AGENDA

A REGULAR MEETING OF THE BOARD OF INVESTMENTS

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, SUITE 810, PASADENA, CALIFORNIA 91101

9:00 A.M., WEDNESDAY, APRIL 11, 2018

The Board may take action on any item on the agenda,
and agenda items may be taken out of order.

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. APPROVAL OF MINUTES

A. Approval of the Minutes of the Special Meeting of March 5, 2018

IV. PUBLIC COMMENT

V. INTERIM CHIEF EXECUTIVE OFFICER'S REPORT
(Memo dated April 2, 2018)

VI. CHIEF INVESTMENT OFFICER'S REPORT
(Memo dated April 2, 2018)

VII. CONSENT ITEMS

A. Recommendation as submitted by Wayne Moore, Chair, Fixed Income/ Hedge Funds/Commodities Committee: That the Board change the cash sweep vehicle from the State Street Institutional Liquid Reserves Fund to the State Street Institutional U.S. Government Money Market Fund. (Memo dated March 19, 2018)

B. Recommendation as submitted by Wayne Moore, Chair, Fixed Income/ Hedge Funds/Commodities Committee: That the Board adopt the changes to the guidelines for the two diversified hedge fund of funds portfolios managed by Grosvenor Capital Management and Goldman Sachs Asset Management. (Memo dated March 22, 2018)

VII. CONSENT ITEMS (Continued)

C. Recommendation as submitted by Michael Schneider, Chair, Audit Committee: That the Board approve revised Audit Committee Charter. (Memo dated April 3, 2018)

D. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the Global Real Estate Sustainability Benchmark: Sustainable Real Assets Conference on April 25, 2018 in London, England and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.
(Placed on the agenda at the request of Mrs. Sanchez)
(Memo dated March 30, 2018)

E. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve international attendance for Trustee Sanchez at the 2018 Sustainable Real Assets Conference in London on April 25, 2018 prior to her attendance at the UCLA Anderson Executive Education – Corporate Governance Program on September 25-27, 2018 in Los Angeles, California.
(Memo dated March 30, 2018)

F. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the 5th Annual Hispanic Heritage Foundation Investors Group Conference on June 28-29, 2018 in New York, New York and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.
(Placed on the agenda at the request of Mrs. Sanchez)
(Memo dated March 27, 2018)

G. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the National Association of Corporate Directors - Technology Symposium on July 12-13, 2018 in Palo Alto, California and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.
(Placed on the agenda at the request of Mr. Kehoe)
(Memo dated March 15, 2018)

VII. CONSENT ITEMS (Continued)

H. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the 2018 Fortune Brainstorm Tech Conference on July 16 –18, 2018 in Aspen, Colorado and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy. (Placed on the agenda at the request of Mr. Green) (Memo dated March 22, 2018)

I. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the 2018 Middle East Summit on May 7- 8, 2018 in Dubai, United Arab Emirates and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy. (Placed on the agenda at the request of Mrs. Sanchez) (Memo dated April 3, 2018)

J. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve international attendance for Trustee Sanchez at the 2018 Middle East Summit in Dubai, United Arab Emirates on May 7- 8, 2018 prior to her attendance at the UCLA Anderson Executive Education – Corporate Governance Program on September 25-27, 2018 in Los Angeles, California. (Memo dated April 3, 2018)

VIII. NON-CONSENT ITEMS

A. Recommendation as submitted by Ted Wright, Principal Investment Officer, Dale Johnson, Investment Officer and Brenda Cullen, Investment Officer: That the Board invite the following firms to interview with the Board for active U.S. small capitalization equity mandates: 1) Quantitative Management Associates, LLC, and 2) Systematic Financial Management, LP. (Memo dated April 2, 2018)

B. Recommendation as submitted by Jonathan Grabel, Chief Investment Officer, Jude Perez, Principal Investment Officer, Esmeralda Del Bosque, Investment Officer and Jeff Jia, Senior Investment Analyst: That the Board adopt the OPEB Master Trust Investment Policy Statement with the proposed revisions. (Memo dated March 15, 2018)

IX. REPORTS

A. Pension Trust Asset Allocation
Jon Grabel, Chief Investment Officer
Stephen McCourt, Meketa Investment Group
Timothy Filla, Meketa Investment Group
(Memo dated March 22, 2018)

B. Board of Investments Offsite Tentative Agenda for July 2018
Jon Grabel, Chief Investment Officer
(Memo dated March 22, 2018)

C. Assembly Bill 2571 – Race and Gender Pay Equity Policy
Barry W. Lew, Legislative Affairs Officer
(For Information Only) (Memo dated April 2, 2018)

D. Selection of Securities Class Action Claims Filing Agent
Michael D. Herrera, Senior Staff Counsel
(For Information Only) (Memo dated April 2, 2018)

E. Amicus Curiae Brief in Metzler Investments GMBH, v. Corinthian Colleges, Inc., etc., 540 F.3d 1049 (9th Cir. 2008)
Michael D. Herrera, Senior Staff Counsel
(For Information Only) (Memo dated April 2, 2018)

F. Cyan, Inc., v. Beaver County Employees Retirement Fund
Johanna M. Fontenot, Senior Staff Counsel
(For Information Only) (Memo dated March 28, 2018)

G. Monthly Status Report on Board of Investments Legal Projects
Steven P. Rice, Chief Counsel
(For Information Only) (Memo dated April 3, 2018)

H. Securities Litigation Report for Calendar Year 2017
Michael D. Herrera, Senior Staff Counsel
(For Information Only) (Memo dated April 2, 2018)

I. Council of Institutional Investors Business Meeting and Public Funds Director Ballots
Scott Zdrazil, Senior Investment Officer
Dale Johnson, Investment Officer
(For Information Only) (Memo dated March 30, 2018)

IX. REPORTS (Continued)

J. Notice of Change of Ownership Structure RREEF America LLC
John McClelland, Principal Investment Officer
(For Information Only) (Memo dated March 27, 2018)

K. March 2018 Fiduciary Counsel Contact and Billing Report
Steven P. Rice, Chief Counsel
(Memo dated April 3, 2018) (Privileged and Confidential)
(Attorney-Client Communication/Attorney Work Product)

X. REPORT ON STAFF ACTION ITEMS

XI. GOOD OF THE ORDER
(For information purposes only)

XII. EXECUTIVE SESSION

A. Conference with Staff and Legal Counsel to Consider the Purchase or Sale of Particular, Specific Pension Fund Investments
(Pursuant to California Government Code Section 54956.81)

1. Juggernaut Capital Partners IV, L.P.

B. Conference with Legal Counsel - Existing Litigation
(Pursuant to Paragraph (1) of Subdivision (d) of Government Code Section 54956.9)

1. LACERA v. Justin Caldbeck
Santa Clara County Superior Court,
Case No. 17CV316347
Counsel: Glaser Weil

2. LACERA's Amicus Brief filed in *Cal Fire Local 2881 v. CalPERS et al.*,
California Supreme Court
Case No. S239958
Counsel: Greines, Martin, Stein & Richland LLP

XIII. ADJOURNMENT

Documents subject to public disclosure that relate to an agenda item for an open session of the Board of Investments that are distributed to members of the Board of Investments less than 72 hours prior to the meeting will be available for public inspection at the time they are distributed to a majority of the Board of Investments Members at LACERA's offices at 300 N. Lake Avenue, Suite 820, Pasadena, CA 91101, during normal business hours of 9:00 a.m. to 5:00 p.m. Monday through Friday.

Persons requiring an alternative format of this agenda pursuant to Section 202 of the Americans with Disabilities Act of 1990 may request one by calling Cynthia Guider at (626) 564-6000, from 8:30 a.m. to 5:00 p.m. Monday through Friday, but no later than 48 hours prior to the time the meeting is to commence. Assistive Listening Devices are available upon request. American Sign Language (ASL) Interpreters are available with at least three (3) business days notice before the meeting date.

