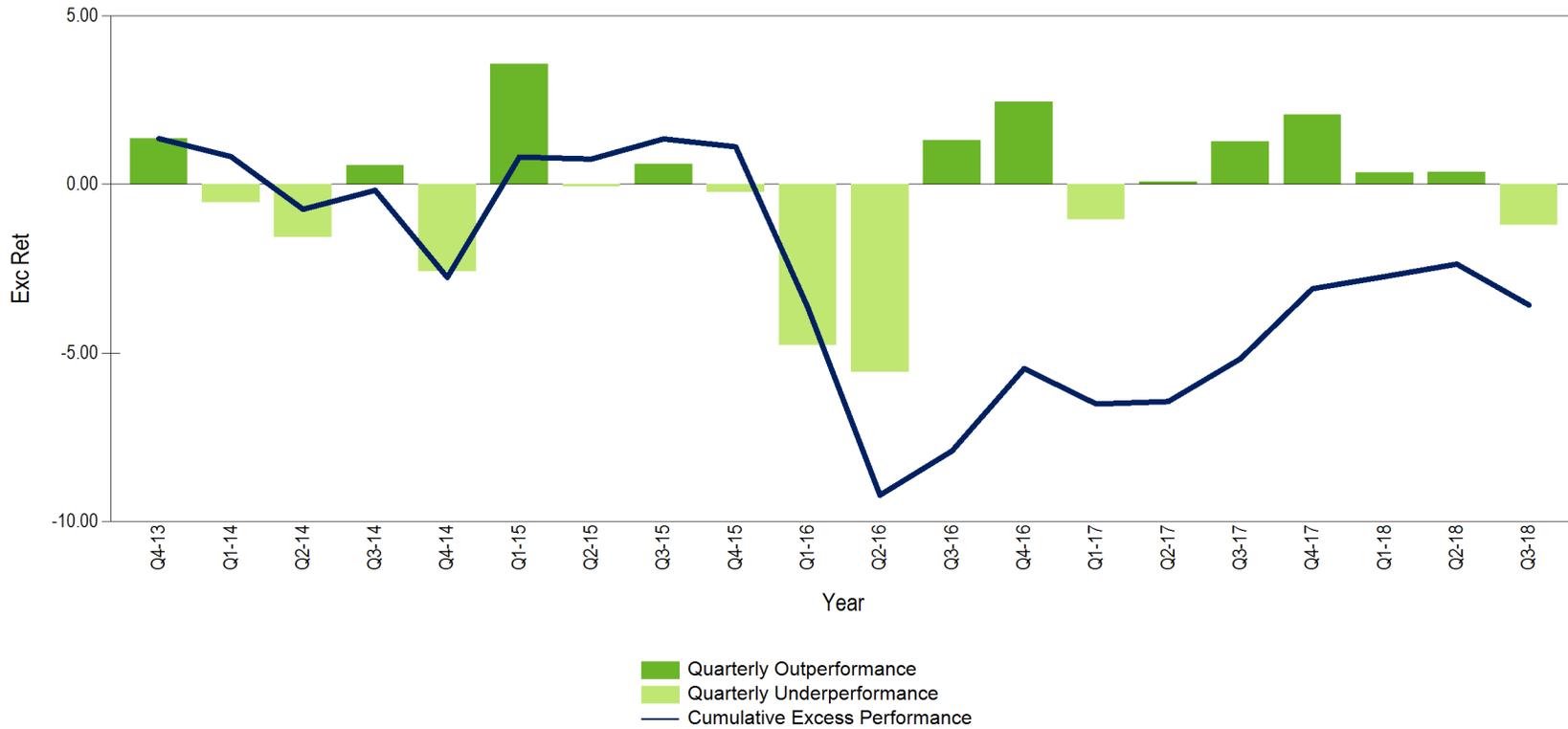
NEPC, LLC

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# Los Angeles City Employees' Retirement System

## ARONSON, JOHNSON & ORTIZ

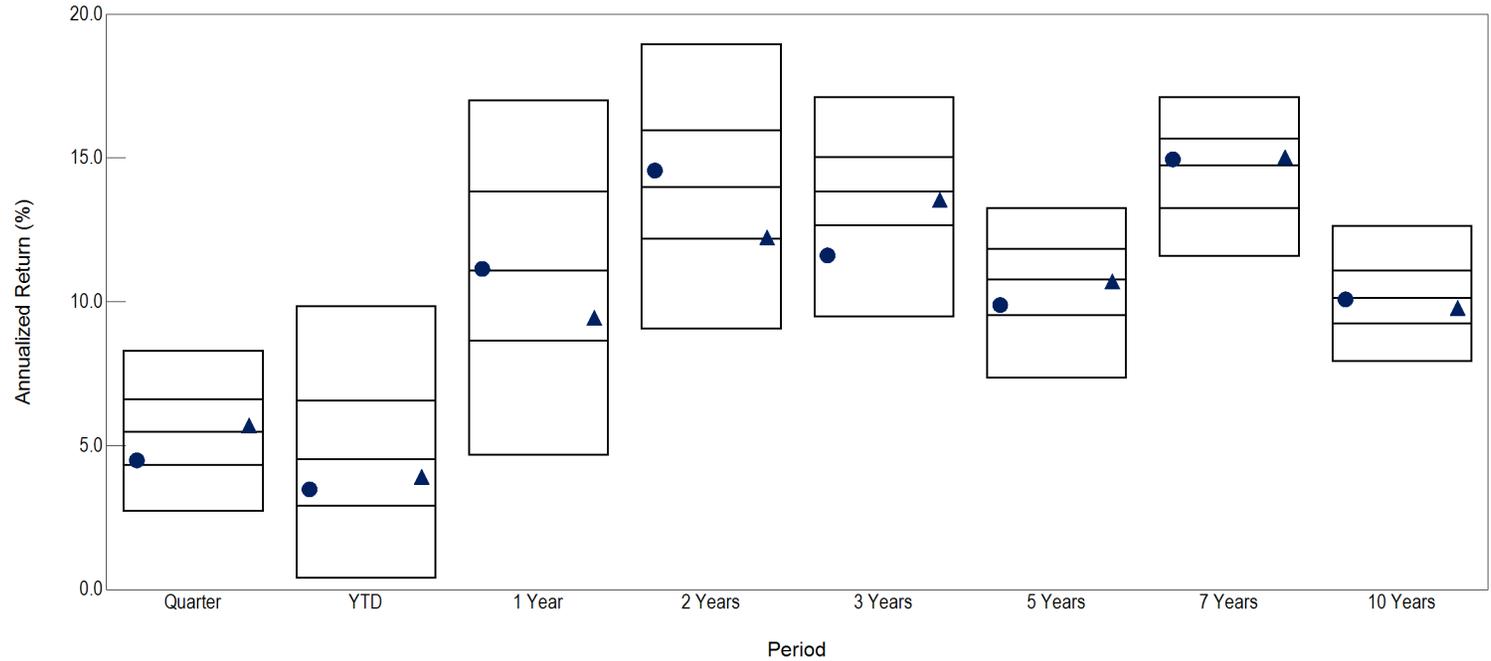
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## ARONSON, JOHNSON & ORTIZ

Aronson, Johnson & Ortiz vs. eV US Large Cap Value Equity Net

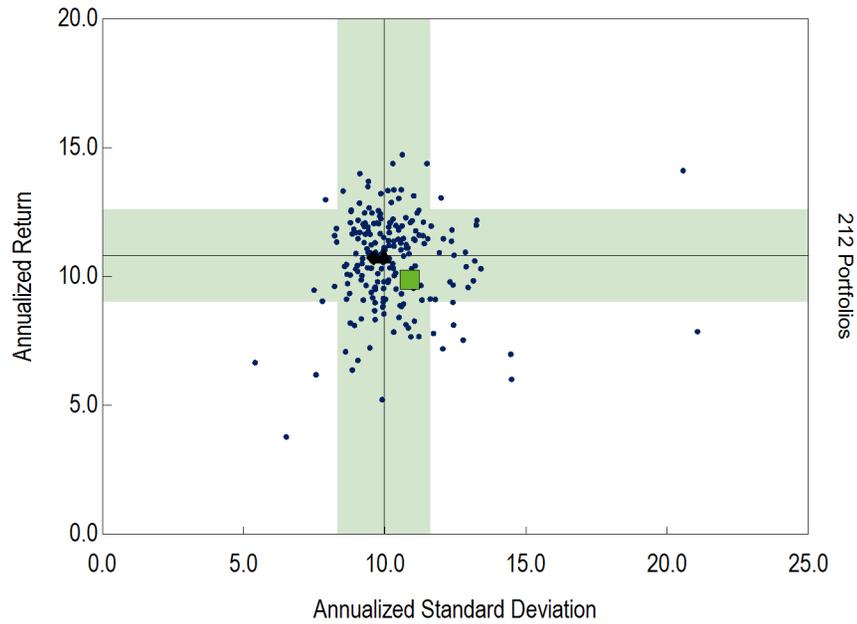


	Return (Rank)															
5th Percentile	8.30	9.85	17.00	18.95	17.12	13.26	17.11	12.65								
25th Percentile	6.63	6.59	13.86	15.99	15.05	11.87	15.69	11.11								
Median	5.50	4.56	11.11	14.00	13.86	10.81	14.76	10.15								
75th Percentile	4.36	2.94	8.68	12.22	12.69	9.55	13.27	9.27								
95th Percentile	2.76	0.43	4.70	9.09	9.52	7.40	11.61	7.96								
# of Portfolios	227	226	225	224	223	212	188	168								
● Aronson, Johnson & Ortiz	4.49	(72)	3.48	(67)	11.14	(50)	14.56	(43)	11.61	(88)	9.89	(67)	14.95	(43)	10.08	(53)
▲ Russell 1000 Value	5.70	(47)	3.92	(62)	9.45	(64)	12.25	(75)	13.55	(57)	10.72	(52)	15.02	(43)	9.79	(60)

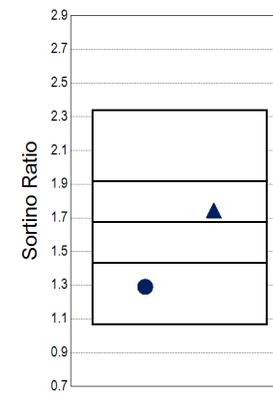
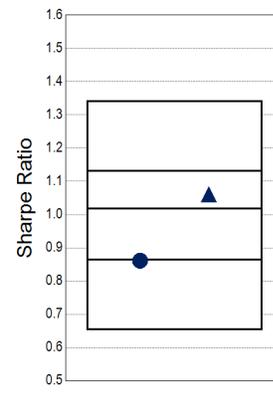
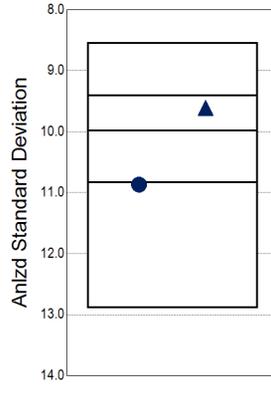
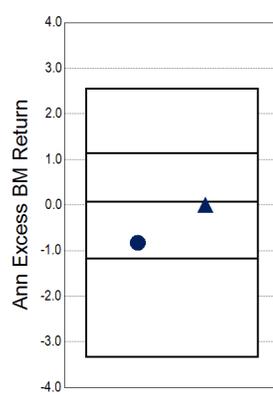
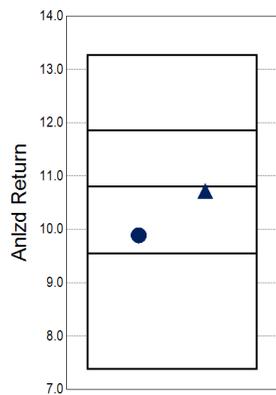
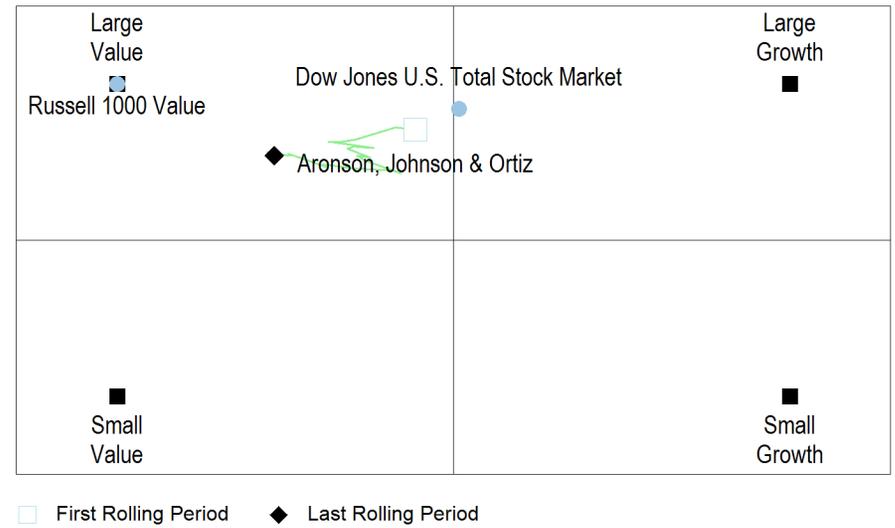


# ARONSON, JOHNSON & ORTIZ

5 Year Risk Return



5 Year Style Map



- Aronson, Johnson & Ortiz
- ▲ Russell 1000 Value
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# Los Angeles City Employees' Retirement System

## EAM INVESTORS

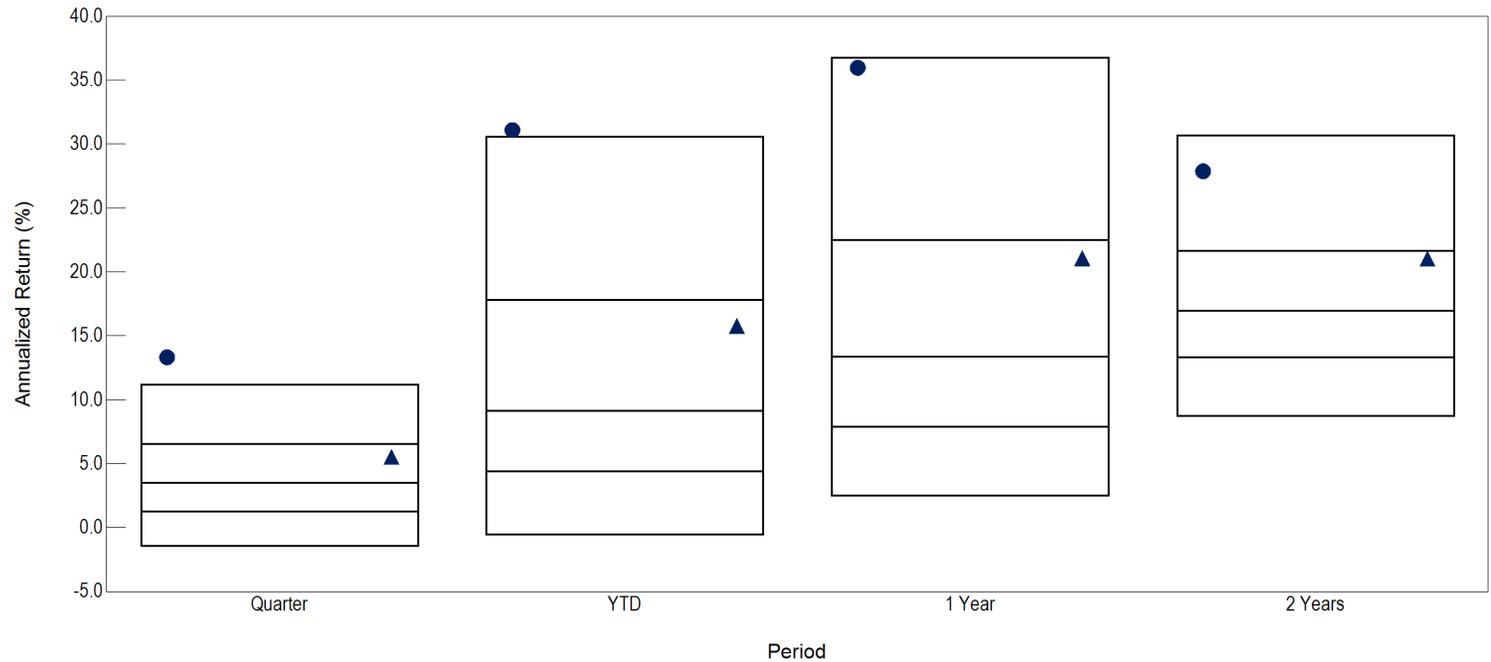
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## EAM INVESTORS

EAM Investors vs. eV US Small Cap Equity Net



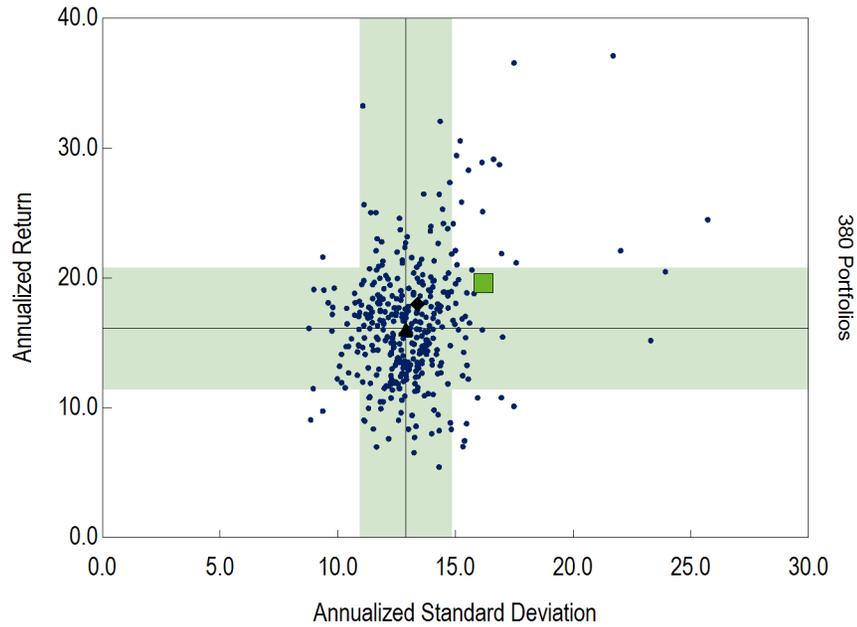
	Return (Rank)							
5th Percentile	11.16	30.55	36.74	30.65				
25th Percentile	6.61	17.86	22.56	21.70				
Median	3.57	9.17	13.41	17.03				
75th Percentile	1.33	4.47	7.93	13.37				
95th Percentile	-1.41	-0.51	2.54	8.76				
# of Portfolios	395	395	394	390				
● EAM Investors	13.32	(2)	31.08	(5)	35.96	(6)	27.86	(9)
▲ Russell 2000 Growth	5.52	(32)	15.76	(29)	21.06	(29)	21.02	(27)



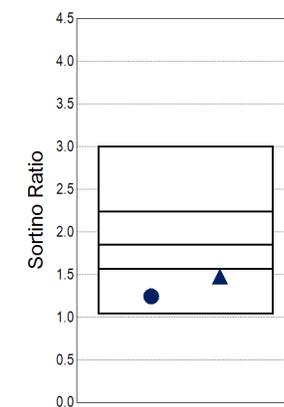
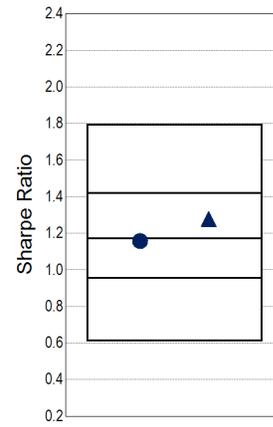
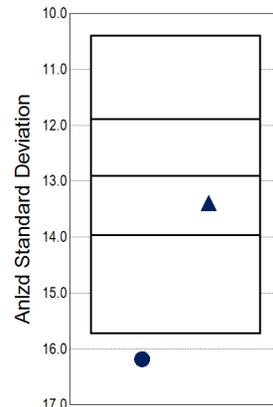
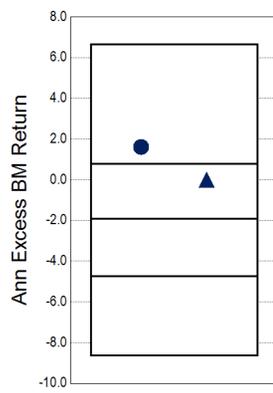
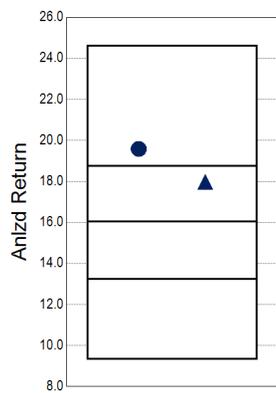
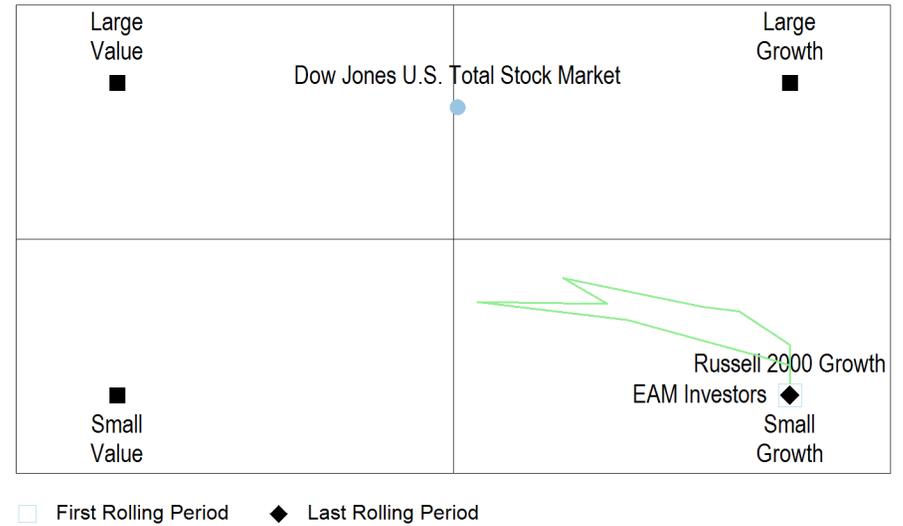
# Los Angeles City Employees' Retirement System

## EAM INVESTORS

Since Inception Risk Return



Since Inception Style Map



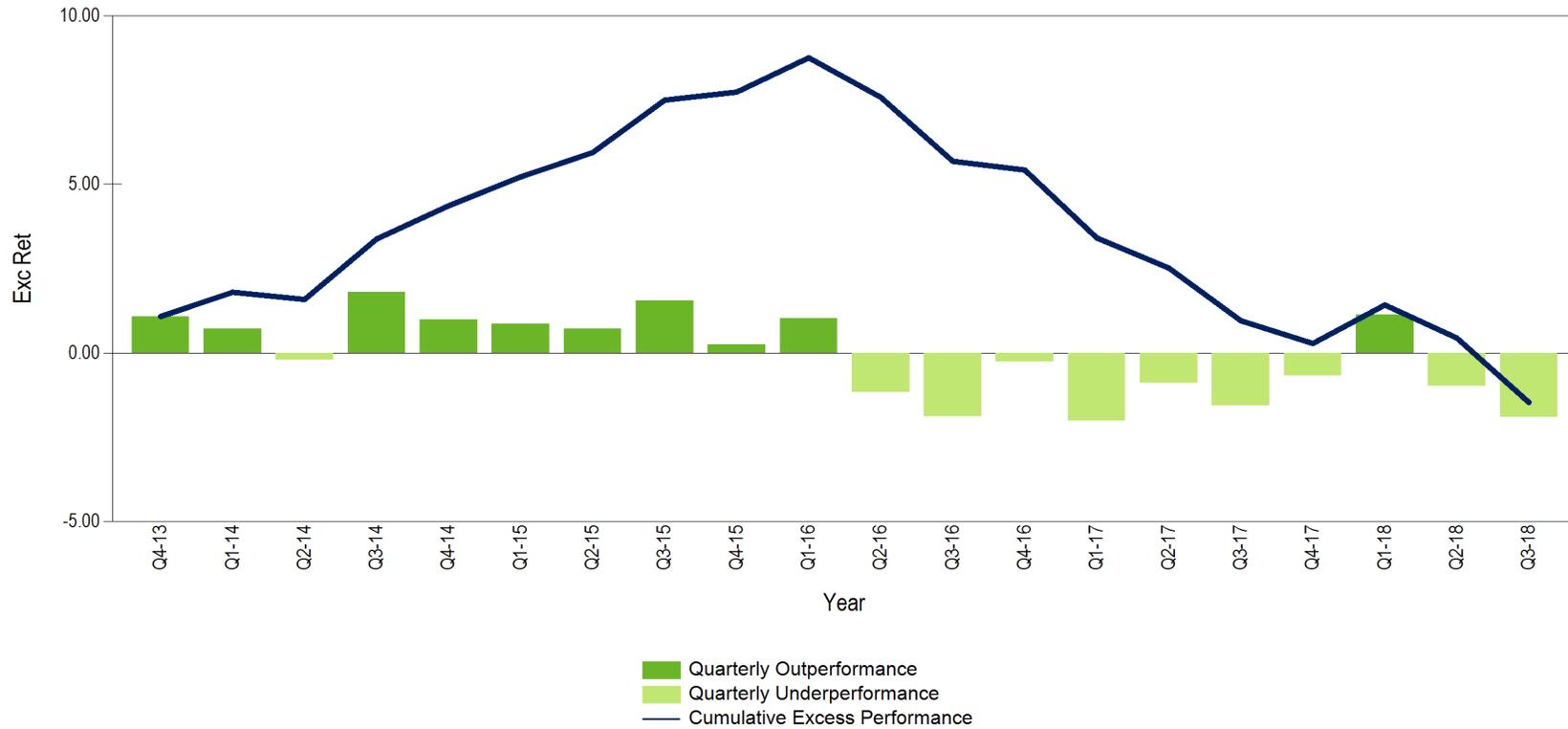
- EAM Investors
- ▲ Russell 2000 Growth
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# Los Angeles City Employees' Retirement System

## PANAGORA

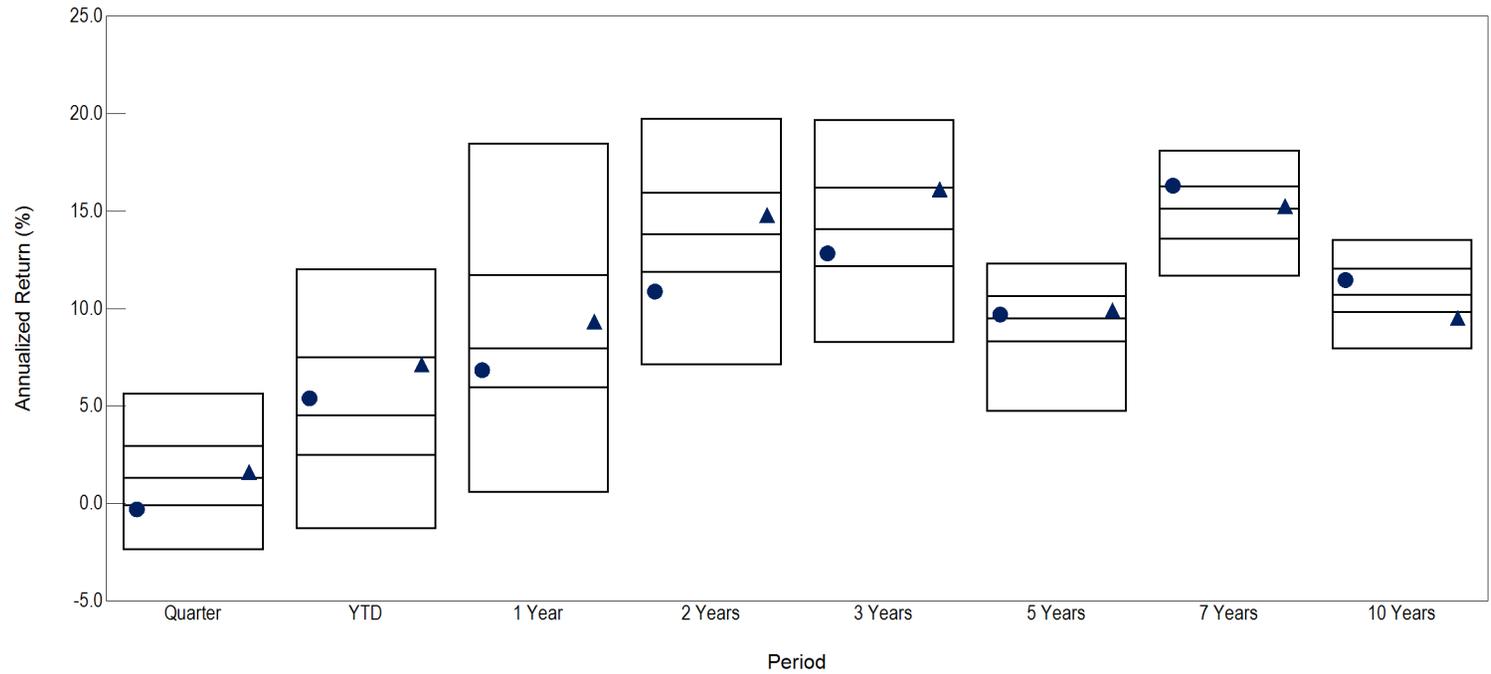
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## PANAGORA

PanAgora vs. eV US Small Cap Value Equity Net



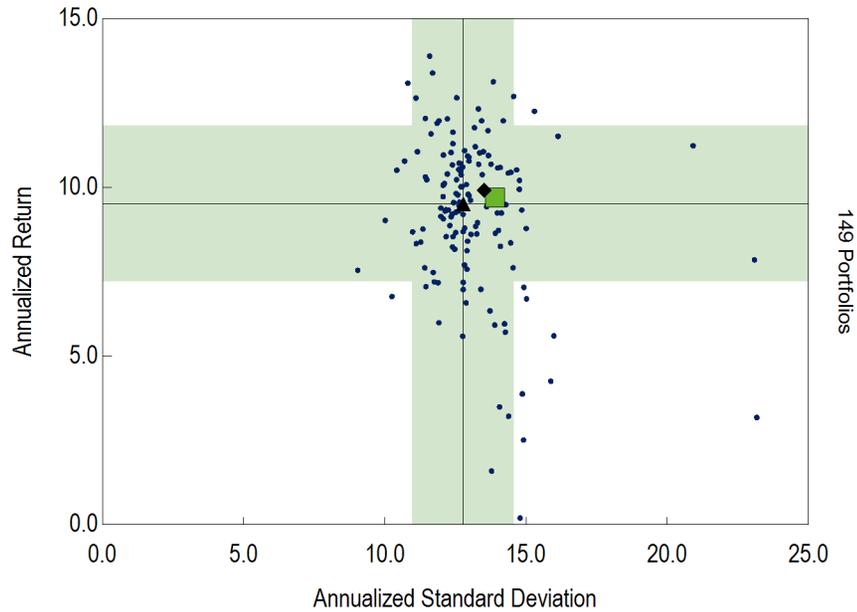
	Return (Rank)															
5th Percentile	5.64	12.01	18.47	19.72	19.69	12.30	18.11	13.52								
25th Percentile	2.99	7.55	11.76	15.96	16.24	10.69	16.29	12.09								
Median	1.35	4.55	8.00	13.83	14.11	9.51	15.16	10.74								
75th Percentile	-0.05	2.53	6.00	11.91	12.20	8.35	13.61	9.86								
95th Percentile	-2.31	-1.25	0.63	7.18	8.32	4.78	11.73	7.98								
# of Portfolios	165	165	165	165	159	149	137	121								
● PanAgora	-0.31	(82)	5.39	(43)	6.84	(61)	10.87	(84)	12.83	(66)	9.69	(47)	16.30	(25)	11.46	(36)
▲ Russell 2000 Value	1.60	(45)	7.14	(31)	9.33	(40)	14.80	(37)	16.12	(26)	9.92	(43)	15.26	(48)	9.52	(84)



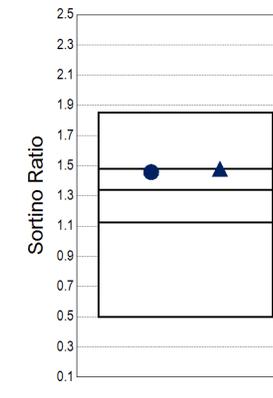
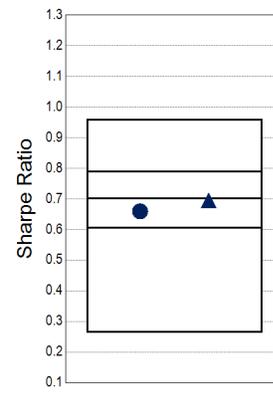
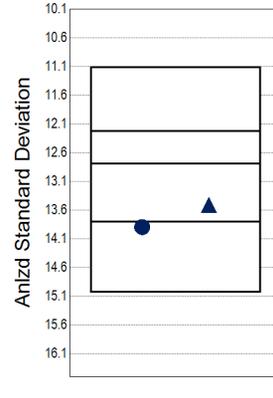
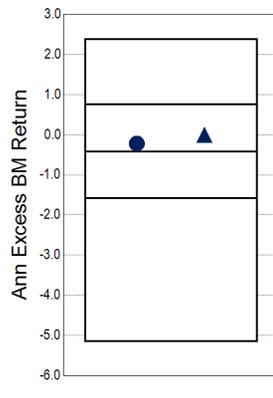
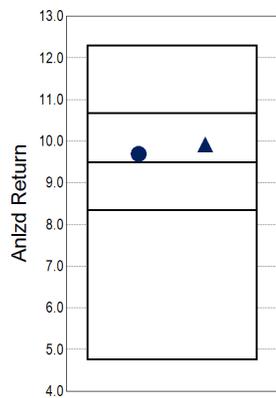
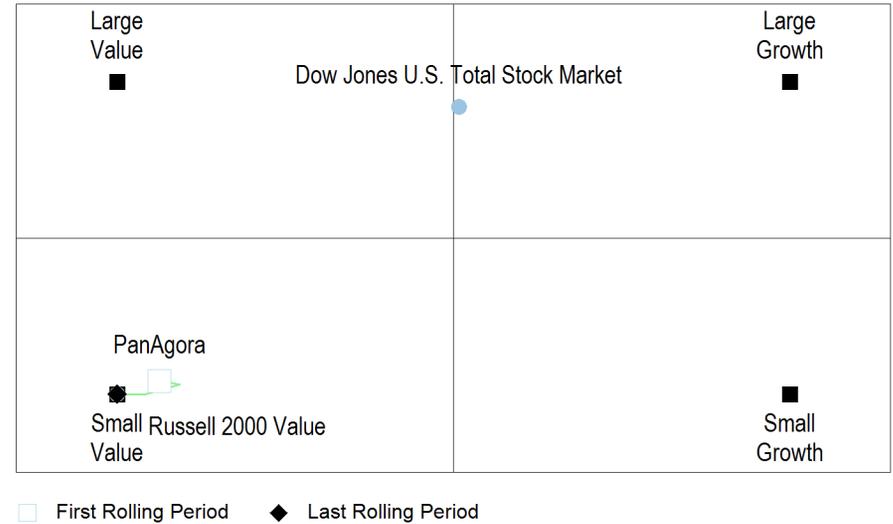
# Los Angeles City Employees' Retirement System

## PANAGORA

5 Year Risk Return



5 Year Style Map

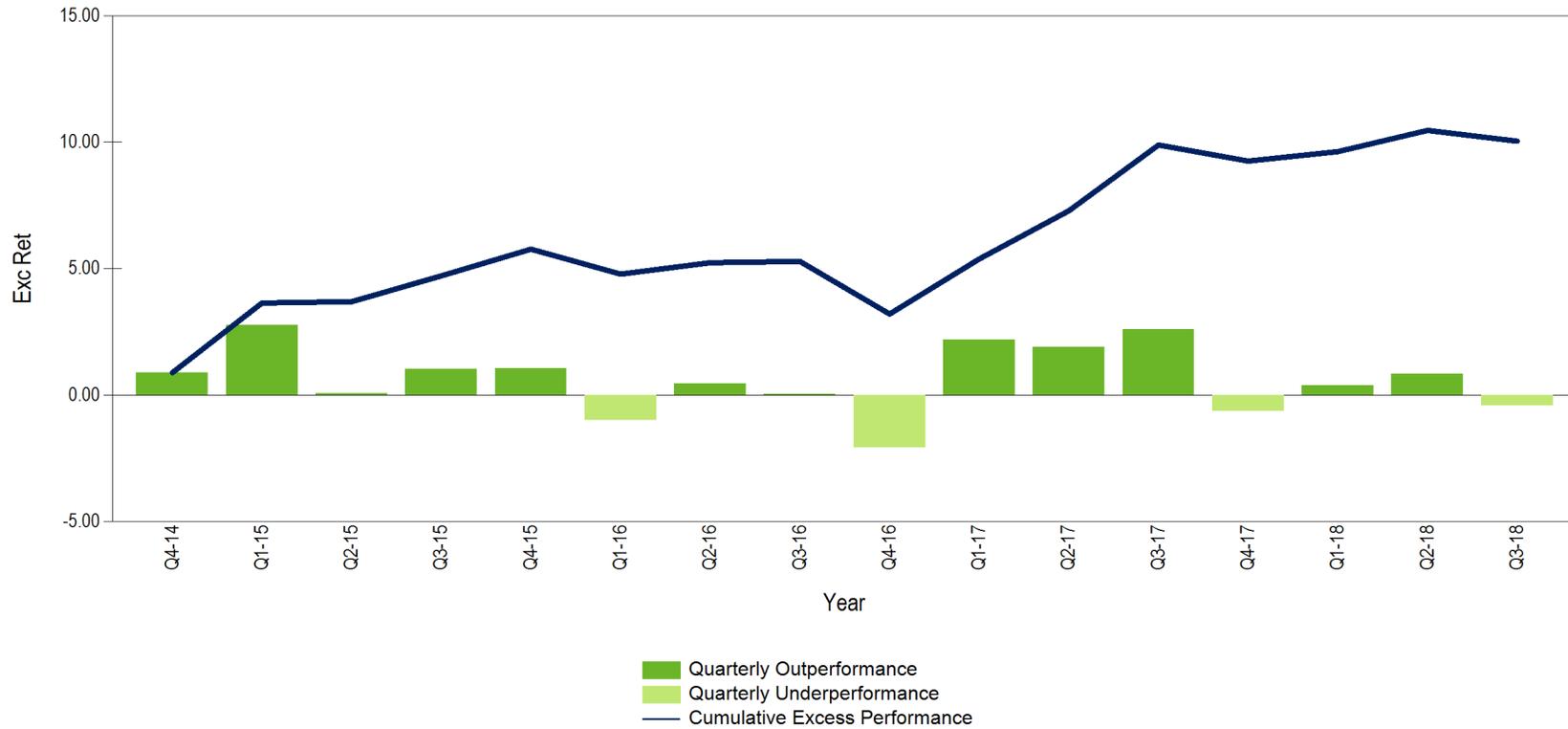


- PanAgora
- ▲ Russell 2000 Value
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# PRINCIPAL GLOBAL INVESTORS

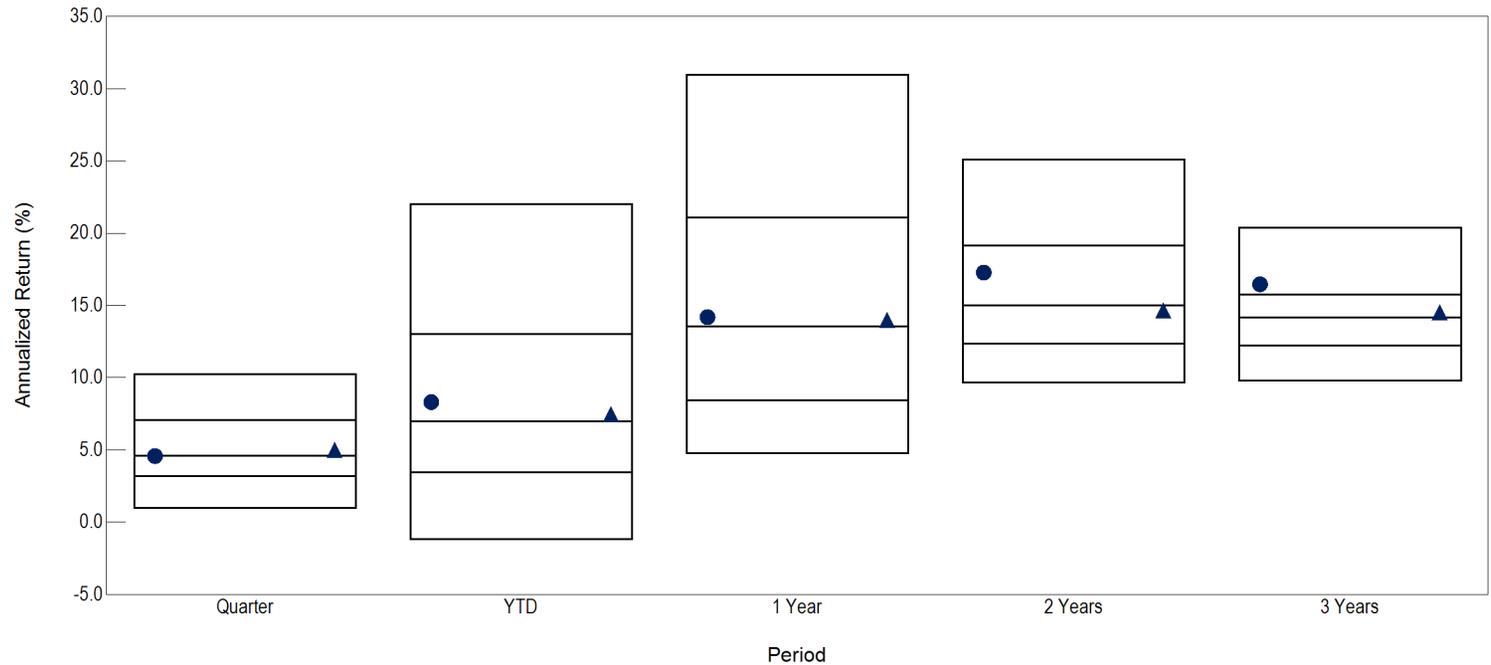
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## PRINCIPAL GLOBAL INVESTORS

Principal Global Investors vs. eV US Mid Cap Equity Net



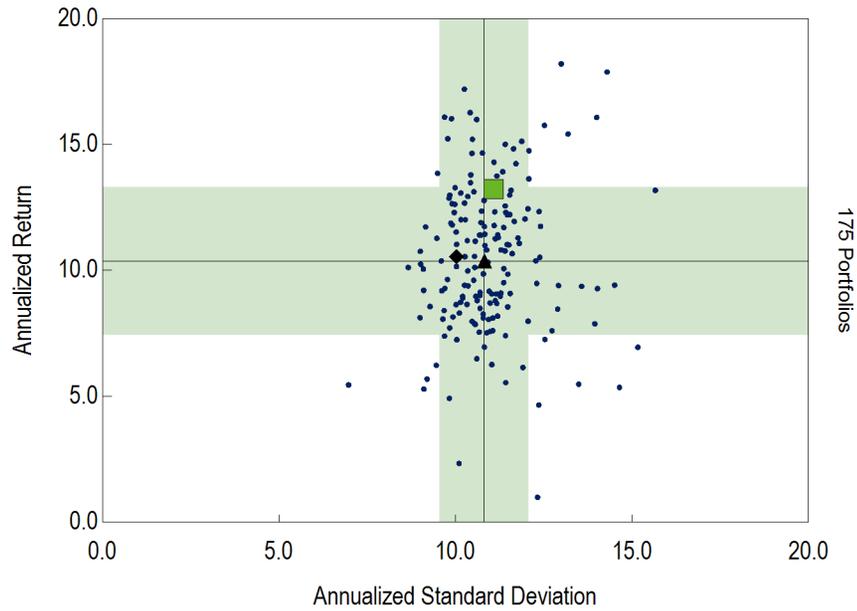
	Return (Rank)									
5th Percentile	10.22		22.00		30.96		25.09		20.38	
25th Percentile	7.10		13.05		21.12		19.17		15.80	
Median	4.62		7.03		13.61		15.06		14.19	
75th Percentile	3.24		3.51		8.46		12.38		12.26	
95th Percentile	1.04		-1.14		4.83		9.69		9.86	
# of Portfolios	182		182		182		180		180	
● Principal Global Investors	4.57	(52)	8.30	(45)	14.19	(48)	17.27	(37)	16.46	(22)
▲ Russell MidCap	5.00	(48)	7.46	(48)	13.98	(49)	14.65	(54)	14.52	(46)



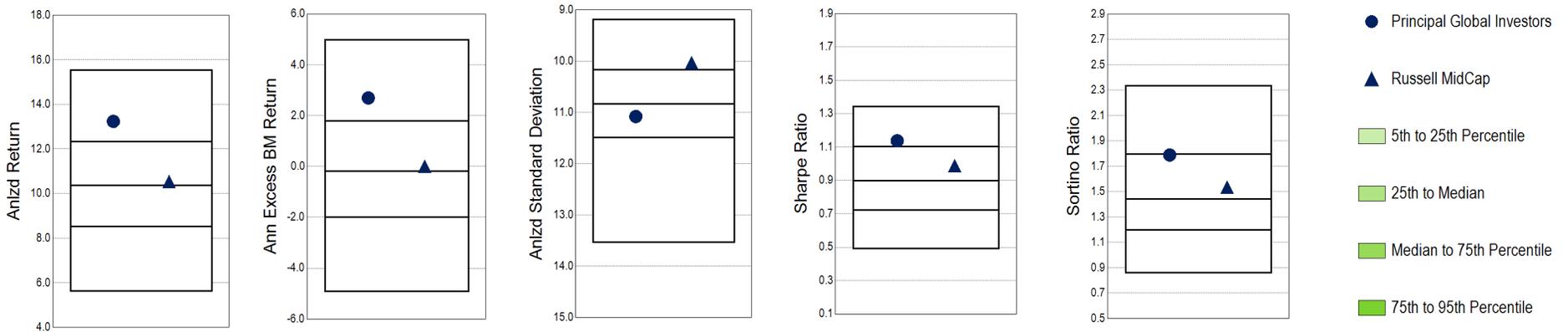
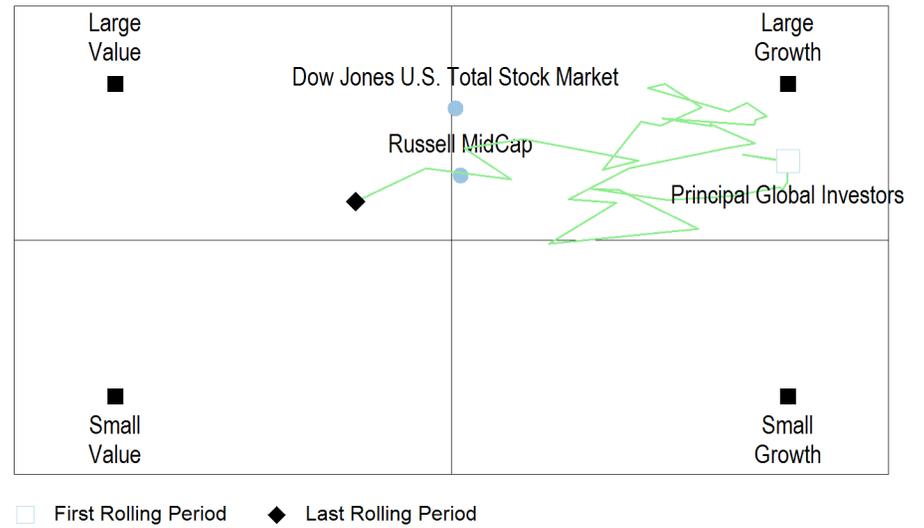
# Los Angeles City Employees' Retirement System