MINUTES OF THE SPECIAL MEETING OF THE BOARD OF INVESTMENTS

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, SUITE 810, PASADENA, CALIFORNIA 91101

9:00 A.M., MONDAY, MARCH 5, 2018

PRESENT: David Green, Chair

Shawn Kehoe, Vice Chair

Wayne Moore, Secretary

Joseph Kelly

David Muir

Ronald Okum

Gina V. Sanchez

Herman B. Santos

Michael Schneider

STAFF ADVISORS AND PARTICIPANTS

Jonathan Grabel, Chief Investment Officer

James Brekk, Interim Deputy Chief Executive Officer

Steven P. Rice, Chief Counsel

John Popowich, Assistant Executive Officer

Christine Roseland, Senior Staff Counsel

John McClelland, Principal Investment Officer

Amit Aggarwal, Investment Officer

STAFF ADVISORS AND PARTICIPANTS (Continued)

Barry W. Lew, Legislative Affairs Officer

The Townsend Group
Jennifer Stevens, Principal

Meketa Investment Group
Timothy Filla, Managing Principal
Stephen McCourt, Managing Principal

I. CALL TO ORDER

The meeting was called to order by Chair Green at 9:10 a.m., in the Board Room of Gateway Plaza.

II. PLEDGE OF ALLEGIANCE

Mr. Moore led the Board Members and staff in reciting the Pledge of Allegiance.

III. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of January 10, 2018

Mr. Kelly requested that in the future, any revisions made to the meeting minutes be redlined.

Mrs. Sanchez made a motion, Mr. Okum seconded, to approve the revised minutes of the regular meeting of January 10, 2018. The motion passed with Messrs. Green, Kehoe, Moore, Muir, Okum, Santos, Schneider, and Mrs. Sanchez voting yes; and Mr. Kelly voting no.

III. APPROVAL OF MINUTES (Continued)

B. Approval of the Minutes of the Special Meeting of February 1, 2018

Mr. Kelly requested to have the meeting minutes amended to reflect Mr. Wayne Moore as Secretary for the Board of Investments.

Mr. Okum made a motion, Mr. Santos seconded, to approve the minutes of the special meeting of February 1, 2018 as amended above. The motion passed with Messrs. Green, Kehoe, Moore, Muir, Okum, Santos, Schneider, and Mrs. Sanchez voting yes; and Mr. Kelly voting no.

C. Approval of the Minutes of the Regular Meeting of February 14, 2018

Mr. Santos made a motion, Mr. Muir seconded, to approve the minutes of the regular meeting of February 14, 2018. The motion passed unanimously.

IV. PUBLIC COMMENT

Mr. Kurt Peterson of UNITE HERE Local 11, addressed the Board regarding item VIII.D.

V. INTERIM CHIEF EXECUTIVE OFFICER'S REPORT
(Memo dated February 26, 2018)

Mr. Brekk announced that there will be a Joint Board of Investments and Board of Retirement Meeting on Wednesday, April 4, 2018 at 9:00 a.m. In addition, there will be two Budget Hearings for Fiscal Year 18-19; one on Wednesday, May 9,

V. INTERIM CHIEF EXECUTIVE OFFICER'S REPORT (Continued)
(Memo dated February 26, 2018)

2018 following the Board of Investments and committee Meetings and the other on Thursday, May 10, 2018 following the Board of Retirement and committee Meetings.

Mr. Brekk noted that the Board of Investments Offsite meeting will be held on Monday, July 9, 2018 and Tuesday, July 10, 2018 at the Loews Hotel in Santa Monica.

Mr. Brekk updated the Board regarding LACERA's classification studies.

Finally, he introduced the new CEO Report Dashboard and went over the new look and metrics systems in the report and thanked John Popowich and his staff for their hard work in creating the new CEO Report Dashboard.

VI. CHIEF INVESTMENT OFFICER'S REPORT
(Memo dated February 23, 2018)

Mr. Grabel provided a presentation on the Chief Investment Officer's Report.

VII. CONSENT ITEMS

Mr. Santos made a motion, Mrs. Sanchez seconded, to approve the following agenda items. The motion passed unanimously.

A. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the International Corporate Governance Network (ICGN) conference on June 25–28, 2018 in Milan, Italy and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy. (Placed on the agenda at the request of Messrs. Green and Santos) (Memo dated February 21, 2018)

VII. CONSENT ITEMS (Continued)

B. Recommendation as submitted by Robert R. Hill, Interim Chief Executive Officer: That the Board approve attendance of Board members at the National Association of Corporate Directors (NACD) - Future Trends Event on June 13, 2018 in Austin, Texas and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.
(Placed on the agenda at the request of Mr. Kehoe)
(Memo dated February 22, 2018)

C. Recommendation as submitted by Dale Johnson, Investment Officer: That the Board approve submission of LACERA's member ballots in support of the Council of Institutional Investors' General Members' Meeting Action Item #1 regarding a revised travel policy and public fund director nominees to the Council of Institutional Investors board of directors. (Memo dated February 23, 2018)

VIII. NON - CONSENT AGENDA

A. Recommendation as submitted by Amit Aggarwal, Investment Officer: That the Board approve a commitment of up to $50 million to AG Europe Realty Fund II. (Memo dated February 22, 2018)

Messrs. McClelland and Aggarwal and Ms. Stevens of Townsend Group were present and answered questions from the Board.

Mr. Kehoe made a motion, Mr. Okum seconded, to approve the agenda item. The motion passed unanimously.

B. Recommendation as submitted by Jon Grabel, Chief Investment Officer: That the Board approve the recommendations proposed in Meketa's March 2018 asset allocation review:

VIII. NON - CONSENT AGENDA (Continued)

1) Adopt the use of a functional framework for LACERA's Total Fund
2) Expand LACERA's opportunity set to include a broader group of investments in Credit and Inflation Hedging/Real Assets

(Memo dated February 20, 2018)

Mr. Grabel and Messrs. McCourt and Filla of Meketa Investment Group were present and answered questions from the Board.

Mr. Santos made a motion, Mr. Schneider seconded, to adopt staff's recommendation for modeling and reporting purposes only. The motion passed unanimously.

C. Recommendation as submitted by Barry W. Lew, Legislative Affairs Officer: That the Board adopt the revised Legislative Policy. (Memo dated February 26, 2018)

Messrs. Lew and Rice were present and answered questions from the Board.

Mr. Kehoe made a motion, Mr. Muir seconded, to have staff revise the Legislative Policy as directed by the Board and return the policy to the Board of Investments for further consideration. The motion passed unanimously (roll call) with Messrs. Green, Kehoe, Kelly, Moore, Muir, Okum, Santos, Schneider and Mrs. Sanchez voting yes.

VIII. NON - CONSENT AGENDA (Continued)

D. Recommendation as submitted by Barry W. Lew, Legislative Affairs Officer: That the Board adopt an “Oppose” position on Assembly Bill 2571, which would restrict certain investments in alternative investment vehicles. (Memo dated February 26, 2018)

Mr. Moore made a motion, Mr. Santos seconded, to adopt a “Watch” position on Assembly Bill 2571, and for staff to report back within 60 days on how staff will address the issues raised by the bill and provide recommendations regarding the issue and collection of information.

Mr. Kelly made a substitute motion, Mr. Okum seconded, to approve staff’s recommendation and adopt an “Oppose” position on Assembly Bill 2571. The motion failed (roll call) with Messrs. Kehoe and Kelly voting yes; Messrs. Green, Moore, Muir, Santos, Schneider and Mrs. Sanchez voting no; and Mr. Okum abstaining.

The Board voted on the original motion as above made by Mr. Moore and seconded by Mr. Santos. The motion passed (roll call) with Messrs. Green, Kehoe, Moore, Muir, Santos, Schneider and Mrs. Sanchez voting yes; Mr. Kelly voting no; and Mr. Okum abstaining.

IX. REPORTS

A. Status and Plan for Joint Organizational Governance Committee Items
Robert R. Hill, Interim Chief Executive Officer
(For Information Only) (Memo dated February 23, 2018

IX. REPORTS (Continued)

Mr. Kelly requested that staff prioritize the broadcasting of Board meetings and provide an update.

The following items were received and filed:

B. OPEB Master Trust
Ted Wright, Principal Investment Officer
(For Information Only) (Memo dated February 15, 2018)

C. Update on OPEB Master Trust New Strategic Asset Allocation Implementation Plan
Jon Grabel, Chief Investment Officer
(For Information Only) (Memo dated February 19, 2018)

D. 2017 Fourth Quarter Hedge Fund Performance Report
James Rice, Senior Investment Officer
(For Information Only) (Memo dated February 22, 2018)

E. Monthly Status Report on Board of Investments Legal Projects
Steven P. Rice, Chief Counsel
(For Information Only) (Memo dated February 23, 2018)

X. REPORT ON STAFF ACTION ITEMS

In regard to item V., the Board requested that staff review the metric calculations on the CEO Report.

In regards to item VI., the Board requested that staff agendize for the next Corporate Governance committee meeting a discussion about LACERA's exposure to Firearms and Ammunition.

XI. GOOD OF THE ORDER
(For information purposes only)

Mr. Muir wished Scott Zdrazil good luck relating to his nomination as Director on the Council of Institutional Investors Board.

Mr. Muir asked staff to include the names of the presenters on the Board meeting agendas.

Mr. Muir requested that staff work on creating a more comprehensive bookmark on the electronic Board packages.

Mr. Muir requested that, at an upcoming Board meeting, staff agendize a discussion by the Legal Office on efforts to impair securities litigation by requiring arbitration.

Mr. Rice congratulated Mike Herrera on being appointed as President of the National Association of Public Pension Attorney's Executive Board.

XII. ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at 12:00 p.m.

<u>Green Folder Information (Information distributed in each Board Members Green Folder at the beginning of the meeting)</u>

1. Council of Institutional Investors Joint Investor Letter to U.S. Senate Banking Committee Regarding Proposed Legislation Relating to Proxy Advisory Firms. (Memo dated February 28, 2018)
(For Information Only)
2. LACERA Exposures to Firearms and Ammunition Manufacturers. (Presentation Slides dated March 5, 2018) (For Information Only)
3. Charts following Page 16 of the Legislative Policy for Agenda Item VIII.C. (For Information Only)
4. Correction to New CEO Report Dashboard (Memo dated March 2, 2018) (For Information Only)
5. Email from Harvey Leiderman, Reed Smith LLP, regarding AB 2571 (Email dated February 27, 2018) (For Information Only)
6. LACERA's Corporate Governance Principles (For Information Only)
7. Online Investment Dashboard (Memo dated February 28, 2018) (For Information Only)
8. Chief Investment Officer's Report – Amendment (Memo dated February 27, 2018) (For Information Only)
9. February 2018 Fiduciary Counsel Contact and Billing Report (Memo dated February 28, 2018) (For Information Only) Privileged and Confidential

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WAYNE MOORE, SECRETARY

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DAVID GREEN, CHAIR

April 2, 2018

TO: Each Member
Board of Retirement
Board of Investments

FROM: Robert R. Hill
Interim Chief Executive Officer

SUBJECT: **CHIEF EXECUTIVE OFFICER'S REPORT**

I am pleased to present the Chief Executive Officer's Report that highlights a few of the operational activities that have taken place during the past month, key business metrics to monitor how well we are meeting our performance objectives, and an educational calendar.

March Madness

We refer to the period beginning in December through the end of March as "March Madness" because retirements tend to spike during this period as members desire to retire in time to be eligible for any April 1 cost-of-living adjustment (COLA) that may be approved. As we have in years past, we are continuing our commitment to share the annual March Madness statistics in the Chief Executive Officer's report. There are two key statistics we track during this time of year.

How well are we keeping up with our member's requests to retire? The chart below shows the total number of pending retirement elections. All incoming retirement requests are triaged by staff to facilitate processing those retirements with immediate retirement dates and those which will require special handling (i.e. legal splits and those with uncompleted service credit purchases).

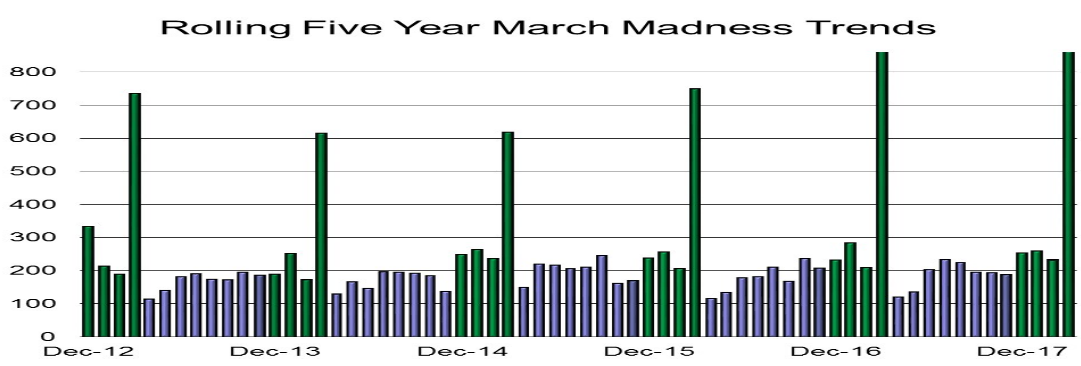
Retirement Month	Retirement Elections
December 2017	**0**
January 2018	**0**
February 2018	**1**
March 2018	**76**
Pending Disability Cases	**82**
Total Pending	**159**

The 77 retirement elections not completed for December - March are pending for the following reasons: pending member action (usually waiting for a signed election) (1), additional research or information required (5), pending processing (71).

The Pending Disability Cases represents the number of approved disability cases being processed by the Benefits Division. Once a disability has been granted by the Board, the Benefits Division staff work with the member and their employer to select a disability effective date, determine the member's option election, and bring them on payroll. These disability cases are pending for the following reasons: pending reciprocal verification (1), currently in process (24), pending a decision on the effective date (25), and waiting for an action by the member (32). These cases are not assigned to a specific month in the "March Madness" period because the final effective date has not been determined. As with service retirements some cases have mitigating factors such as legal splits and uncompleted purchases which can also extend processing. We expect to successfully meet the retirement agenda deadlines for a majority of our March Madness retirees.

The second key statistic is the volume of retirements during the year, and especially during March Madness. This gives us an indication on the severity of the stress being placed on our capacity to meet our various member service requests and demands placed upon our staff.

The green bars in the following chart reflect those members who have been approved to retire (i.e., their retirement elections have been approved and completed). The red bars reflect those cases that have not been processed as of the date of this report. As of March 22, 2018, we have processed 1605 out of 1682 retirements for the March Madness period so far. Comparing the total processed and pending per month we are running slightly higher than the five-year average (last five competed years) for December (252 vs. avg. of 248), and for January (258 vs. avg. of 253), and above average for February (233 vs. avg. of 202). March (939 vs. avg. of 716) well above average. Putting this into perspective during last year's March Madness 1,588 members retired, which was higher than the rolling five-year average of 1,418 (the five year averages may change from month to month as disability cases are processed due to retroactive retirement dates).