## PRINCIPAL GLOBAL INVESTORS

Since Inception Risk Return



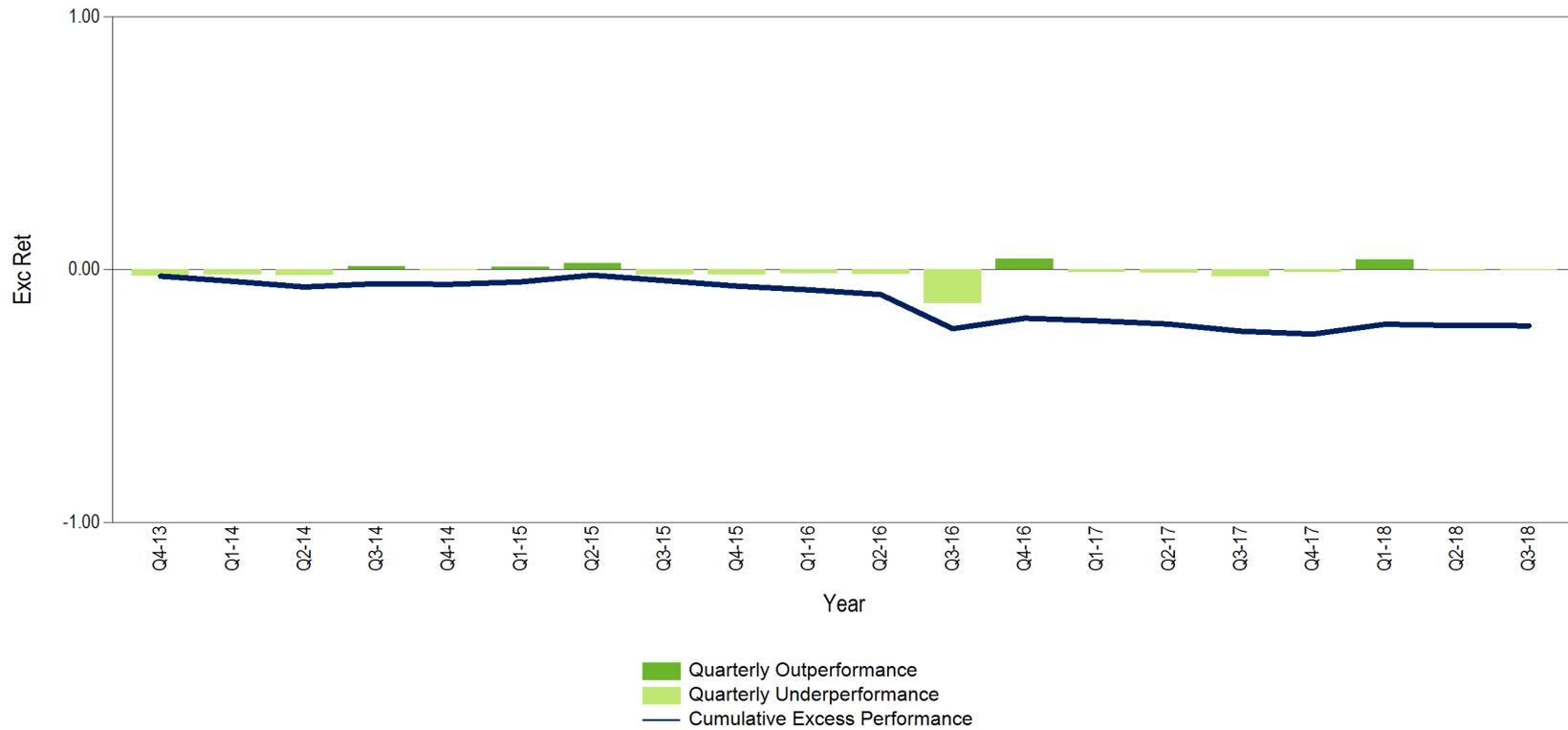
Since Inception Style Map



# Los Angeles City Employees' Retirement System

## RHUMBLINE ADVISORS S&P 500

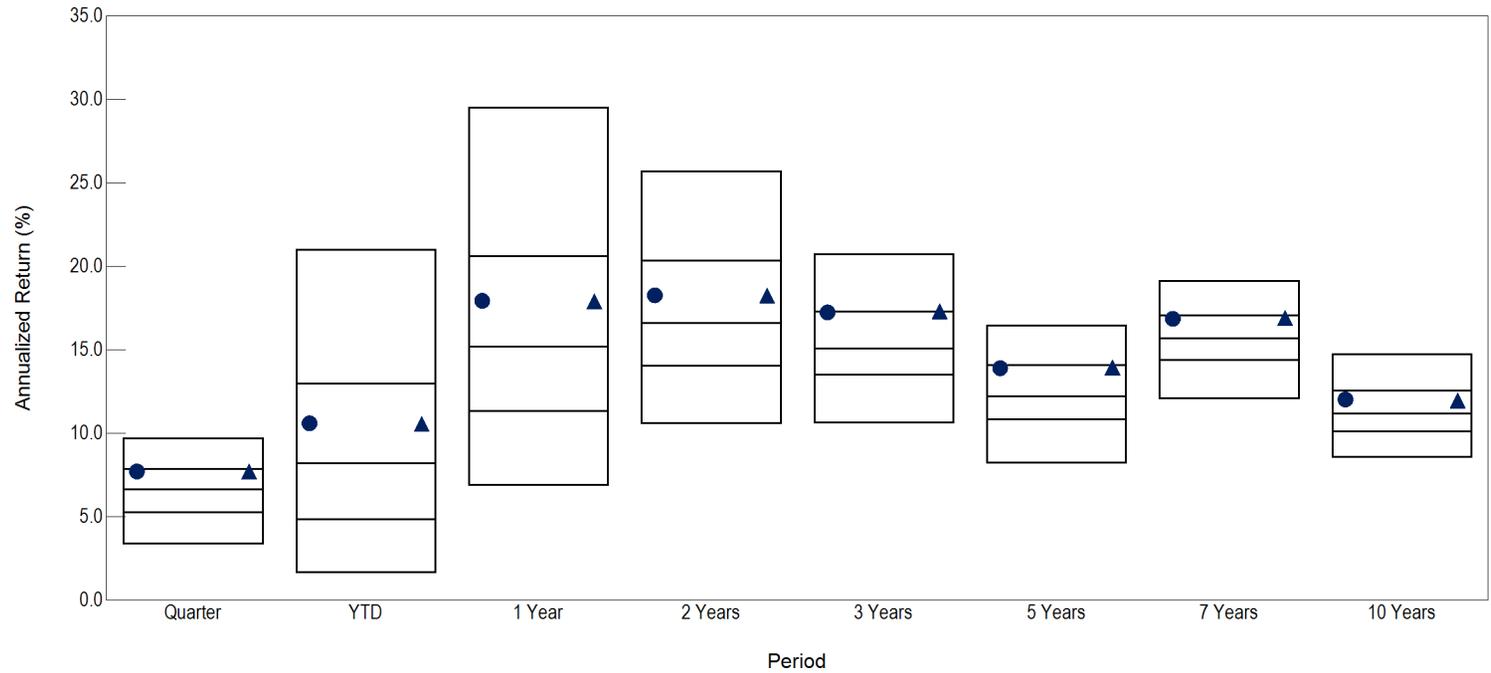
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## RHUMBLINE ADVISORS S&P 500

Rhumbline Advisors S&P 500 vs. eV US Large Cap Equity Net

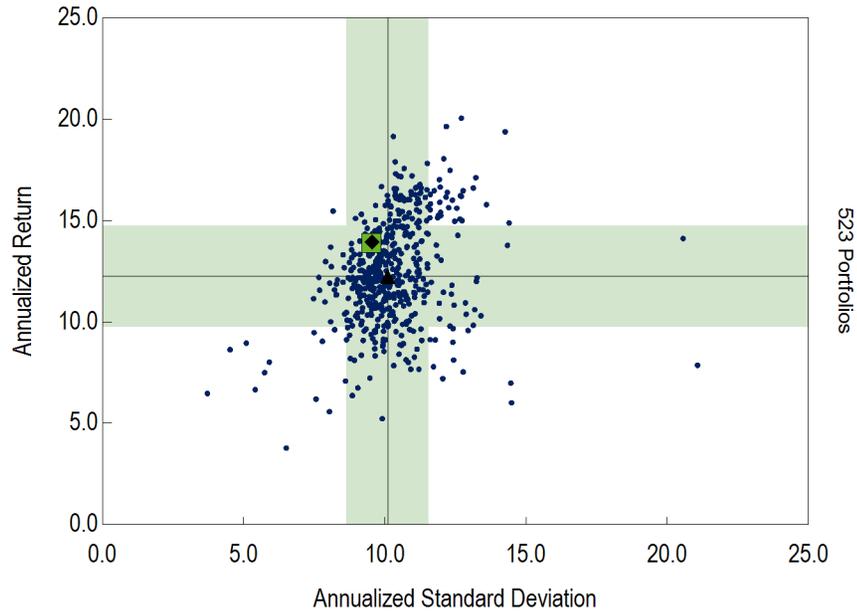


	Return (Rank)																							
5th Percentile	9.70	21.00	29.51	25.70	20.75	16.47	19.12	14.73	7.71	(30)	10.60	(35)	17.94	(36)	18.27	(37)	17.24	(26)	13.90	(28)	16.86	(30)	12.03	(36)
25th Percentile	7.90	13.00	20.66	20.37	17.35	14.14	17.11	12.58	7.71	(29)	10.56	(35)	17.91	(36)	18.26	(37)	17.31	(26)	13.95	(27)	16.91	(30)	11.97	(38)
Median	6.66	8.26	15.23	16.63	15.13	12.25	15.73	11.22																
75th Percentile	5.32	4.89	11.37	14.09	13.55	10.89	14.43	10.15																
95th Percentile	3.44	1.73	6.94	10.63	10.70	8.27	12.14	8.64																
# of Portfolios	567	566	565	558	545	523	465	419																
● Rhumbline Advisors S&P 500	7.71	(30)	10.60	(35)	17.94	(36)	18.27	(37)	17.24	(26)	13.90	(28)	16.86	(30)	12.03	(36)								
▲ S&P 500	7.71	(29)	10.56	(35)	17.91	(36)	18.26	(37)	17.31	(26)	13.95	(27)	16.91	(30)	11.97	(38)								

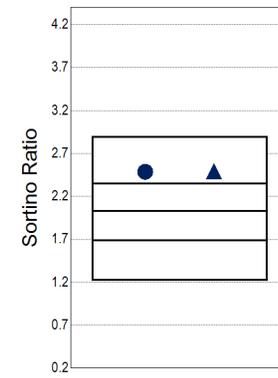
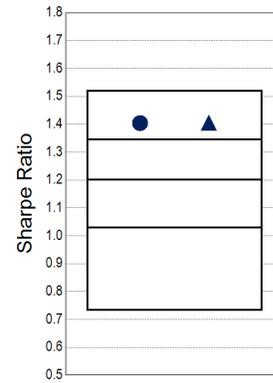
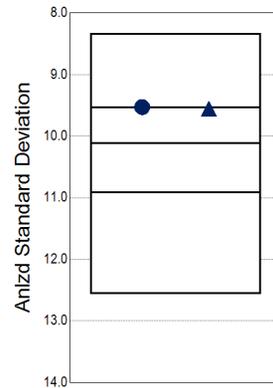
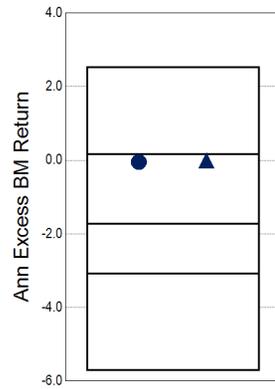
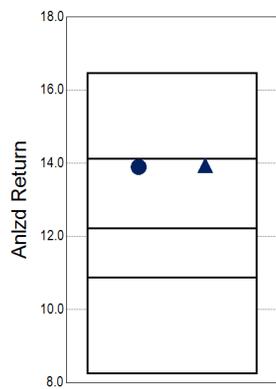
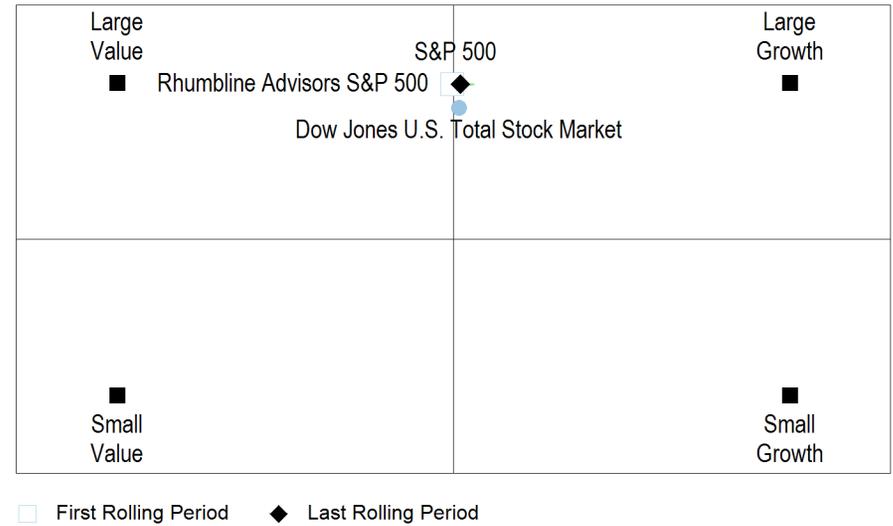


# RHUMBLINE ADVISORS S&P 500

5 Year Risk Return



5 Year Style Map

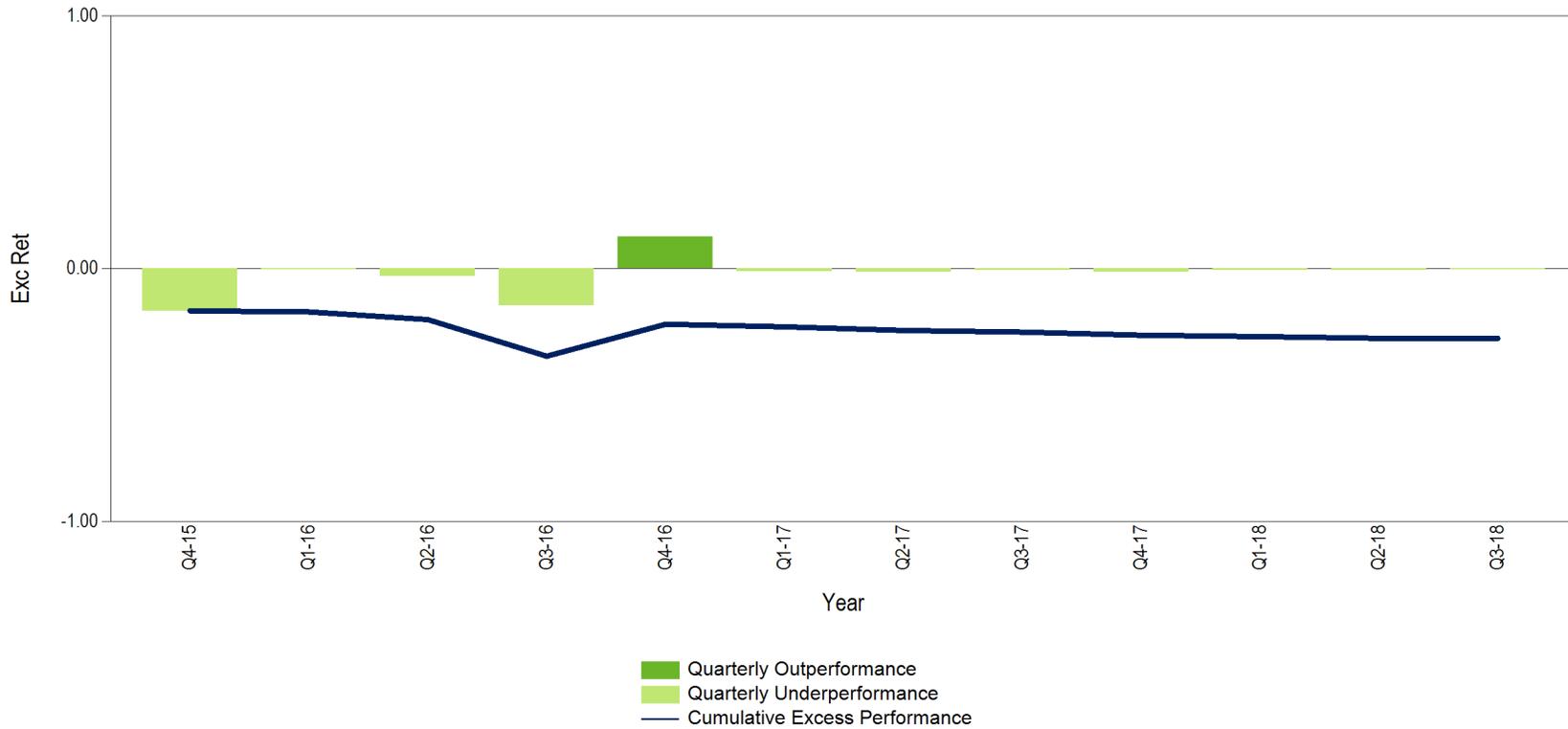


- Rhumbline Advisors S&P 500
- ▲ S&P 500
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



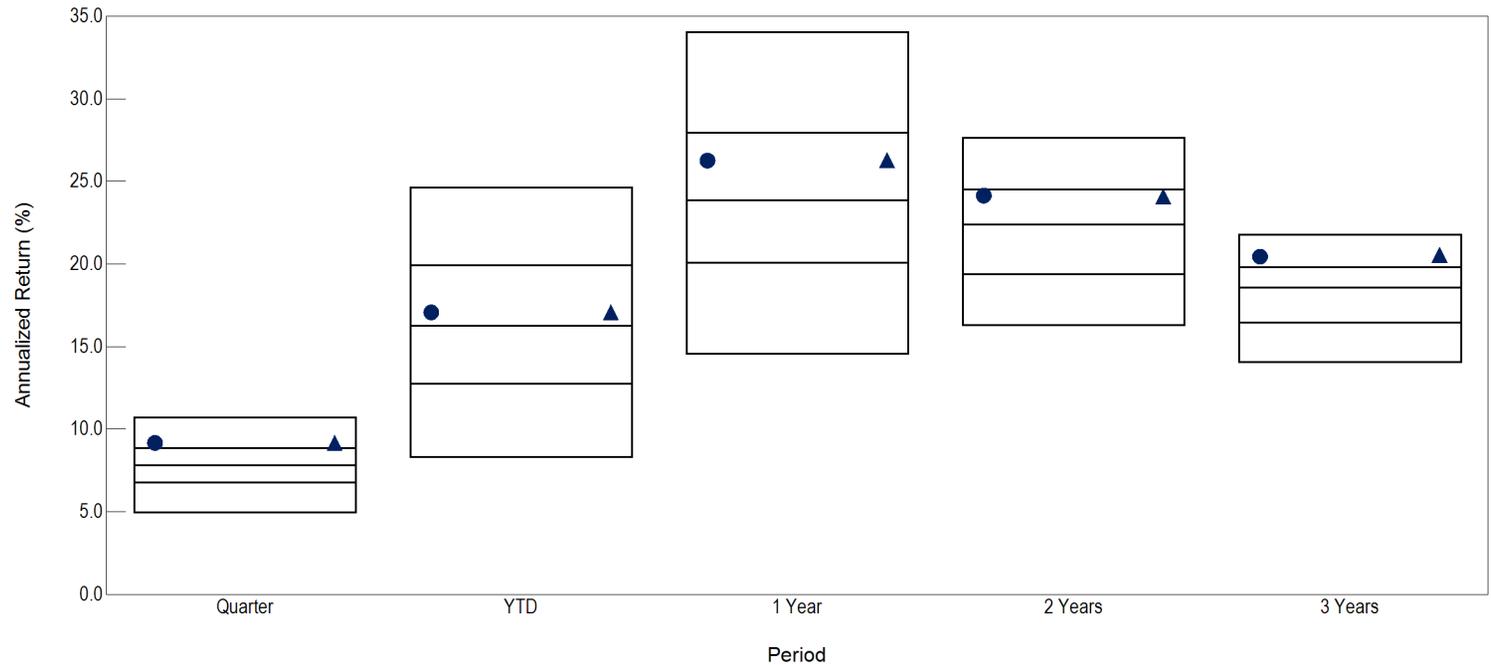
# RHUMBLINE ADVISORS RUSSELL 1000 GROWTH

Quarterly and Cumulative Excess Performance



# RHUMBLINE ADVISORS RUSSELL 1000 GROWTH

Rhumbline Advisors Russell 1000 Growth vs. eV US Large Cap Growth Equity Net

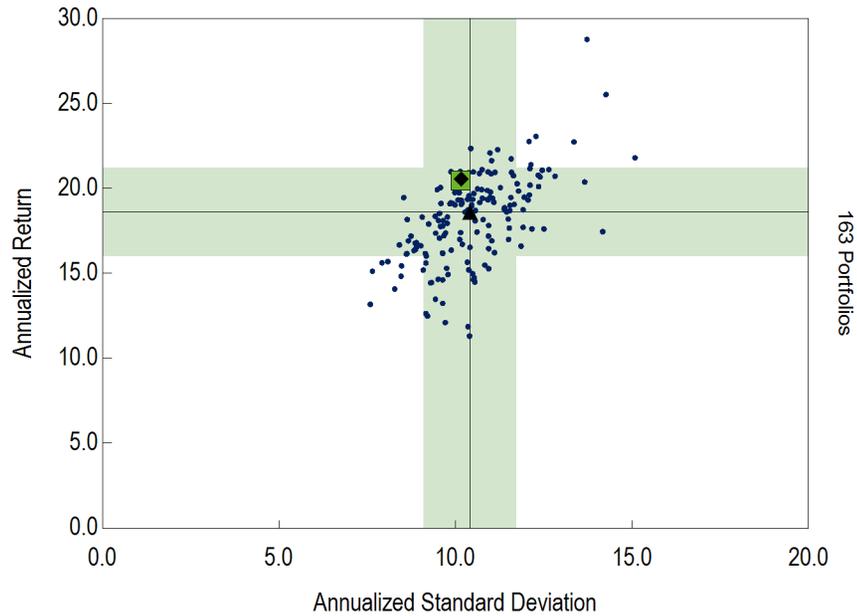


	Return (Rank)									
5th Percentile	10.72		24.62		34.05		27.65		21.79	
25th Percentile	8.89		19.96		27.98		24.57		19.86	
Median	7.84		16.30		23.89		22.44		18.60	
75th Percentile	6.82		12.80		20.10		19.41		16.48	
95th Percentile	4.99		8.36		14.59		16.32		14.10	
# of Portfolios	172		172		172		169		163	
● Rhumbline Advisors Russell 1000 Growth	9.17	(21)	17.07	(45)	26.27	(35)	24.14	(33)	20.45	(19)
▲ Russell 1000 Growth	9.17	(21)	17.09	(44)	26.30	(35)	24.10	(33)	20.55	(19)

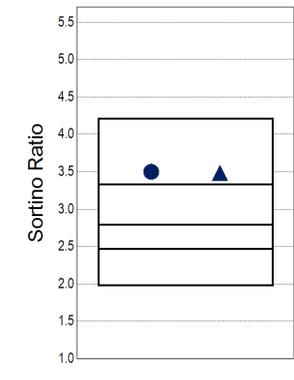
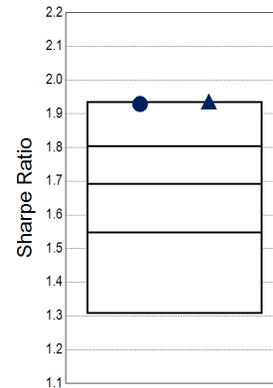
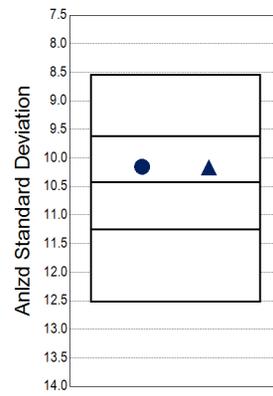
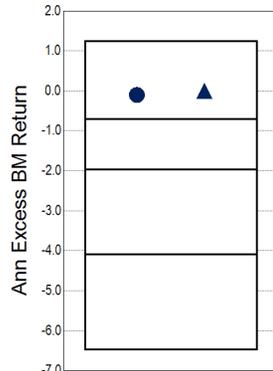
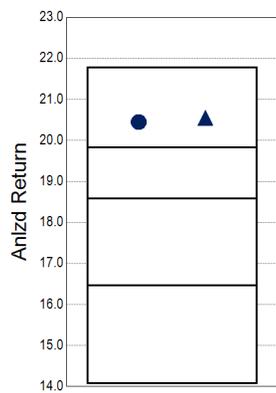
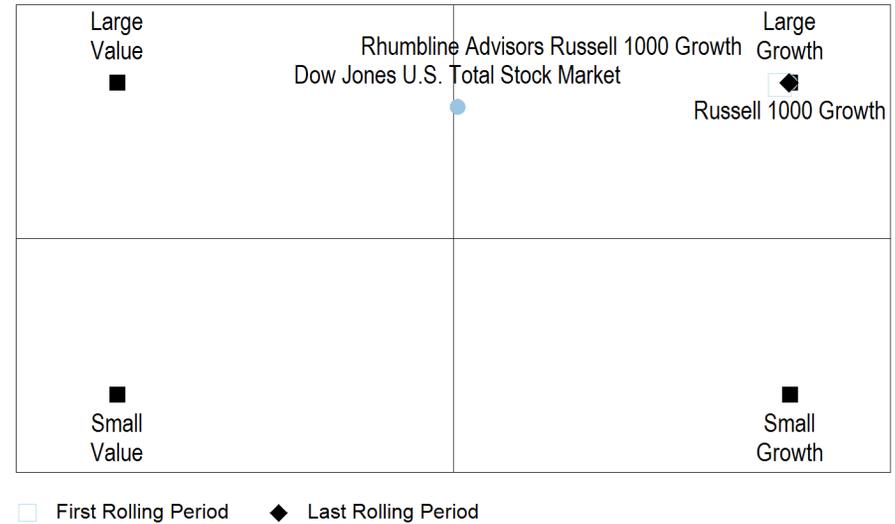


# RHUMBLINE ADVISORS RUSSELL 1000 GROWTH

3 Year Risk Return



3 Year Style Map

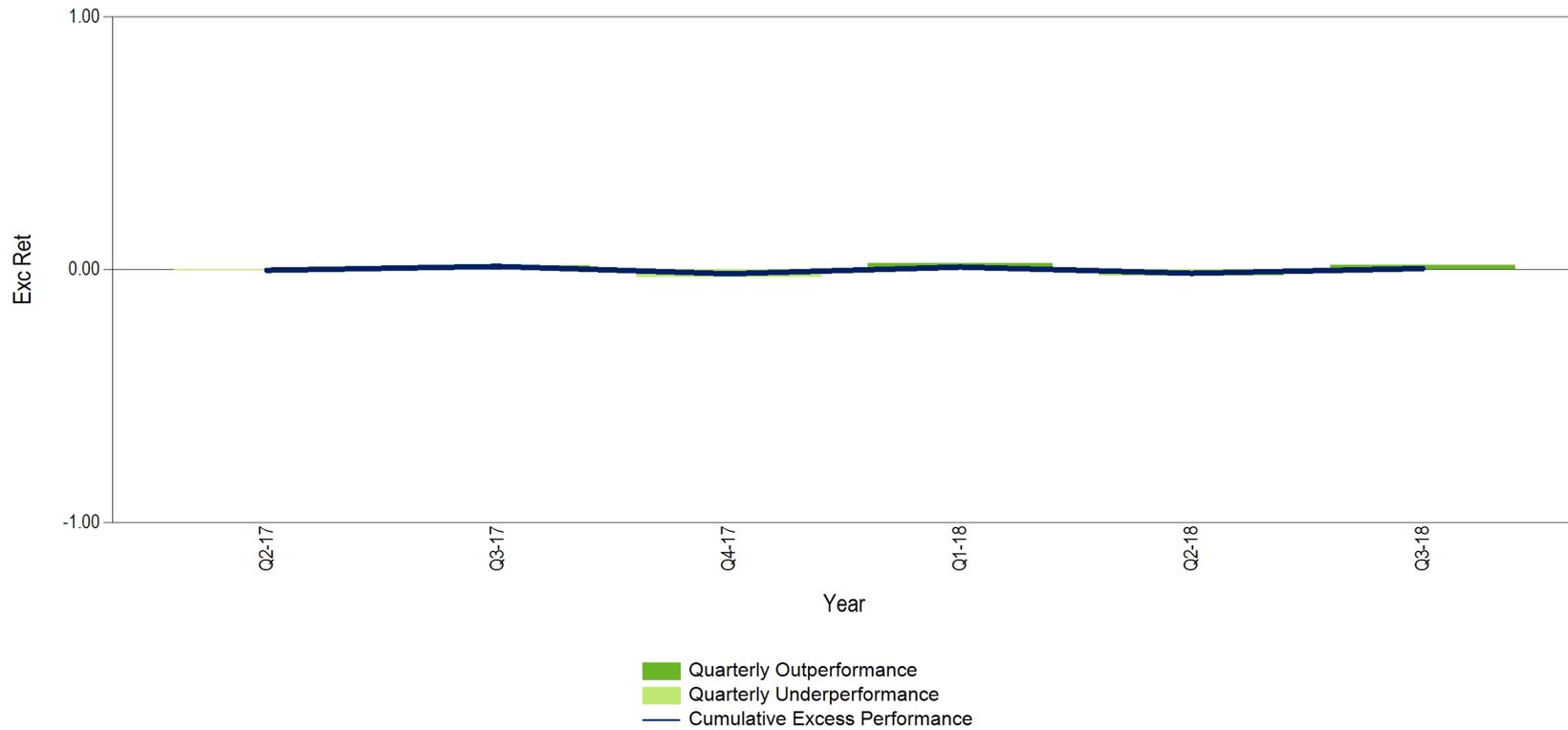


- Rhumbline Advisors Russell 1000 Growth
- ▲ Russell 1000 Growth
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



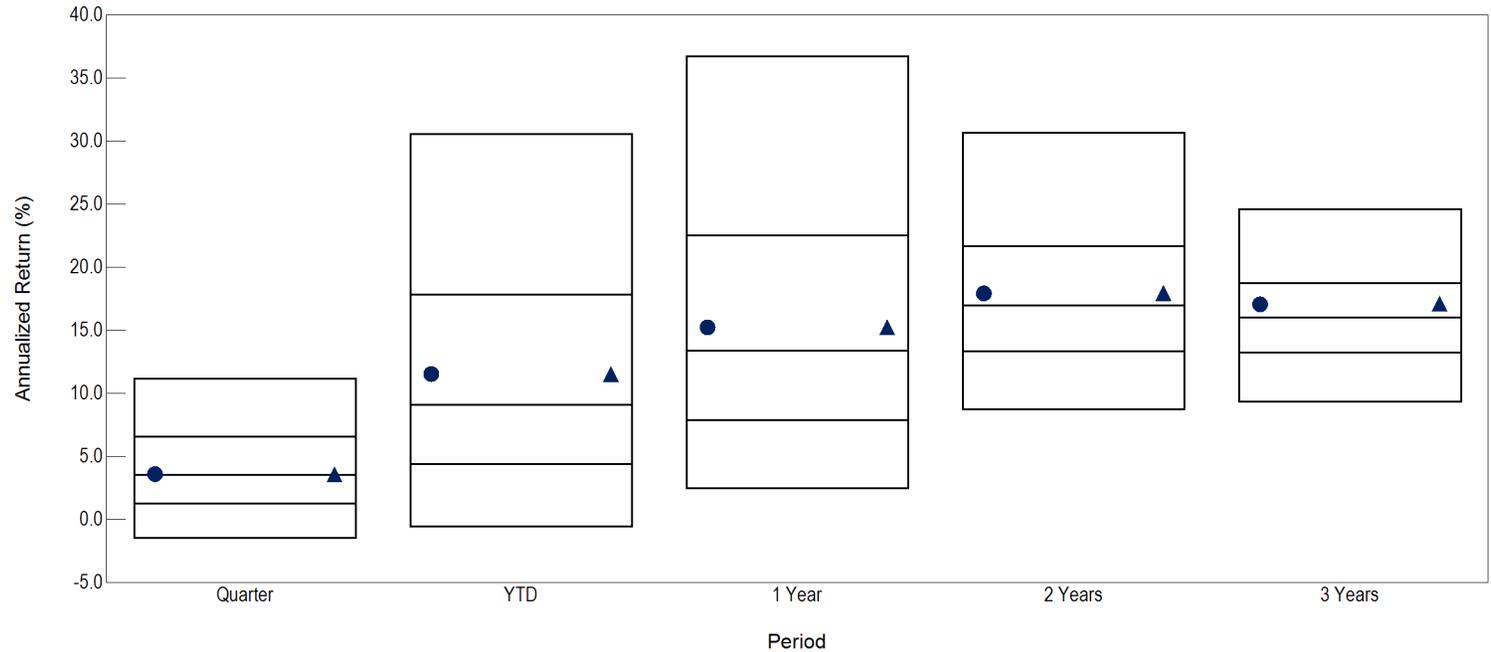
# RHUMBLINE ADVISORS RUSSELL 2000

Quarterly and Cumulative Excess Performance



# RHUMBLINE ADVISORS RUSSELL 2000

Rhumbline Advisors Russell 2000 vs. eV US Small Cap Equity Net

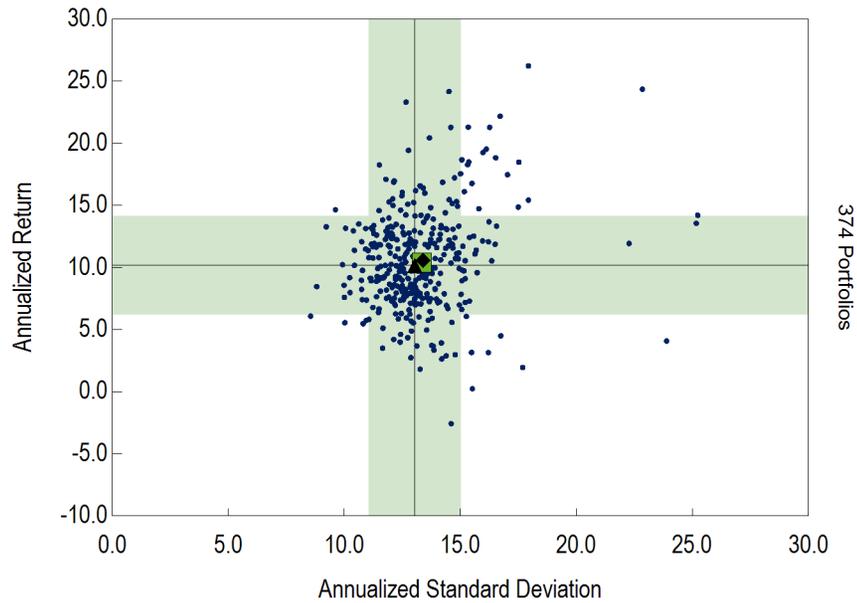


	Return (Rank)									
5th Percentile	11.16		30.55		36.74		30.65		24.62	
25th Percentile	6.61		17.86		22.56		21.70		18.80	
Median	3.57		9.17		13.41		17.03		16.08	
75th Percentile	1.33		4.47		7.93		13.37		13.27	
95th Percentile	-1.41		-0.51		2.54		8.76		9.39	
# of Portfolios	395		395		394		390		380	
● Rhumbline Advisors Russell 2000	3.59	(50)	11.54	(42)	15.23	(44)	17.92	(43)	17.06	(41)
▲ Russell 2000	3.58	(50)	11.51	(42)	15.24	(44)	17.96	(43)	17.12	(41)

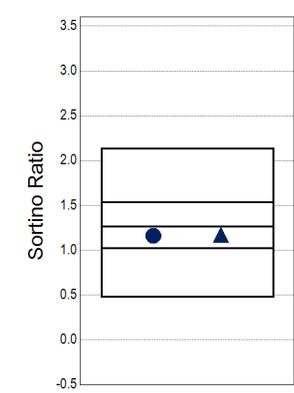
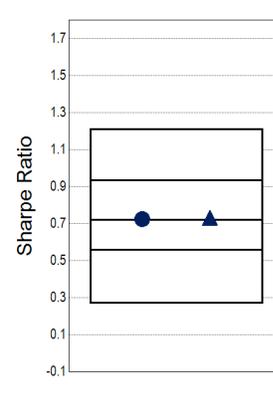
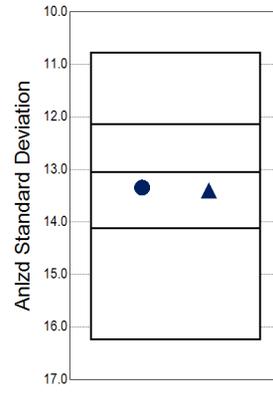
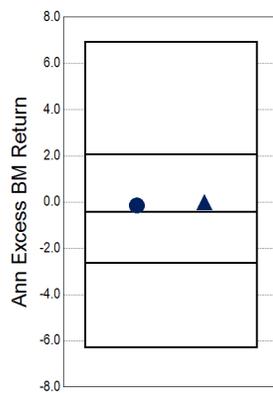
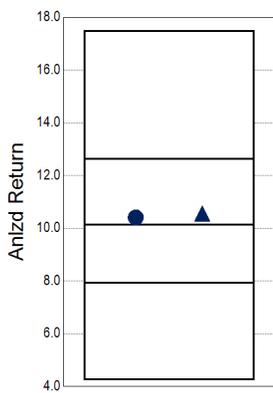
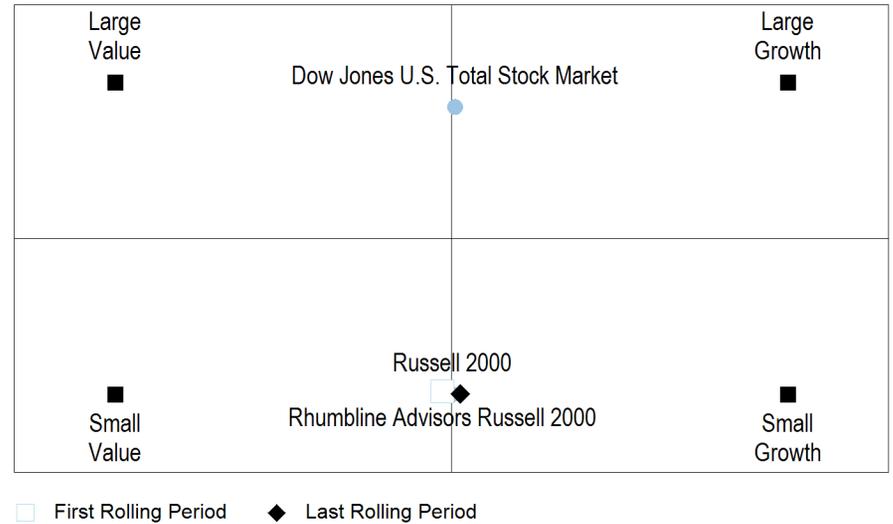


# RHUMBLINE ADVISORS RUSSELL 2000

Since Inception Risk Return



Since Inception Style Map

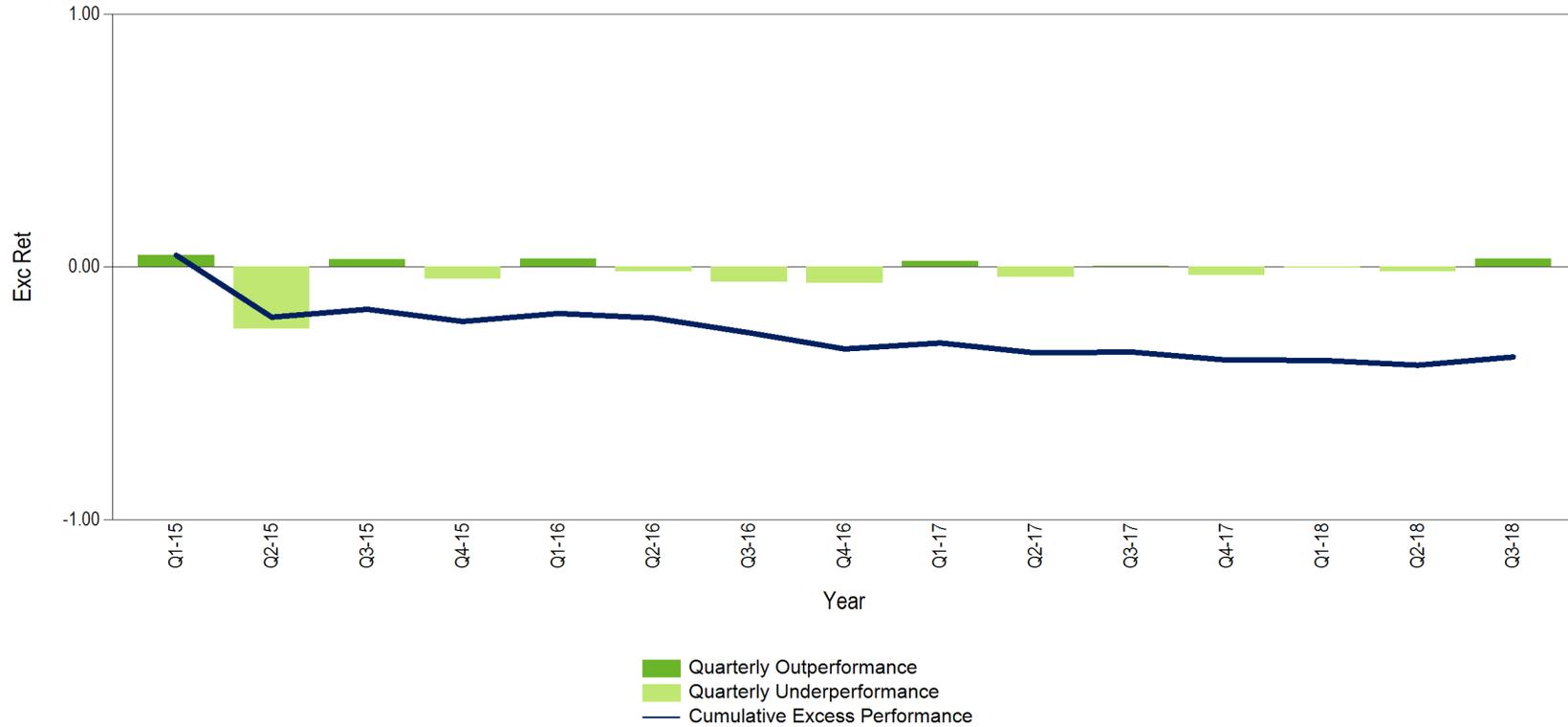


- Rhumbline Advisors Russell 2000
- ▲ Russell 2000
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



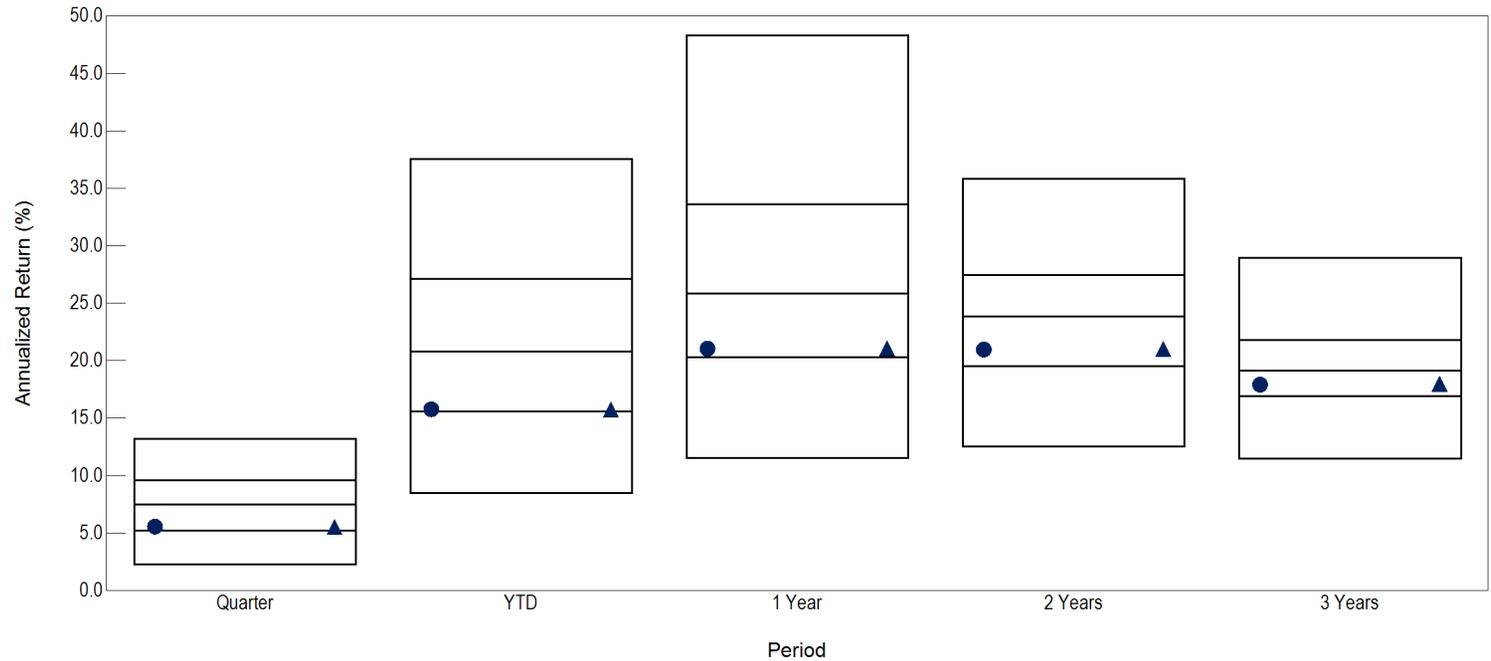
# RHUMBLINE ADVISORS RUSSELL 2000 GROWTH