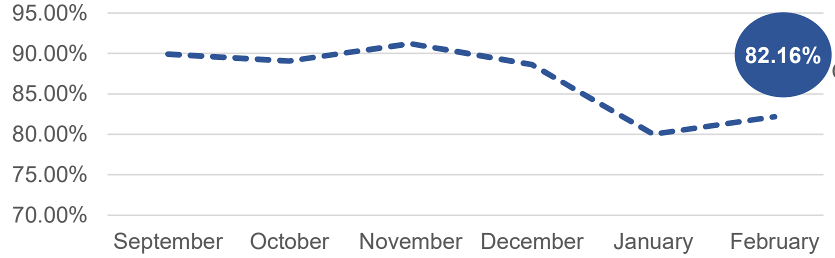
RH: jp
CEO report Apr 2018.doc
Attachments

Striving for Excellence in Service

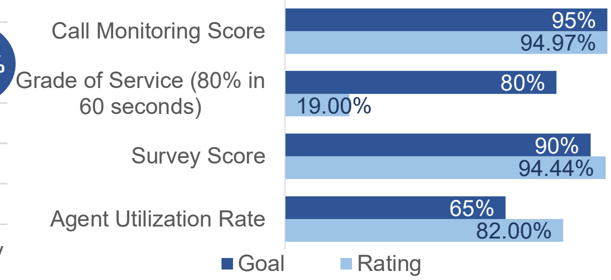
Outreach Attendance	Outreach Events	Outreach Satisfaction	Member Service Center	Member Services Calls
3,080	**22**	**94.8%**	**100.0%**	**14,038**
24,780 Year-to-Date	285 Year-to-Date	0.2% Change Since Last Mo.	0.0% Change Since Last Mo.	13,675 3 Mo. Avg.

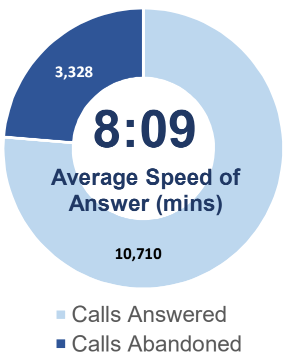
Member Services

Key Performance Indicator
(Overall Performance)



Key Performance Indicator
(Components)





Top Calls

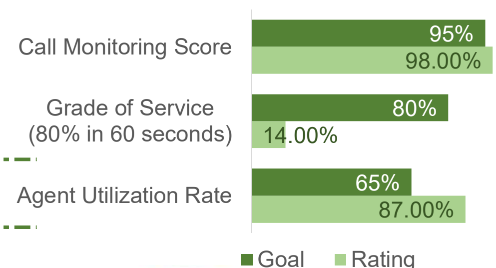
1. Workshop Info/Appointments Inquiry
2. My LACERA: Portal Login Issues
3. Death: Benefit Explanations

476 Emails
9:07 hours
Avg. Response Time (ART)

Retiree Healthcare

Top Calls

1. Part B Premium Reimbursement
2. Medical Benefits - General Inquiries
3. Medical-New Enroll./Change/Cancel



785 Emails
1 day
Avg. Response Time (ART)

Disability

Applications

588
On Hand

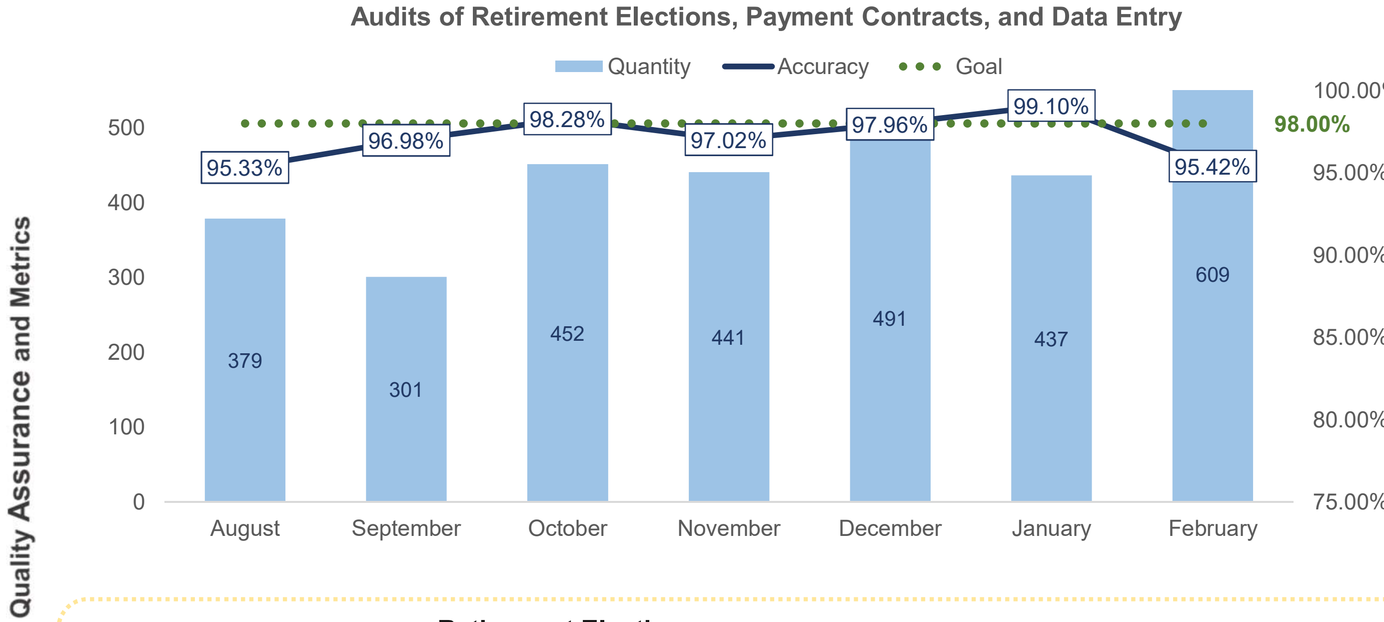
46	Received
361	Year-to-Date
0	Re-opened
1	Year-to-Date
44	To Board - Initial
318	Year-to-Date
4	Closed
47	Year-to-Date
586	In Process
586	Year-to-Date

Appeals

120
On Hand

1	Received
22	Year-to-Date
3	Admin Closed/Rule 32
18	Year-to-Date
1	Referee Recommended
9	Year-to-Date
1	Revised/Reconsidered for Granting
4	Year-to-Date
116	In Process
116	Year-to-Date

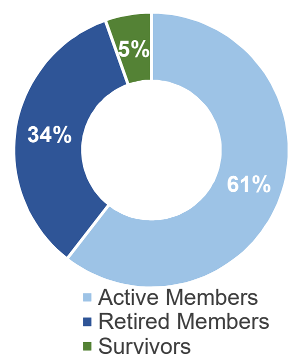
Striving for Excellence in Quality

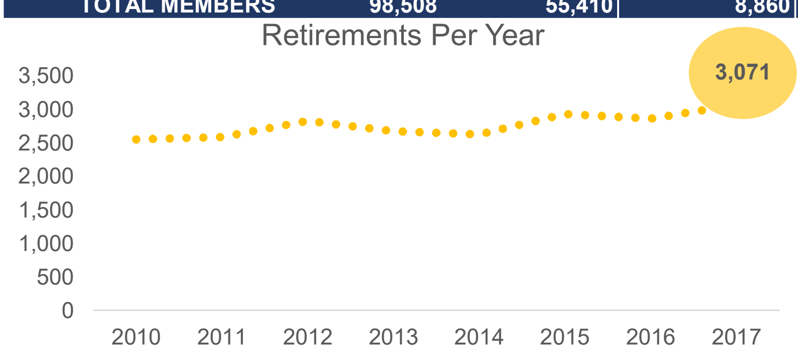


	Retirement Elections		Payment Contracts		Data Entry	
February 2018	458	Samples	61	Samples	90	Samples
95.42%	90.40%	Accuracy	98.00%	Accuracy	97.87%	Accuracy

Member Snapshot

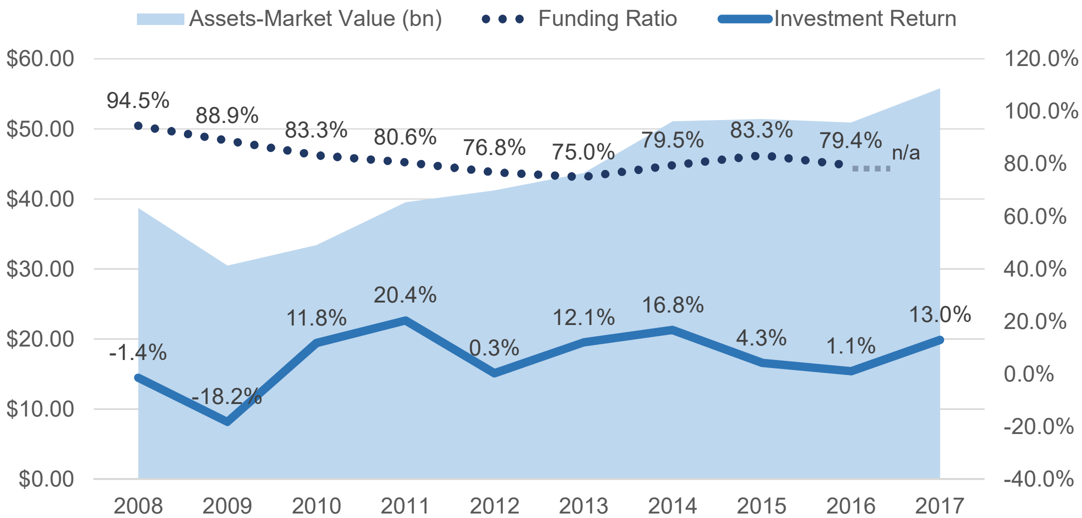
	Members as of 04/02/18				
	Plan	Active	Retired	Survivors	Total
General	Plan A	157	17,867	4,563	**22,587**
	Plan B	53	686	67	**806**
	Plan C	61	422	63	**546**
	Plan D	44,234	13,647	1,263	**59,144**
	Plan E	18,878	12,163	1,056	**32,097**
	Plan G	22,222	9	1	**22,232**
	Total General	**85,605**	**44,794**	**7,013**	**137,412**
Safety	Plan A	6	5,522	1,581	**7,109**
	Plan B	10,524	5,089	266	**15,879**
	Plan C	2,373	5	0	**2,378**
	Total Safety	**12,903**	**10,616**	**1,847**	**25,366**
TOTAL MEMBERS		**98,508**	**55,410**	**8,860**	**162,778**





	Healthcare Program (YTD)		Healthcare Enrollments (Monthly)	
	Employer	Member		
Medical	$315.48m	$26.71m	Medical	49,180
Dental	$28.27m	$2.91m	Dental	50,322
Part B	$37.92m	xxxx	Part B	32,923
			LTC	693
Total	**$381.68m**	**$29.63m**	**Total**	**133,118**

Key Financial Metrics



Funding Metrics
(as of 6/30/17)

Employer NC	9.97%*
UAAL	9.73%*
Assumed Rate	7.25%*
Star Reserve	$614m*
Total Assets	$52.7b*

Contributions
(as of 6/30/17)

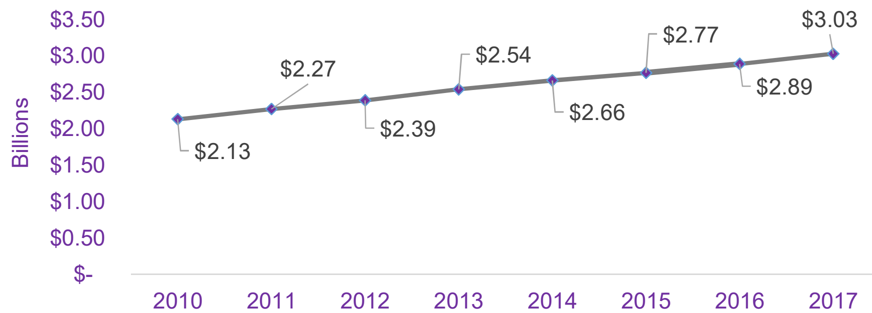
	Employer	Member
Annual Add	$1331.4m	$526.6m
% of Payroll	19.7%*	6.65%*

*Effective July 1, 2017, as of 06/30/16 actuarial valuation

Retired Members Payroll

Monthly Payroll	$267.83m
Payroll YTD	$2.1b
New Retired Payees Added	360
Seamless %	99.72%
New Seamless Payees Added	2,314
Seamless YTD	99.70%
By Check %	4.00%
By Direct Deposit %	96.00%