Quarterly and Cumulative Excess Performance



# RHUMBLINE ADVISORS RUSSELL 2000 GROWTH

Rhumbline Advisors Russell 2000 Growth vs. eV US Small Cap Growth Equity Net

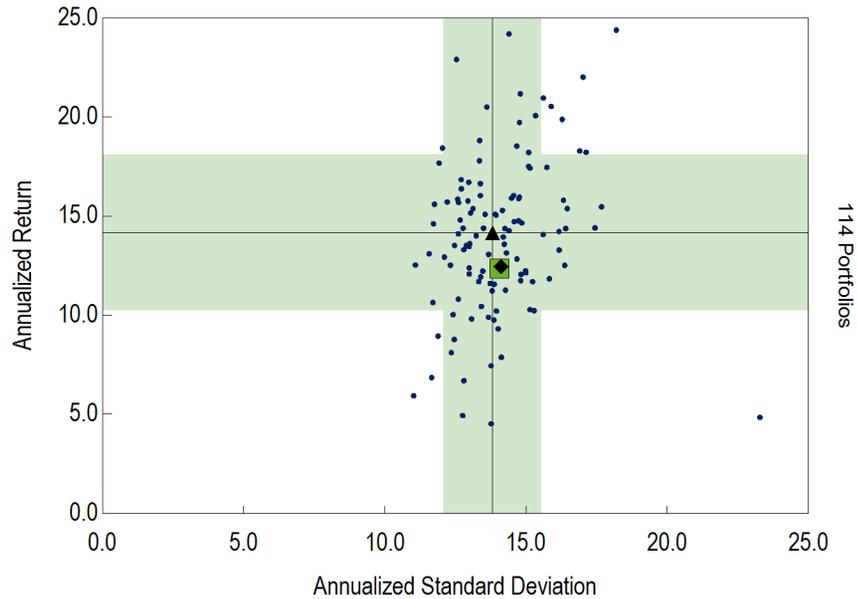


	Return (Rank)									
5th Percentile	13.20		37.54		48.33		35.82		28.93	
25th Percentile	9.66		27.17		33.65		27.52		21.86	
Median	7.55		20.83		25.90		23.89		19.20	
75th Percentile	5.25		15.66		20.33		19.58		16.97	
95th Percentile	2.31		8.52		11.60		12.60		11.51	
# of Portfolios	125		125		125		123		119	
● Rhumbline Advisors Russell 2000 Growth	5.56	(74)	15.77	(74)	21.04	(73)	20.97	(70)	17.91	(66)
▲ Russell 2000 Growth	5.52	(75)	15.76	(74)	21.06	(73)	21.02	(70)	17.98	(65)

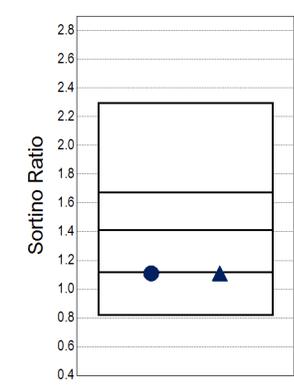
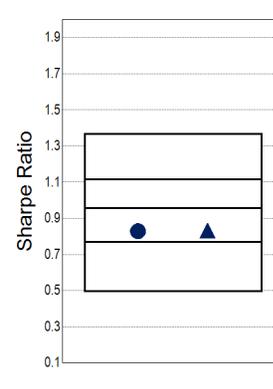
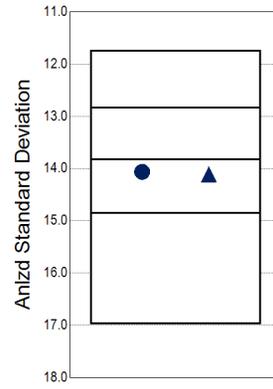
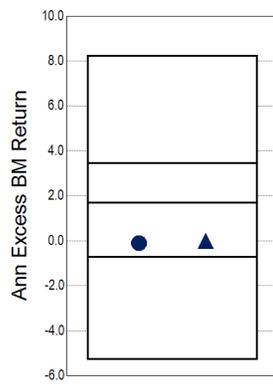
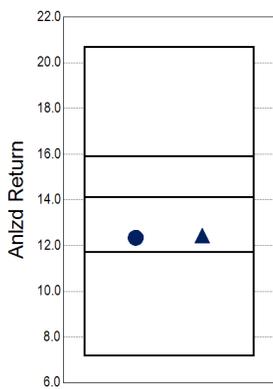
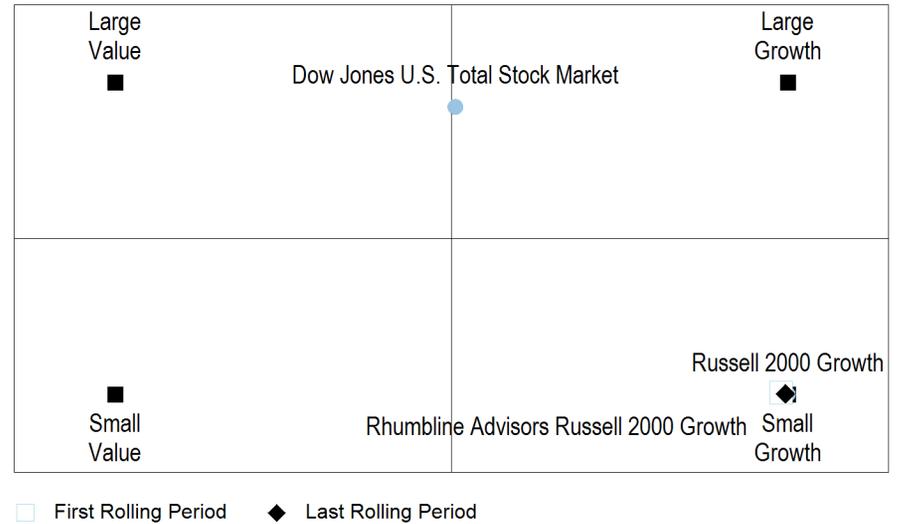


# RHUMBLINE ADVISORS RUSSELL 2000 GROWTH

Since Inception Risk Return



Since Inception Style Map

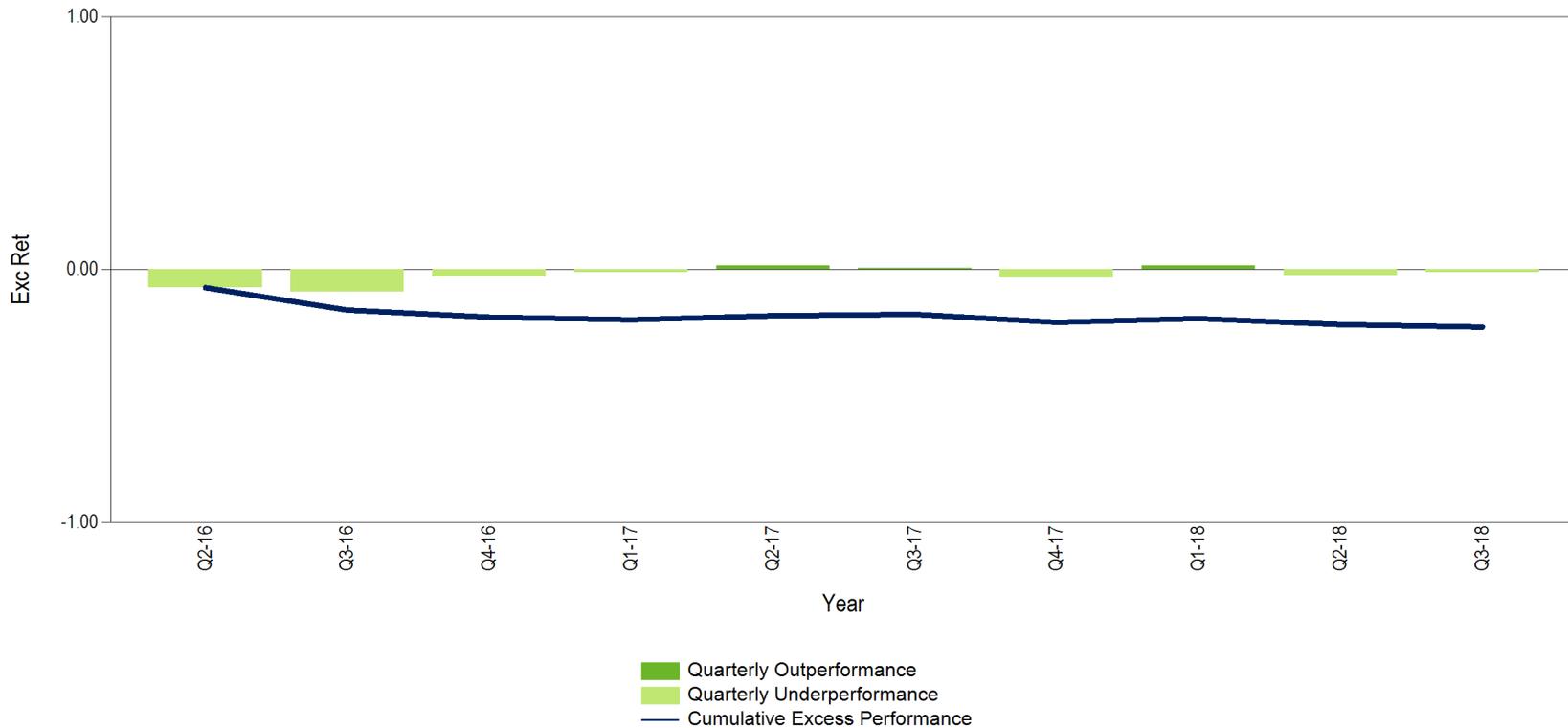


- Rhumbline Advisors Russell 2000 Growth
- ▲ Russell 2000 Growth
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



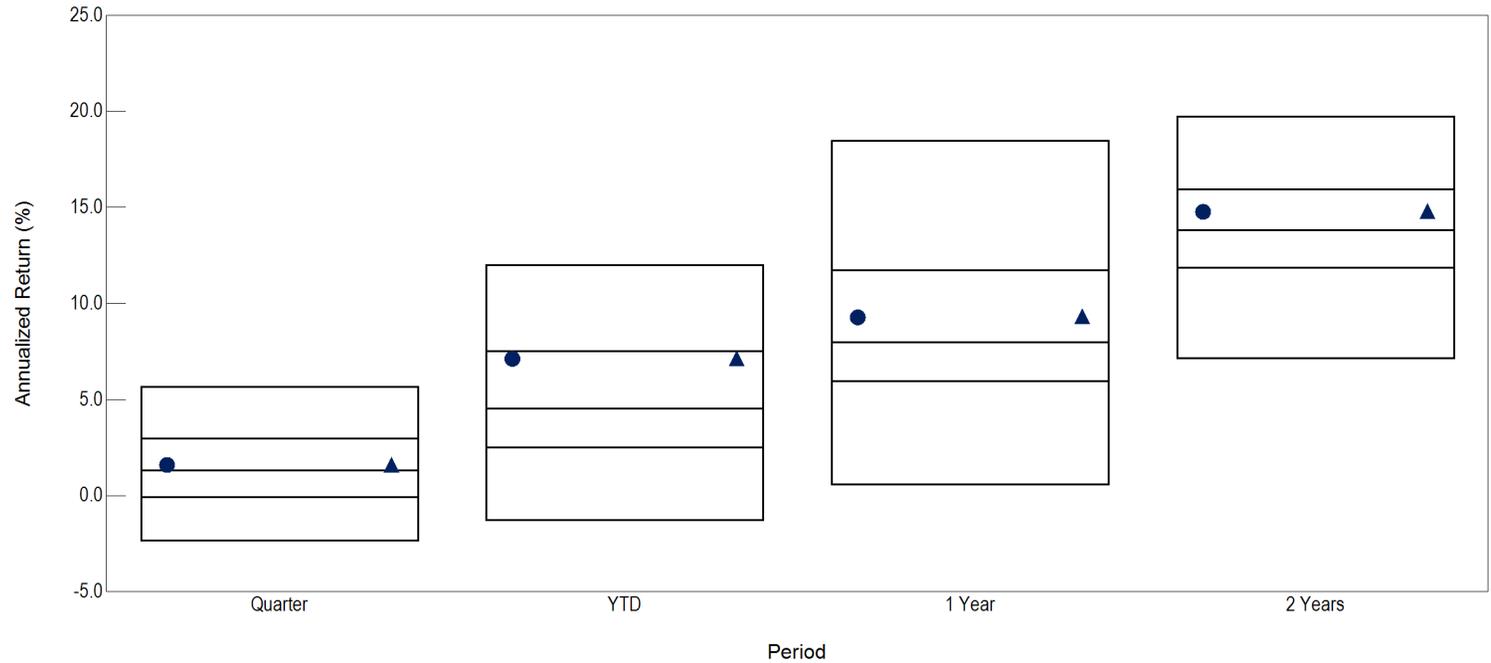
# RHUMBLINE ADVISORS RUSSELL 2000 VALUE

Quarterly and Cumulative Excess Performance



# RHUMBLINE ADVISORS RUSSELL 2000 VALUE

Rhumbline Advisors Russell 2000 Value vs. eV US Small Cap Value Equity Net

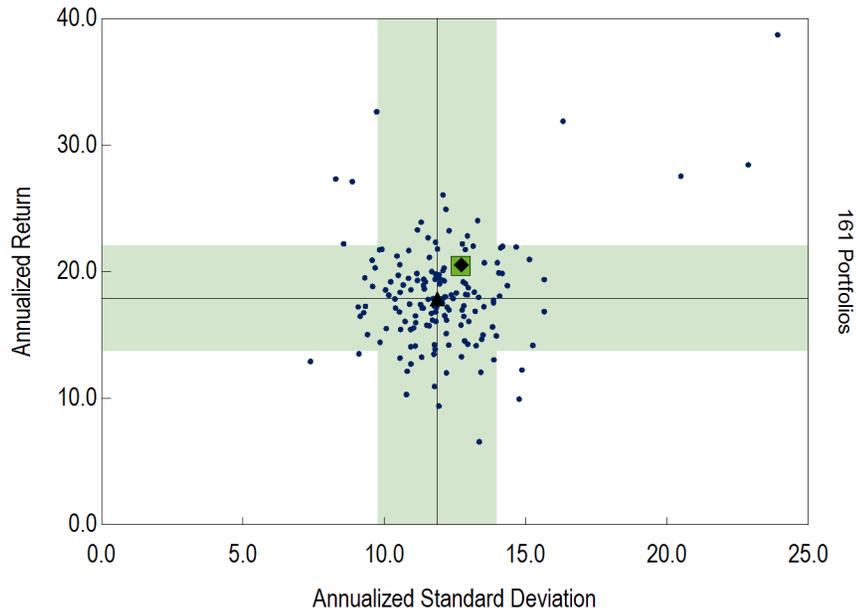


	Return (Rank)			
5th Percentile	5.64	12.01	18.47	19.72
25th Percentile	2.99	7.55	11.76	15.96
Median	1.35	4.55	8.00	13.83
75th Percentile	-0.05	2.53	6.00	11.91
95th Percentile	-2.31	-1.25	0.63	7.18
# of Portfolios	165	165	165	165
● Rhumbline Advisors Russell 2000 Value	1.59 (46)	7.12 (31)	9.28 (40)	14.77 (37)
▲ Russell 2000 Value	1.60 (45)	7.14 (31)	9.33 (40)	14.80 (37)

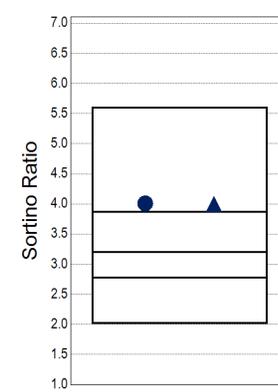
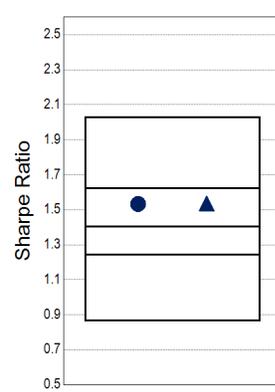
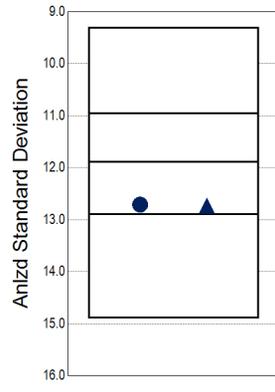
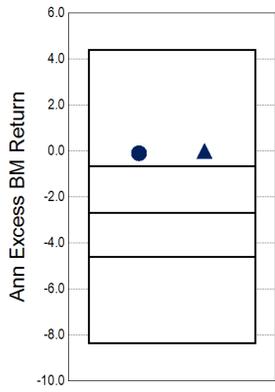
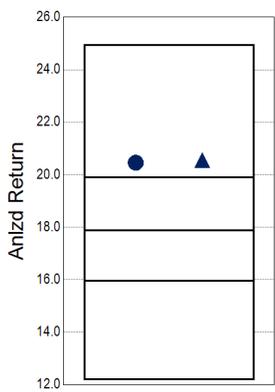
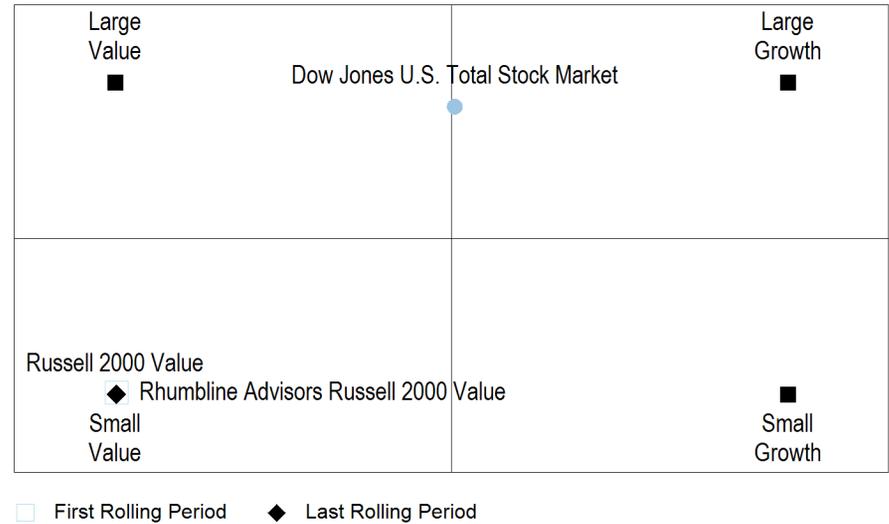


# RHUMBLINE ADVISORS RUSSELL 2000 VALUE

Since Inception Risk Return



Since Inception Style Map



- Rhumbline Advisors Russell 2000 Value
- ▲ Russell 2000 Value
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# **NON-U.S. EQUITY MANAGER PERFORMANCE**

NEPC, LLC

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# AQR CAPITAL

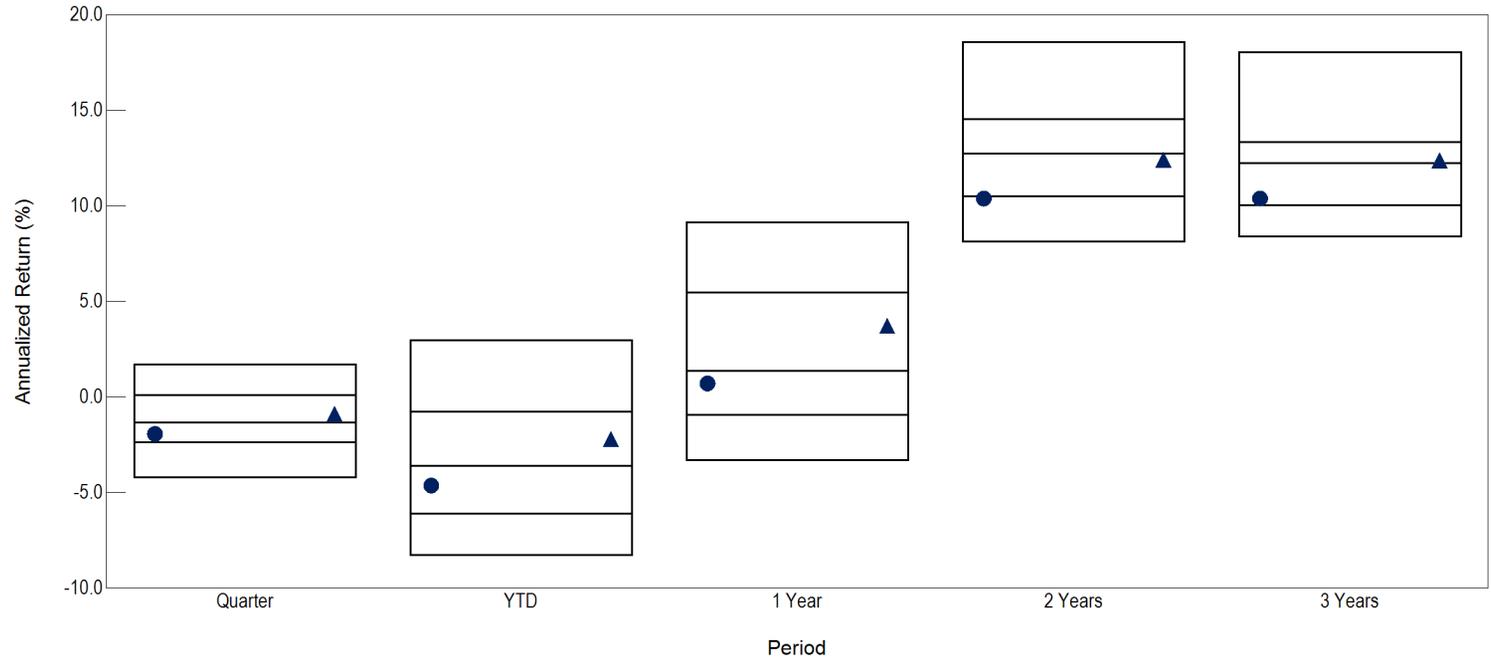
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## AQR CAPITAL

AQR Capital vs. eV EAFE Small Cap Equity Net



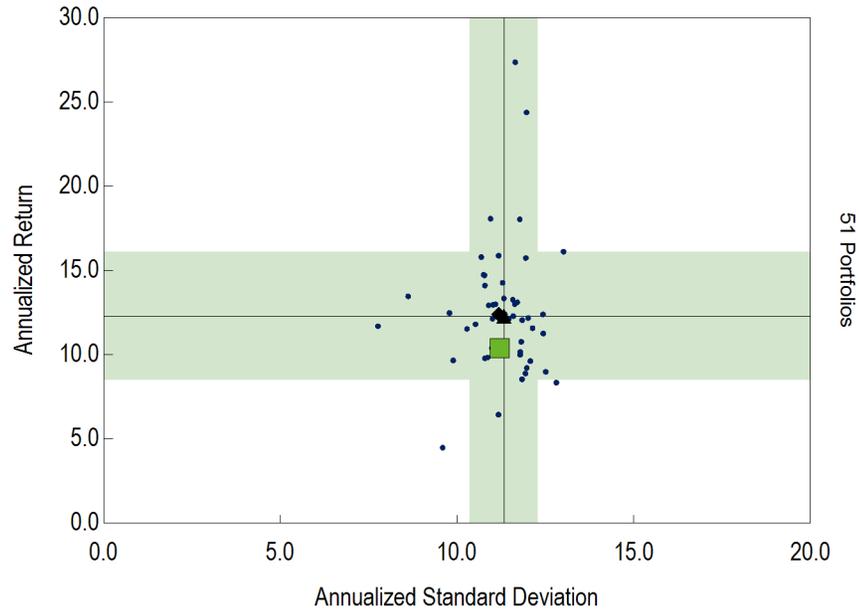
	Return (Rank)									
5th Percentile	1.72		2.98		9.14		18.59		18.05	
25th Percentile	0.13		-0.73		5.51		14.56		13.39	
Median	-1.30		-3.56		1.41		12.77		12.28	
75th Percentile	-2.32		-6.07		-0.88		10.54		10.06	
95th Percentile	-4.17		-8.24		-3.25		8.19		8.43	
# of Portfolios	54		54		54		54		51	
● AQR Capital	-1.93	(67)	-4.62	(57)	0.71	(61)	10.39	(78)	10.39	(72)
▲ MSCI EAFE Small Cap	-0.88	(48)	-2.19	(33)	3.73	(39)	12.42	(59)	12.39	(45)



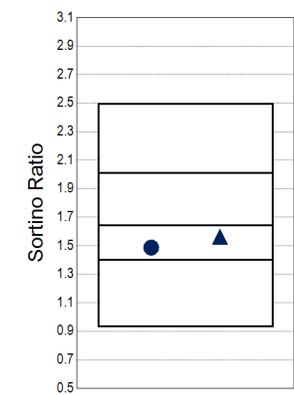
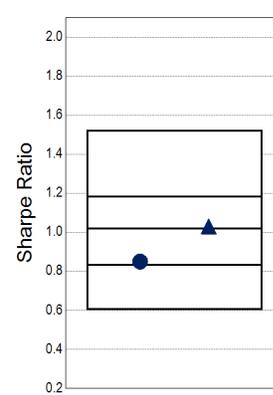
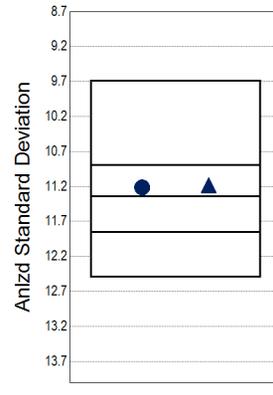
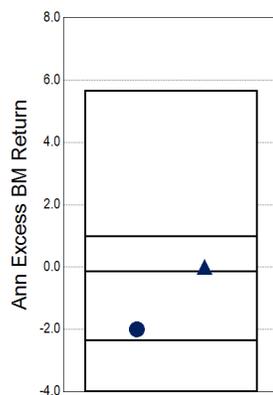
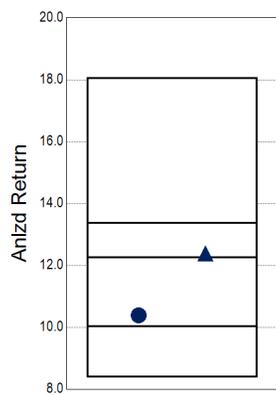
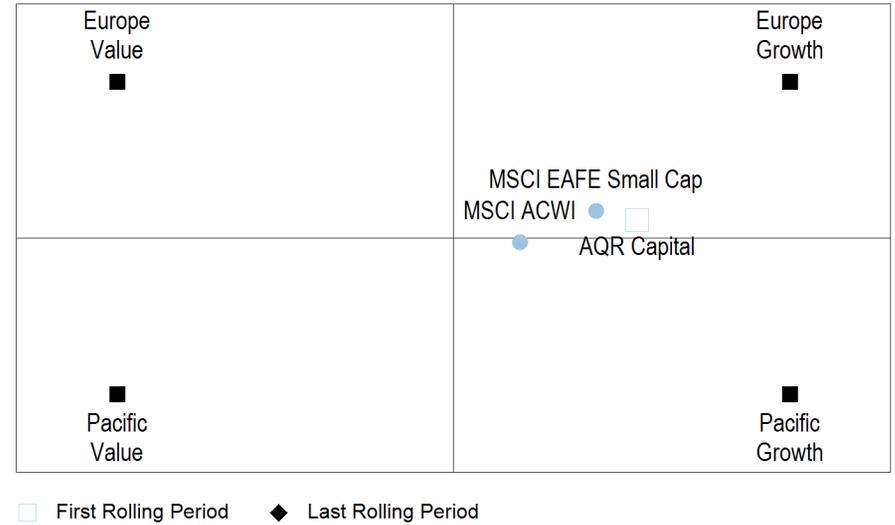
# Los Angeles City Employees' Retirement System

## AQR CAPITAL

3 Year Risk Return



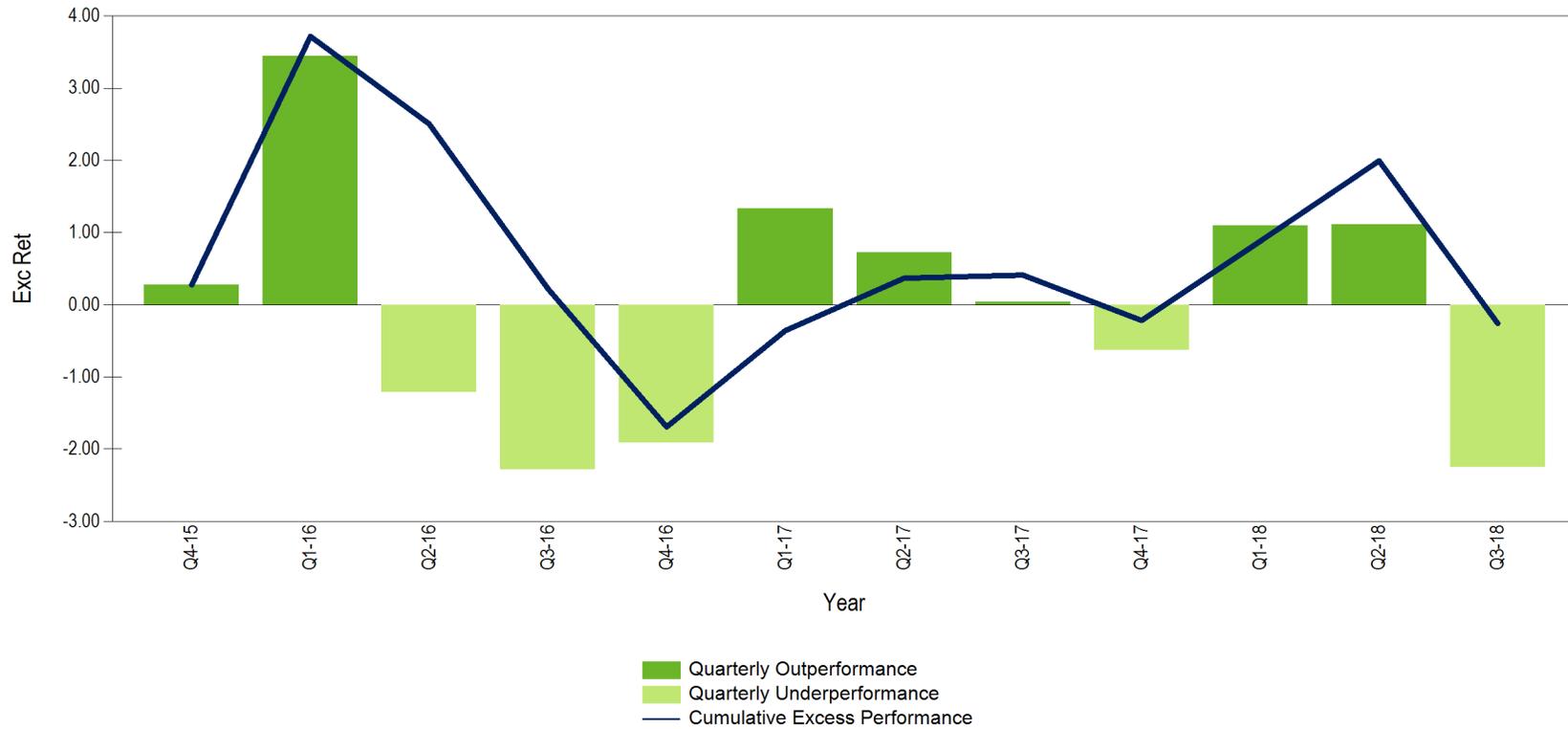
3 Year Style Map



- AQR Capital
- ▲ MSCI EAFE Small Cap
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



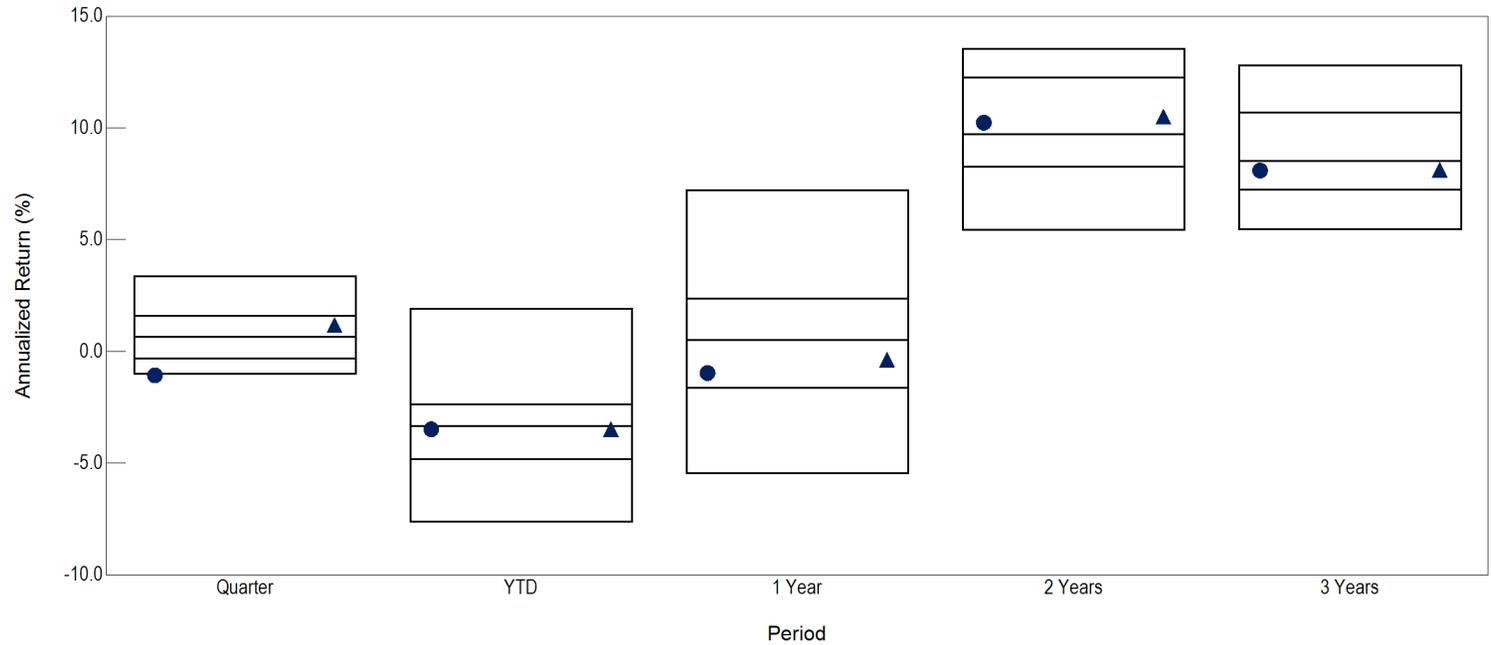
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## BARROW HANLEY

Barrow Hanley vs. eV EAFE Value Equity Net



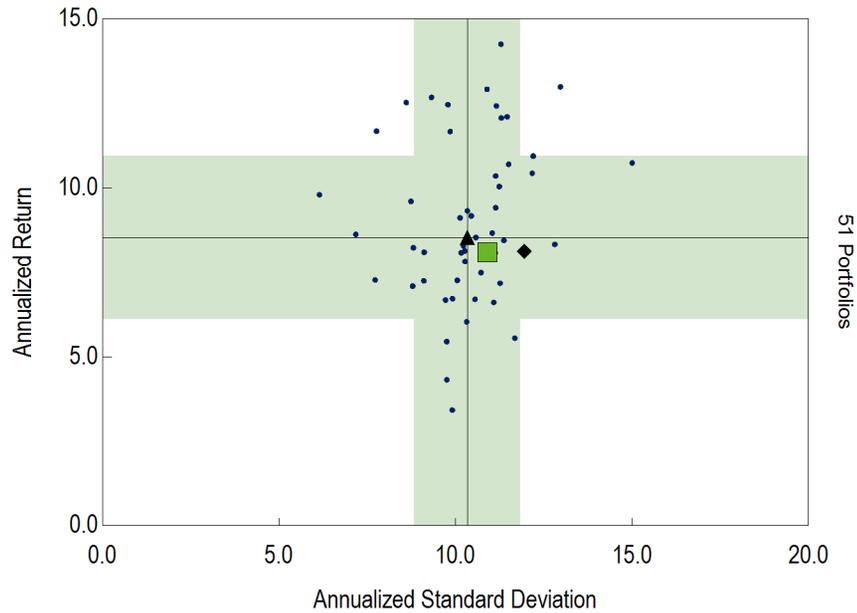
	Return (Rank)									
	Quarter		YTD		1 Year		2 Years		3 Years	
5th Percentile	3.37		1.90		7.21		13.53		12.80	
25th Percentile	1.63		-2.33		2.38		12.29		10.72	
Median	0.67		-3.33		0.54		9.73		8.53	
75th Percentile	-0.30		-4.81		-1.61		8.30		7.27	
95th Percentile	-0.97		-7.60		-5.43		5.47		5.50	
# of Portfolios	53		53		53		53		51	
● Barrow Hanley	-1.07	(97)	-3.49	(56)	-0.97	(69)	10.23	(45)	8.09	(65)
▲ MSCI EAFE Value	1.18	(39)	-3.49	(56)	-0.36	(60)	10.50	(39)	8.12	(63)



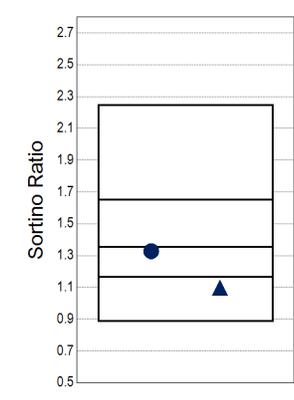
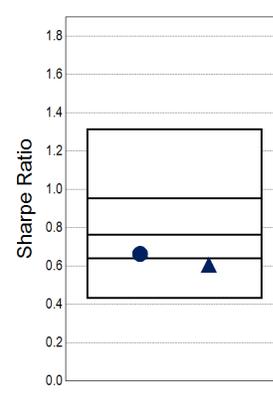
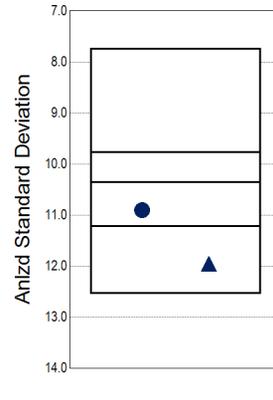
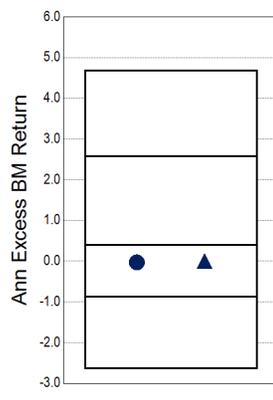
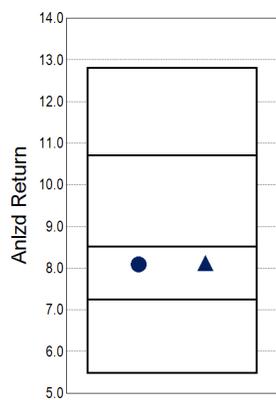
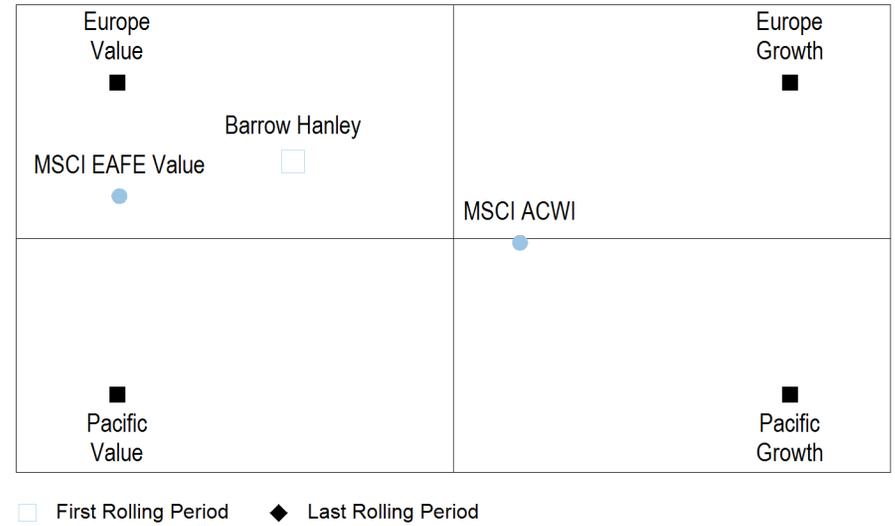
# Los Angeles City Employees' Retirement System

## BARROW HANLEY

3 Year Risk Return



3 Year Style Map

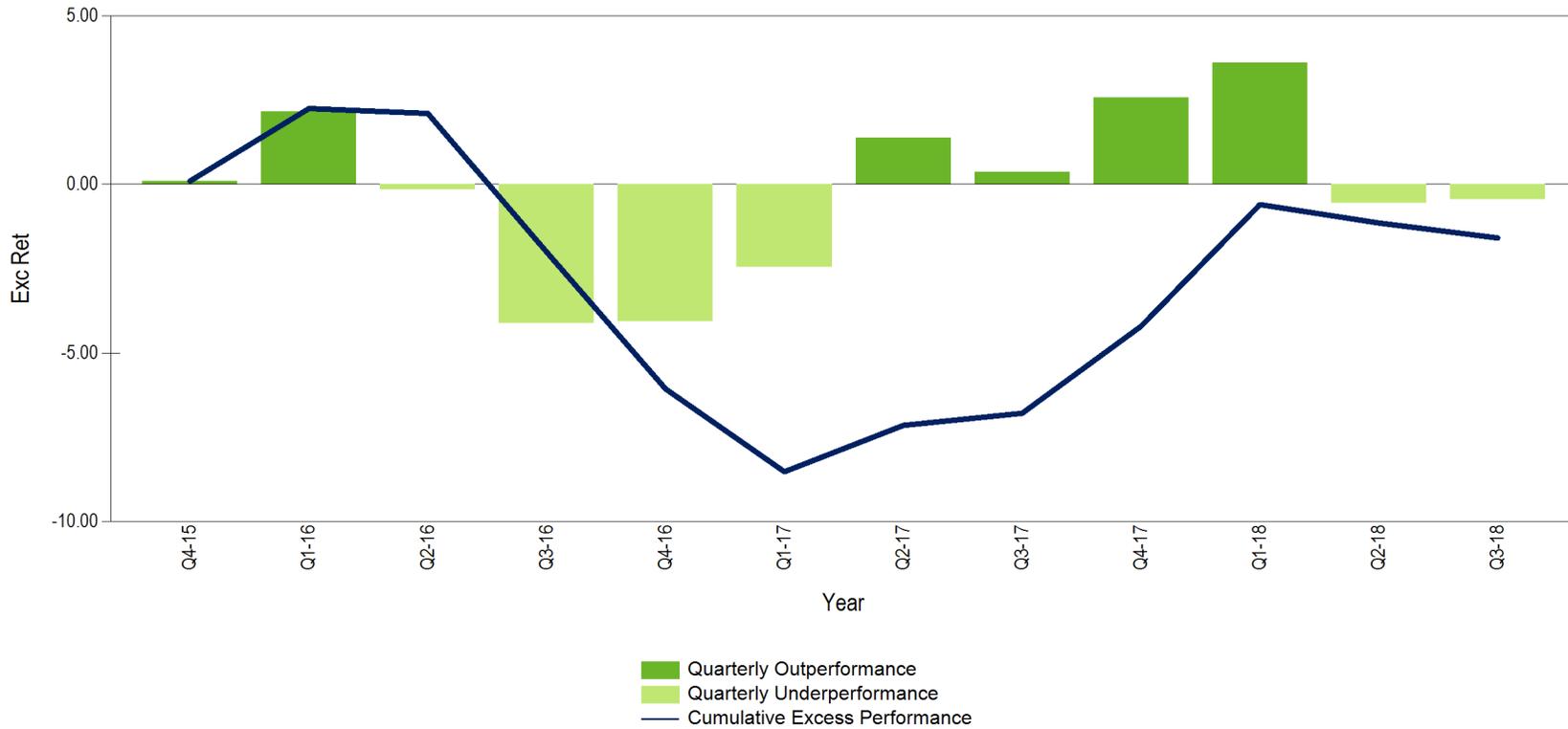


- Barrow Hanley
- ▲ MSCI EAFE Value
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# LAZARD ASSET MANAGEMENT