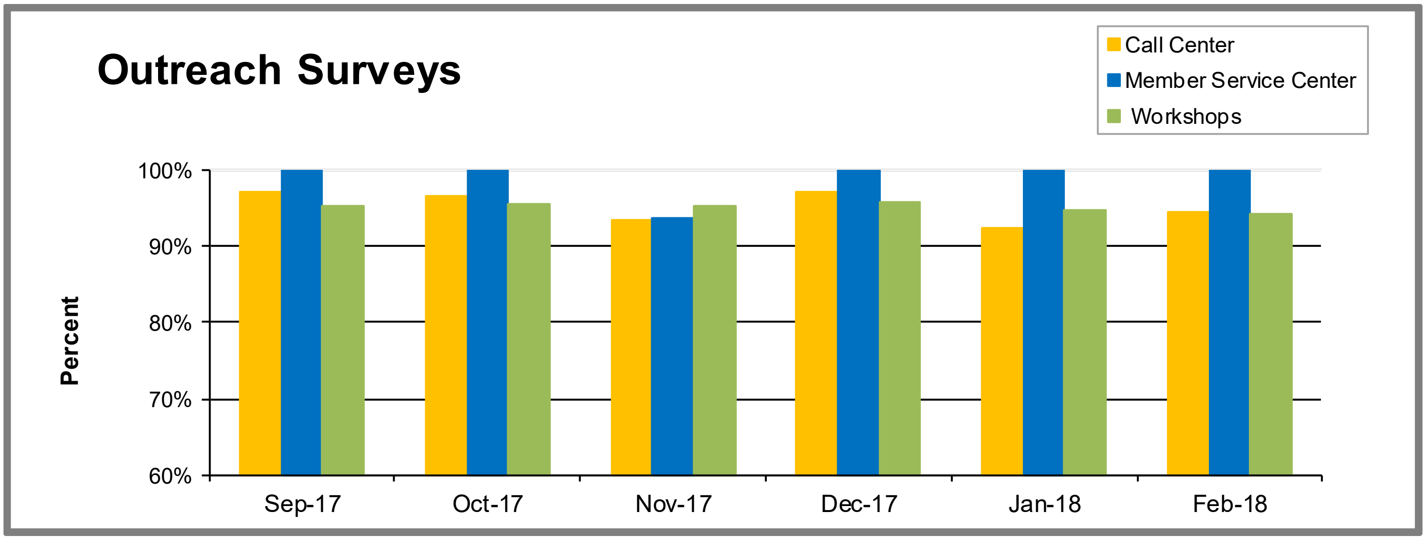
Retiree Payroll by Year

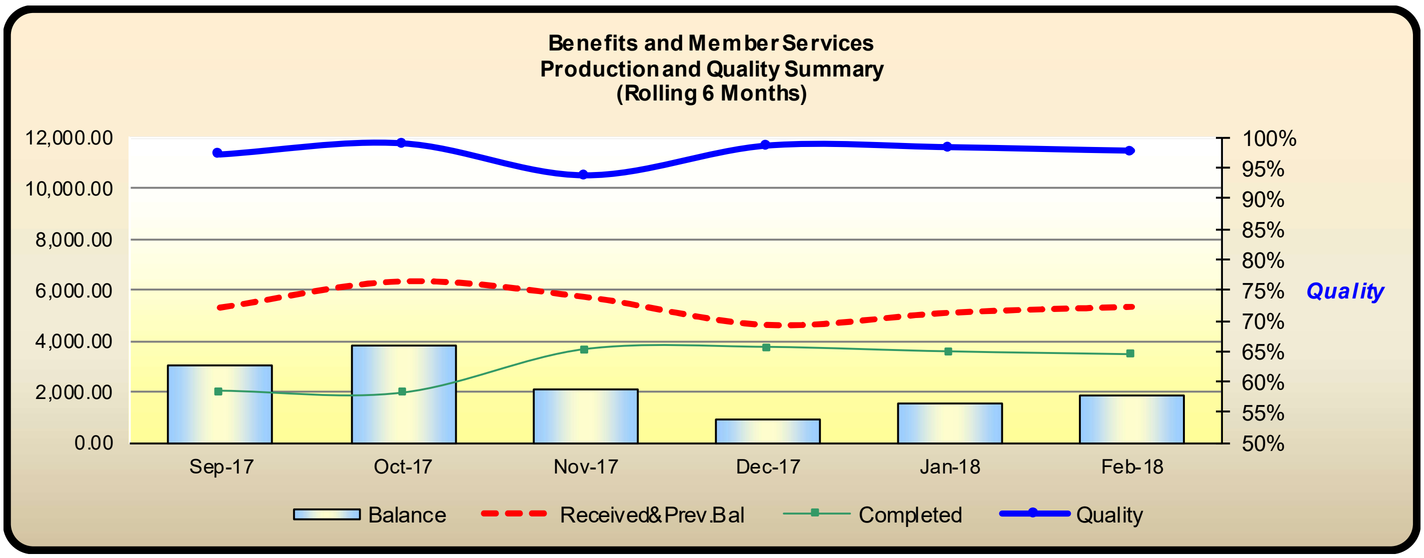


MORE COMING SOON!

LACERA's KEY BUSINESS METRICS

OUTREACH EVENTS AND ATTENDANCE				
Type	# of WORKSHOPS		# of MEMBERS	
	Monthly	YTD	Monthly	YTD
Benefit Information	4	107	218	5,896
Mid Career	1	8	82	316
New Member	9	98	172	2,070
Pre-Retirement	6	61	171	1,643
General Information	1	4	25	367
Retiree Events	1	7	79	705
Member Service Center	Daily	Daily	2,333	13,783
TOTALS	**22**	**285**	**3,080**	**24,780**





Member Services Contact Center			RHC Call Center	Top Calls
Overall Key Performance Indicator (KPI)		82.16%		
Category	**Goal**	**Rating**		Member Services
Call Center Monitoring Score	95%	94.97%	98%	1) Workshop Info\Appointments: Inquiry
Grade of Service (80% in 60 seconds)	80%	19%	14%	2) My LACERA: Portal Login Issue
Call Center Survey Score	90%	94.44%	xxxxx	3) Death: Benefit Explanation
Agent Utilization Rate	65%	82%	87%	
Number of Calls		14,038	5,831	Retiree Health Care
Number of Calls Answered		10,710	4,442	1) Part B Premium Reimbusement
Number of Calls Abandoned		3,328	1,357	2) Medical Benefits - General Inquiries
Calls-Average Speed of Answer (hh:mm:ss)		00:08:09	00:10:04	3) Medical-New Enroll./Change/Cancel
Number of Emails		476	785	
Emails-Average Response Time (hh:mm:ss)		09:07:12	(Days) 1	Adjusted for weekends

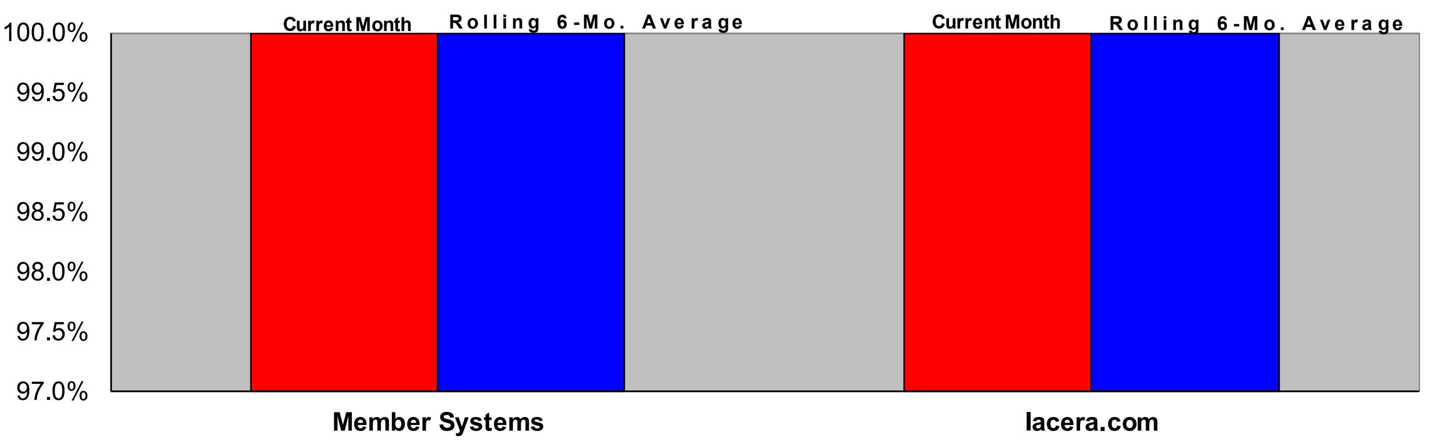
LACERA's KEY BUSINESS METRICS

Fiscal Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Assets-Market Value	$38.7	$30.5	$33.4	$39.5	$41.2	$43.7	$51.1	$51.4	$50.9	$55.8
Funding Ratio	94.5%	88.9%	83.3%	80.6%	76.8%	75.0%	79.5%	83.3%	79.4%	n/a
Investment Return	-1.4%	-18.2%	11.8%	20.4%	0.3%	12.1%	16.8%	4.3%	1.1%	13.0%

DISABILITY INVESTIGATIONS

APPLICATIONS	TOTAL	YTD		APPEALS	TOTAL	YTD
On Hand	588	xxxxxxx		On Hand	120	xxxxxxx
Received	46	361		Received	1	22
Re-opened	0	1		Administratively Closed/Rule 32	3	18
To Board – Initial	44	318		Referee Recommendation	1	9
Closed	4	47		Revised/Reconsidered for Granting	1	4
In Process	**586**	**586**		**In Process**	**116**	**116**

SYSTEMS AVAILABILITY - FEBRUARY 2018



Active Members as of 4/2/18	
General-Plan A	157
General-Plan B	53
General-Plan C	61
General-Plan D	44,234
General-Plan E	18,878
General-Plan G	22,222
Total General	**85,605**
Safety-Plan A	6
Safety-Plan B	10,524
Safety-Plan C	2,373
Total Safety	**12,903**
TOTAL ACTIVE	**98,508**

Retired Members/Survivors as of 4/2/18	Retirees	Survivors	Total
General-Plan A	17,867	4,563	22,430
General-Plan B	686	67	753
General-Plan C	422	63	485
General-Plan D	13,647	1,263	14,910
General-Plan E	12,163	1,056	13,219
General-Plan G	9	1	10
Total General	**44,794**	**7,013**	**51,807**
Safety-Plan A	5,522	1,581	7,103
Safety-Plan B	5,089	266	5,355
Safety-Plan C	5	0	5
Total Safety	**10,616**	**1,847**	**12,463**
TOTAL RETIRED	**55,410**	**8,860**	**64,270**