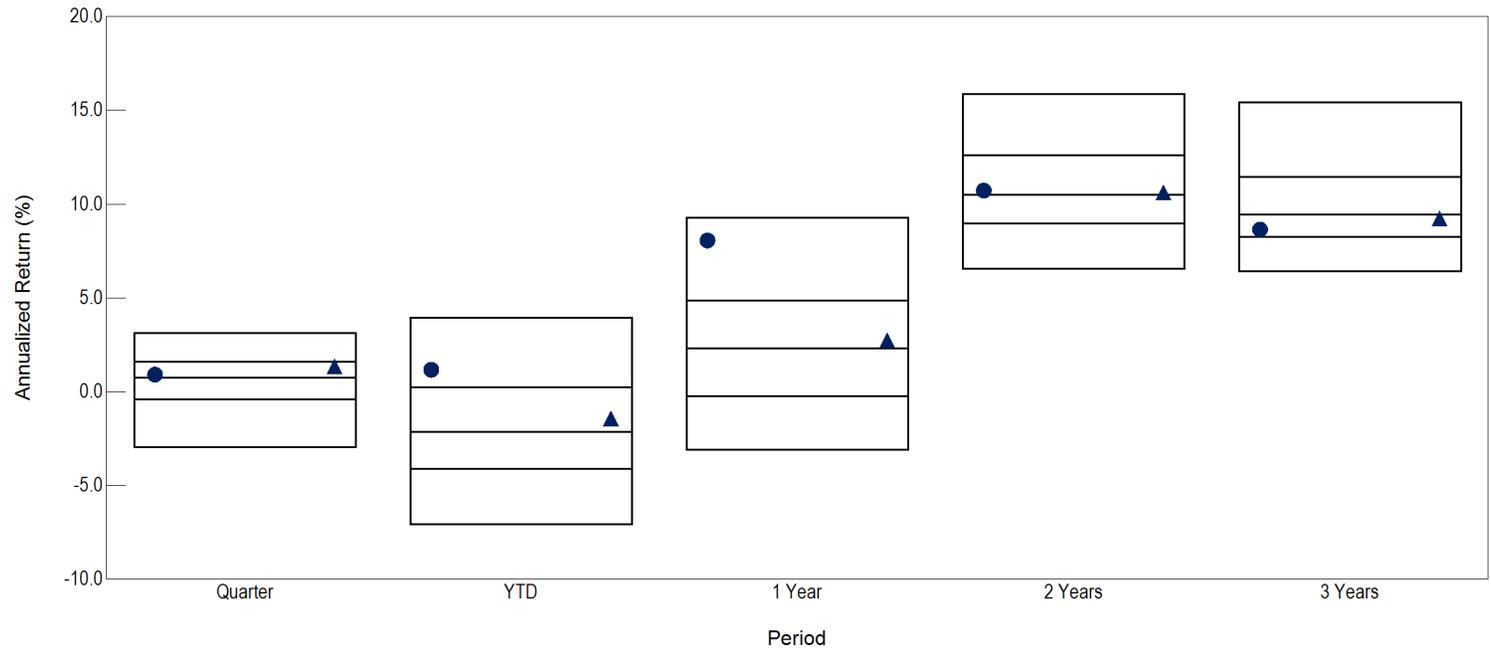
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## LAZARD ASSET MANAGEMENT

Lazard Asset Management vs. eV All EAFE Equity Net

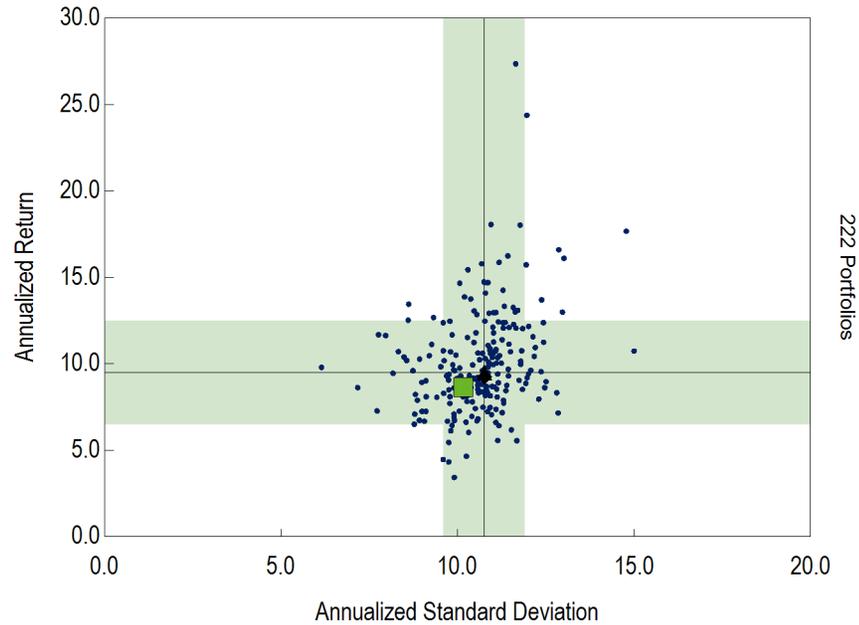


	Return (Rank)									
5th Percentile	3.13		3.95		9.27		15.87		15.41	
25th Percentile	1.64		0.29		4.90		12.65		11.49	
Median	0.77		-2.11		2.36		10.54		9.49	
75th Percentile	-0.38		-4.06		-0.21		9.01		8.28	
95th Percentile	-2.91		-7.05		-3.04		6.59		6.44	
# of Portfolios	234		234		234		232		222	
● Lazard Asset Management	0.91	(46)	1.17	(19)	8.06	(10)	10.72	(48)	8.65	(67)
▲ MSCI EAFE	1.35	(34)	-1.43	(43)	2.74	(46)	10.62	(49)	9.23	(55)

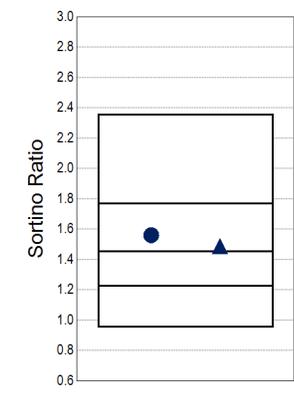
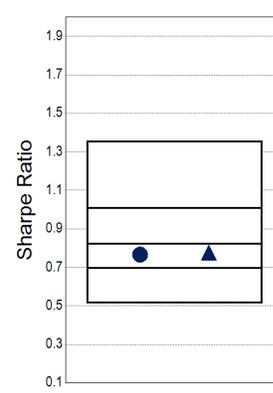
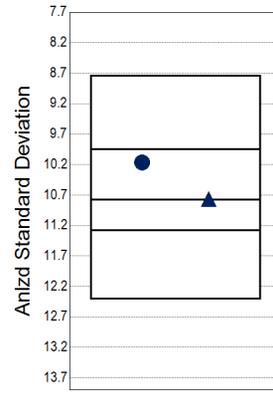
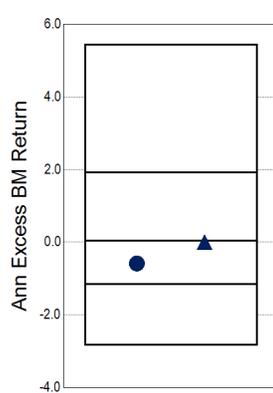
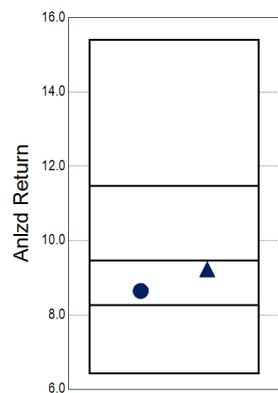
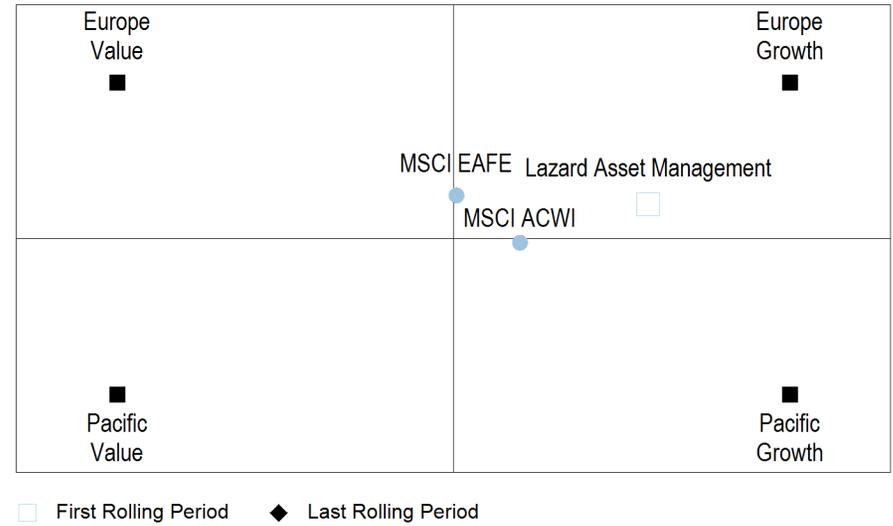


# LAZARD ASSET MANAGEMENT

3 Year Risk Return



3 Year Style Map

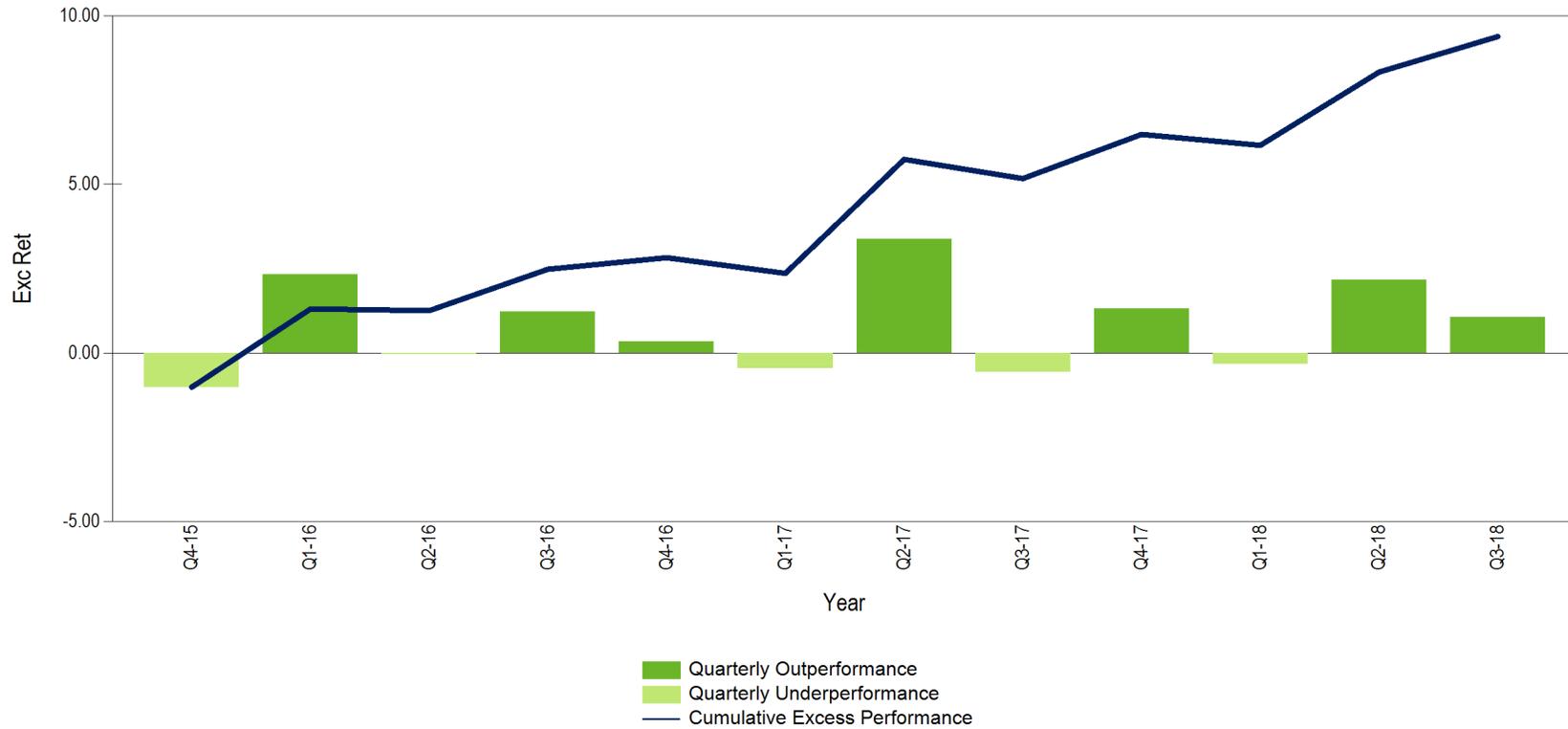


- Lazard Asset Management
- ▲ MSCI EAFE
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



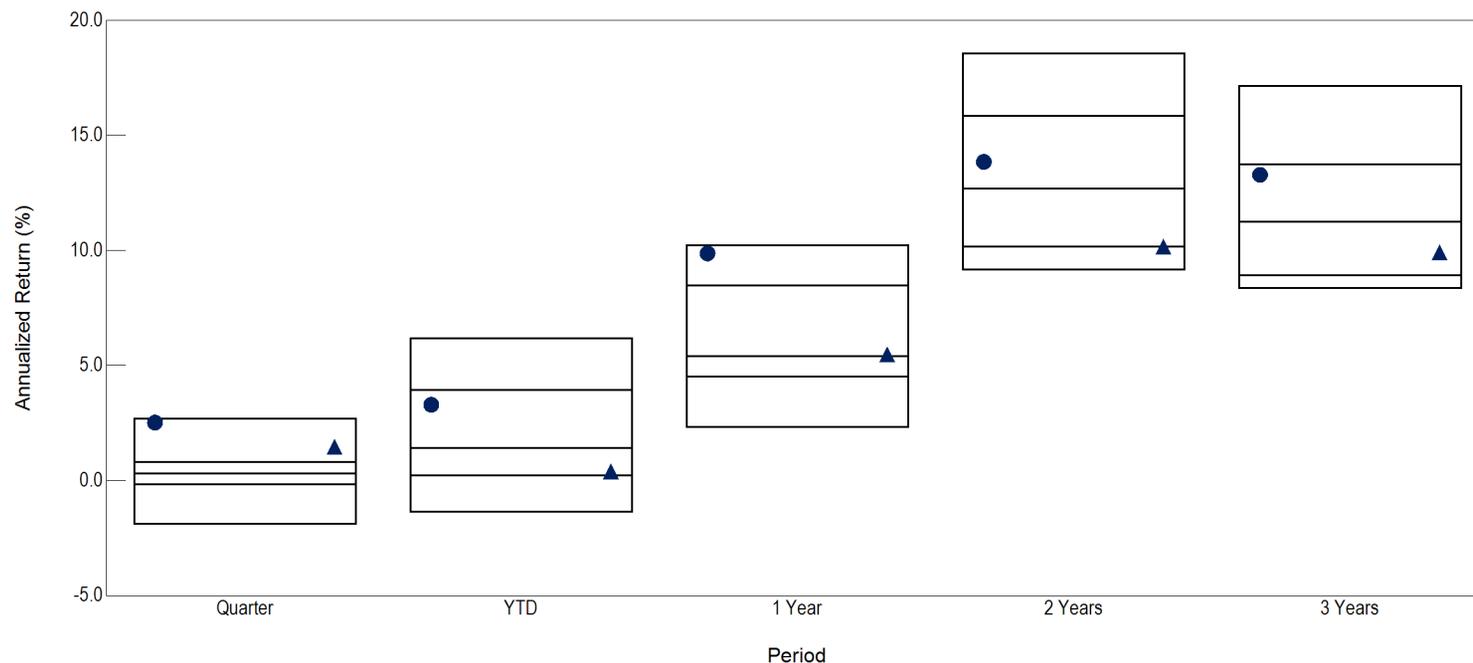
# MFS INSTITUTIONAL ADVISORS

Quarterly and Cumulative Excess Performance



# MFS INSTITUTIONAL ADVISORS

MFS Institutional Advisors vs. eV EAFE All Cap Growth Net

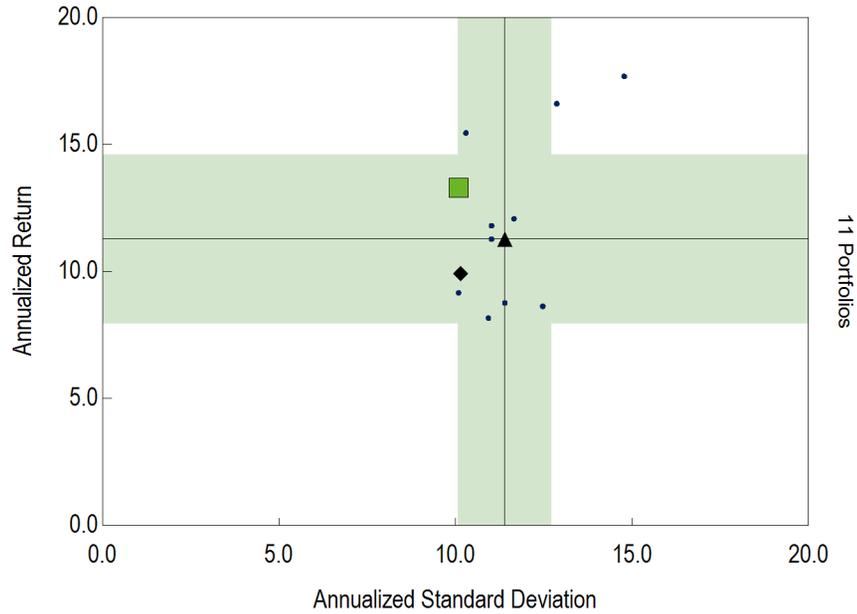


	Return (Rank)									
5th Percentile	2.69		6.17		10.22		18.56		17.14	
25th Percentile	0.84		3.95		8.51		15.87		13.75	
Median	0.35		1.45		5.41		12.70		11.26	
75th Percentile	-0.15		0.25		4.55		10.19		8.95	
95th Percentile	-1.85		-1.34		2.36		9.19		8.39	
# of Portfolios	12		12		12		12		11	
● MFS Institutional Advisors	2.51	(10)	3.29	(36)	9.86	(8)	13.84	(44)	13.28	(27)
▲ MSCI World ex USA Growth NR USD	1.46	(15)	0.39	(74)	5.47	(49)	10.15	(77)	9.91	(67)

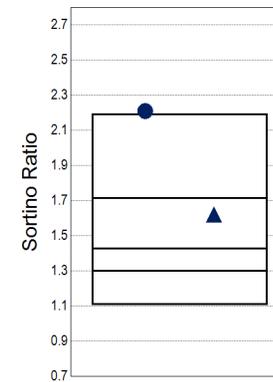
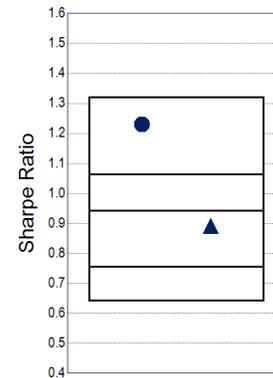
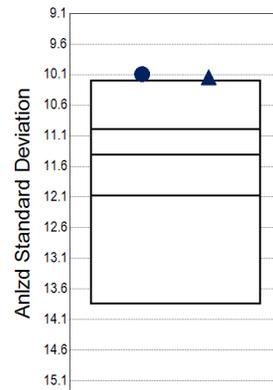
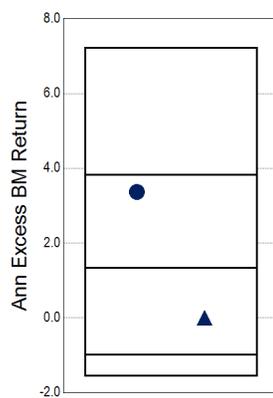
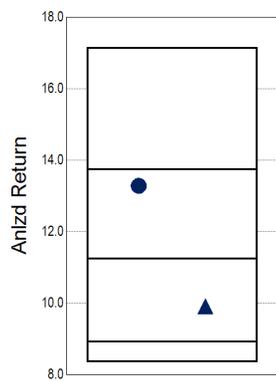
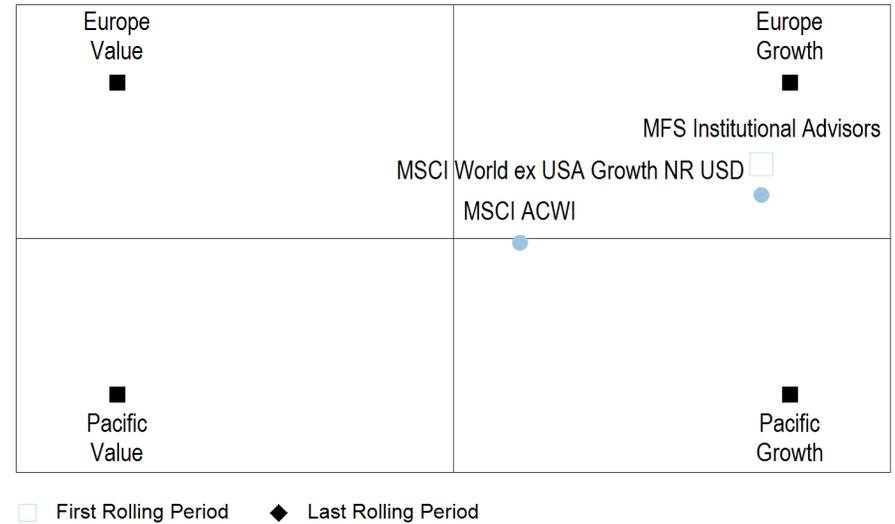


# MFS INSTITUTIONAL ADVISORS

3 Year Risk Return



3 Year Style Map



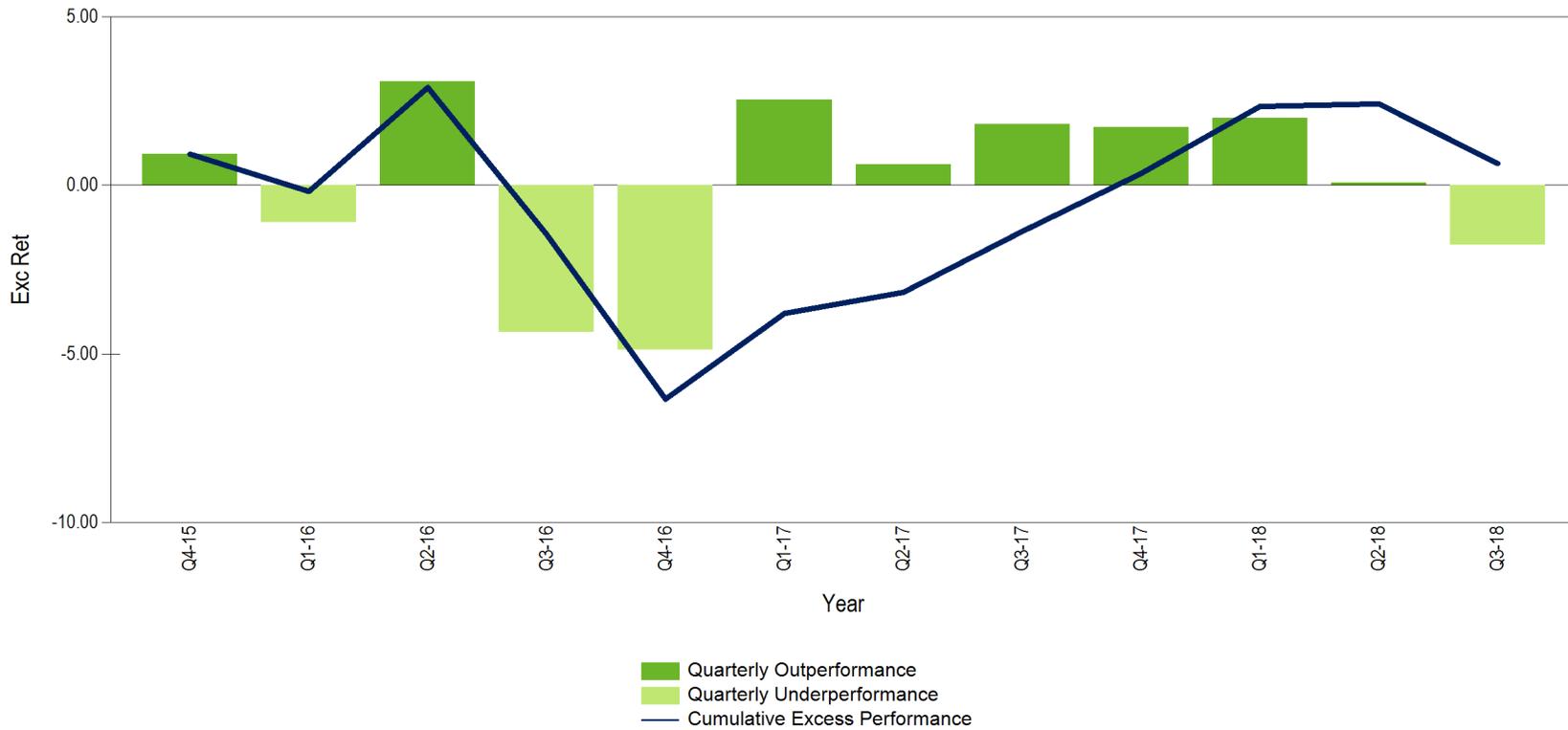
- MFS Institutional Advisors
- ▲ MSCI World ex USA Growth NR USD
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# Los Angeles City Employees' Retirement System

## OBERWEIS ASSET MGMT

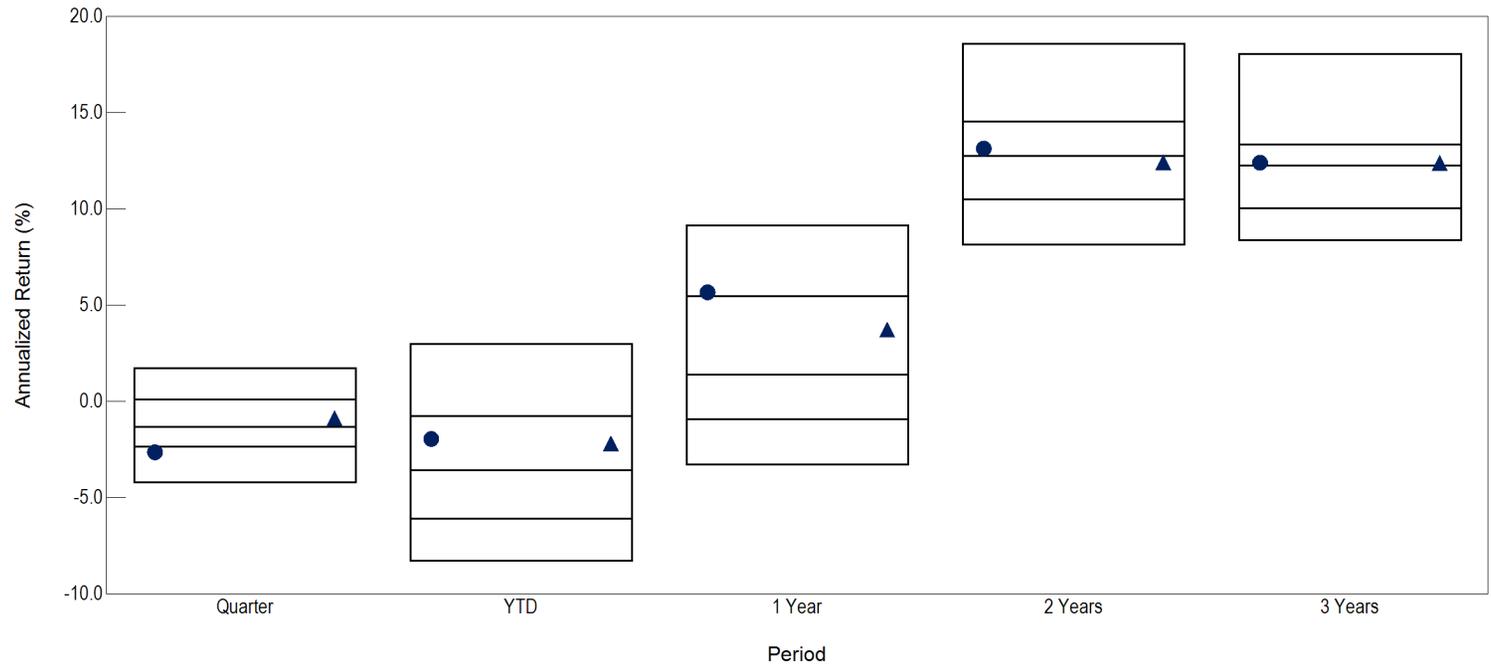
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## OBERWEIS ASSET MGMT

Oberweis Asset Mgmt vs. eV EAFE Small Cap Equity Net



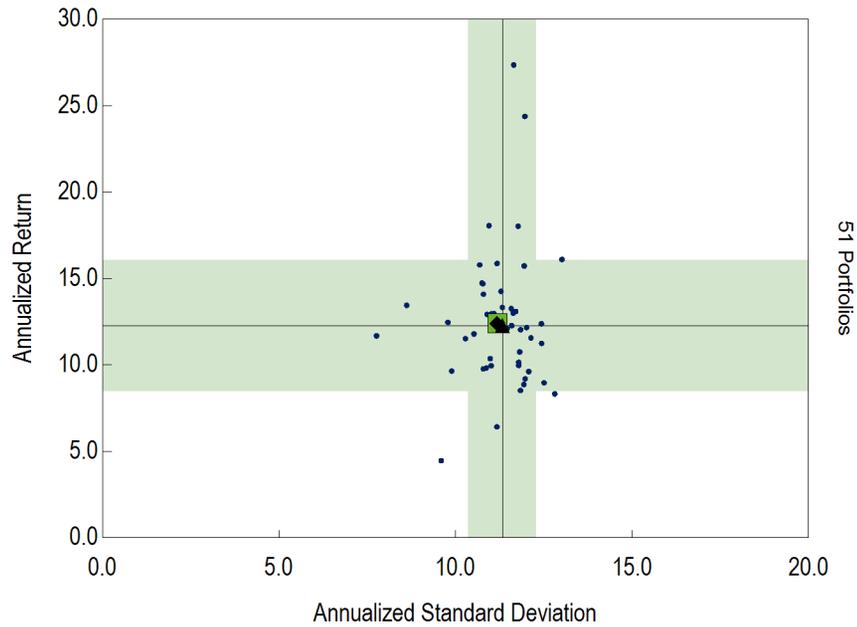
	Return (Rank)									
5th Percentile	1.72		2.98		9.14		18.59		18.05	
25th Percentile	0.13		-0.73		5.51		14.56		13.39	
Median	-1.30		-3.56		1.41		12.77		12.28	
75th Percentile	-2.32		-6.07		-0.88		10.54		10.06	
95th Percentile	-4.17		-8.24		-3.25		8.19		8.43	
# of Portfolios	54		54		54		54		51	
● Oberweis Asset Mgmt	-2.65	(78)	-1.95	(30)	5.67	(24)	13.13	(43)	12.40	(42)
▲ MSCI EAFE Small Cap	-0.88	(48)	-2.19	(33)	3.73	(39)	12.42	(59)	12.39	(45)



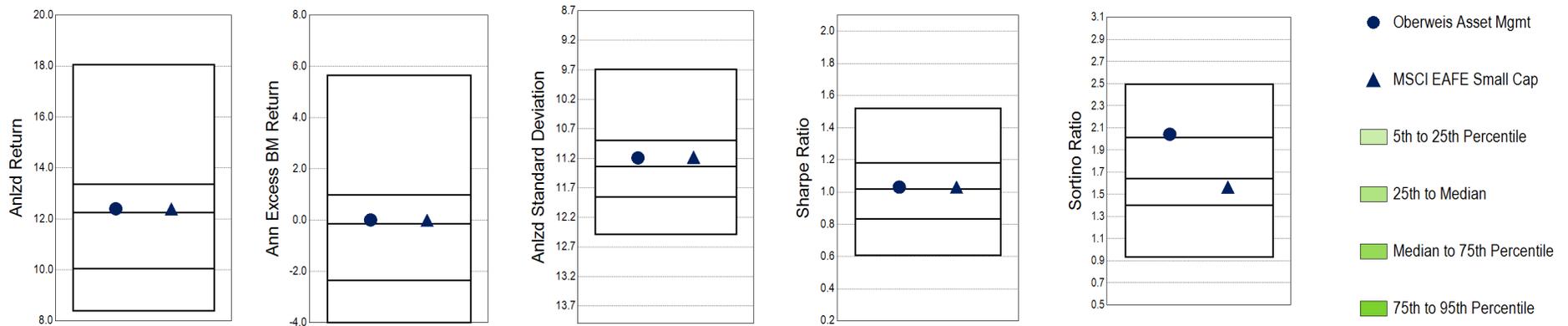
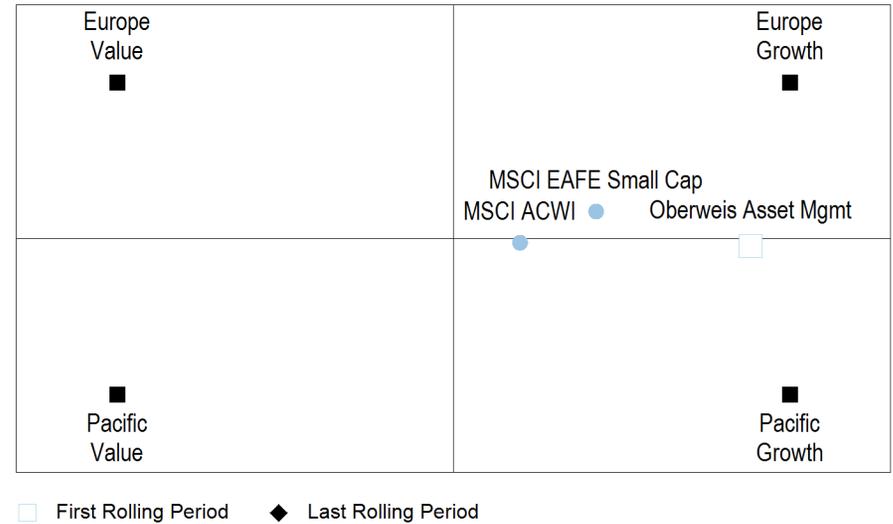
# Los Angeles City Employees' Retirement System

## OBERWEIS ASSET MGMT

3 Year Risk Return



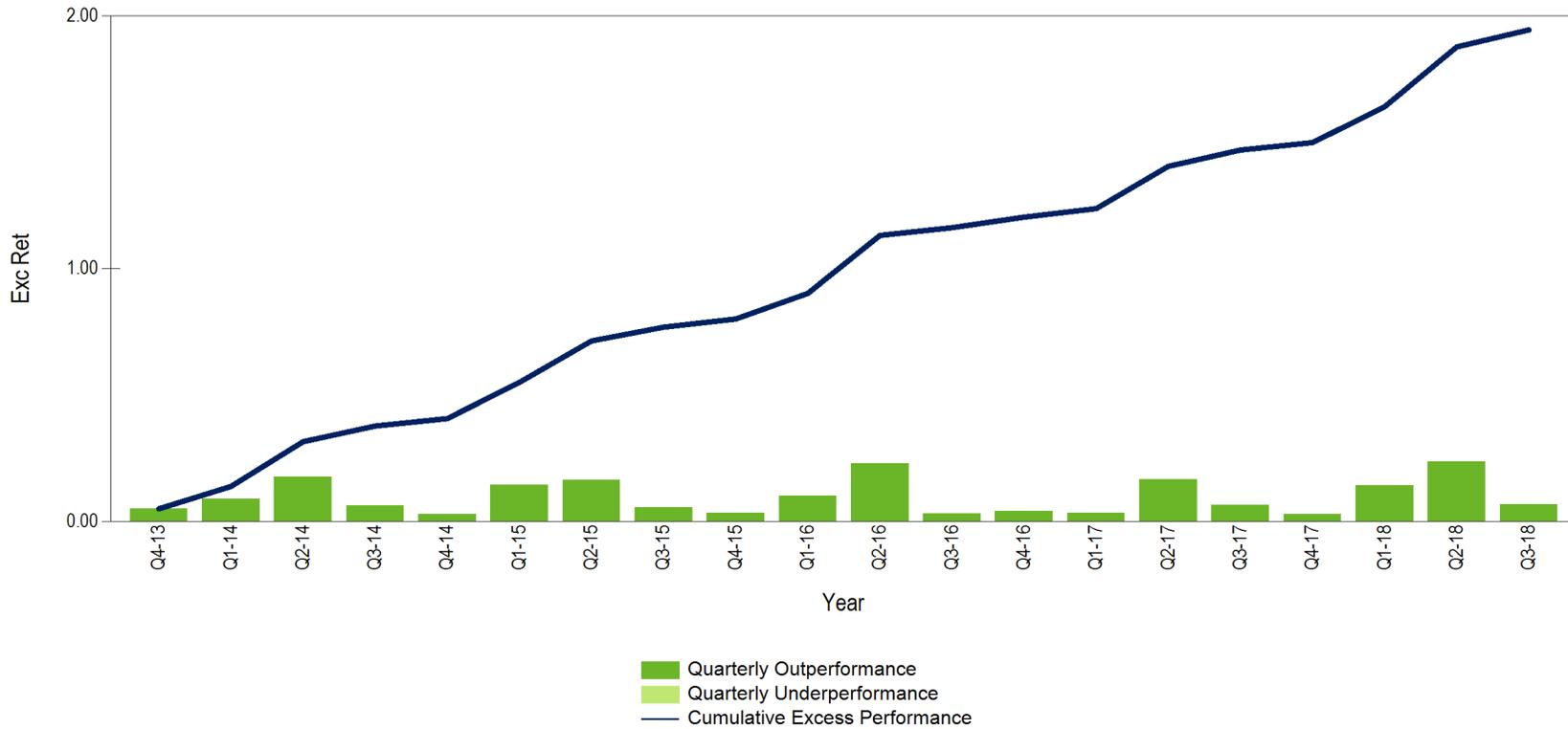
3 Year Style Map



# Los Angeles City Employees' Retirement System

## SSGA WORLD EX US IMI

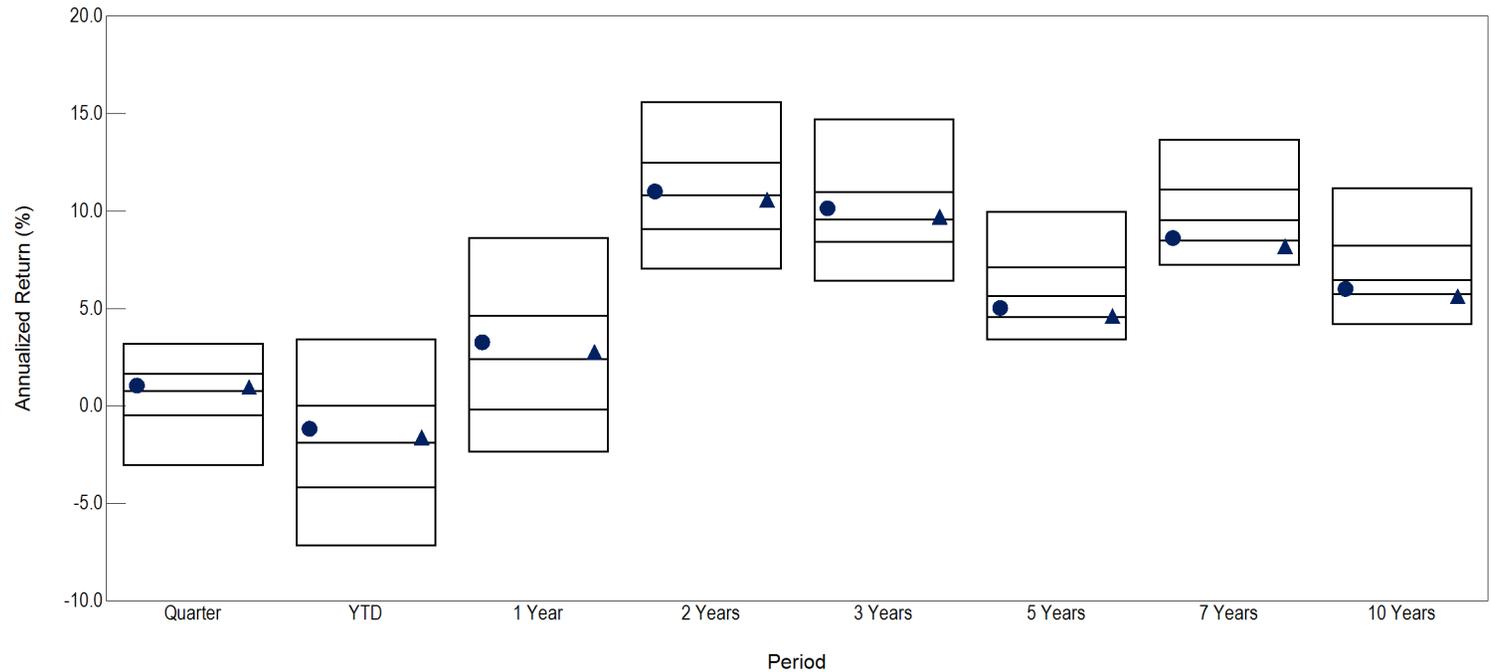
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## SSGA WORLD EX US IMI

SSgA World ex US IMI vs. eV EAFE Core Equity Net



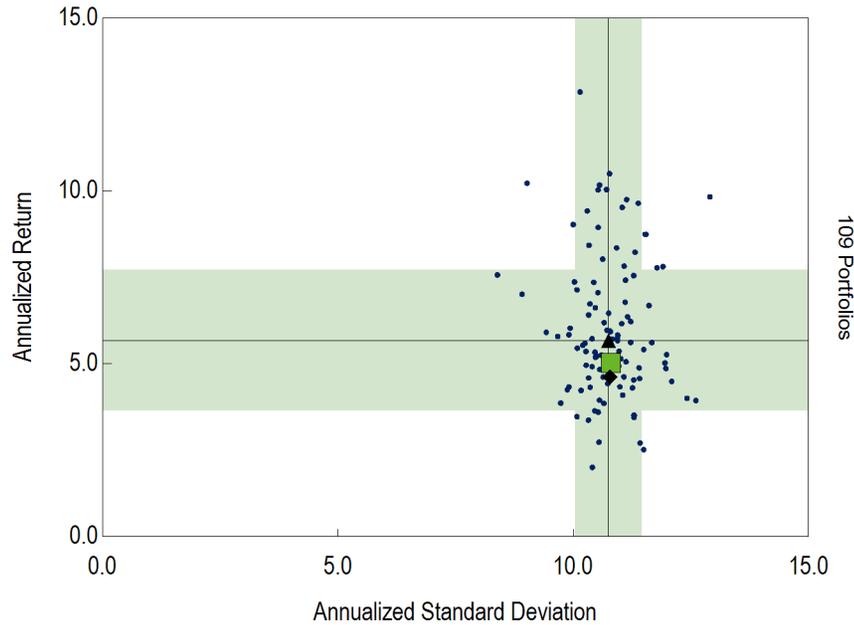
	Return (Rank)															
	Quarter		YTD		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
5th Percentile	3.18		3.41		8.63		15.59		14.70		9.95		13.67		11.17	
25th Percentile	1.68		0.03		4.65		12.52		11.01		7.14		11.15		8.27	
Median	0.78		-1.85		2.44		10.83		9.61		5.67		9.56		6.50	
75th Percentile	-0.44		-4.13		-0.16		9.11		8.44		4.59		8.52		5.78	
95th Percentile	-2.99		-7.12		-2.32		7.09		6.47		3.46		7.29		4.24	
# of Portfolios	138		138		138		137		131		109		95		80	
● SSGA World ex US IMI	1.05	(43)	-1.17	(40)	3.27	(41)	11.01	(48)	10.14	(41)	5.03	(66)	8.62	(74)	6.01	(68)
▲ MSCI World ex USA IMI NR USD	0.98	(45)	-1.62	(46)	2.78	(46)	10.58	(52)	9.72	(49)	4.62	(74)	8.20	(81)	5.64	(78)



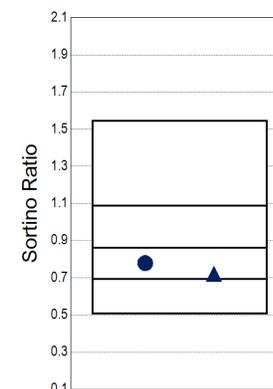
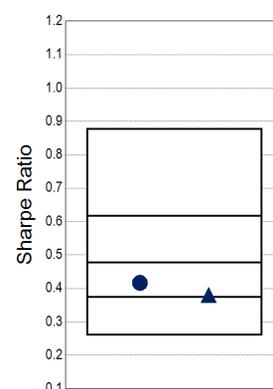
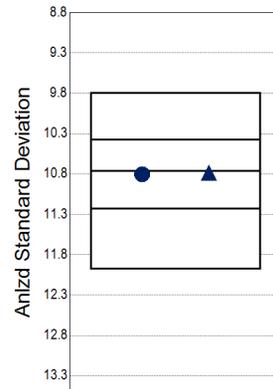
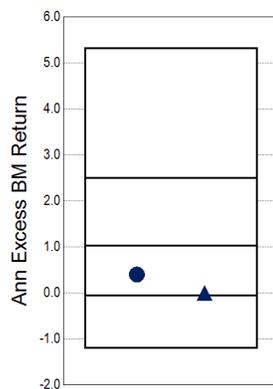
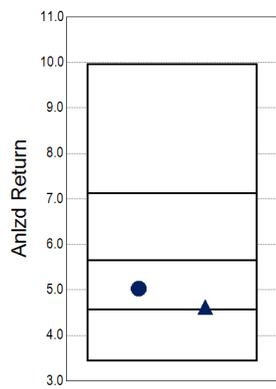
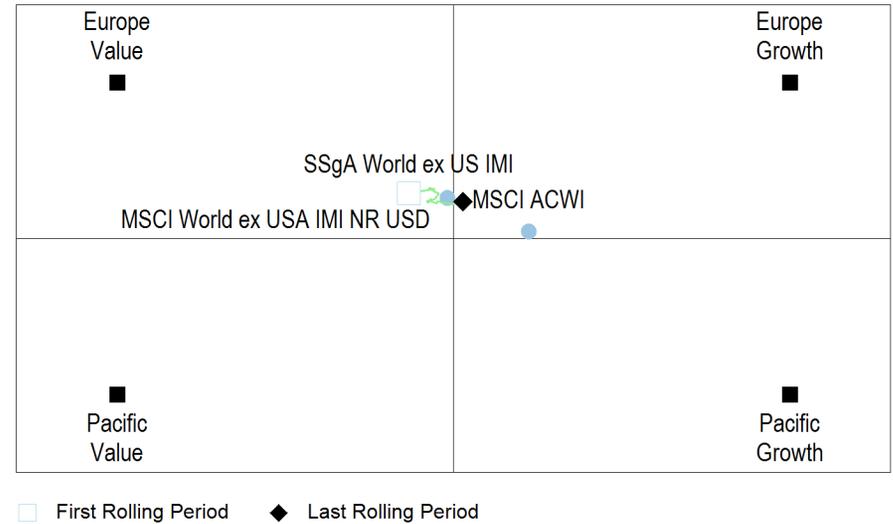
# Los Angeles City Employees' Retirement System

## SSGA WORLD EX US IMI

5 Year Risk Return



5 Year Style Map

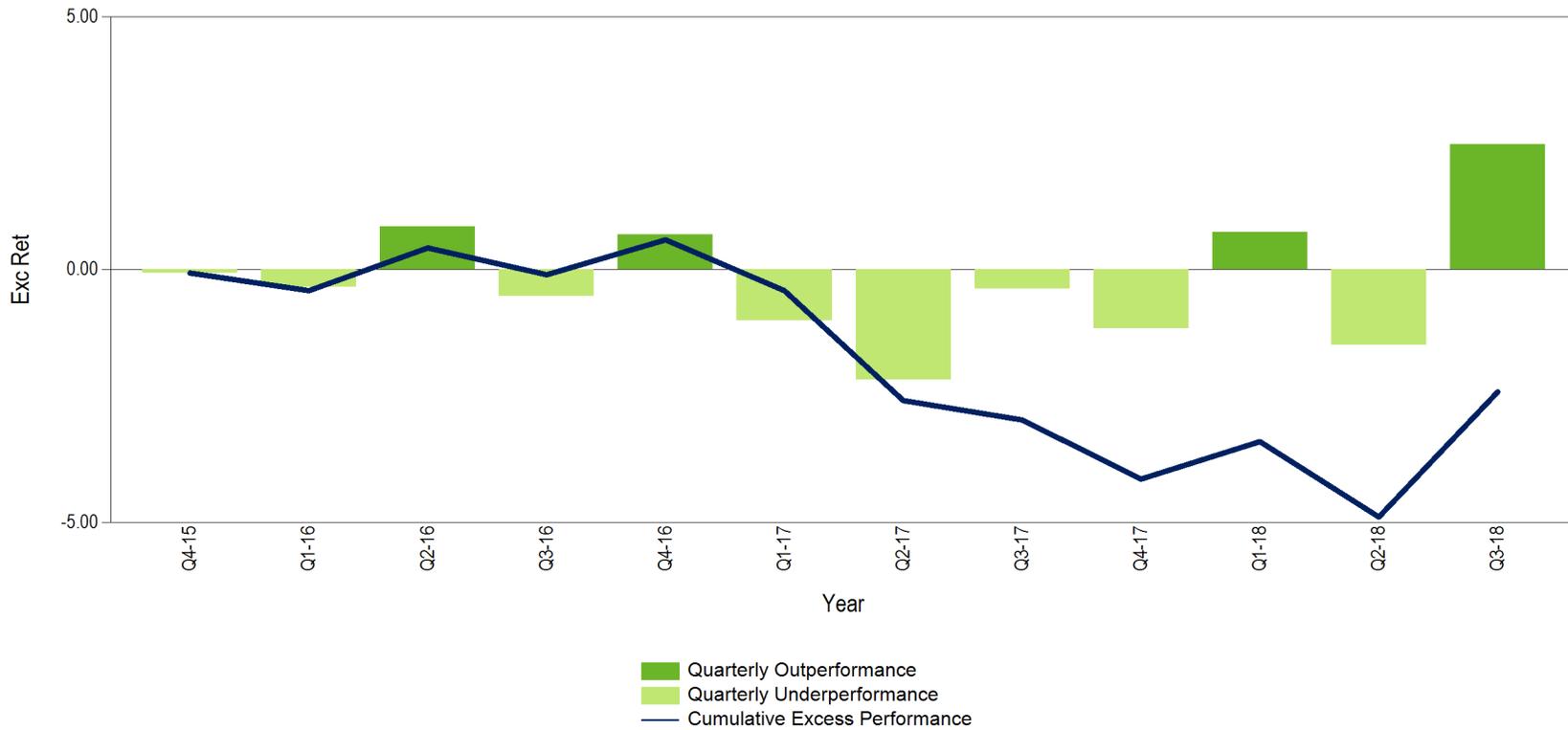


- SSGA World ex US IMI
- ▲ MSCI World ex USA IMI NR USD
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# AXIOM EMERGING MARKETS

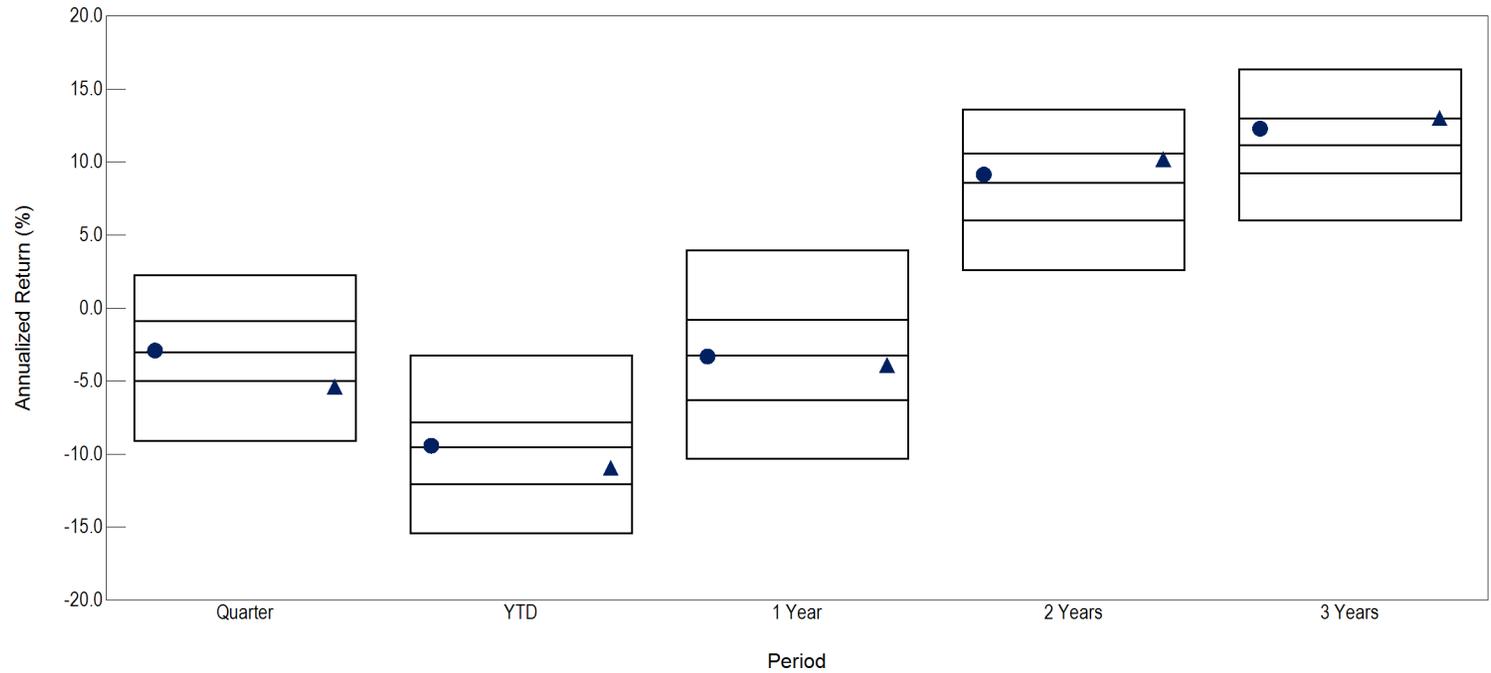
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## AXIOM EMERGING MARKETS

Axiom Emerging Markets vs. eV Emg Mkts Equity Net

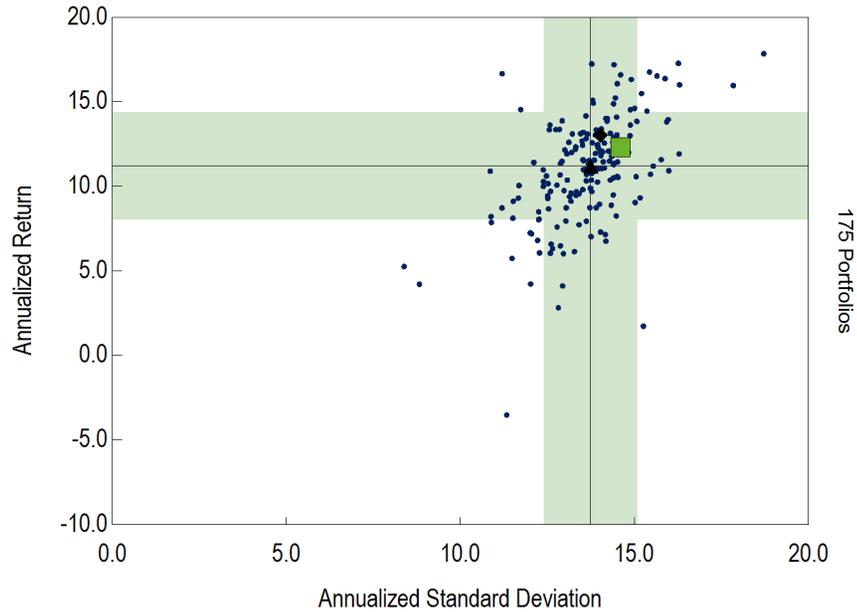


	Return (Rank)									
5th Percentile	2.25		-3.26		3.93		13.62		16.33	
25th Percentile	-0.85		-7.80		-0.78		10.64		13.04	
Median	-3.00		-9.50		-3.20		8.62		11.19	
75th Percentile	-4.95		-12.02		-6.25		6.03		9.29	
95th Percentile	-9.05		-15.39		-10.29		2.63		6.03	
# of Portfolios	193		190		189		184		175	
● Axiom Emerging Markets	-2.91	(50)	-9.42	(49)	-3.31	(51)	9.15	(45)	12.29	(34)
▲ MSCI Emerging Markets Growth NR USD	-5.38	(83)	-10.94	(68)	-3.89	(56)	10.19	(32)	13.03	(26)

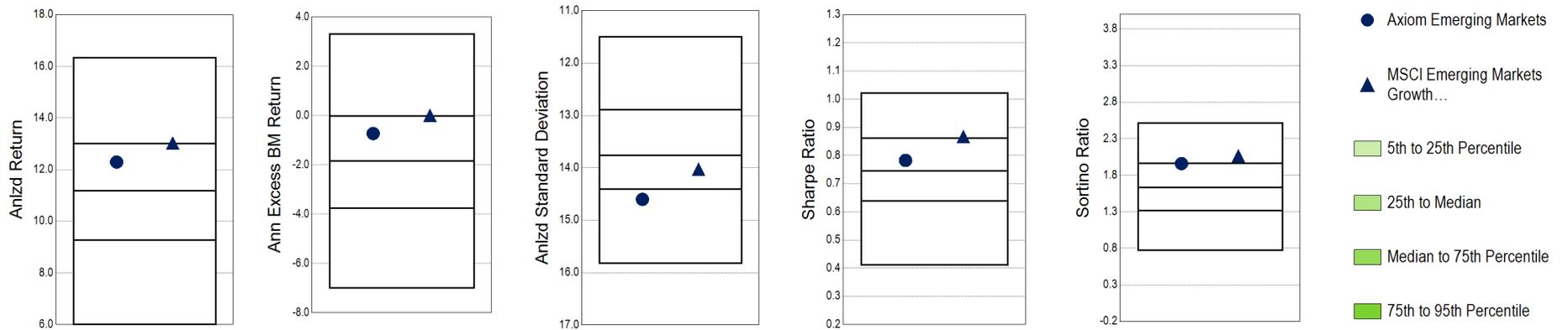
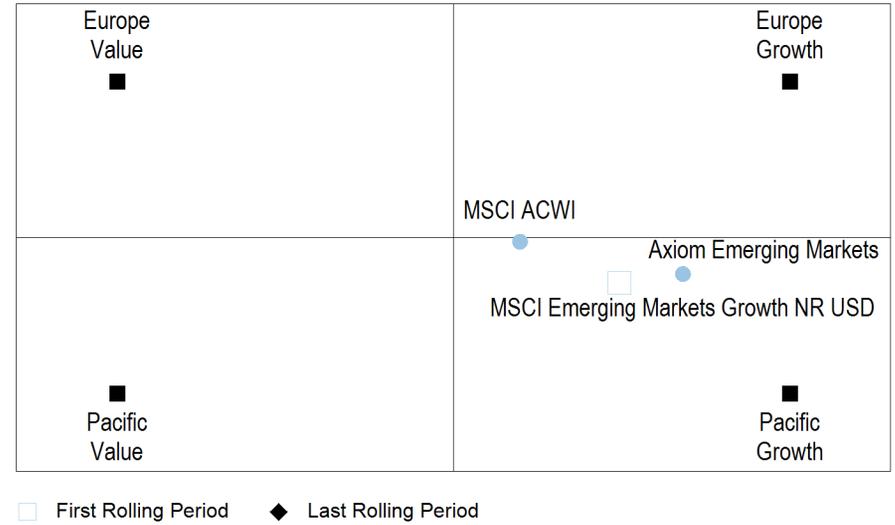


# AXIOM EMERGING MARKETS

3 Year Risk Return



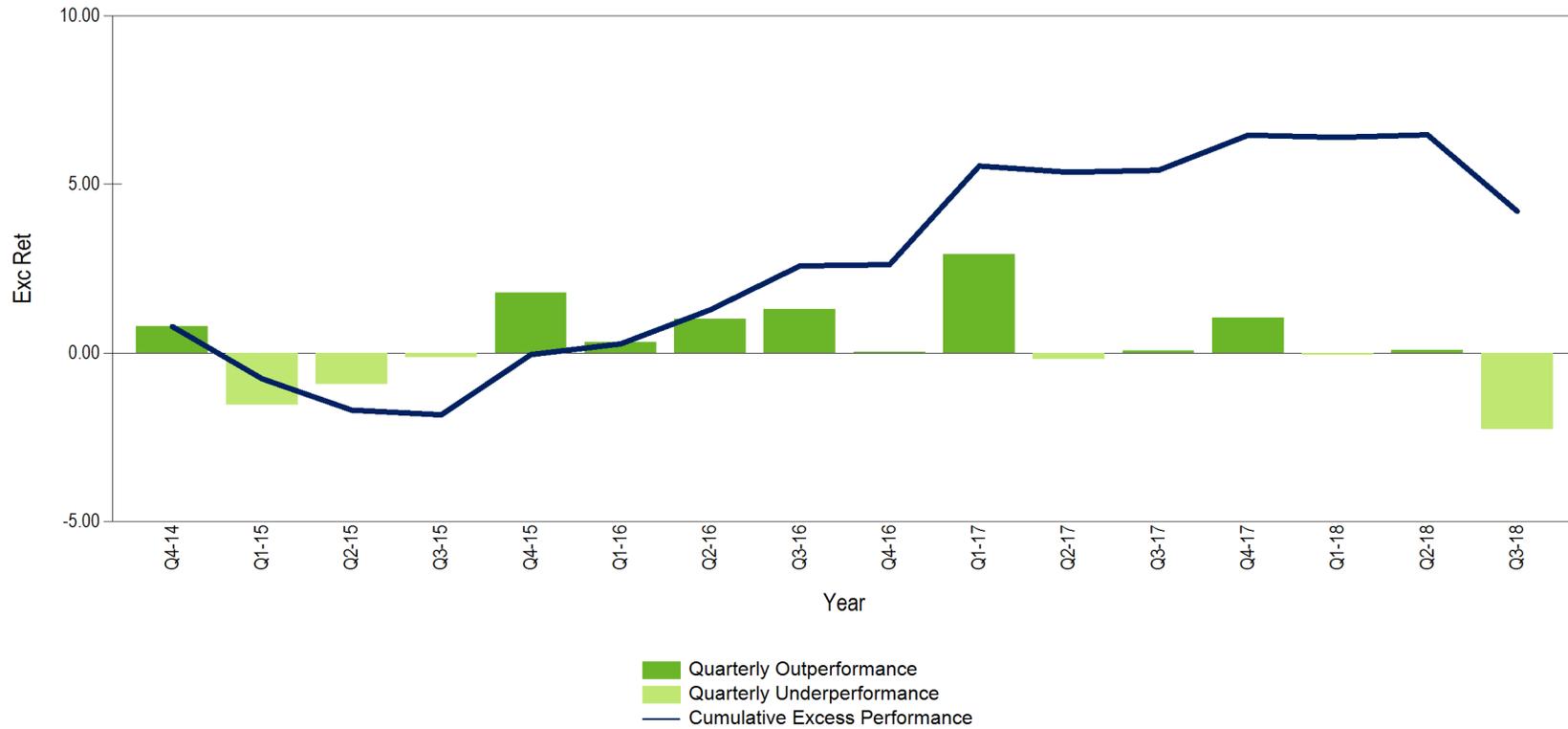
3 Year Style Map



# Los Angeles City Employees' Retirement System

## DFA EMERGING MARKETS

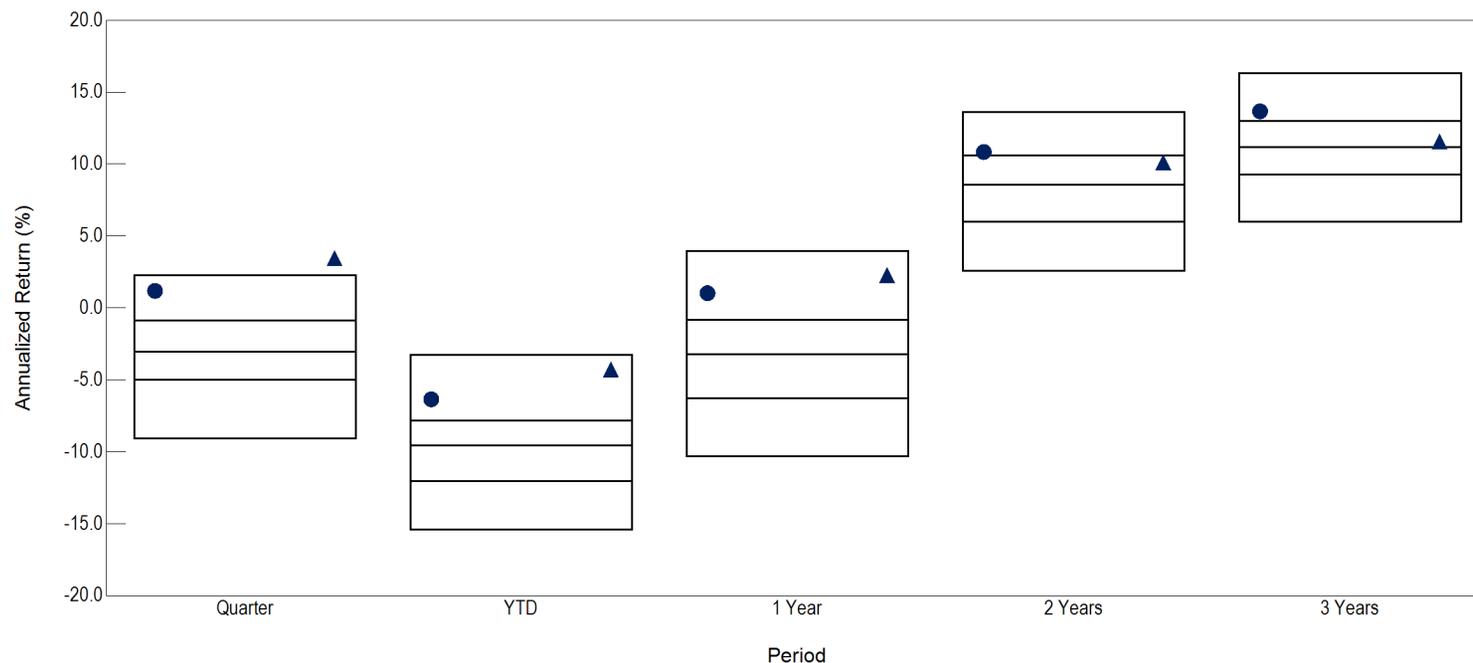
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## DFA EMERGING MARKETS

DFA Emerging Markets vs. eV Emg Mkts Equity Net



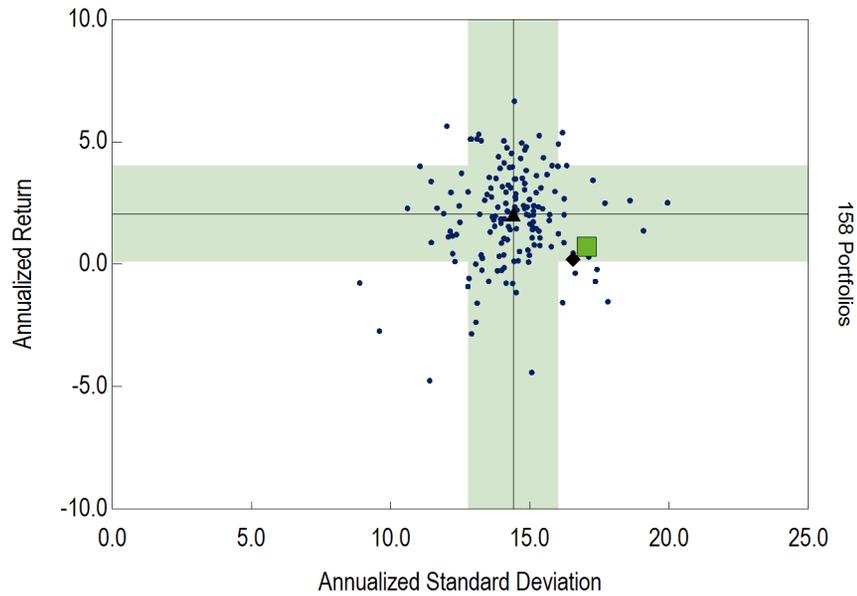
	Return (Rank)									
5th Percentile	2.25	-3.26	3.93	13.62	16.33					
25th Percentile	-0.85	-7.80	-0.78	10.64	13.04					
Median	-3.00	-9.50	-3.20	8.62	11.19					
75th Percentile	-4.95	-12.02	-6.25	6.03	9.29					
95th Percentile	-9.05	-15.39	-10.29	2.63	6.03					
# of Portfolios	193	190	189	184	175					
● DFA Emerging Markets	1.17	(11)	-6.36	(17)	1.02	(11)	10.83	(21)	13.66	(18)
▲ MSCI Emerging Markets Value NR USD	3.44	(2)	-4.28	(8)	2.27	(8)	10.11	(32)	11.55	(43)



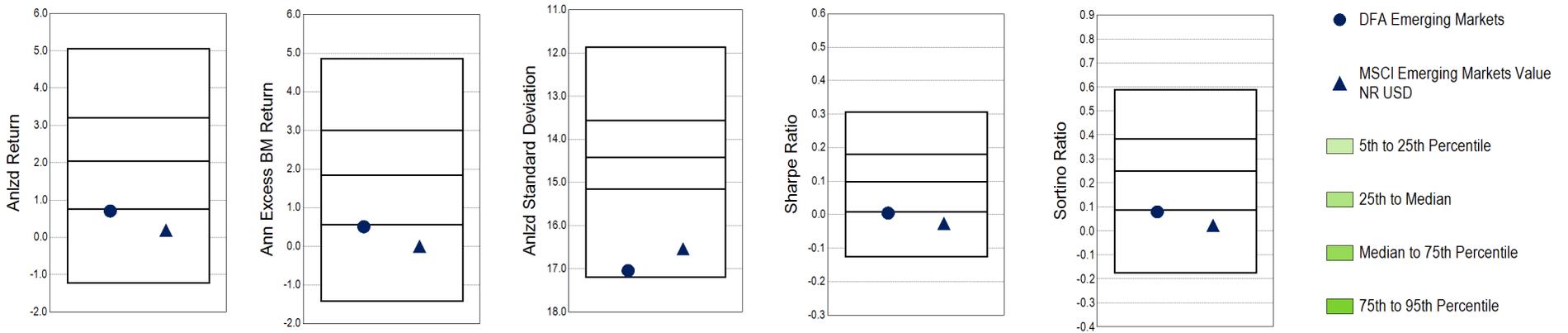
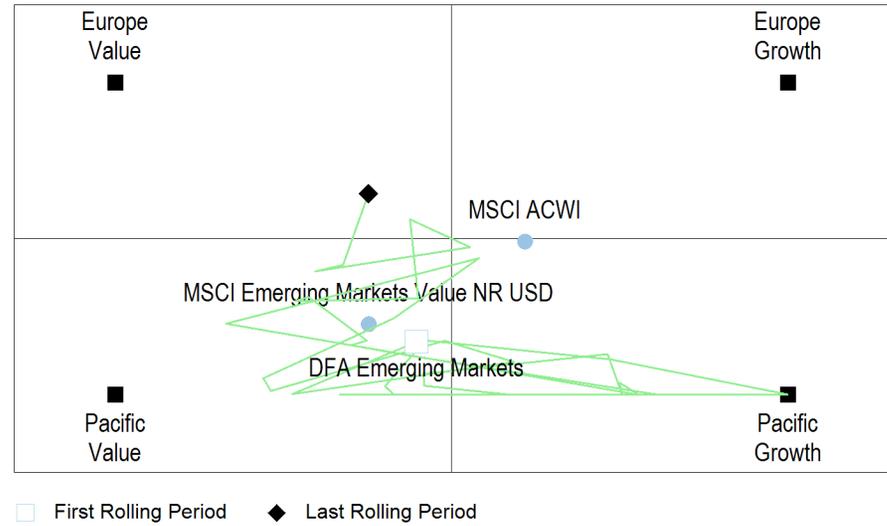
# Los Angeles City Employees' Retirement System

## DFA EMERGING MARKETS

Since Inception Risk Return



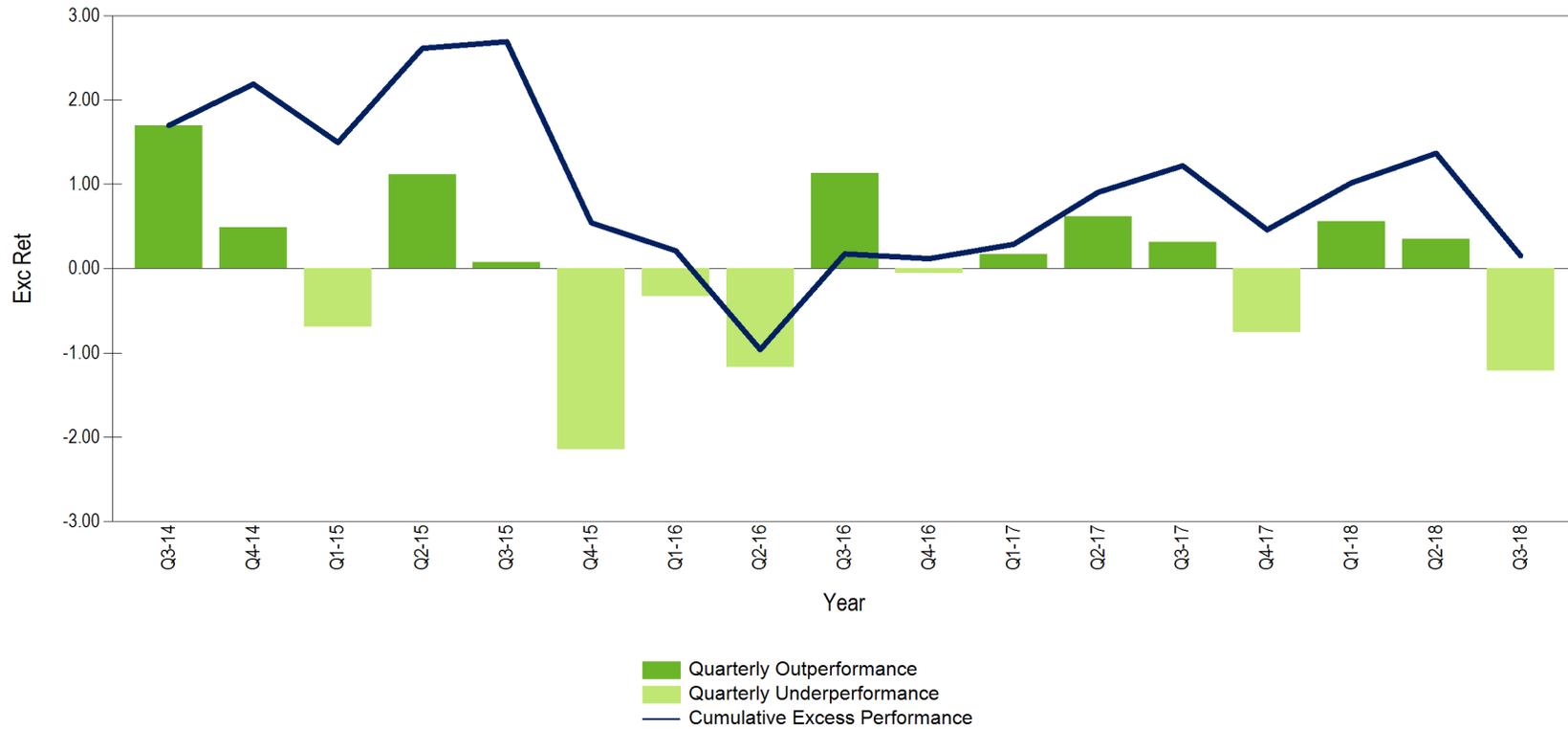
Since Inception Style Map



# Los Angeles City Employees' Retirement System

## QMA EMERGING MARKETS

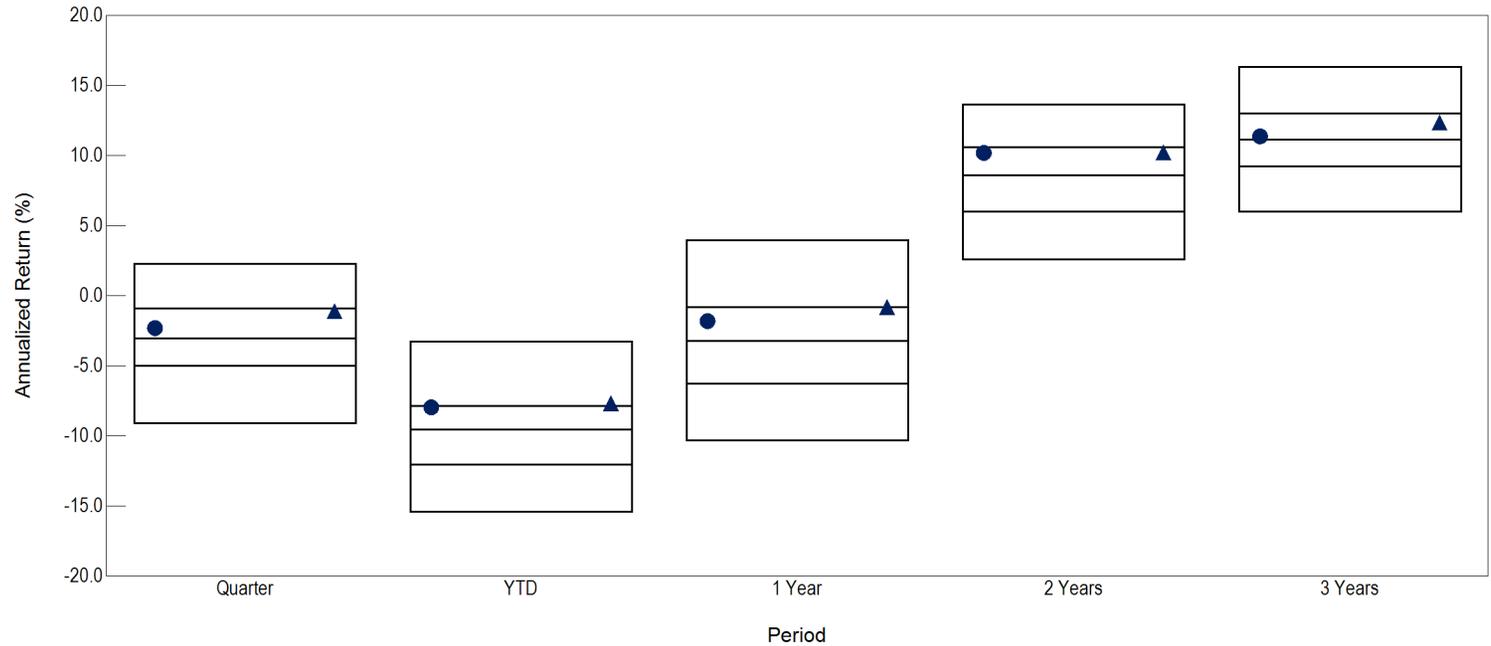
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## QMA EMERGING MARKETS

QMA Emerging Markets vs. eV Emg Mkts Equity Net



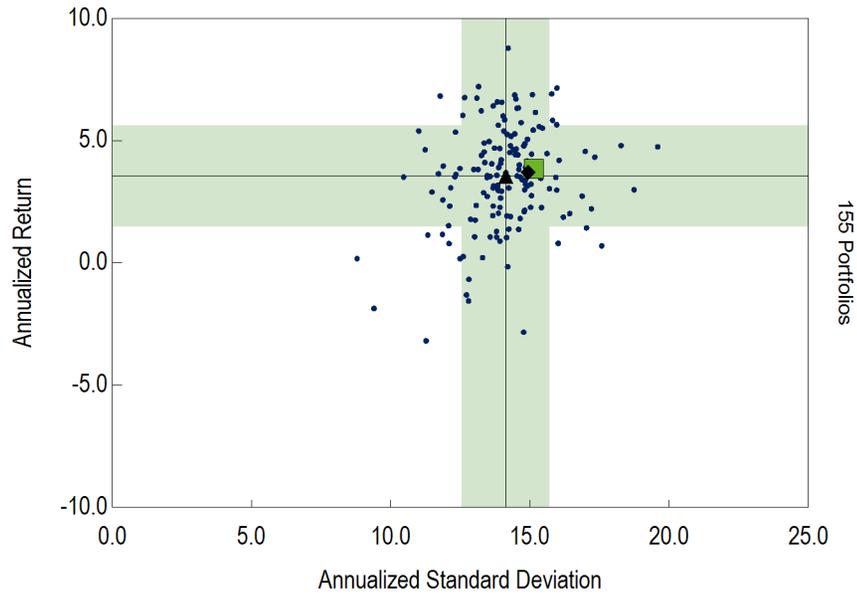
	Return (Rank)									
5th Percentile	2.25		-3.26		3.93		13.62		16.33	
25th Percentile	-0.85		-7.80		-0.78		10.64		13.04	
Median	-3.00		-9.50		-3.20		8.62		11.19	
75th Percentile	-4.95		-12.02		-6.25		6.03		9.29	
95th Percentile	-9.05		-15.39		-10.29		2.63		6.03	
# of Portfolios	193		190		189		184		175	
● QMA Emerging Markets	-2.31	(42)	-7.96	(31)	-1.82	(32)	10.18	(32)	11.37	(48)
▲ MSCI Emerging Markets	-1.09	(29)	-7.68	(24)	-0.81	(26)	10.21	(32)	12.36	(33)



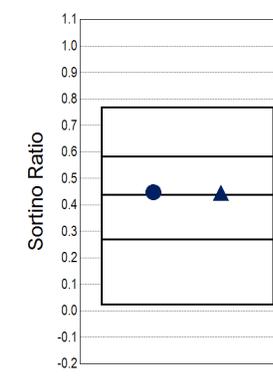
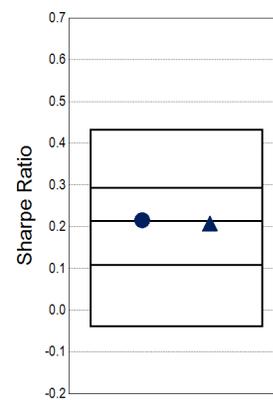
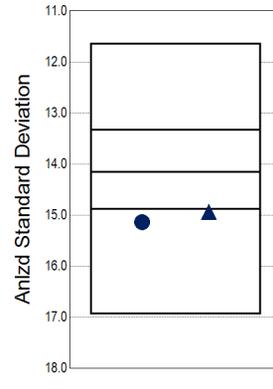
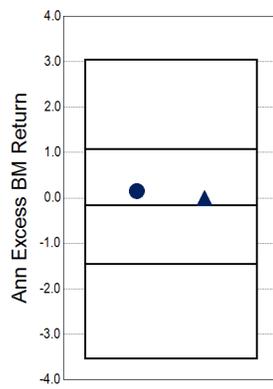
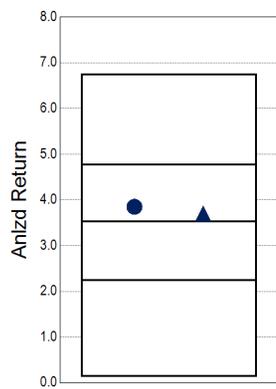
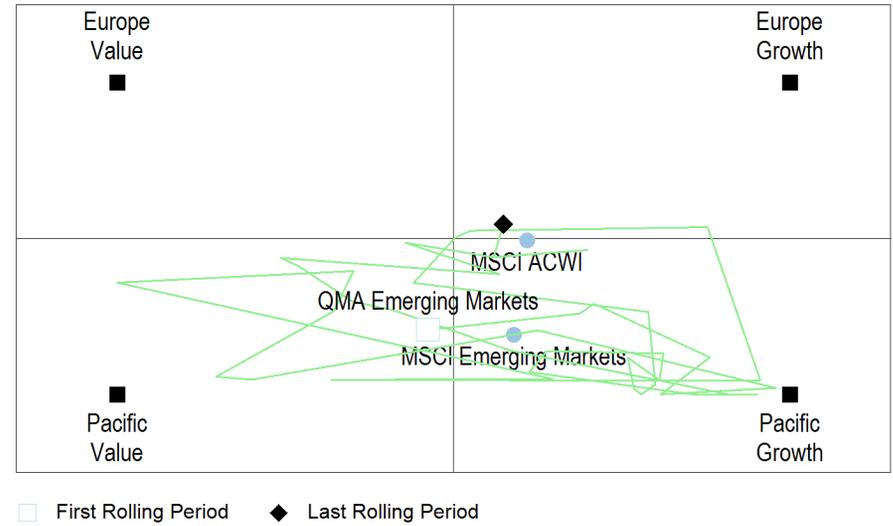
# Los Angeles City Employees' Retirement System

## QMA EMERGING MARKETS

Since Inception Risk Return



Since Inception Style Map



- QMA Emerging Markets
- ▲ MSCI Emerging Markets
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# **CORE FIXED INCOME MANAGER PERFORMANCE**

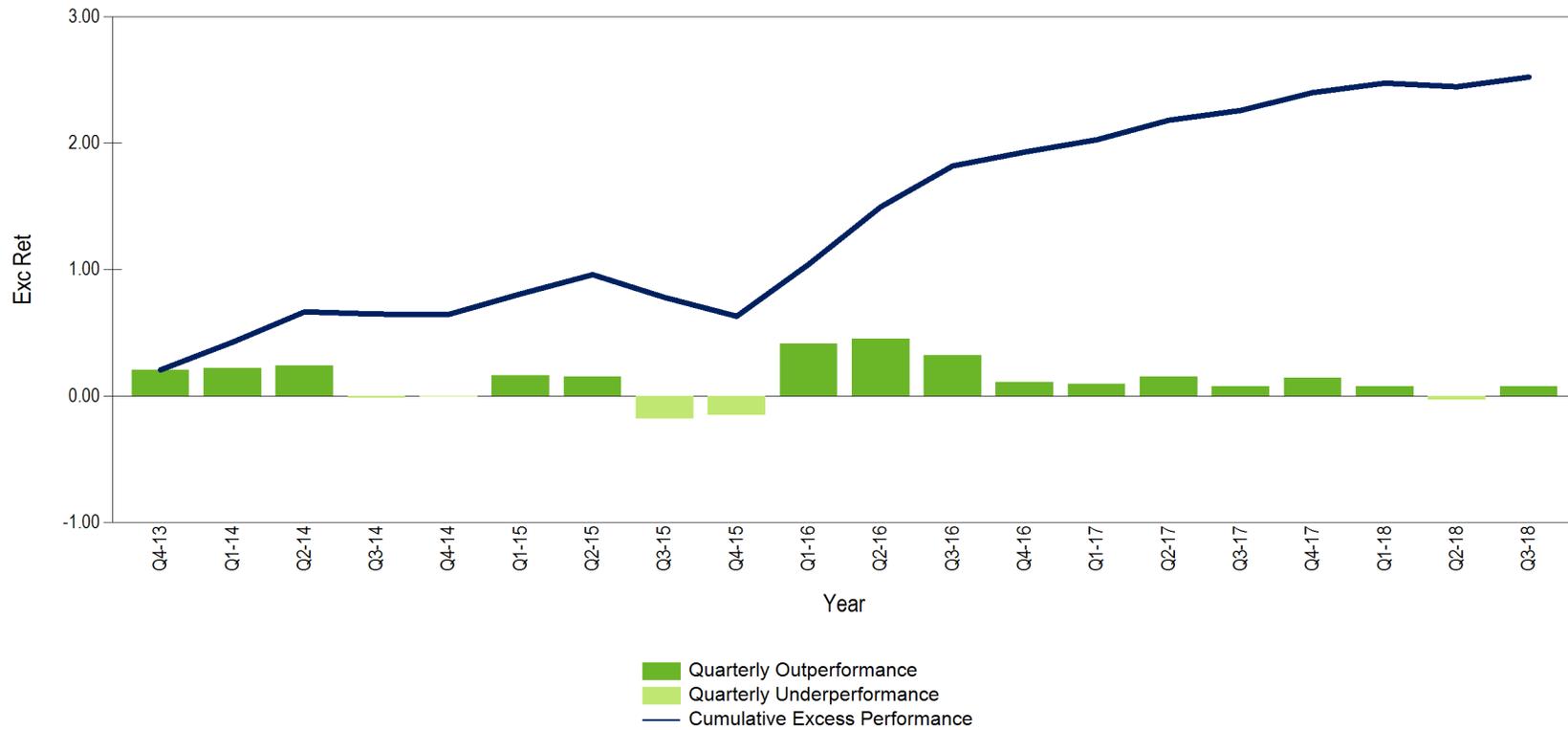
NEPC, LLC

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# Los Angeles City Employees' Retirement System

## BAIRD ADVISORS

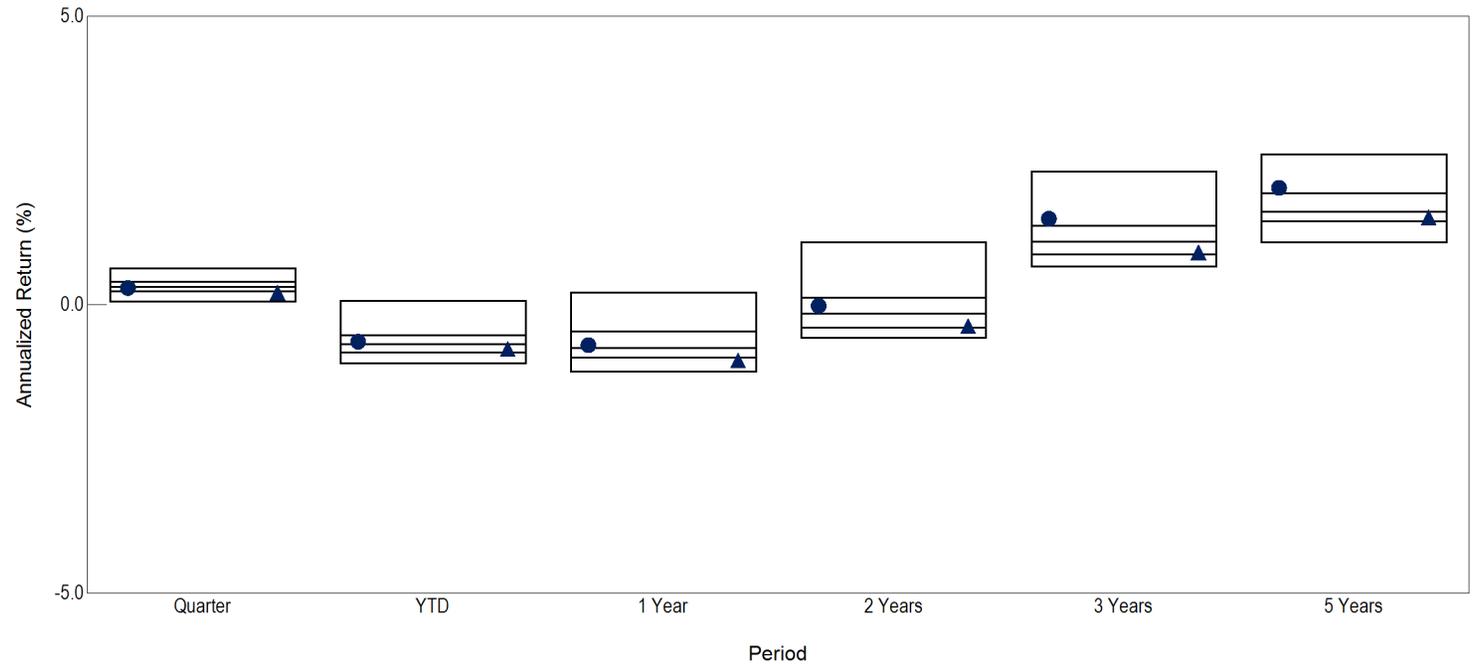
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## BAIRD ADVISORS