Retired Members	
Monthly Payroll	267.83 Million
Payroll YTD	2.1 Billion
No. Monthly Added	360
Seamless %	99.72%
No. YTD Added	2,314
Seamless YTD %	99.70%
Direct Deposit %	96.00%

Health Care Program (YTD Totals)	Employer Amount	Member Amount
Medical	315,485,566	26,715,921
Dental	28,272,252	2,915,347
Med Part B	37,929,096	xxxxxxxxxx
Total Amount	**$381,686,914**	**$29,631,268**

Health Care Program Enrollments (Monthly)	
Medical	49,180
Dental	50,322
Med Part B	32,923
Long Term Care (LTC)	693

Funding Metrics as of 6/30/17	
Employer Normal Cost	9.97%*
UAAL	9.73%*
Assumed Rate	7.25%*
Star Reserve	$614 million
Total Assets	$52.7 billion

Member Contributions as of 6/30/17	
Annual Additions	$526.6 million
% of Payroll	6.65%*

Employer Contributions as of 6/30/17	
Annual Addition	$1,331.4 million
% of Payroll	19.70%*

*Effective July 1, 2017, as of 6/30/16 actuarial valuation.

Metrics YTD from July 1, 2017 through February 28, 2018

Date	Conference
May, 2018	
6-9	Government Finance Officers Association (GFOA) Annual Conference St. Louis, MO
13-16	NCPERS (National Conference on Public Employee Retirement Systems) Annual Conference New York, NY
15-17	UCLA Anderson Executive Education – Corporate Governance Program Los Angeles, CA
15-18	SACRS Anaheim, CA
21-22	IFEBP (International Foundation of Employment Benefit Plans) Legislative Update Washington D.C.
21-23	IACP Technology Conference Providence, RI
21-25	Investment Strategies & Portfolio Management *(prev. Pension Fund & Investment Mgmt.)* Wharton School, University of Pennsylvania
June, 2018	
4-6	National Association of Securities Professionals (NASP) 29th Annual Pension & Financial Services Conference Houston, TX
8	CALAPRS (California Association of Public Retirement Systems) Round Table – Trustees Hilton Oakland Airport
8	CALAPRS (California Association of Public Retirement Systems) Round Table – Benefits Hilton Oakland Airport
11-13	2018 MoneyConf – "The Future of Money" Dublin, Ireland
11-13	Trustee Leadership Forum for Retirement Security at the Harvard Kennedy School Cambridge, MA
13	National Association of Corporate Directors (NACD) – Future Trends Event Austin, TX
20-22	AHIP (America's Health Insurance Plans) Institute San Diego, CA
25-27	IFEBP Public Employee Benefits Institute Las Vegas, NV

L//.CERA

April 2, 2018

TO: Each Member
Board of Investments

FROM : Jon Grabel
Chief Investment Officer

SUBJECT: **CHIEF INVESTMENT OFFICER'S REPORT—FEBRUARY 2018**

The following memorandum and attachments constitute the CIO report for February 2018. **Attachment 1** presents summary investment information including market values, actual and target allocations, and returns. **Attachment 2** is a summary investment report for the OPEB Master Trust. A list of all current applicants for public investment-related searches is included as **Attachment 3** and will be provided on a monthly basis to identify firms with whom LACERA is in a quiet period.

PERFORMANCE

The Total Fund finished with an approximate investment balance of $55.4 billion.[1] The month had a negative net return of -2.1%. All asset categories except for hedge funds registered investment losses for the month. For the fiscal year to date, the Total Fund has gained 7.5%.

The OPEB Master Trust generated a negative return in February. For the month, the L.A. County, LACERA, and Superior Court funds all had net losses of -3.4%, -3.3%, and -3.4%, respectively. For the fiscal year to date, L.A. County, LACERA, and Superior Court funds had respective net gains of 10.3%, 10.4%, and 9.9%.

ATTRIBUTION

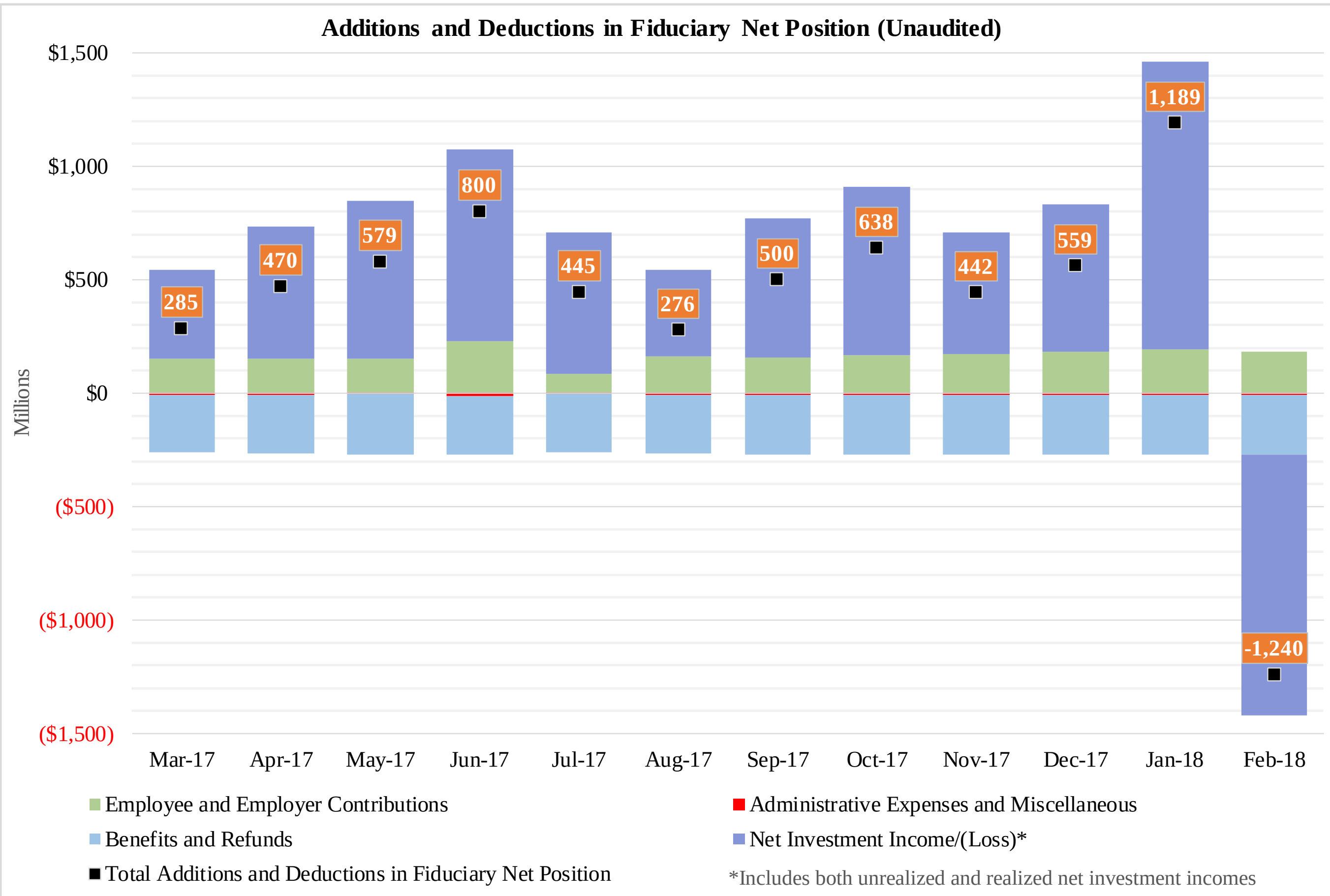
In the upcoming months, as LACERA's analytical systems and practices are enhanced, this section will discuss risk and attribution on the Total Fund level.