Baird Advisors vs. eV US Interm Duration Fixed Inc Net



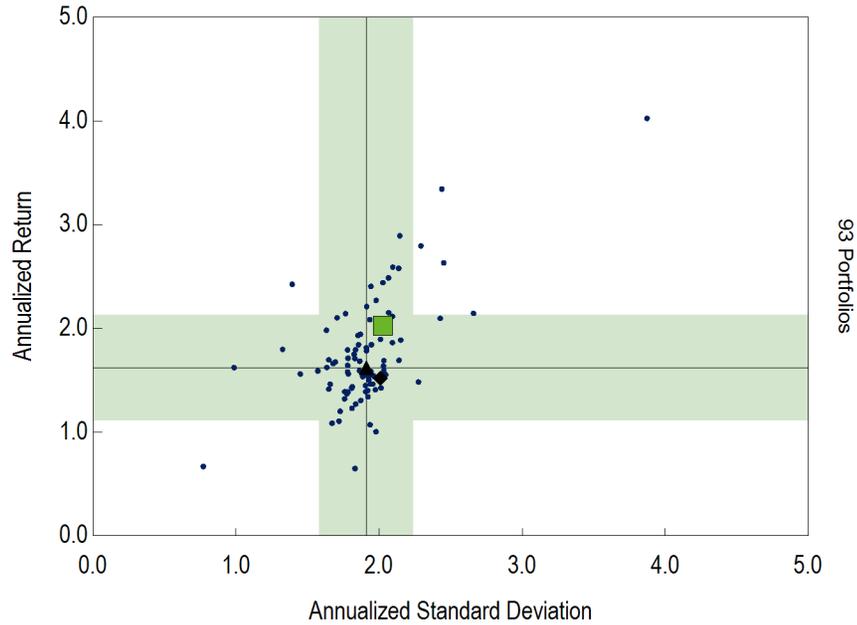
	Return (Rank)											
5th Percentile	0.63		0.07		0.21		1.08		2.31		2.61	
25th Percentile	0.41		-0.52		-0.45		0.13		1.38		1.94	
Median	0.32		-0.67		-0.74		-0.14		1.10		1.62	
75th Percentile	0.24		-0.82		-0.91		-0.39		0.88		1.46	
95th Percentile	0.07		-1.01		-1.15		-0.57		0.68		1.10	
# of Portfolios	97		97		97		96		96		93	
● Baird Advisors	0.29	(57)	-0.64	(47)	-0.70	(48)	-0.02	(34)	1.49	(22)	2.03	(23)
▲ BBgBarc US Govt/Credit Int TR	0.21	(78)	-0.76	(62)	-0.96	(84)	-0.37	(72)	0.91	(72)	1.52	(71)



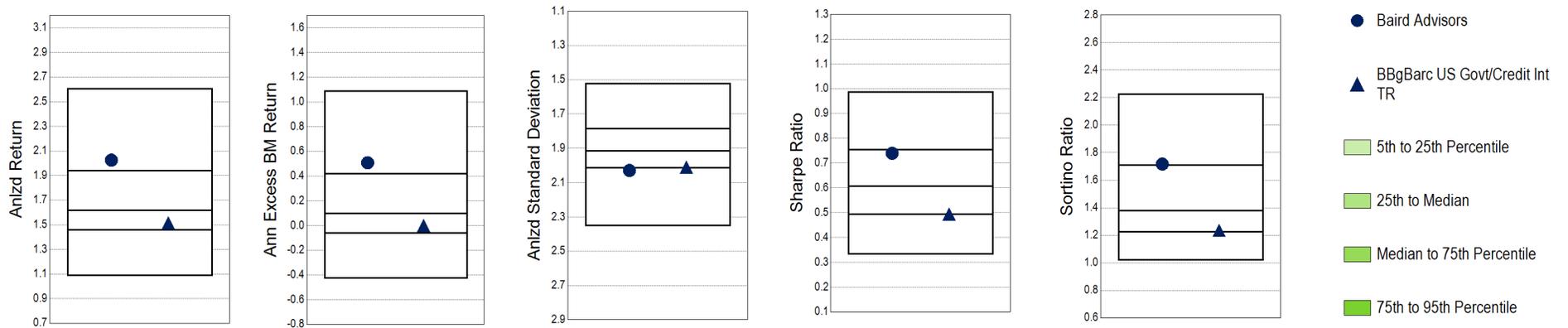
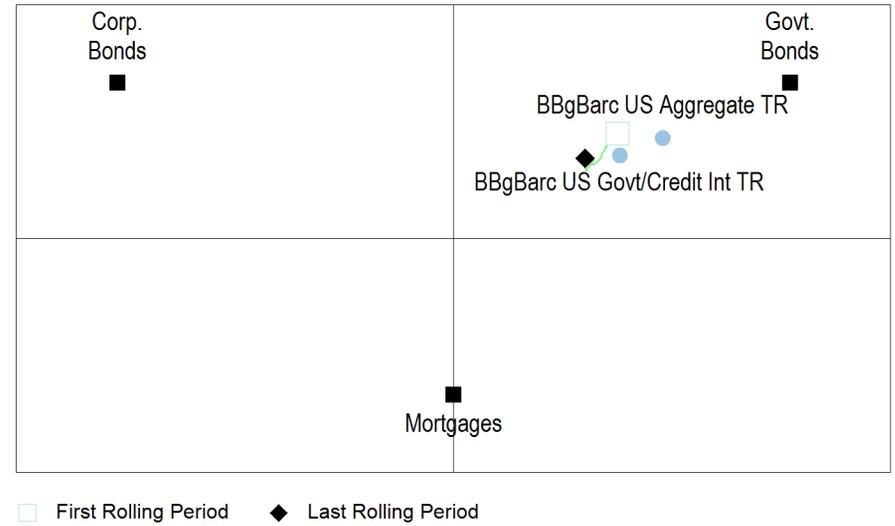
# Los Angeles City Employees' Retirement System

## BAIRD ADVISORS

5 Year Risk Return



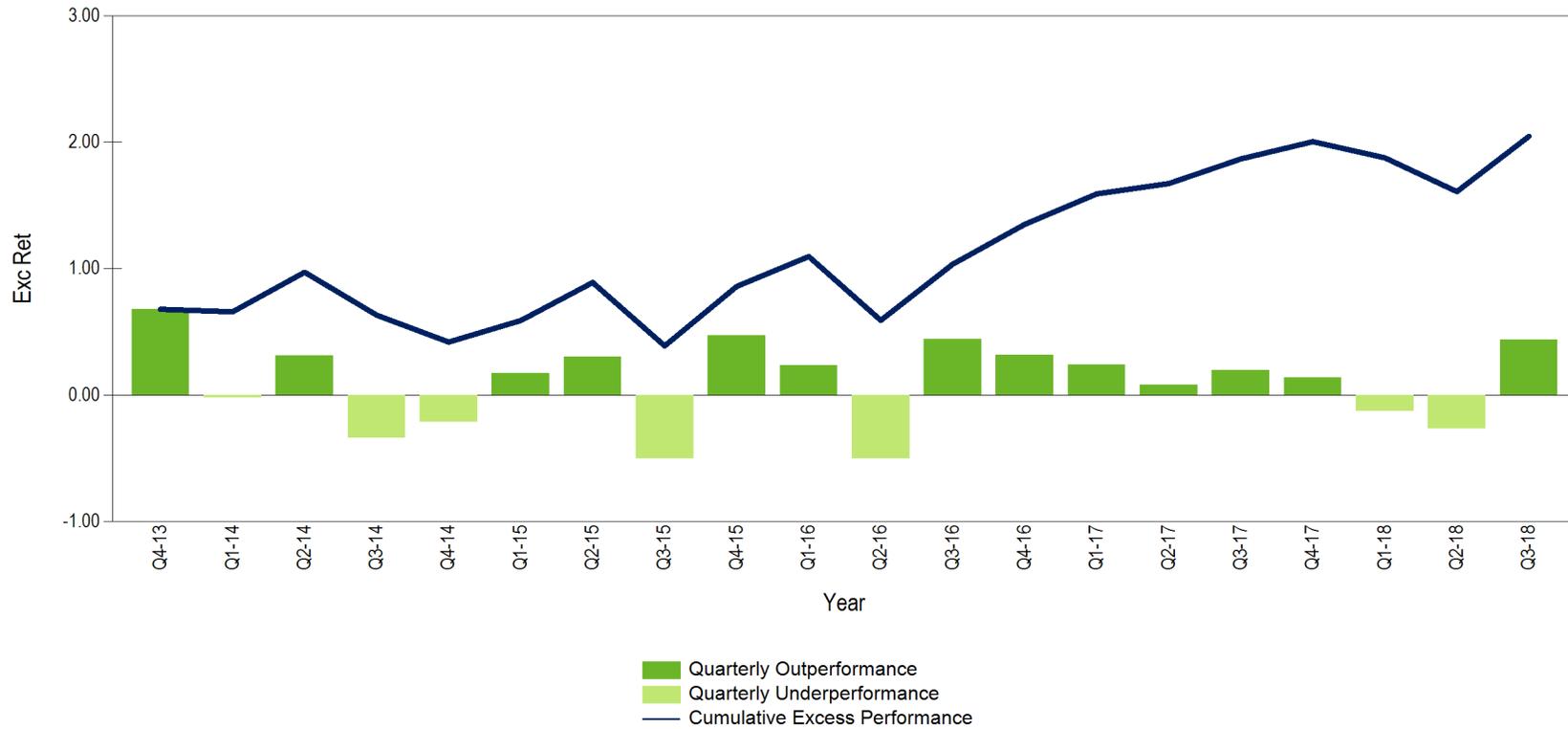
5 Year Style Map



# Los Angeles City Employees' Retirement System

## LM CAPITAL

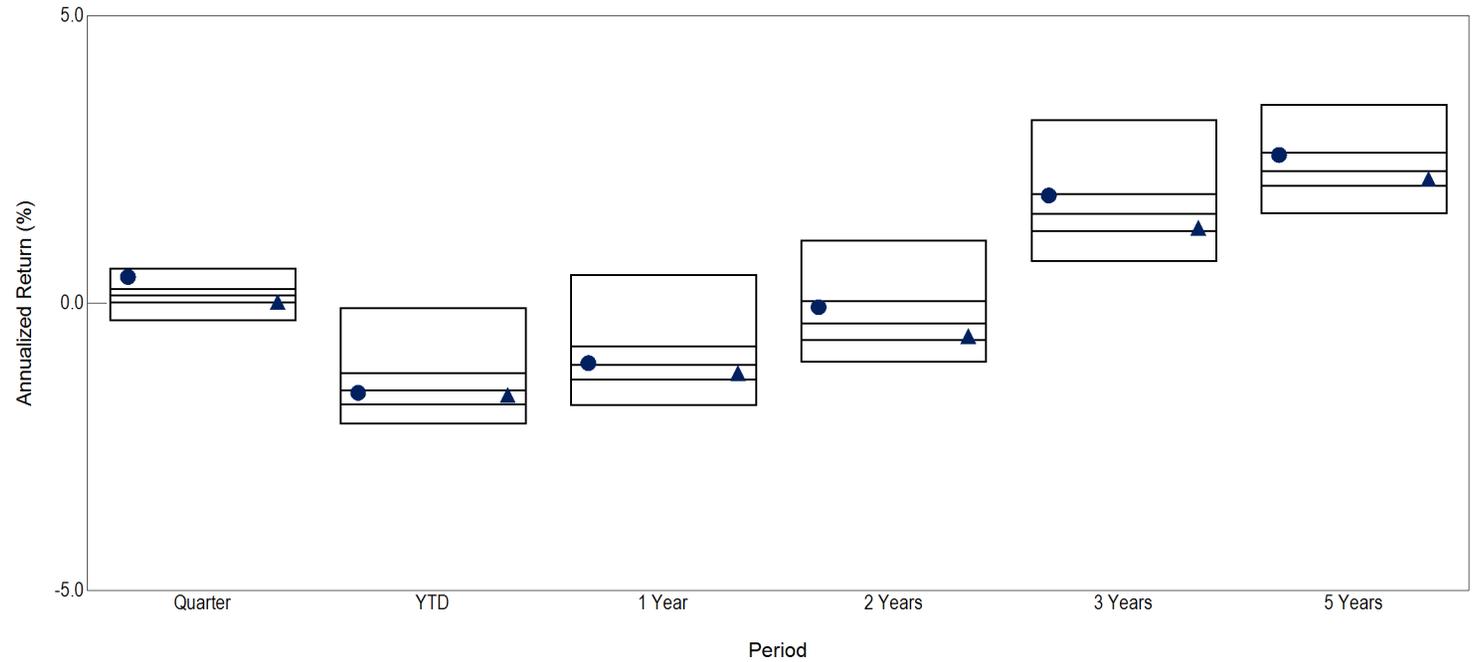
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## LM CAPITAL

Core Fixed Income Managers vs. eV US Core Fixed Inc Net



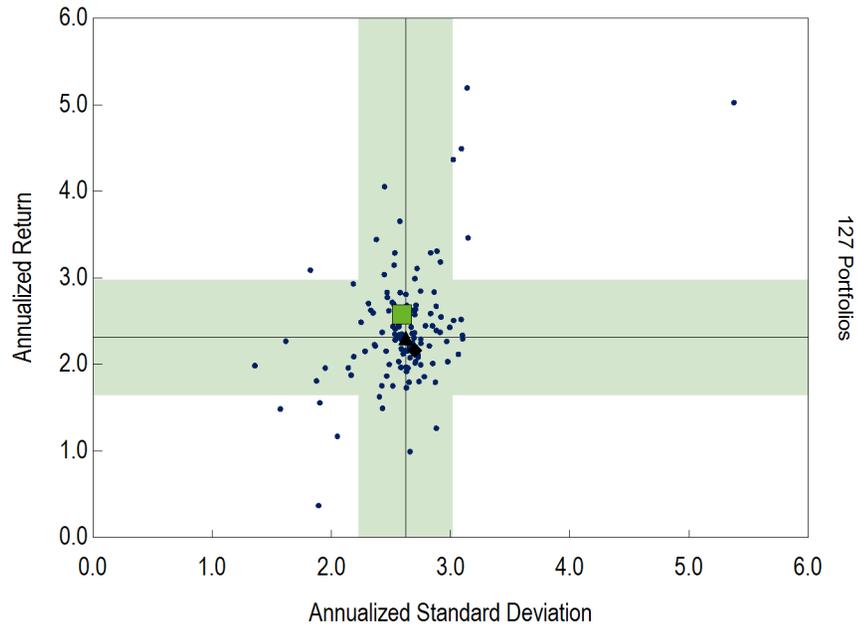
	Return (Rank)											
5th Percentile	0.60		-0.08		0.49		1.09		3.19		3.46	
25th Percentile	0.26		-1.21		-0.74		0.05		1.91		2.63	
Median	0.14		-1.51		-1.06		-0.34		1.57		2.31	
75th Percentile	0.03		-1.75		-1.32		-0.63		1.27		2.06	
95th Percentile	-0.29		-2.08		-1.76		-1.01		0.74		1.58	
# of Portfolios	134		133		133		131		129		127	
● LM Capital	0.46	(11)	-1.56	(58)	-1.04	(48)	-0.07	(28)	1.87	(27)	2.58	(30)
▲ Core Fixed Income Blend	0.02	(77)	-1.60	(64)	-1.22	(66)	-0.57	(72)	1.31	(70)	2.16	(67)



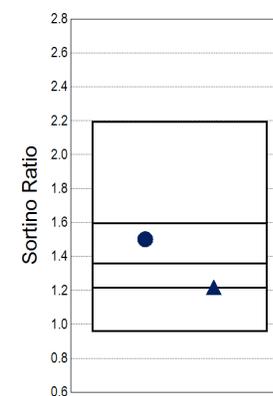
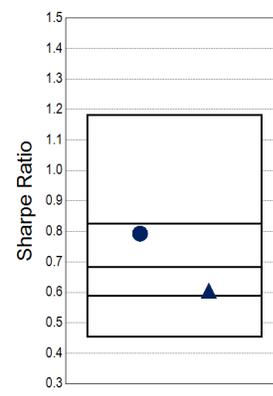
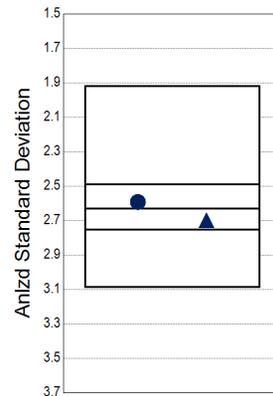
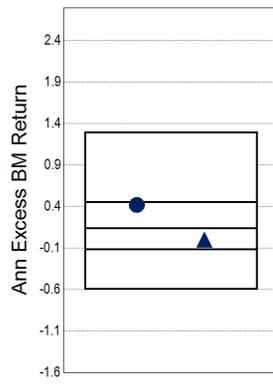
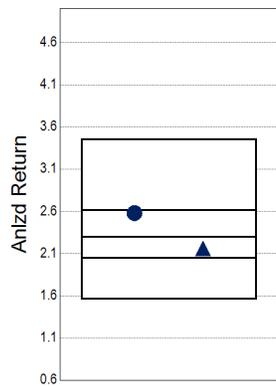
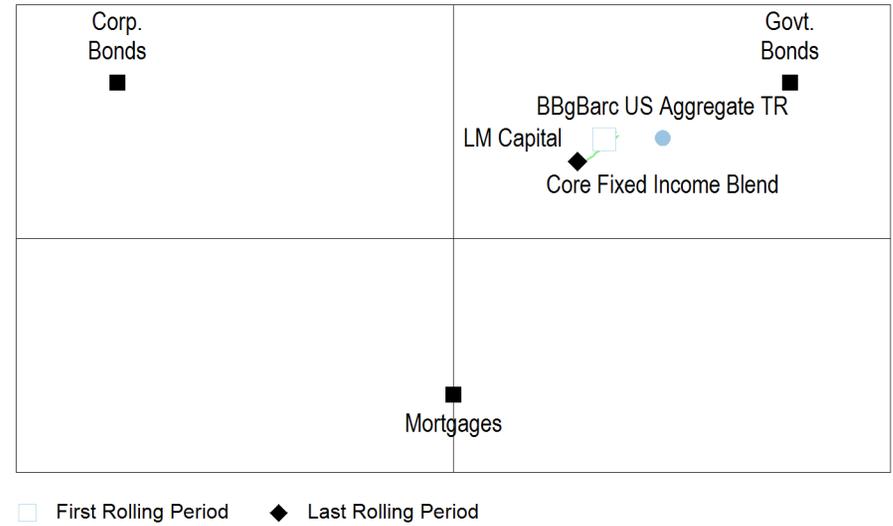
# Los Angeles City Employees' Retirement System

## LM CAPITAL

5 Year Risk Return



5 Year Style Map



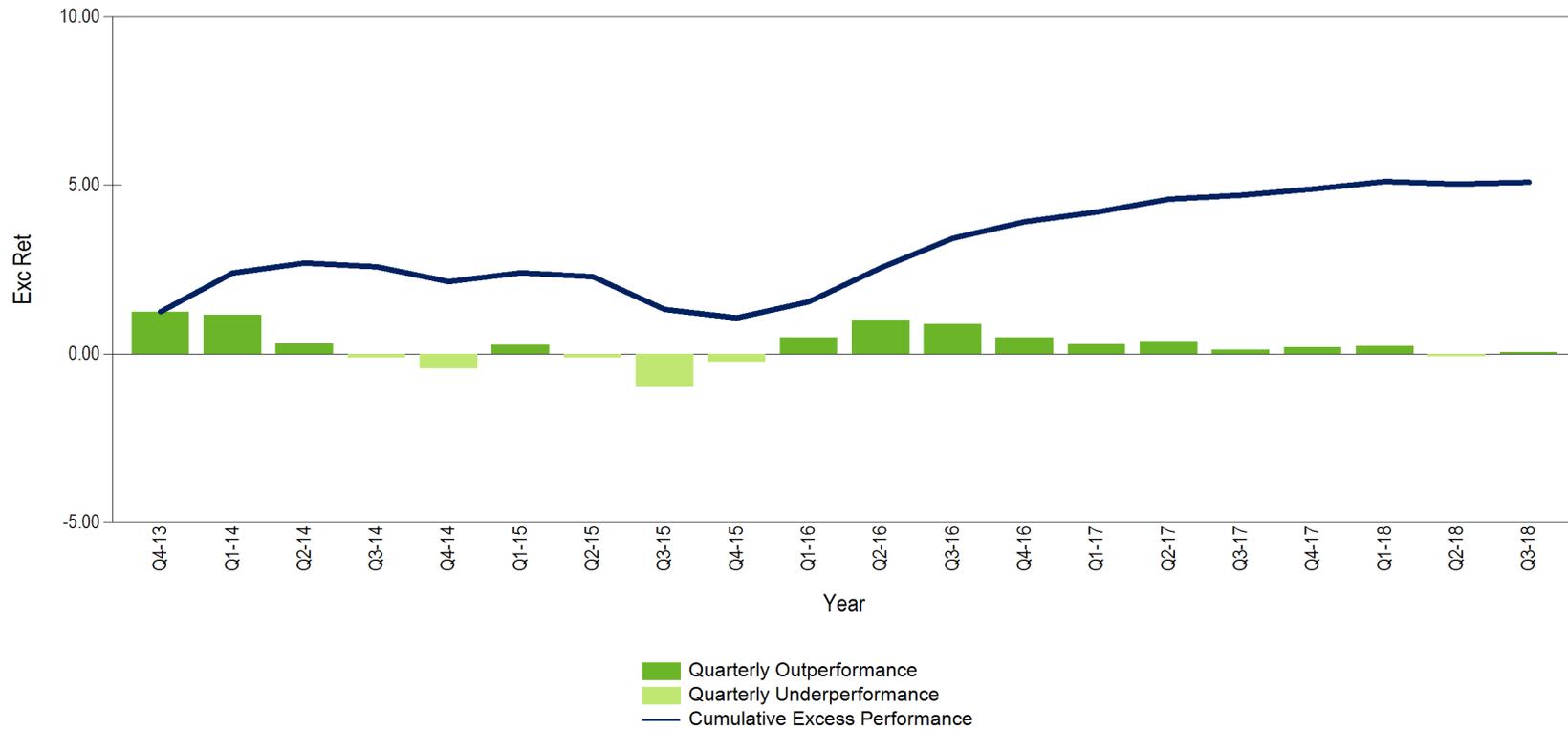
- LM Capital
- ▲ Core Fixed Income Blend
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# Los Angeles City Employees' Retirement System

## LOOMIS SAYLES

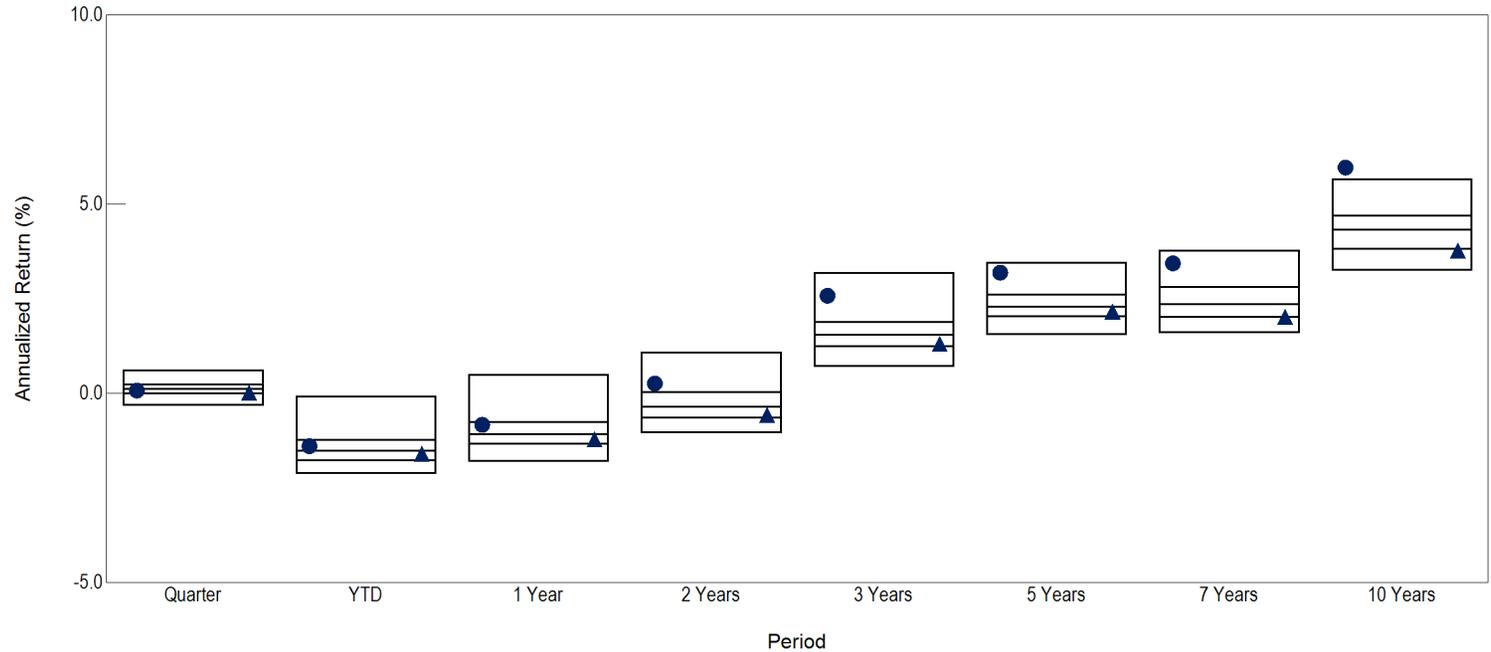
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## LOOMIS SAYLES

Loomis Sayles vs. eV US Core Fixed Inc Net



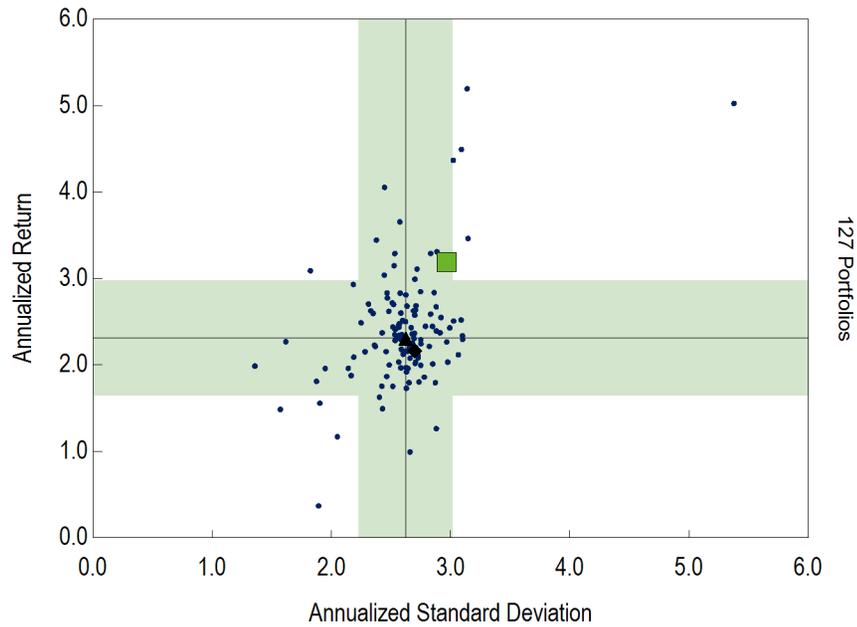
	Return (Rank)															
5th Percentile	0.60	-0.08	0.49	1.09	3.19	3.46	3.77	5.67								
25th Percentile	0.26	-1.21	-0.74	0.05	1.91	2.63	2.82	4.71								
Median	0.14	-1.51	-1.06	-0.34	1.57	2.31	2.37	4.34								
75th Percentile	0.03	-1.75	-1.32	-0.63	1.27	2.06	2.04	3.84								
95th Percentile	-0.29	-2.08	-1.76	-1.01	0.74	1.58	1.63	3.29								
# of Portfolios	134	133	133	131	129	127	120	110								
● Loomis Sayles	0.07	(70)	-1.40	(40)	-0.83	(30)	0.26	(19)	2.58	(9)	3.19	(9)	3.44	(10)	5.97	(4)
▲ BC US Agg LACERS custom	0.02	(77)	-1.60	(64)	-1.22	(66)	-0.57	(72)	1.31	(70)	2.16	(67)	2.02	(77)	3.77	(80)



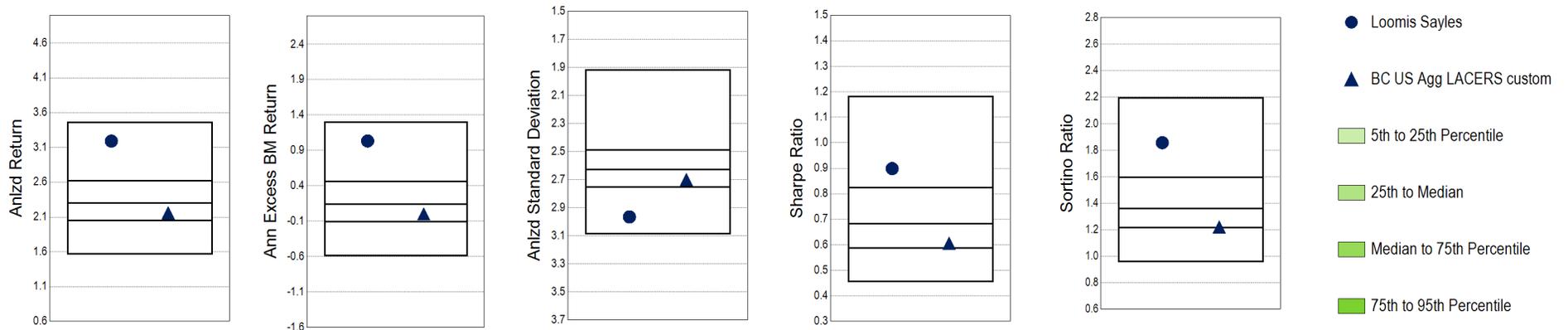
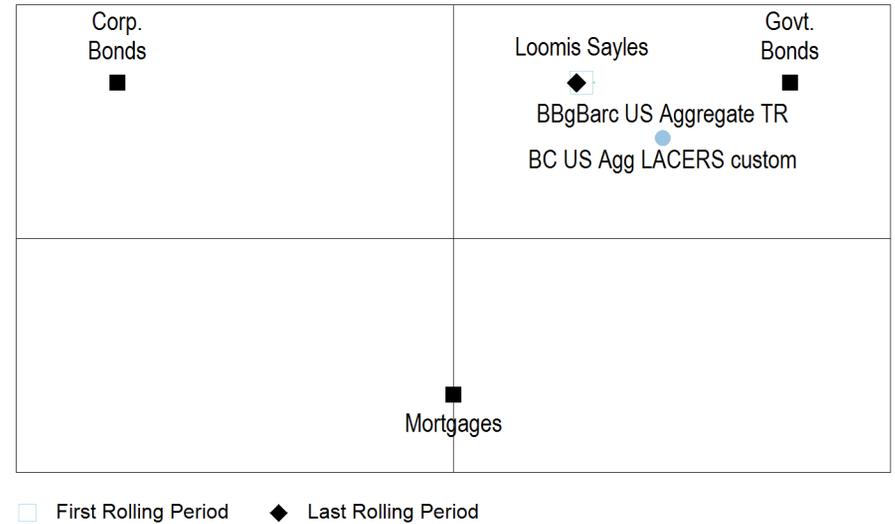
# Los Angeles City Employees' Retirement System

## LOOMIS SAYLES

5 Year Risk Return



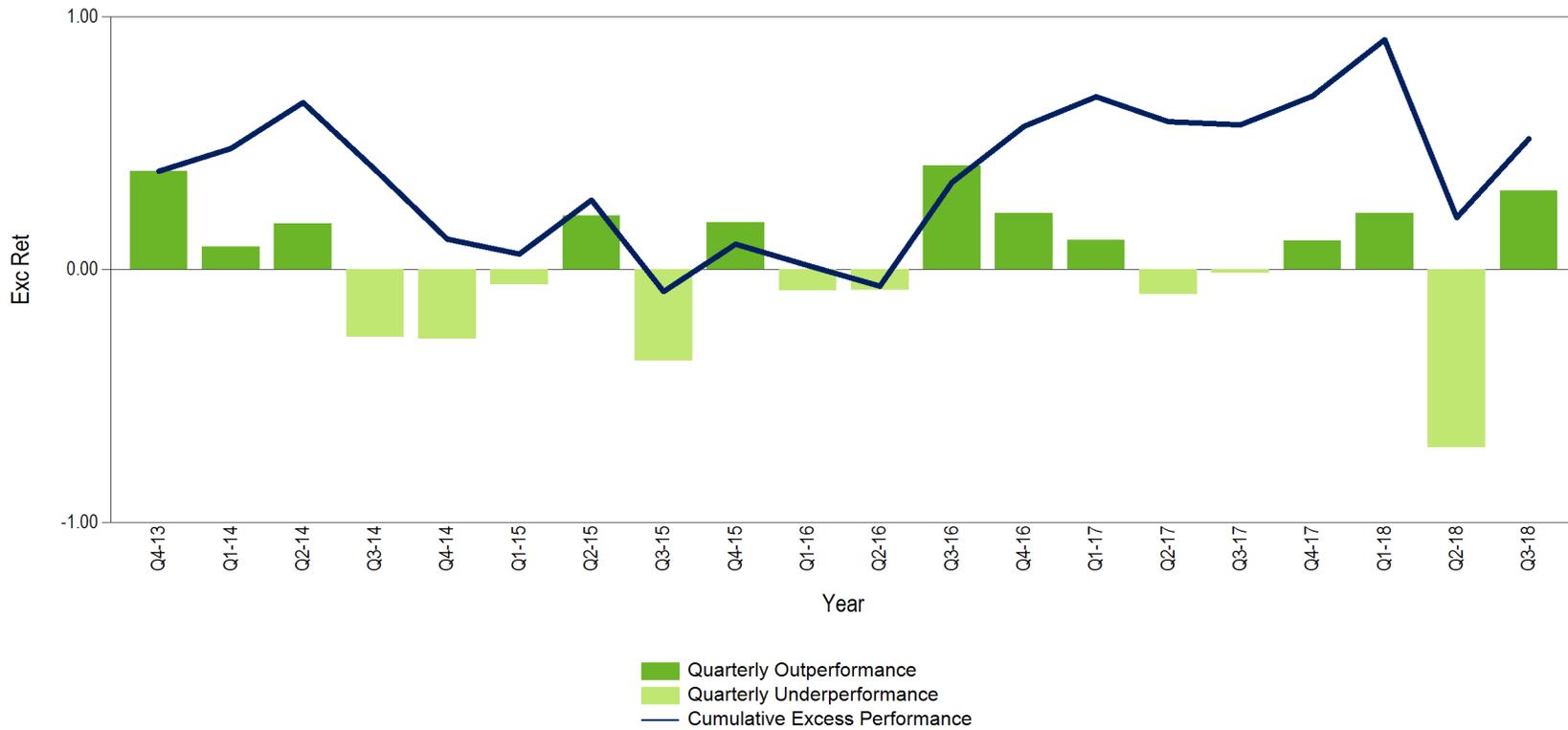
5 Year Style Map



# Los Angeles City Employees' Retirement System

## NEUBERGER BERMAN

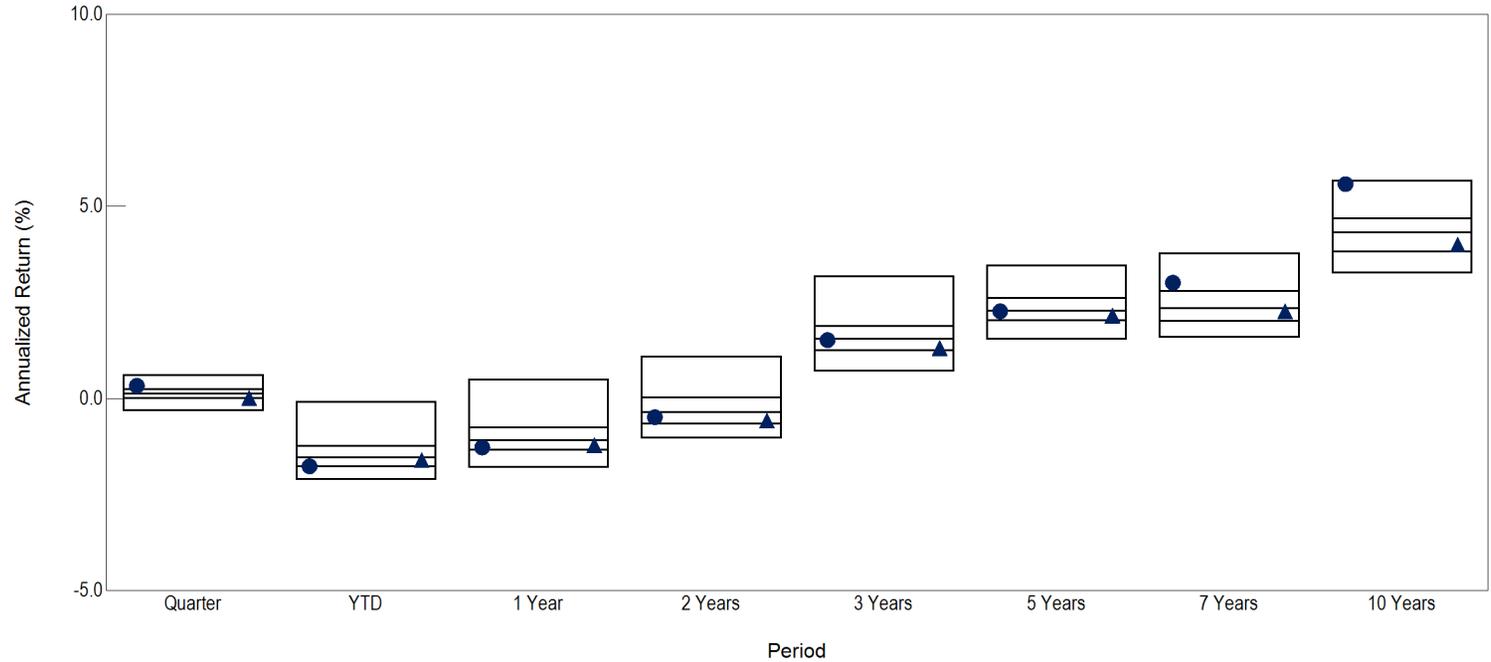
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## NEUBERGER BERMAN

Neuberger Berman vs. eV US Core Fixed Inc Net



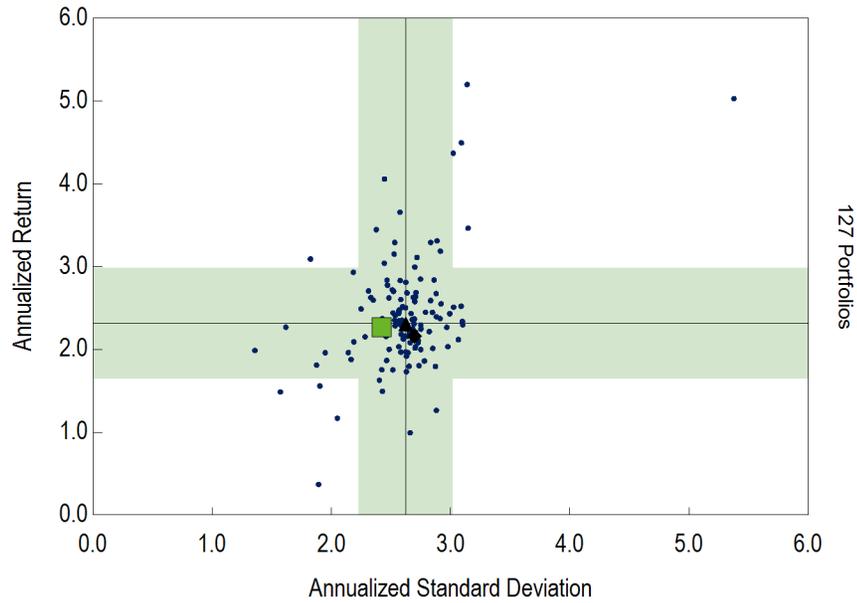
	Return (Rank)															
5th Percentile	0.60	-0.08	0.49	1.09	3.19	3.46	3.77	5.67								
25th Percentile	0.26	-1.21	-0.74	0.05	1.91	2.63	2.82	4.71								
Median	0.14	-1.51	-1.06	-0.34	1.57	2.31	2.37	4.34								
75th Percentile	0.03	-1.75	-1.32	-0.63	1.27	2.06	2.04	3.84								
95th Percentile	-0.29	-2.08	-1.76	-1.01	0.74	1.58	1.63	3.29								
# of Portfolios	134	133	133	131	129	127	120	110								
● Neuberger Berman	0.33	(17)	-1.77	(78)	-1.27	(72)	-0.49	(63)	1.52	(54)	2.27	(57)	3.01	(19)	5.58	(6)
▲ Core Fixed Income Blend	0.02	(77)	-1.60	(64)	-1.22	(66)	-0.57	(72)	1.31	(70)	2.16	(67)	2.28	(59)	4.01	(69)



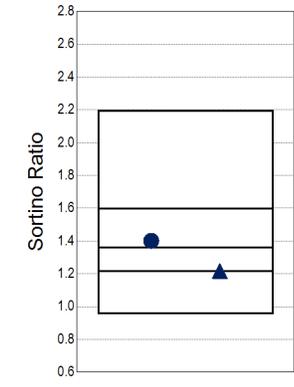
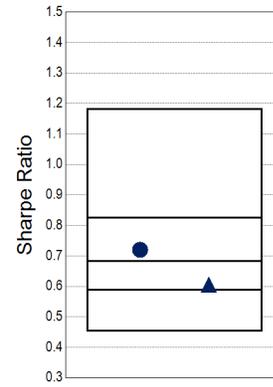
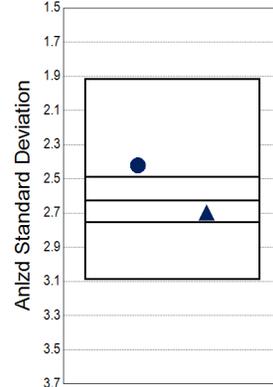
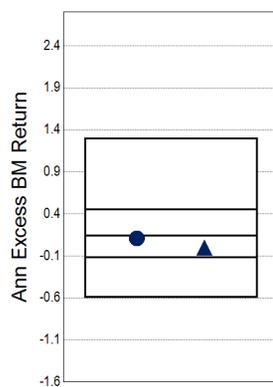
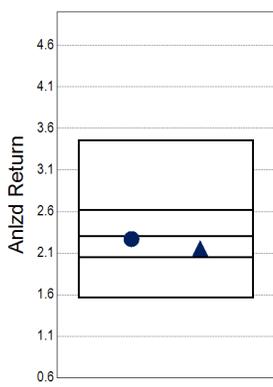
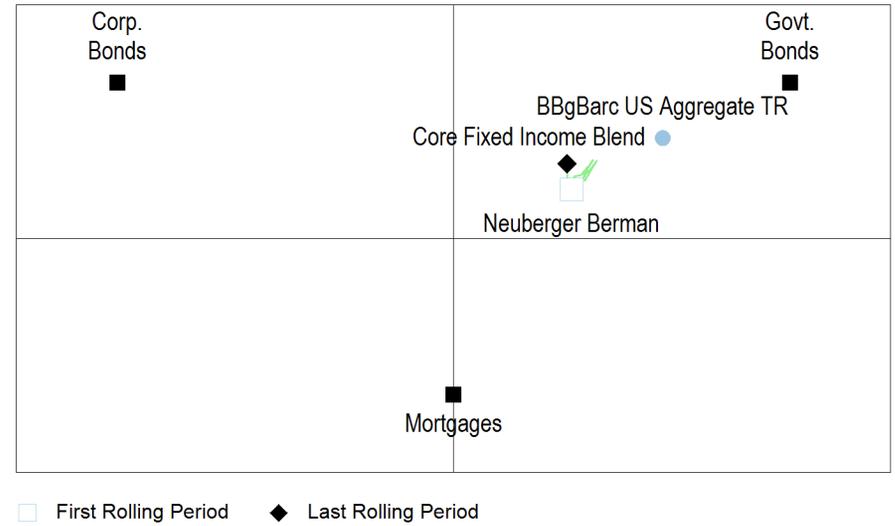
# Los Angeles City Employees' Retirement System

## NEUBERGER BERMAN

5 Year Risk Return



5 Year Style Map



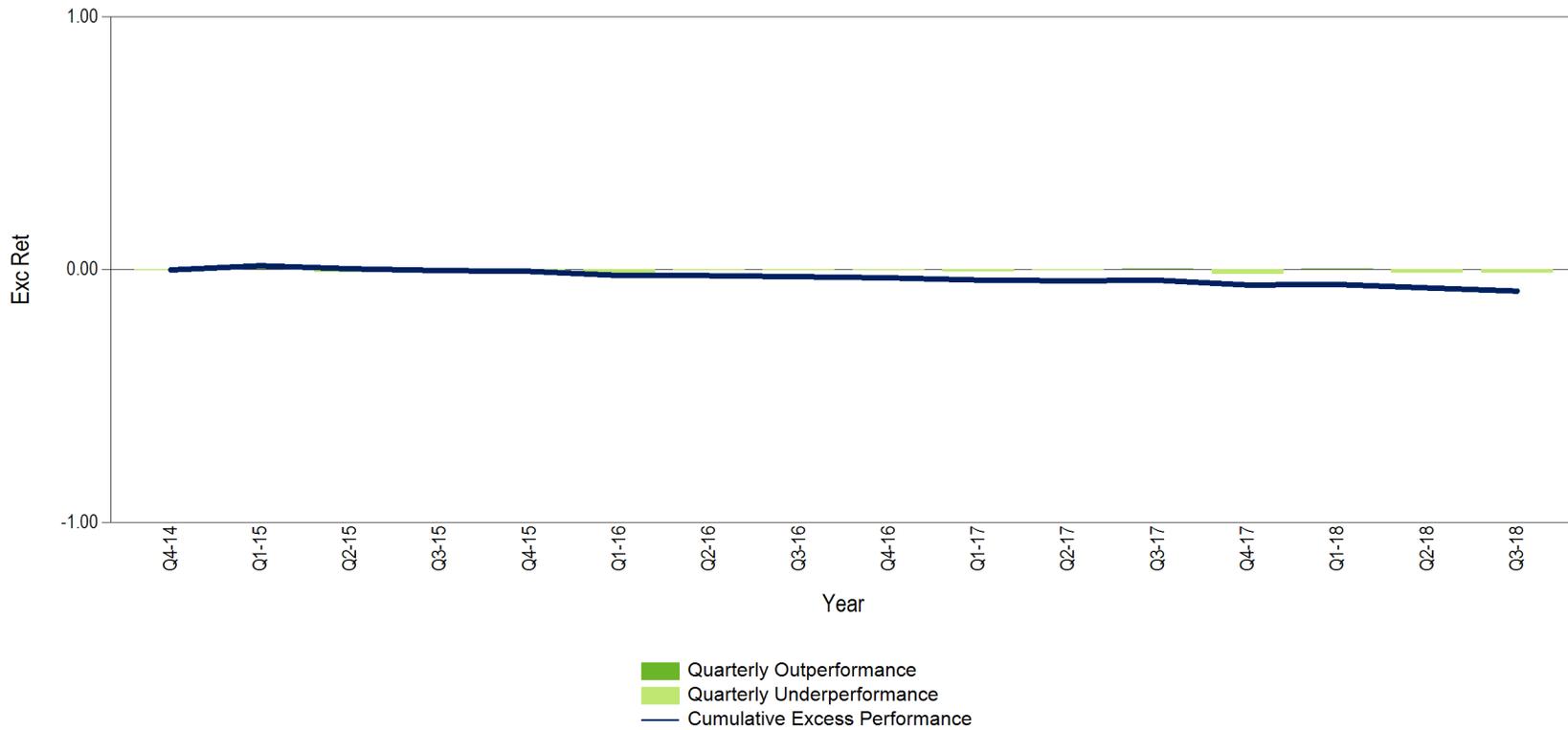
- Neuberger Berman
- ▲ Core Fixed Income Blend
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# Los Angeles City Employees' Retirement System

## SSGA U.S. AGGREGATE BOND

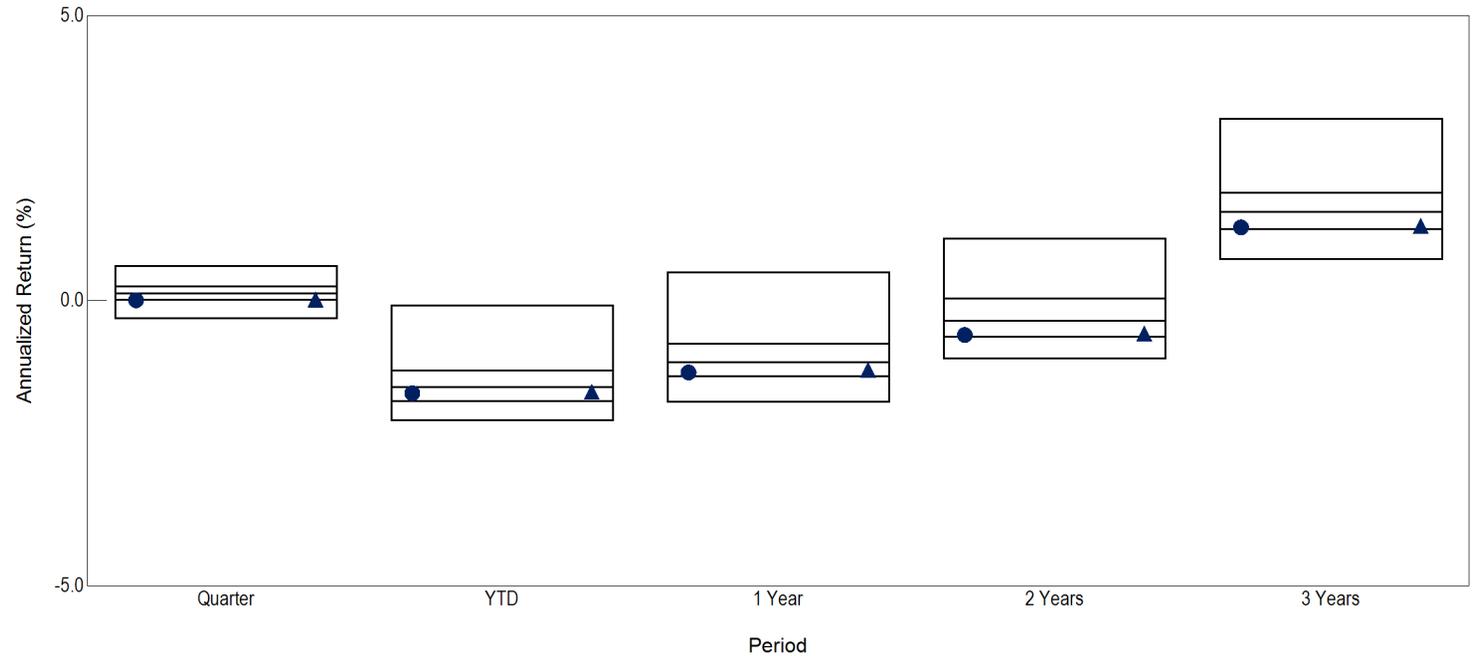
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## SSGA U.S. AGGREGATE BOND

SSgA U.S. Aggregate Bond vs. eV US Core Fixed Inc Net



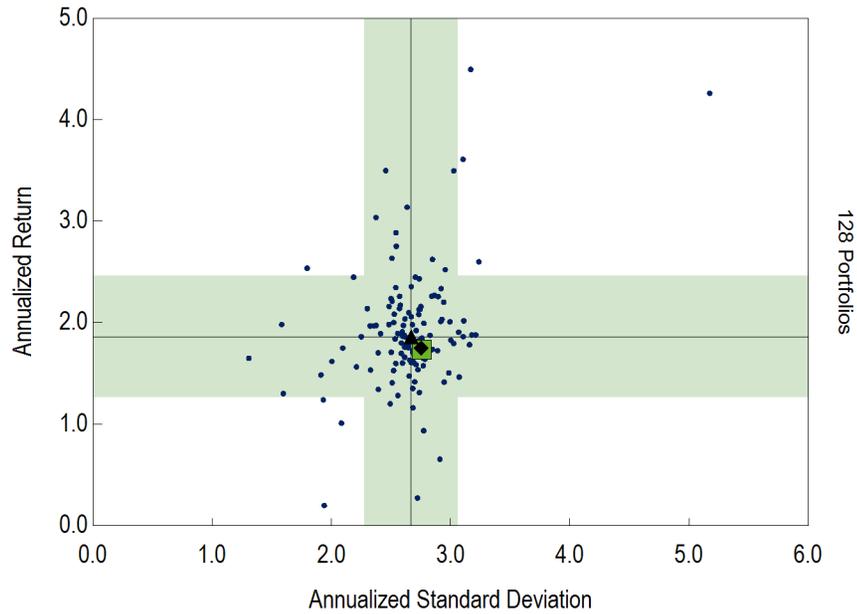
	Return (Rank)									
5th Percentile	0.60		-0.08		0.49		1.09		3.19	
25th Percentile	0.26		-1.21		-0.74		0.05		1.91	
Median	0.14		-1.51		-1.06		-0.34		1.57	
75th Percentile	0.03		-1.75		-1.32		-0.63		1.27	
95th Percentile	-0.29		-2.08		-1.76		-1.01		0.74	
# of Portfolios	134		133		133		131		129	
● SSGA U.S. Aggregate Bond	0.01	(79)	-1.62	(65)	-1.26	(72)	-0.60	(73)	1.29	(74)
▲ BBgBarc US Aggregate TR	0.02	(77)	-1.60	(64)	-1.22	(66)	-0.57	(72)	1.31	(70)



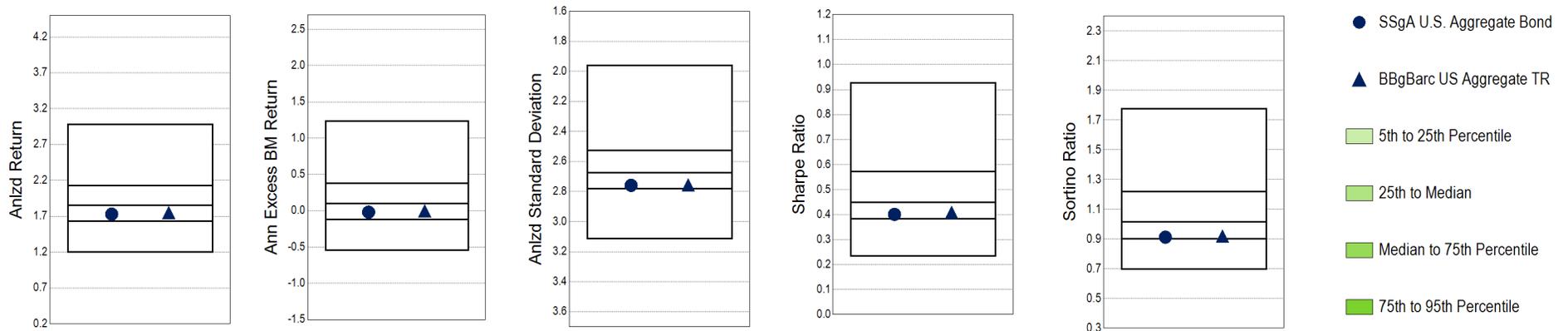
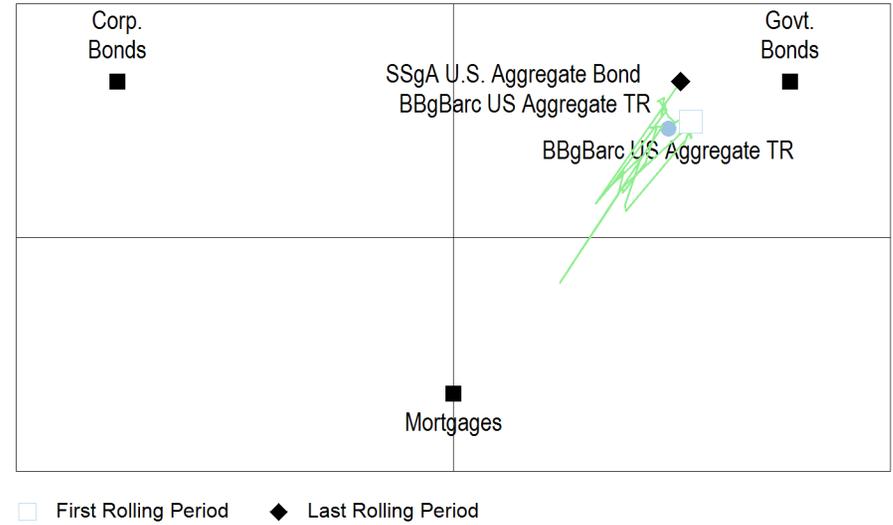
# Los Angeles City Employees' Retirement System

## SSGA U.S. AGGREGATE BOND

Since Inception Risk Return



Since Inception Style Map

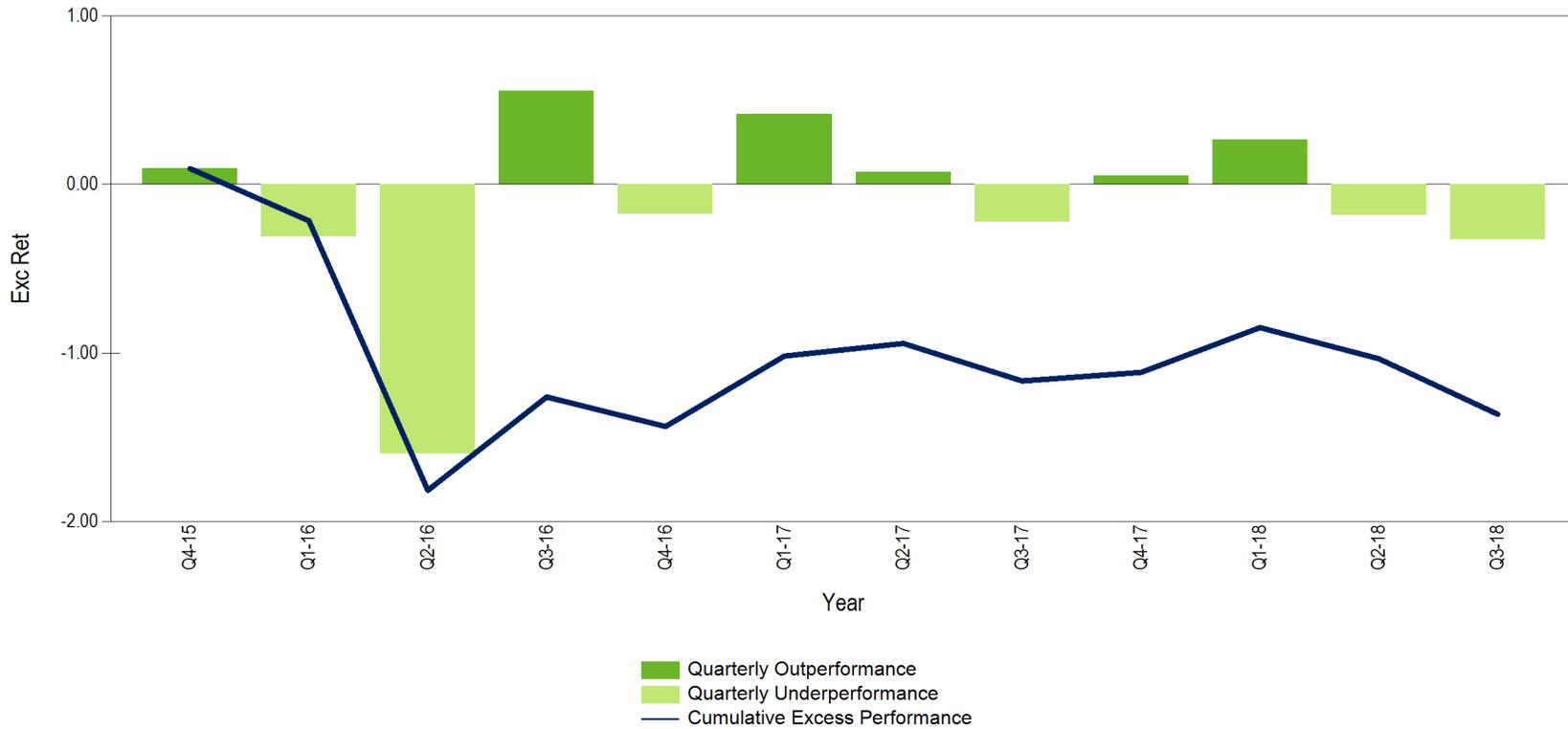


# **CREDIT OPPORTUNITIES MANAGER PERFORMANCE**

NEPC, LLC

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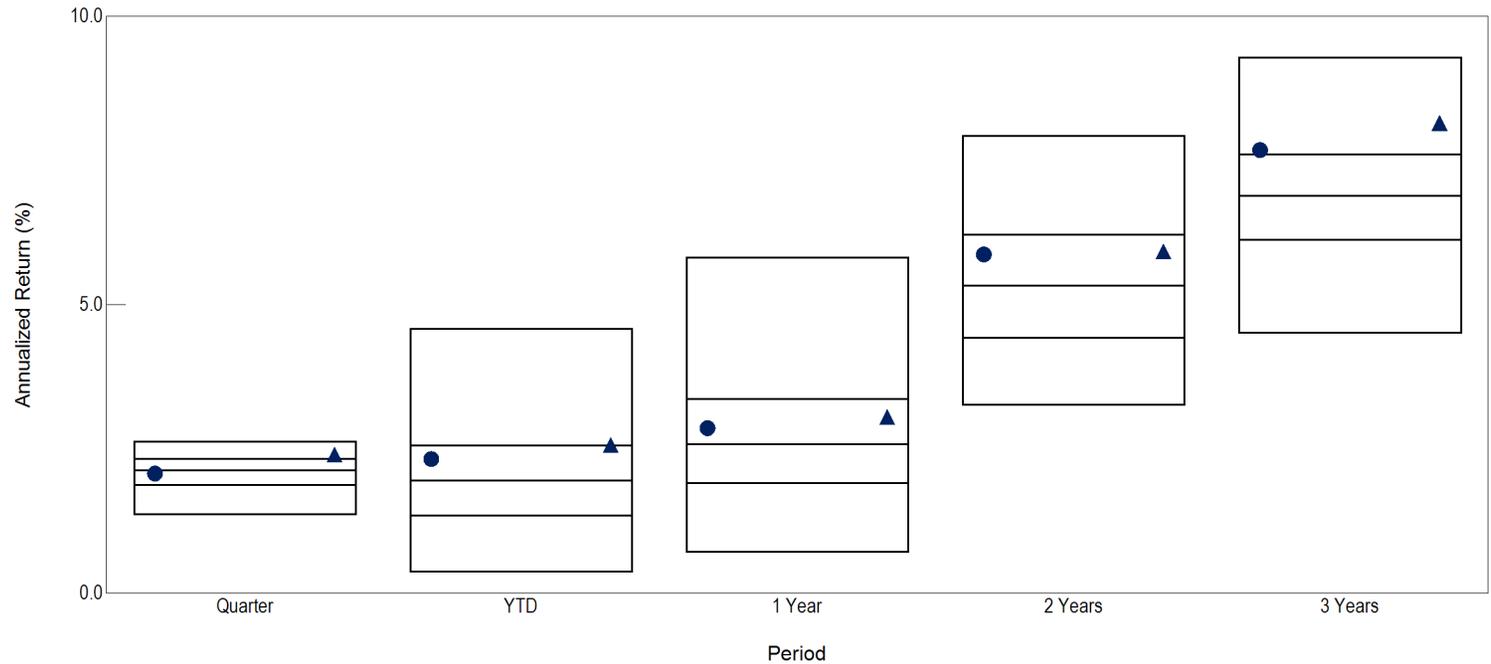
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## AEGON USA

AEGON USA vs. eV US High Yield Fixed Inc Net



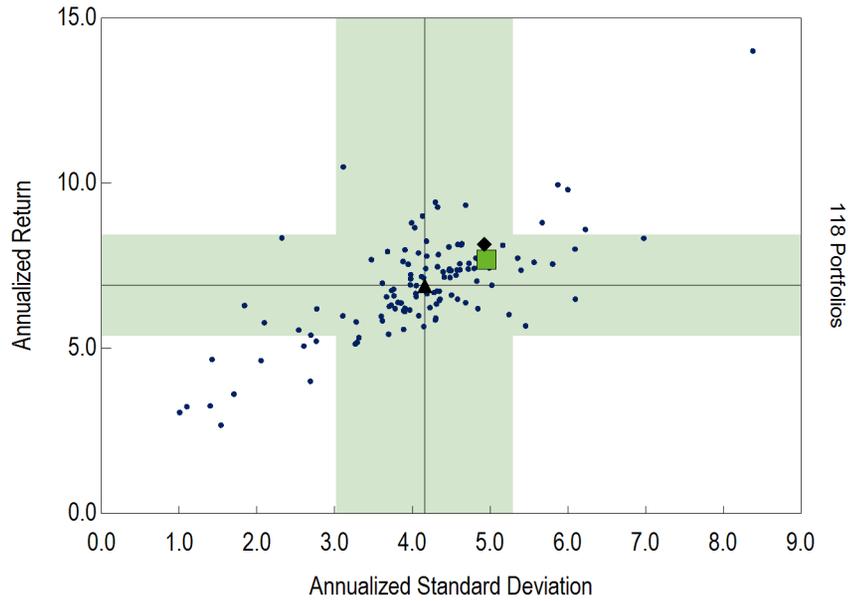
	Return (Rank)									
5th Percentile	2.63		4.58		5.82		7.92		9.28	
25th Percentile	2.35		2.57		3.38		6.23		7.62	
Median	2.14		1.97		2.60		5.34		6.90	
75th Percentile	1.88		1.35		1.92		4.44		6.14	
95th Percentile	1.38		0.39		0.73		3.28		4.53	
# of Portfolios	126		125		125		121		118	
● AEGON USA	2.07	(57)	2.33	(34)	2.86	(40)	5.87	(31)	7.68	(24)
▲ BBgBarc US High Yield 2% Issuer Cap TR	2.40	(22)	2.57	(26)	3.05	(33)	5.92	(31)	8.15	(14)



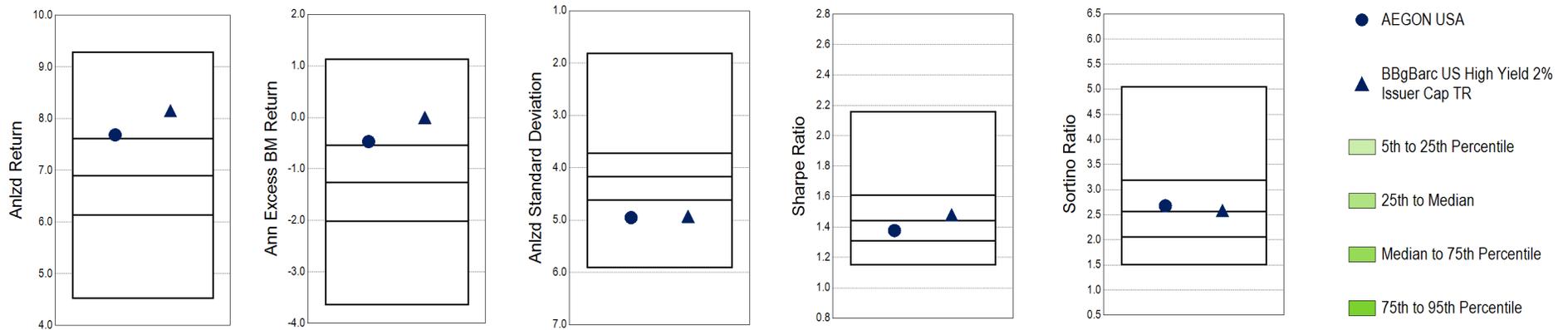
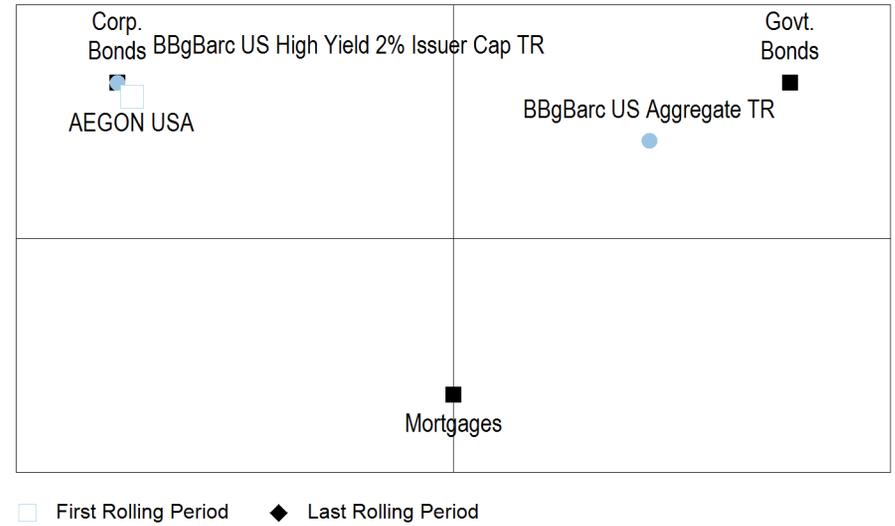
# Los Angeles City Employees' Retirement System

## AEGON USA

3 Year Risk Return

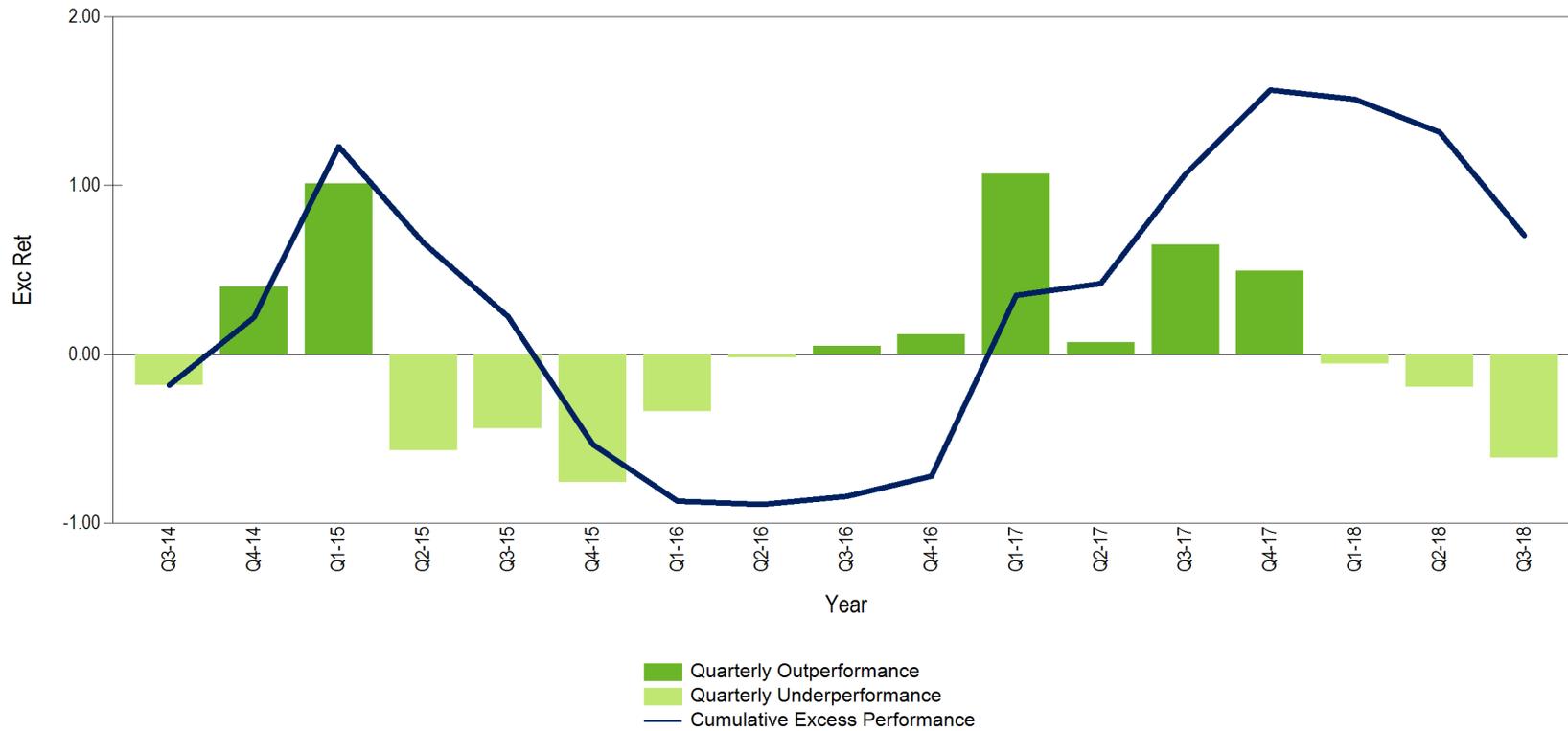


3 Year Style Map



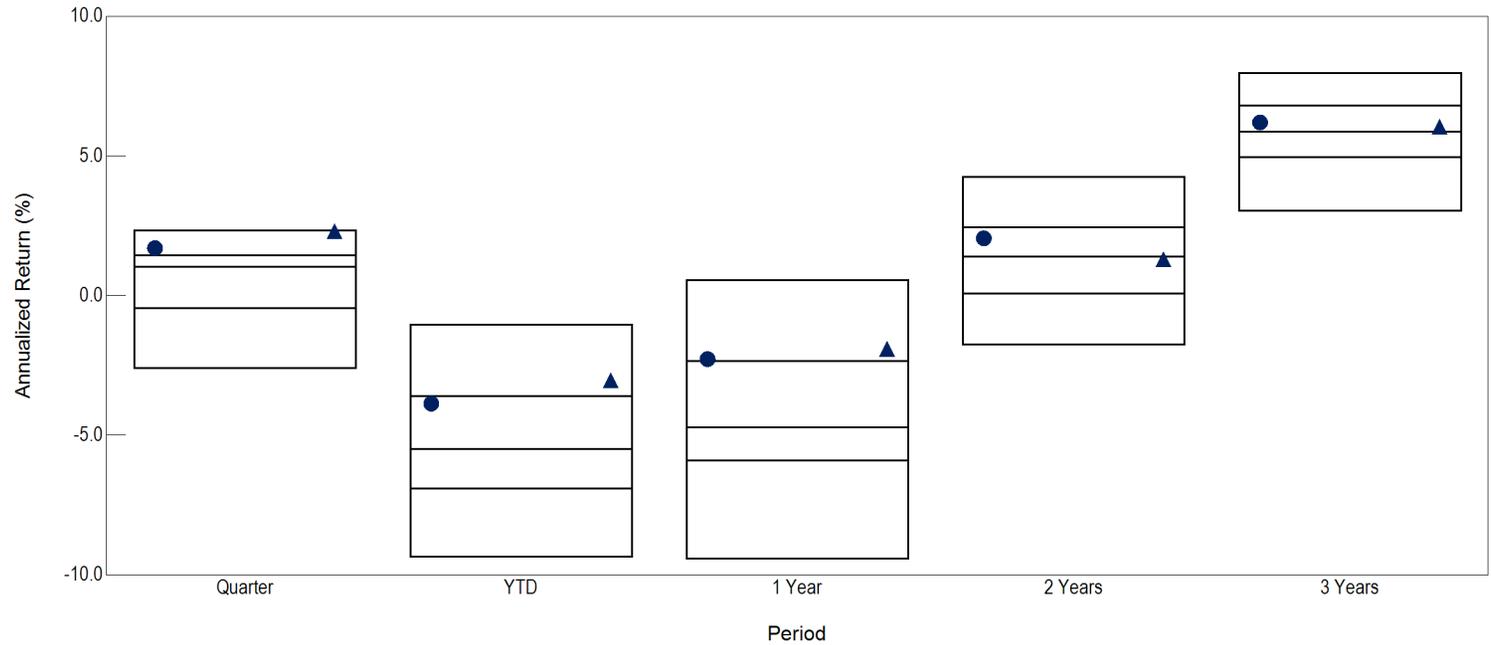
# PRUDENTIAL EMERGING MARKETS

Quarterly and Cumulative Excess Performance



# PRUDENTIAL EMERGING MARKETS

Prudential Emerging Markets vs. eV Emg Mkt Fixed Inc Hedged Net

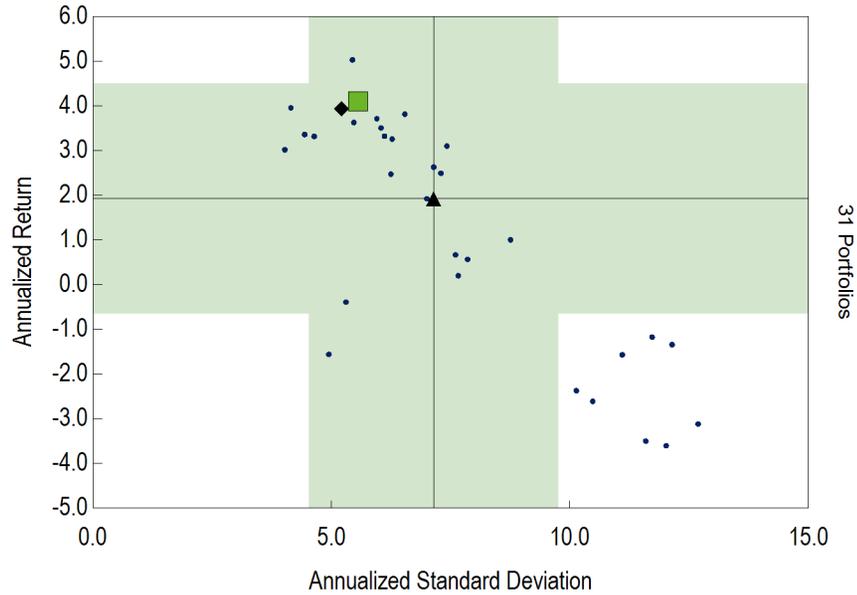


	Return (Rank)									
5th Percentile	2.32		-1.05		0.56		4.24		7.95	
25th Percentile	1.46		-3.58		-2.32		2.46		6.83	
Median	1.05		-5.47		-4.71		1.41		5.89	
75th Percentile	-0.43		-6.88		-5.89		0.09		4.98	
95th Percentile	-2.57		-9.33		-9.40		-1.72		3.05	
# of Portfolios	41		41		41		41		39	
● Prudential Emerging Markets	1.69	(23)	-3.87	(30)	-2.28	(25)	2.05	(37)	6.19	(44)
▲ JP Morgan EMBI Global Diversified	2.30	(6)	-3.04	(22)	-1.92	(22)	1.29	(52)	6.04	(49)

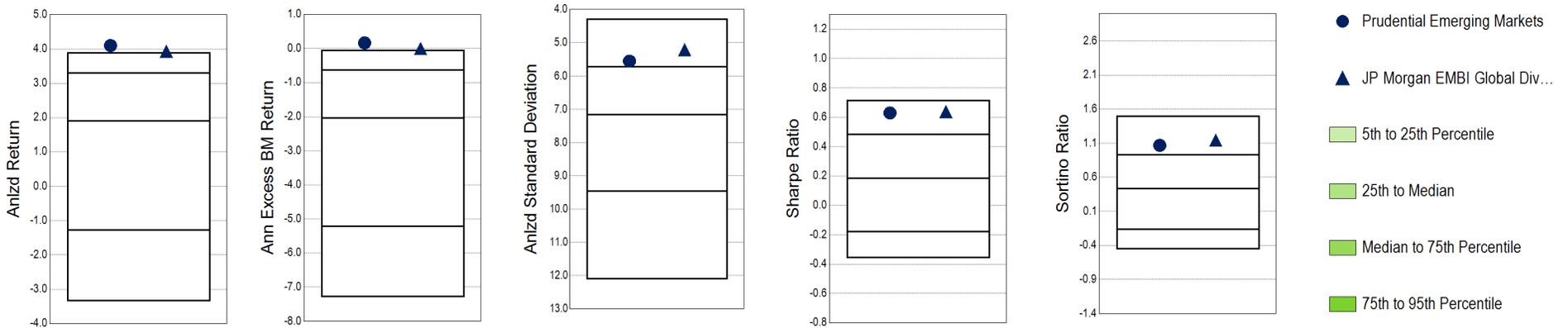
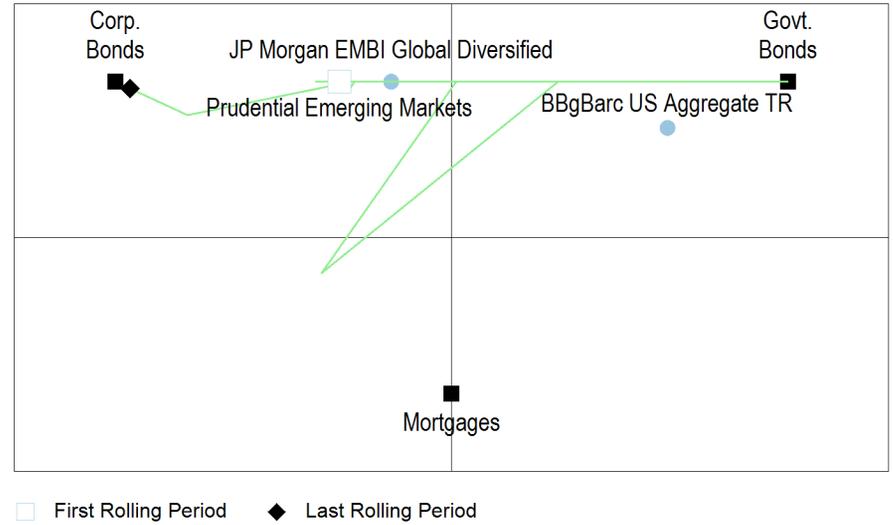


# PRUDENTIAL EMERGING MARKETS

Since Inception Risk Return

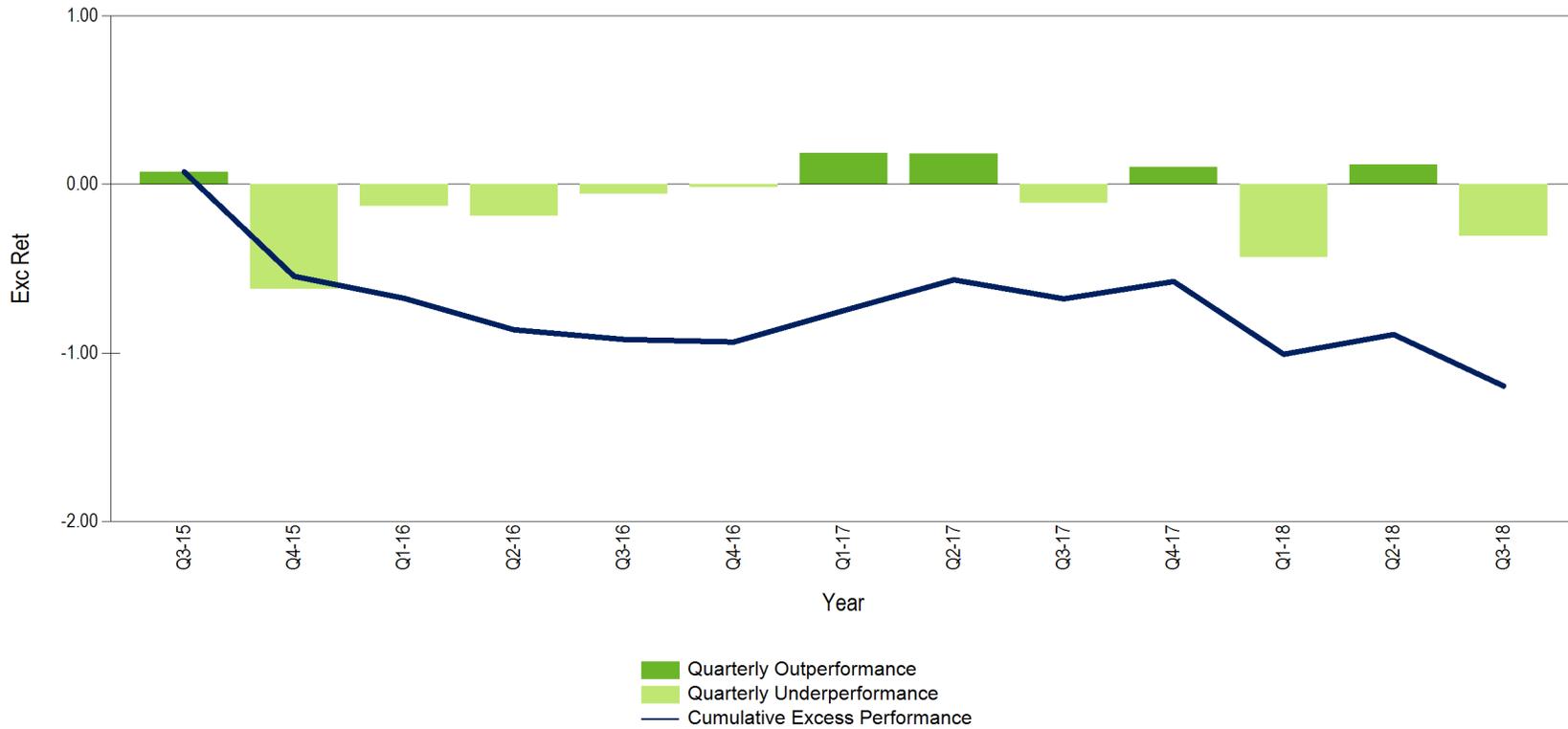


Since Inception Style Map



# BAIN CAPITAL SENIOR LOAN FUND, LP

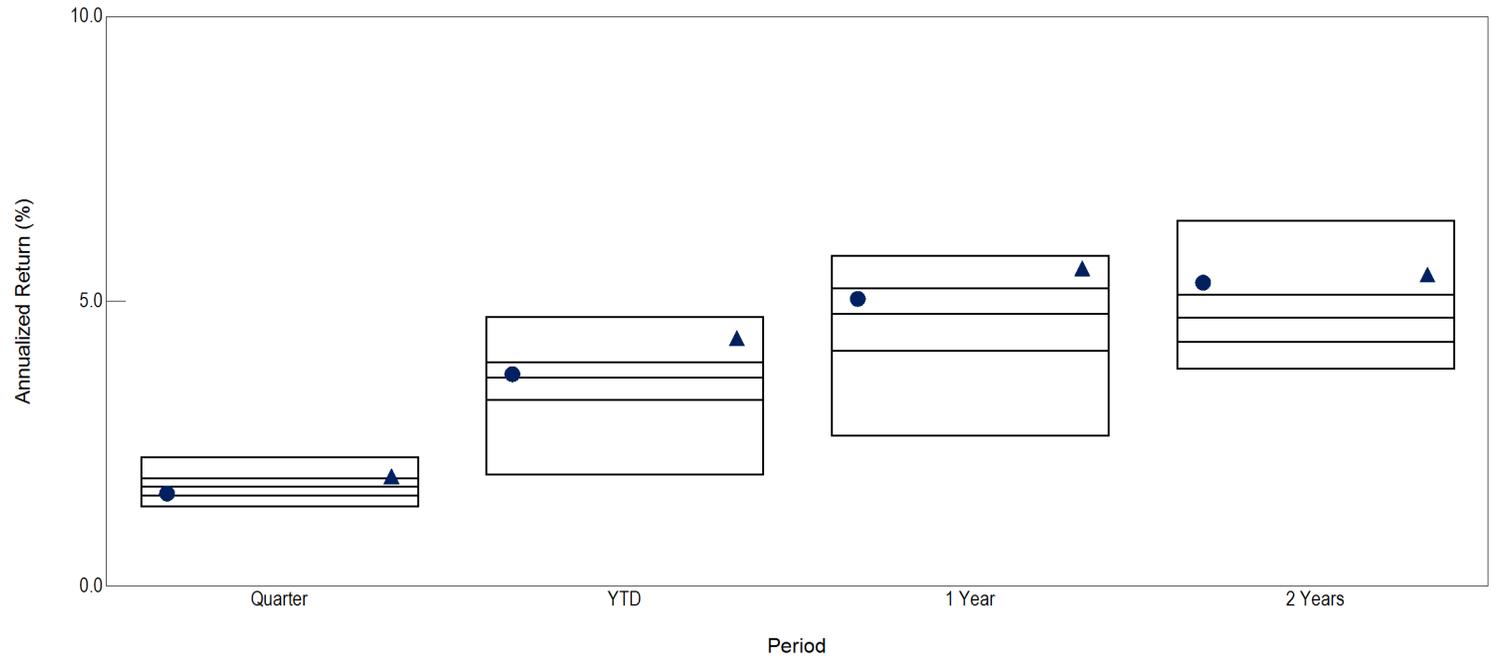
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## BAIN CAPITAL SENIOR LOAN FUND, LP

Bain Capital Senior Loan Fund, LP vs. eV US Float-Rate Bank Loan Fixed Inc Net

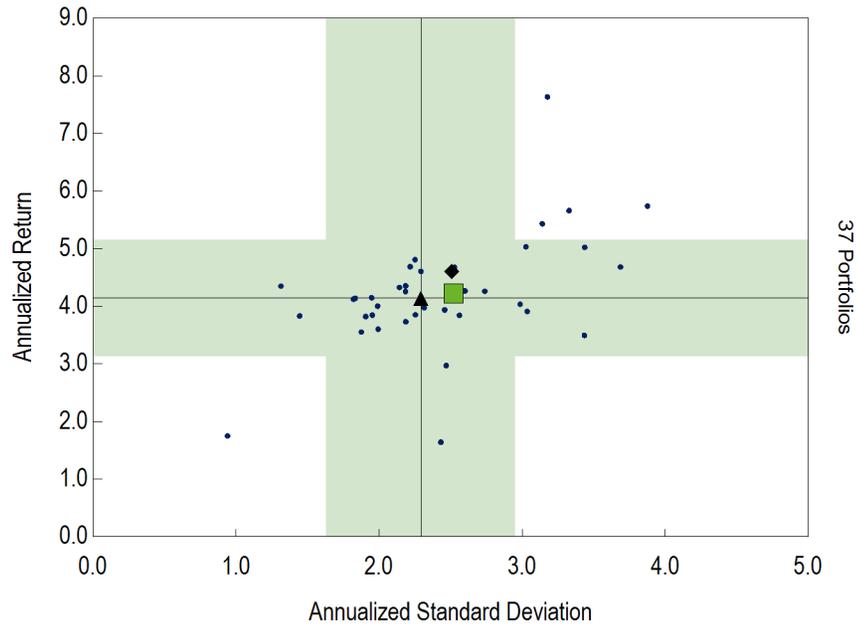


	Return (Rank)			
	Quarter	YTD	1 Year	2 Years
5th Percentile	2.27	4.73	5.80	6.41
25th Percentile	1.91	3.94	5.24	5.13
Median	1.76	3.68	4.79	4.73
75th Percentile	1.60	3.28	4.14	4.29
95th Percentile	1.42	1.97	2.66	3.83
# of Portfolios	39	39	39	38
● Bain Capital Senior Loan Fund, LP	1.63 (73)	3.72 (40)	5.04 (36)	5.33 (19)
▲ Credit Suisse Leveraged Loans	1.93 (24)	4.36 (10)	5.58 (15)	5.47 (16)

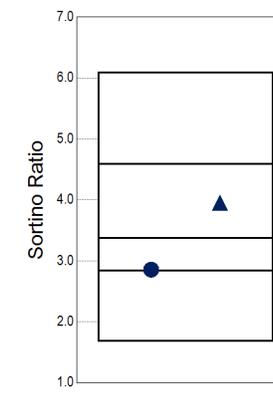
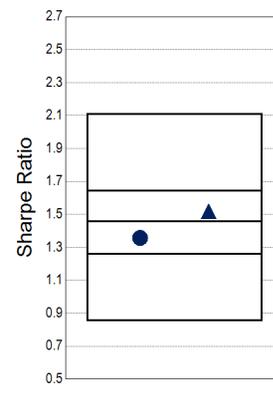
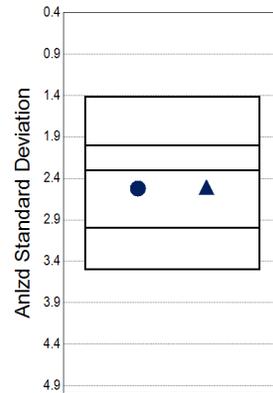
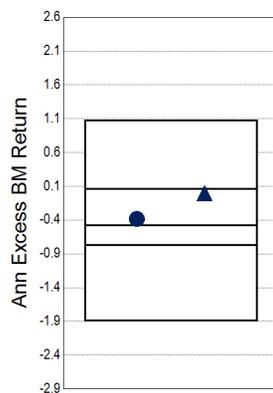
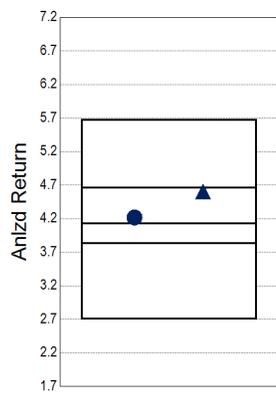
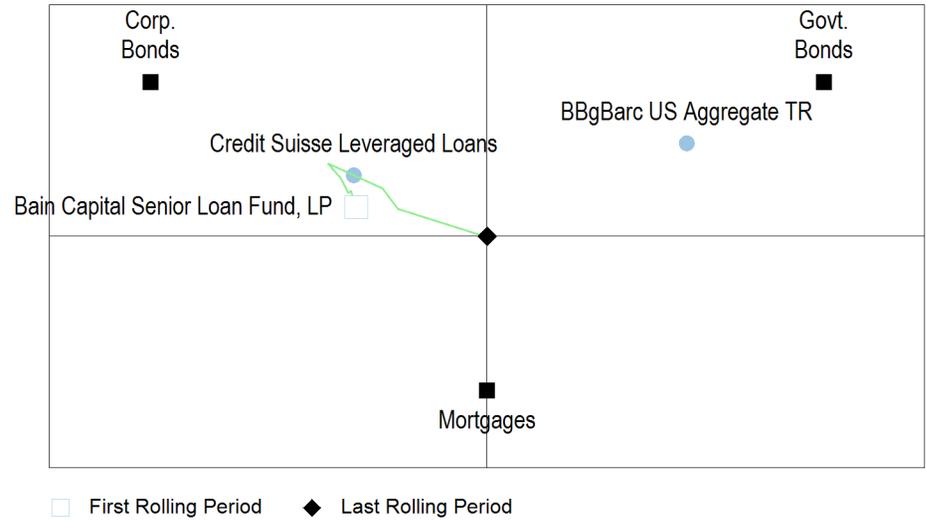


# BAIN CAPITAL SENIOR LOAN FUND, LP

Since Inception Risk Return



Since Inception Style Map



- Bain Capital Senior Loan Fund, LP
- ▲ Credit Suisse Leveraged Lo...
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# REAL ASSETS MANAGER PERFORMANCE

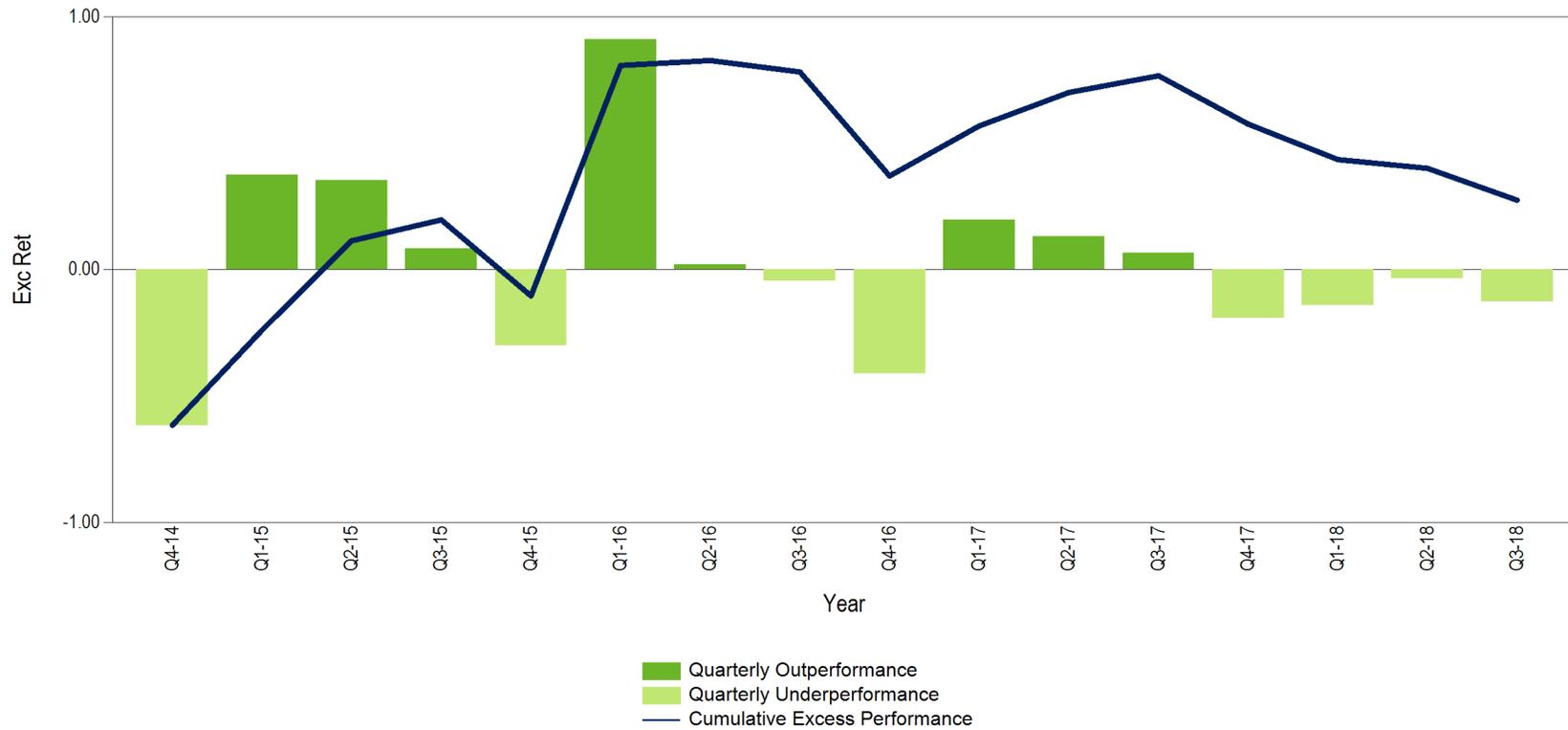
NEPC, LLC

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# Los Angeles City Employees' Retirement System

## DFA US TIPS

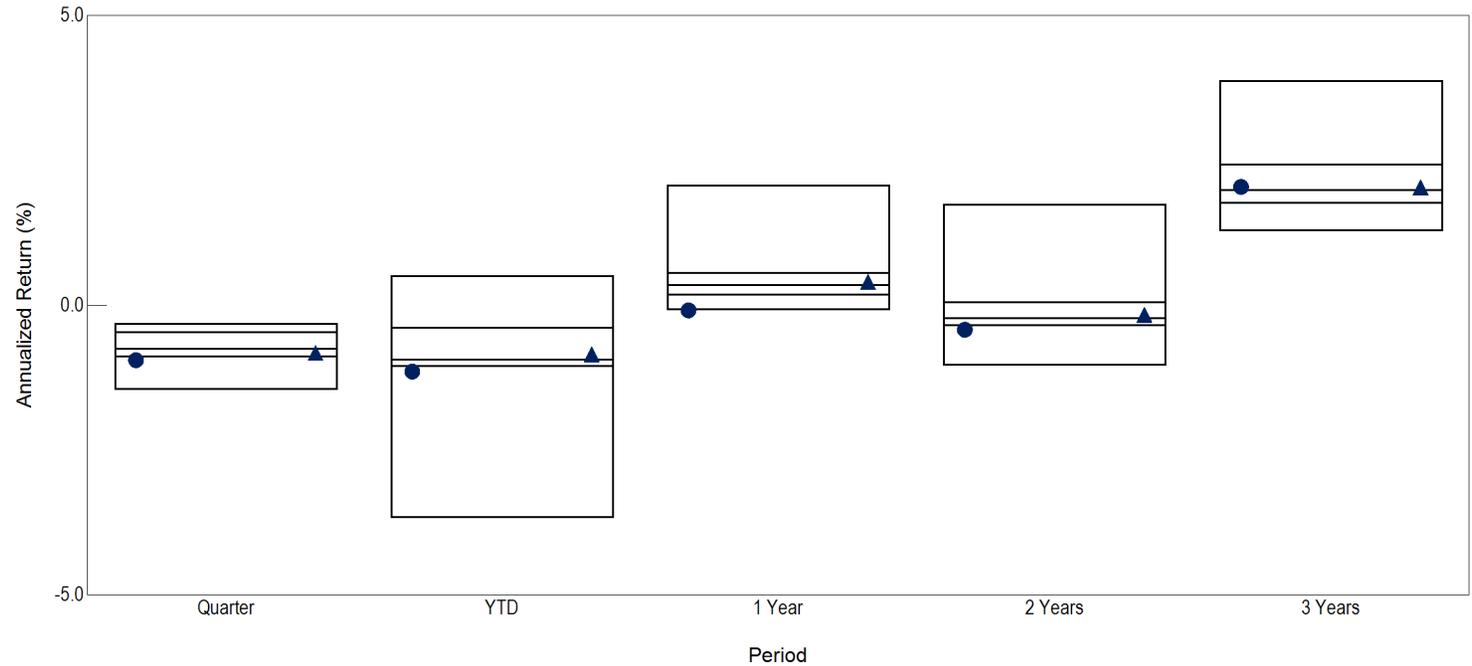
Quarterly and Cumulative Excess Performance



# Los Angeles City Employees' Retirement System

## DFA US TIPS

DFA US TIPS vs. eV US TIPS / Inflation Fixed Inc Net



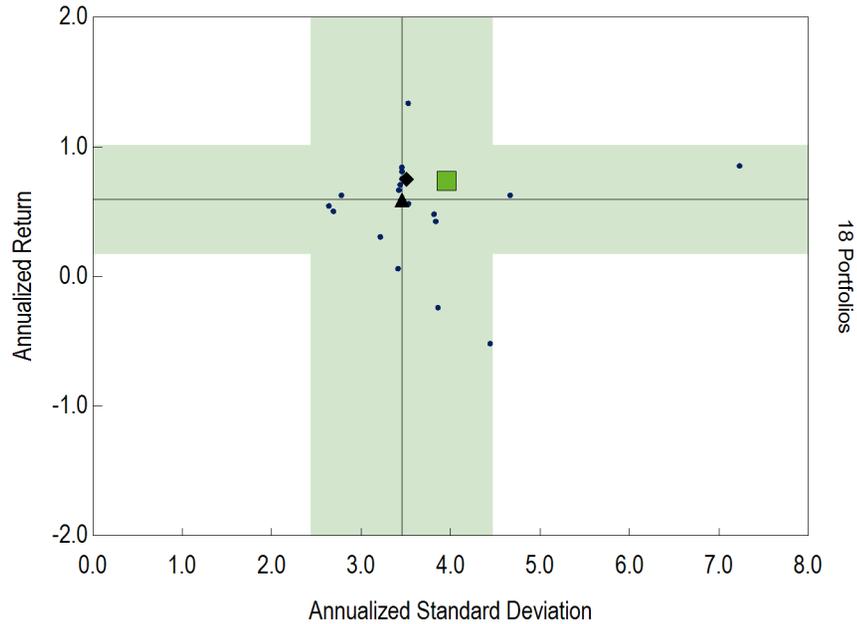
	Return (Rank)									
5th Percentile	-0.32		0.50		2.07		1.73		3.87	
25th Percentile	-0.46		-0.37		0.57		0.07		2.44	
Median	-0.74		-0.92		0.36		-0.21		2.00	
75th Percentile	-0.87		-1.04		0.19		-0.34		1.78	
95th Percentile	-1.43		-3.64		-0.06		-1.01		1.31	
# of Portfolios	21		20		20		20		20	
● DFA US TIPS	-0.95	(91)	-1.14	(82)	-0.09	(96)	-0.42	(86)	2.04	(46)
▲ BBgBarc US TIPS TR	-0.82	(63)	-0.84	(45)	0.41	(40)	-0.16	(41)	2.04	(47)



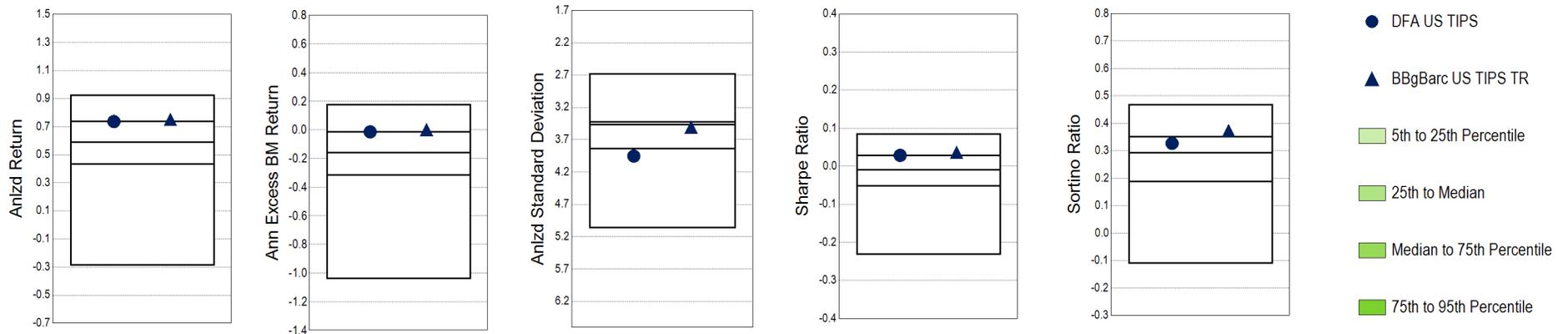
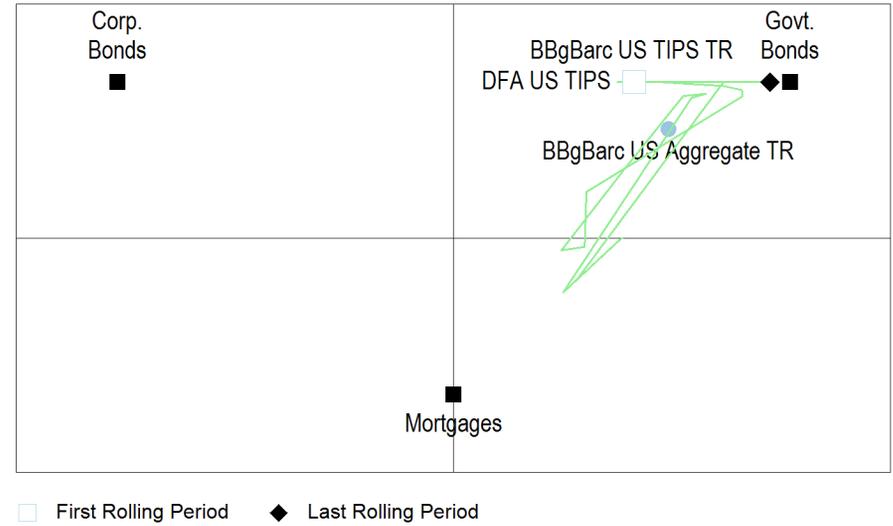
# Los Angeles City Employees' Retirement System

## DFA US TIPS

Since Inception Risk Return

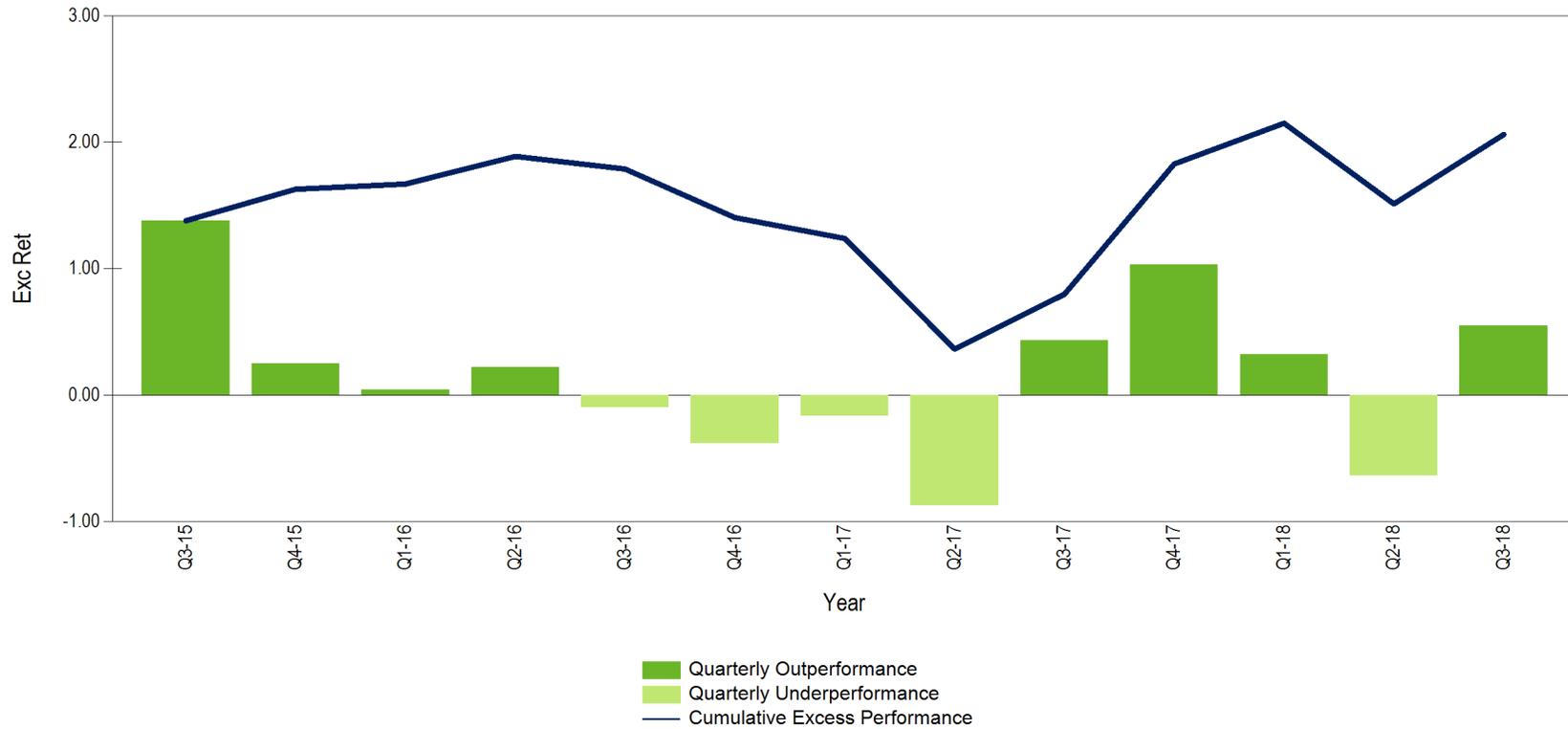


Since Inception Style Map



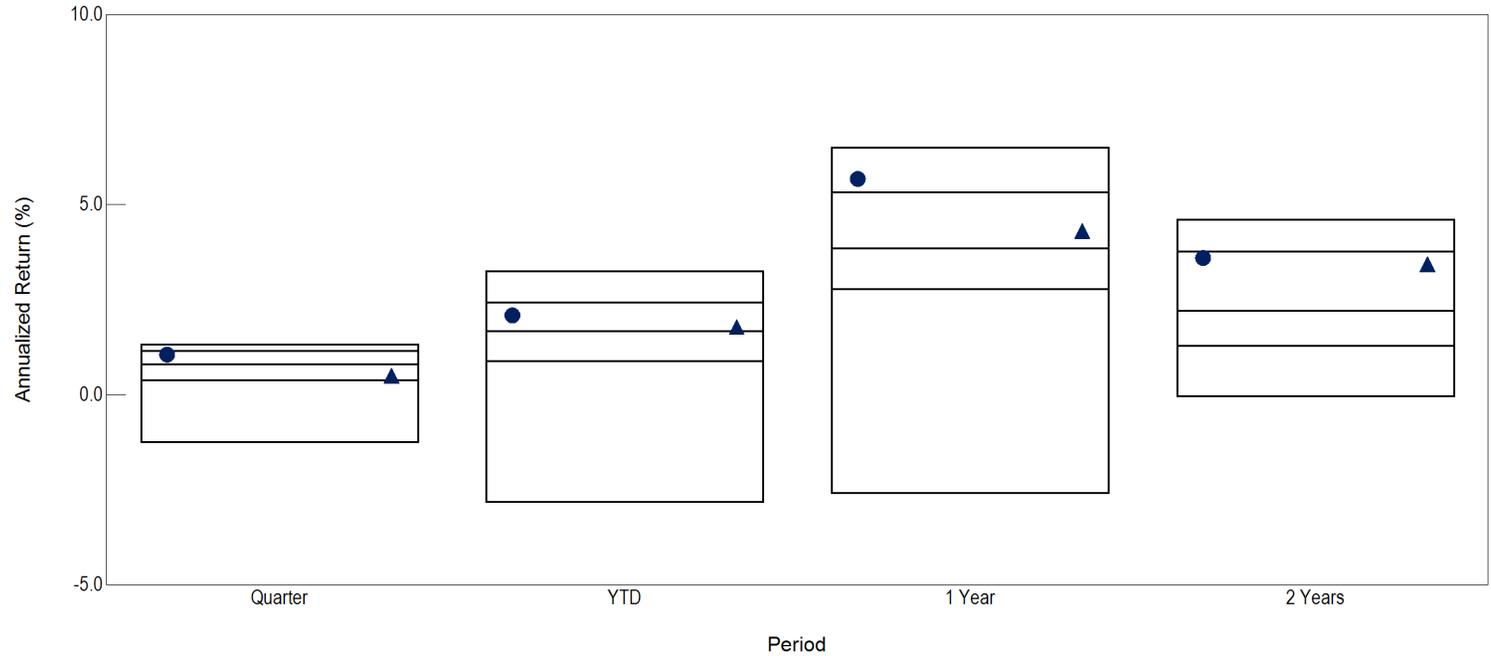
# CENTERSQUARE US REAL ESTATE

Quarterly and Cumulative Excess Performance



# CENTERSQUARE US REAL ESTATE

CenterSquare US Real Estate vs. eV US REIT Net

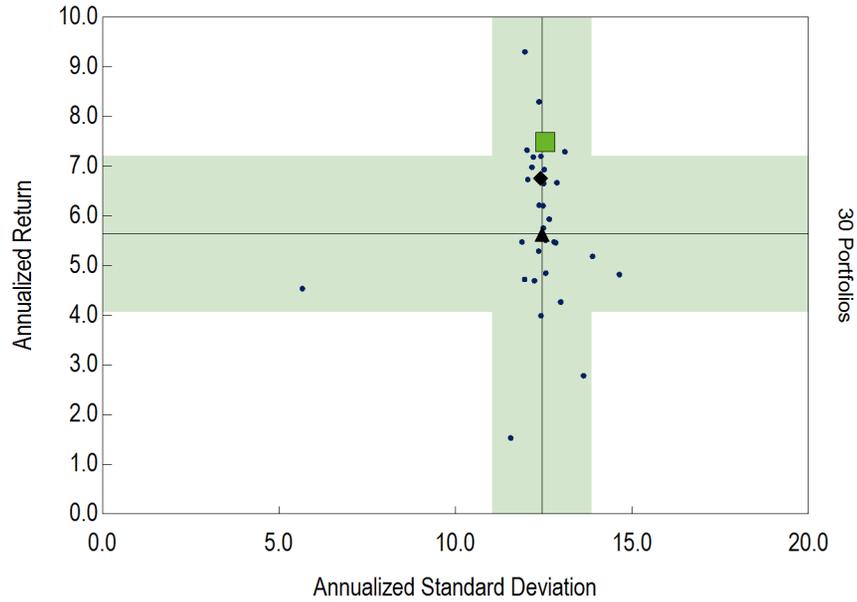


	Return (Rank)			
	Quarter	YTD	1 Year	2 Years
5th Percentile	1.32	3.24	6.50	4.60
25th Percentile	1.16	2.43	5.34	3.78
Median	0.82	1.68	3.87	2.23
75th Percentile	0.40	0.90	2.79	1.30
95th Percentile	-1.23	-2.80	-2.57	-0.02
# of Portfolios	31	31	31	30
● CenterSquare US Real Estate	1.05 (38)	2.08 (35)	5.67 (18)	3.59 (27)
▲ FTSE NAREIT All Equity REIT	0.50 (68)	1.78 (46)	4.31 (45)	3.43 (29)

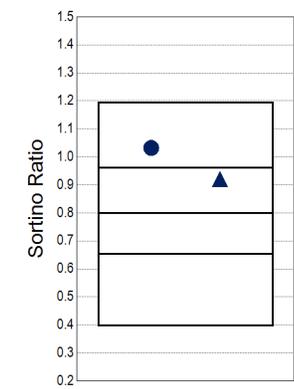
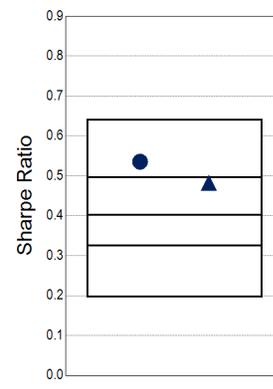
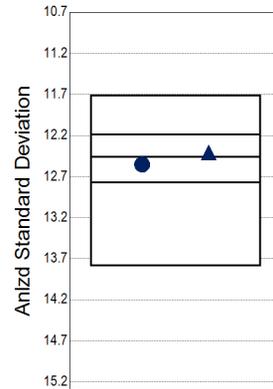
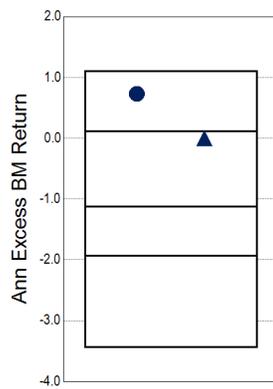
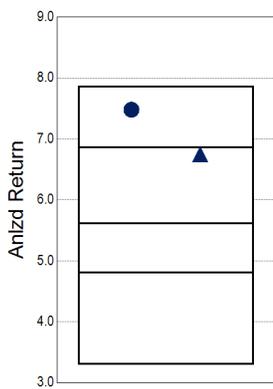
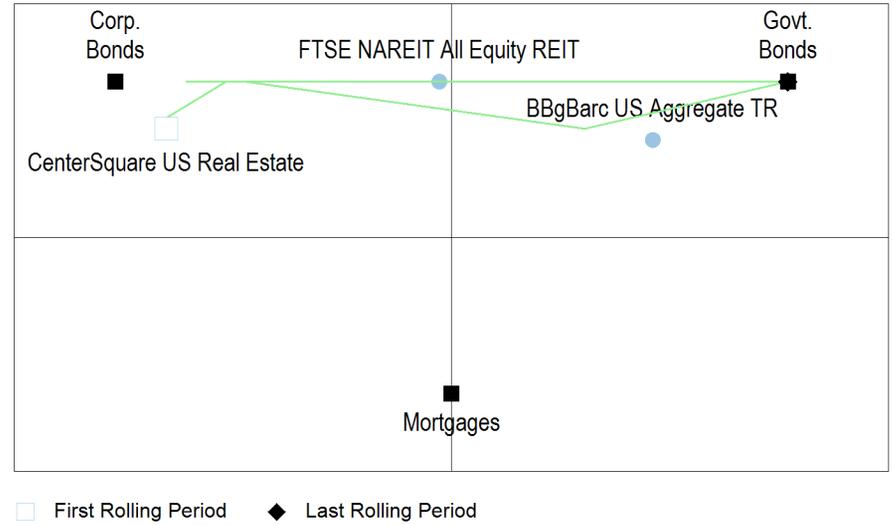


# CENTERSQUARE US REAL ESTATE

Since Inception Risk Return



Since Inception Style Map



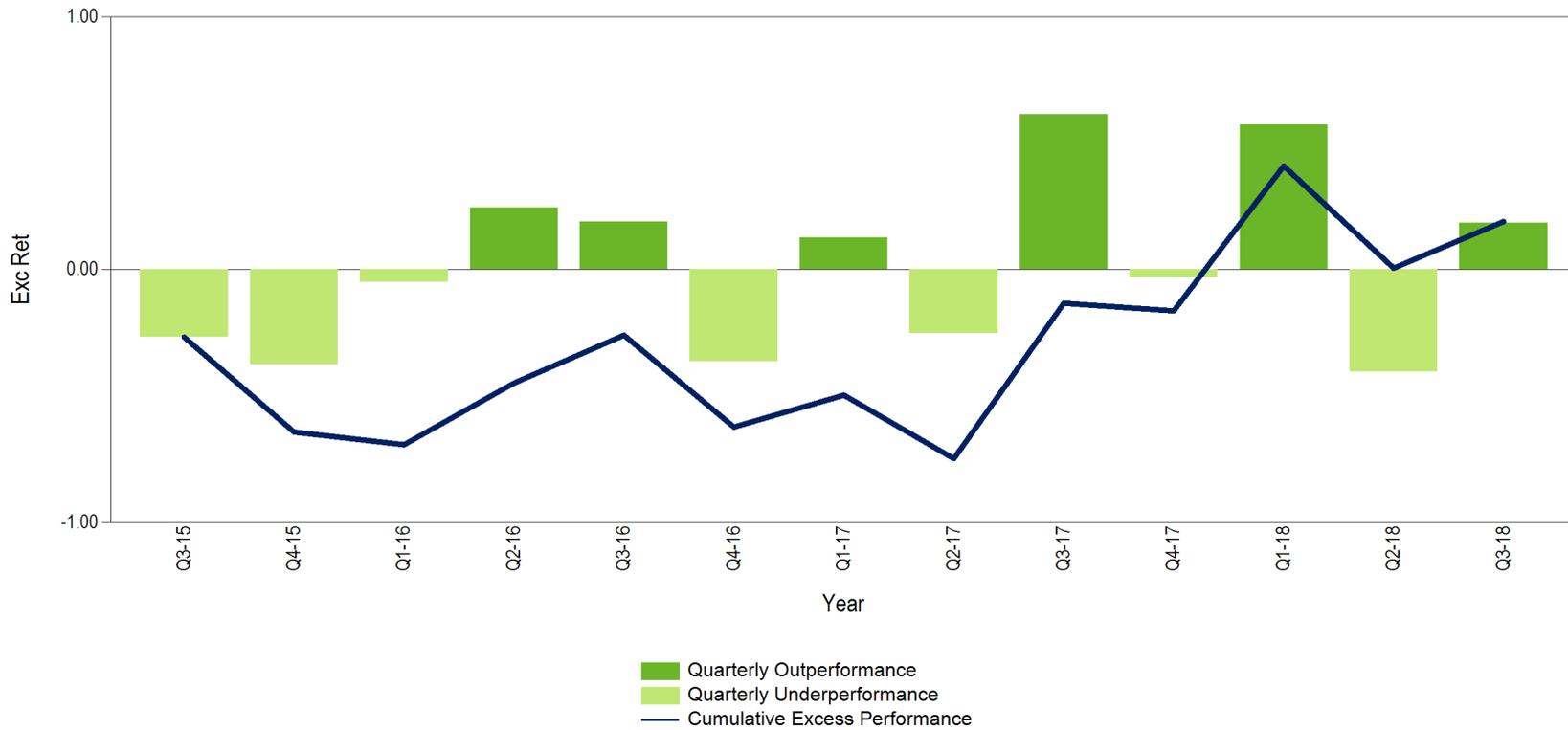
- CenterSquare US Real Estate
- ▲ FTSE NAREIT All Equity REIT
- 5th to 25th Percentile
- 25th to Median
- Median to 75th Percentile
- 75th to 95th Percentile



# Los Angeles City Employees' Retirement System

## CORE COMMODITY MGMT

Quarterly and Cumulative Excess Performance



# DEFINITIONS

NEPC, LLC

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# POLICY INDEX DEFINITIONS

**Policy Index:** Current (adopted January 10, 2012) 24% Russell 3000 Index, 29% MSCI ACWI ex USA Net Index, 19% Bbg Barclays U.S. Aggregate Bond Index, 5% Credit Opportunities Blend, 10% Real Assets Blend, 12% Private Equity Blend, 1% Citi 3 Month T-Bill Index

**U.S. Equity Blend:** July 1, 2011 - Current: Russell 3000 Index; September 30, 1994 - December 31, 1999 S&P 500 Index 33.75, Russell 1000 Value Index 35%, Russell 1000 Growth 12.5%, Russell 2000 Value 12.5%, Russell 2000 Growth 6.25%

**Core Fixed Income Blend:** July 1, 2013 – Current: Bbg Barclays U.S. Aggregate Bond Index

**Credit Opportunities Blend:** 65% Bbg Barclays U.S. HY 2% Cap Index, 35% JPM EMBIGD Index

**Public Real Assets Blend:** 60% Bbg Barclays U.S. TIPS Index, 20% Bbg Commodity Index, 10% FTSE NAREIT All Equity Index, 10% Alerian MLP Index

**Real Estate Blend:** July 1, 2014 - Current NCREIF ODCE + 0.80%; July 1, 2012 - June 30, 2014 NCREIF Property Index Lagged +1%; October 1, 1994 - June 30, 2012 NCREIF Property Index Lagged

**Private Equity Blend:** February 1, 2012 – current: Russell 3000 + 3%; Inception – January 31, 2012: Russell 3000 + 4%

Note: Policy index definitions do not reflect the updated target asset allocation adopted on April 24, 2018.

Note: See Investment Policy for a full description of the indices listed.



# GLOSSARY OF INVESTMENT TERMINOLOGY

**# Of Portfolios/Observations<sup>1</sup>** - The total number of data points that make up a specified universe

**Allocation Index<sup>3</sup>** - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly: The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

**Asset Allocation Effect<sup>2</sup>** - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

**Agency Bonds (Agencies)<sup>3</sup>** - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

**Asset Backed Securities (ABS)<sup>3</sup>** - Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

**Attribution<sup>3</sup>** - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager's decisions.

**Average Effective Maturity<sup>4</sup>** - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

**Batting Average<sup>1</sup>** - A measurement representing an investment manager's ability to meet or beat an index.

*Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.*

**Brinson Fachler (BF) Attribution<sup>1</sup>** - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

**Brinson Hood Beebower (BHB) Attribution<sup>1</sup>** - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

**Corporate Bond (Corp)<sup>4</sup>** - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

**Correlation<sup>1</sup>** - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

Data Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net



# GLOSSARY OF INVESTMENT TERMINOLOGY

**Coupon<sup>4</sup>** – The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

**Currency Effect<sup>1</sup>** – Is the effect that changes in currency exchange rates over time affect excess performance.

**Derivative Instrument<sup>2</sup>** – A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

**Downside Deviation<sup>1</sup>** – Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

*Formula:*

*Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.*

**Duration<sup>3</sup>** – Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

**Equity/Debt/Cash Ratio<sup>1</sup>** – The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. A 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

**Foreign Bond<sup>3</sup>** – A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

**Hard Hurdle<sup>5</sup>** – is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate.

**High-Water Mark<sup>4</sup>** – The highest peak in value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

**Hurdle Rate<sup>4</sup>** – The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

**Interaction Effects<sup>2</sup>** – The interaction effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

**Median<sup>3</sup>** – The value (rate of return, market sensitivity, etc.) that exceeds one-half of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

**Modified Duration<sup>3</sup>** – The percentage change in the price of a fixed income security that results from a change in yield.

**Mortgage Backed Securities (MBS)<sup>3</sup>** – Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

**Municipal Bond (Muni)<sup>4</sup>** – A debt security issued by a state, municipality or county to finance its capital expenditures.

**Net Investment Change<sup>1</sup>** – Is the change in an investment after accounting for all Net Cash Flows.

**Performance Fee<sup>4</sup>** – A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

*Data Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net*



# GLOSSARY OF INVESTMENT TERMINOLOGY

**Policy Index<sup>3</sup>** - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

**Price to Book (P/B)<sup>4</sup>** - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

**Price to Earnings (P/E)<sup>3</sup>** - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

**Price to Sales (P/S)<sup>4</sup>** - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

**Return on Equity (ROE)<sup>4</sup>** - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

**Selection (or Manager) Effect<sup>2</sup>** - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

**Soft Hurdle rate<sup>5</sup>** - is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

**Tiered Fee<sup>1</sup>** - A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

**Total Effects<sup>2</sup>** - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

**Total Return<sup>1</sup>** - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

**Universe<sup>3</sup>** - The list of all assets eligible for inclusion in a portfolio.

**Upside Deviation<sup>1</sup>** - Standard Deviation of Positive Returns

**Weighted Avg. Market Cap.<sup>4</sup>** - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

**Yield (%)<sup>3</sup>** - The current yield of a security is the current indicated annual dividend rate divided by current price.

**Yield to Maturity<sup>3</sup>** - The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgerco.net



# DISCLOSURES

NEPC, LLC

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### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

### **Reporting Methodology**

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



# LACERA and the Principles for Responsible Investment

Presentation to the Board of  
Los Angeles City Employees Retirement System (LACERS)  
November 27, 2018



LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

# Overview

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- I. About LACERA and the Principles for Responsible Investment
  
- II. Approach to Corporate Governance and Responsible Stewardship
  - Objectives and Philosophy
  - Active Ownership
  - Collaboration
  - ESG Integration
  - Select Initiatives
  
- III. Appendix – Speaker Biography

# LACERA and the Principles for Responsible Investment



# About LACERA



## Mission

*To produce, protect, and provide the promised benefits*

**\$57 billion**

*in assets as of June 30, 2018*

**170,000**

*active and retired members*

# LACERA's Commitment to the PRI

LACERA became a PRI signatory in 2008.

As a signatory, LACERA strives to adhere to PRI's six principles of responsible investment.

## United Nations-affiliated Principles for Responsible Investment (PRI)

- 1 We will incorporate ESG issues into investment analysis and decision-making processes.
- 2 We will be active owners and incorporate ESG issues into our ownership policies and practices.
- 3 We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- 4 We will promote acceptance and implementation of the Principles within the investment industry.
- 5 We will work together to enhance our effectiveness in implementing the Principles.
- 6 We will each report on our activities and progress towards implementing the Principles.



More information available at [www.unpri.org](http://www.unpri.org)

# Approach to Corporate Governance and Responsible Stewardship



# Objective of Corporate Governance and Stewardship

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LACERA seeks to responsibly steward its investments in a manner that promotes and safeguards the interests of LACERA and its members.

## **MISSION STATEMENT**

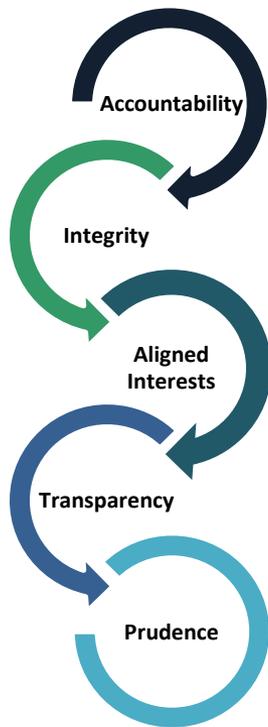
*We produce,  
protect, and  
provide the  
promised benefits.*

Through its corporate governance work, LACERA supports policies and practices at portfolio companies, as well as public policies governing financial markets, that are consistent with LACERA's economic interests to promote sustainable, long-term value for the fund.

In doing so, LACERA seeks to enhance its ability to fulfil its mission for LACERA members, in line with its fiduciary duty of acting for the exclusive benefit of LACERA and its members.

# Philosophy on Governance and Stewardship

LACERA's *Corporate Governance Principles* are organized around five core concepts that collectively provide a framework by which LACERA aims to promote **sustainable investment returns** and **responsible stewardship** of fund assets.



## **Accountability** from corporate boards and asset managers

LACERA advocates policies and practices that encourage corporate directors and external asset managers to be accountable to investors as the providers of capital. Accountability ensures that a firm's operations and reporting are managed in the best interests of investors.

## **Integrity** in capital markets and fair, equitable treatment of investors

Integrity and trust are the cornerstones of capital markets and essential for economic stability. Core investor rights ensure fair, equitable treatment of investors and instill investor confidence.

## **Aligned interests** between executives and asset managers with investors

Compensation and incentives should align the interests of senior executives, as well as asset managers, with the investors who provide the firms with capital. Compensation should promote sustainable value creation.

## **Transparency** in reporting of key financial and operating performance

Financial markets work most efficiently when investors have timely, reliable, and comparable information about material aspects of a firm's performance.

## **Prudent** risk mitigation of social and environmental factors

Environmental and social factors - such as resource scarcity, human capital, and climate risk - may shape and impact a firm's ability to generate and sustain value. Firms should prudently manage social and environmental factors relevant to the firm's business strategy, industry, and geographic markets.

LACERA's *Corporate Governance Principles* are publicly available at

<http://www.lacera.com/BoardResourcesWebSite/BoardOrientationPdf/policies/CorpGovPrinciples.pdf>.



# Active Ownership: Putting Principles Into Practice

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LACERA exercises its rights as an investor to promote practices at portfolio companies and in financial market policy that are aligned with its *Corporate Governance Principles*.



***Vote:*** LACERA votes proxies at portfolio companies to encourage sound governance and prudent risk management.



***Engage:*** LACERA engages portfolio companies in dialogues as an investor to advance best practices on select priorities.



***Advocate:*** LACERA promotes and safeguards its interests as an investor with legislators and regulators on financial market policy.



***Collaborate:*** LACERA collaborates with other pension systems and institutional investors to advance common interests.

# Collaboration: Partnerships and Member Associations

LACERA amplifies its voice by collaborating with other public pension systems and institutional investors to address collective challenges and advance common interests.



United States association of pension funds, other employee benefit plans, endowments and foundations with over \$3.5 trillion in assets focused on effective corporate governance, strong shareowner rights, and vibrant, transparent, and fair capital markets. See [www.cii.org](http://www.cii.org).



Investor-led organization comprised of 700 investors with over US \$34 trillion in assets with the mission to promote effective standards of corporate governance and investor stewardship to advance efficient markets and sustainable economies worldwide. See [www.icgn.org](http://www.icgn.org).



Association of 114 global organizations with over US\$30 trillion in assets dedicated to effective corporate governance practices throughout Asia, with a belief that corporate governance is fundamental to long-term economic development in Asia. See [www.acga-asia.org](http://www.acga-asia.org).



Association of over 1,400 global signatories representing US\$59 trillion in assets committed to understanding the implications of environmental, social, and governance issues and supporting the integration of these issues into investment and ownership decisions. See [www.unpri.org](http://www.unpri.org).

# ESG Integration: Enhancing risk/return analysis

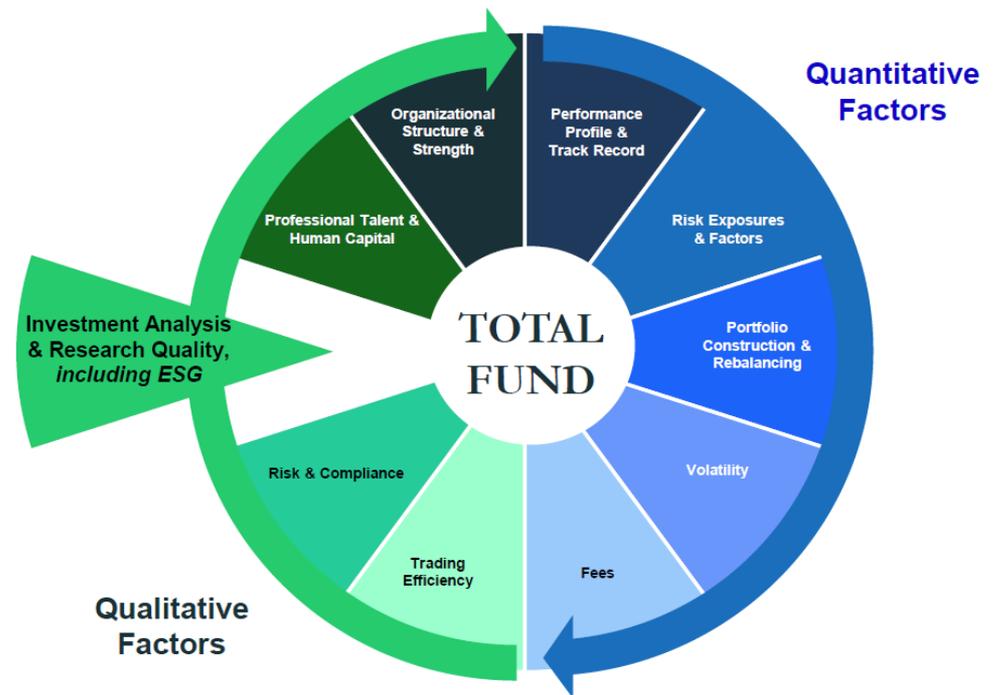
Environmental, social, and corporate governance factors (“ESG”) may impact the value of an investment.

Issues ranging from board quality, executive incentives, accounting practices, effective human capital management, product safety, customer relations, natural resource scarcity, and bribery or corruption – among others – might present risks or create opportunities for generating sustainable investment returns. The materiality and relevance of such factors vary across geographies, industries, and according to different investment time horizons.

LACERA is integrating ESG factors into a “Total Fund View” in order to provide an extra layer of information and to inform prudent investment analysis and decisions.

Taking into consideration material ESG factors that may impact investment value supports LACERA’s mission to produce and protect the promised benefits.

## Optimizing Asset Allocation Through Multivariate Total Fund Analytics and Manager Monitoring



# A Few Current Initiatives

Several current projects seek to advance LACERA's focus on corporate governance and ESG integration



## Sound Public Policy

Write to policymakers to defend robust investor rights and support sound financial market policy in proposed legislation and regulation, in conjunction with Council of Institutional Investors and other pensions.



## Enhance Due Diligence

Assess how external asset managers identify, assess, and integrate material ESG factors into investment strategies and relate ESG to financial performance.

Pursue standard due diligence of money managers' diversity & inclusion efforts, inclusive of track record on sexual harassment.



## Quality ESG Data

Encourage disclosure of investment-relevant data so that investors can accurately price material risks and rewards. For example, LACERA supports the Climate Action 100+, a global project requesting the most carbon intensive companies to provide clear reporting on how climate may impact their business models.\*



## Encourage Best Practices

California initiative to engage state-level companies lacking gender diversity in the boardroom, in collaboration with several California public pensions, in light of mounting research linking board diversity to outperformance.

\*See more information at: <https://climateaction100.wordpress.com/>

For more information, see

[www.lacera.com/investments/corporategovernance](http://www.lacera.com/investments/corporategovernance)



# Appendix



# Speaker Biography

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Scott Zdrazil  
Senior Investment Officer  
Los Angeles County Employees Retirement Association (LACERA)

Scott Zdrazil is a Senior Investment Officer at the Los Angeles County Employees Retirement Association (LACERA), where he manages LACERA's corporate governance program and leads LACERA's efforts to integrate environmental, social, and governance (ESG) factors into the investment process. LACERA manages over \$57 billion in assets on behalf of more than 170,000 active and retired beneficiaries. Mr. Zdrazil serves on the board of the Council of Institutional Investors, where he is also Treasurer and Chair of the Audit Committee. He was previously First Vice President – Corporate Governance at Amalgamated Bank of New York and Director of Strategy and Corporate Engagement at the Office of the New York City Comptroller, where he guided corporate governance initiatives in support of the New York City Retirement Systems.