[1] For months that coincide with calendar quarter end, the Total Fund value is calculated using the custodian's quarter-end market values for all asset classes. For inter-quarter periods, the Total Fund value is calculated using the custodian's month-end market value for all asset classes except for private equity and real estate. Private equity and real estate market values are calculated by adjusting the preceding quarter-end market value for subsequent cash flows.

CASH FLOWS, CASH BALANCES, AND FIDUCIARY NET POSITION[2]

As illustrated in Chart 1 below, included to provide detail on the sources of monthly transactional flows, the Plan's fiduciary net position decreased by -$1.2 billion during the month of February. Over the last twelve months, the Plan's net position has increased by $4.9 billion.

Chart 1: Additions and Deductions in Fiduciary Net Position (Unaudited)



With respect to cash, LACERA finished the month of February with approximately $1.3 billion in the Fund's primary operating account, as reported by the master custodian and identified as "cash" on various Total Fund reports. There was additional cash held in internal accounts dedicated to asset categories with frequent cash flows as well as cash held by select external managers. As illustrated in Chart 2 below, LACERA held a total of $1.4 billion of internal operating cash and short-term investments across all of its operating accounts and LACERA's external investment managers held a further $519 million in cash and short-term investments.

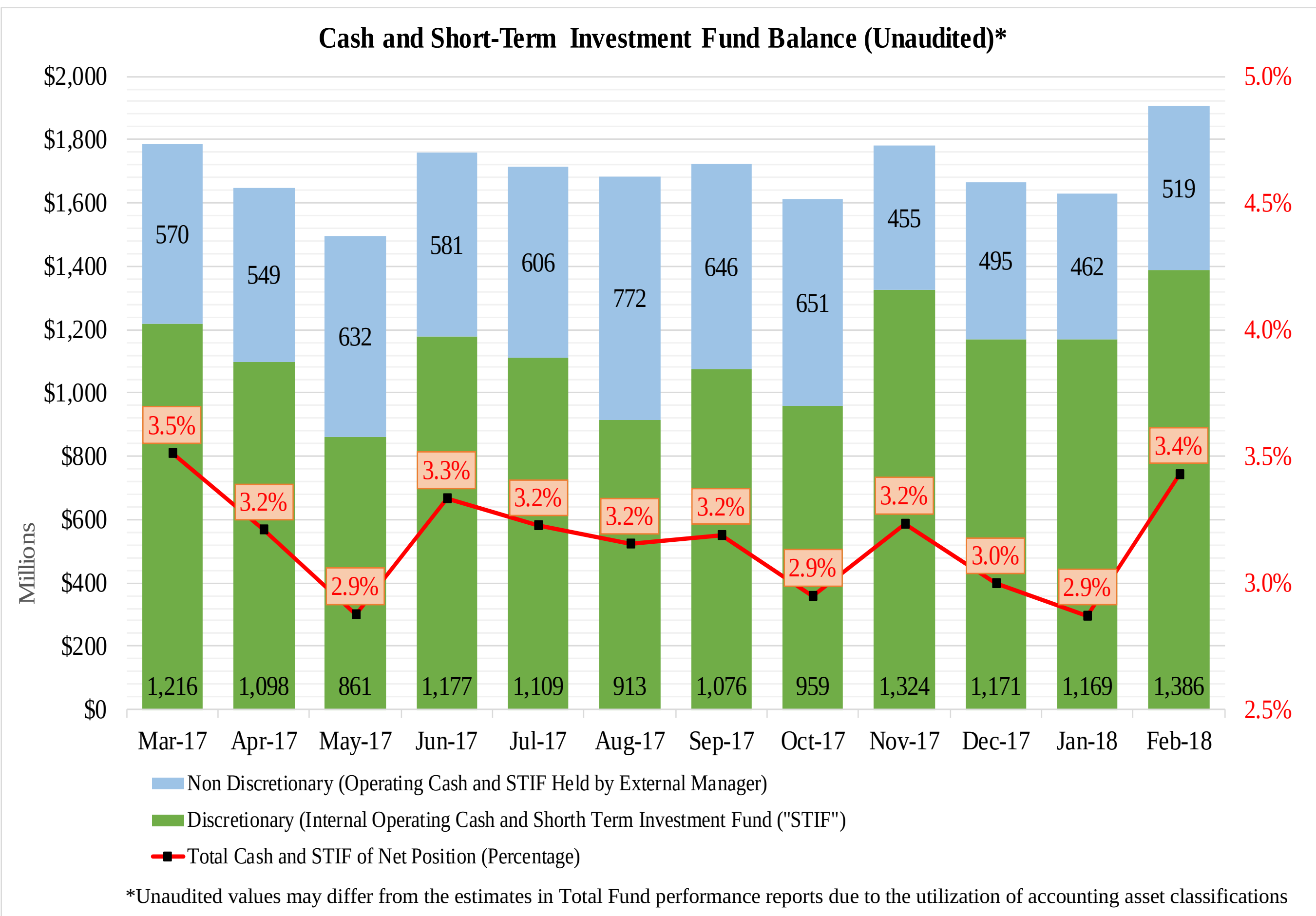
[2] LACERA's Fiduciary Net Position is an unaudited snapshot of account balances as of the preceding month end and reflects assets available for future payments to retirees and their beneficiaries, including investment fund assets, as well as any liabilities owed as of the report date. The Plan's net position is inclusive of both investment and operational net assets, while the Total Fund's position includes investment net assets only.

In total, LACERA held approximately $1.9 billion in cash and short-term investment funds at the end of February, which can be categorized as follows:

- Non-discretionary (operating cash and Short Term Investment Fund ("STIF") balances held by external investment managers): $519 million
- Discretionary (internal operating cash and STIF balances accessible for the daily operating needs of the plan): $1.4 billion

The Fund's total cash and short-term investment fund balance represented 3.4% of the Plan's unaudited net position, while its discretionary cash and short-term investment fund balance represented 2.5% of the Plan's unaudited net position.

Chart 2: Cash and Short-Term Investment Fund Balance (Unaudited)



The following table (Table 1) provides a summary of cash flows at the asset category level. For the month of February, Hedge Funds, Public Equity and Real Estate had net investment distributions (cash inflows) totaling $639.9 million. Private Equity and Fixed Income had net investment contributions (cash outflows) totaling -$371.8 million.

Table 1: Asset Category Cash Flows

Asset Category and Activity	$ in Millions	Cash Impact
Private Equity		
Distributions	$46.7	Inflow
Capital calls	-$68.5	Outflow
Private Equity	*-$21.8*	*Net Outflow*
Public Equity: U.S.		
Distributions	$220.7	Inflow
Contributions	-$10.1	Outflow
U.S. Equity	*$210.6*	*Net Inflow*
Public Equity: Non-U.S.		
Distributions	$400.0	Inflow
Contributions	$0.0	Outflow
Currency hedge	-$42.4	Outflow
Non-U.S. Equity	*$357.6*	*Net Inflow*
Fixed Income		
Distributions	$0.0	Inflow
Contributions	-$350.0	Outflow
Fixed Income	*-$350.0*	*Net Outflow*
Commodities		
No activity	$0.0	Net Flow
Commodities	*$0.0*	*n/m*
Hedge Funds		
Distributions	$46.8	Inflow
Contributions	$0.0	Outflow
Hedge Funds	*$46.8*	*Net Inflow*
Real Estate		
Separate account net activity	$33.6	Inflow
Commingled fund net activity	-$8.7	Outflow
Real Estate	*$24.9*	*Net Inflow*

The Public Equity asset class realized a -$42.4 million cash outflow from the Non-U.S. Equity currency-hedging program. LACERA's Asset Allocation Policy requires that the developed markets Non-U.S. Equity allocation, currently $13.0 billion, maintain a passive currency hedge overlay on 50% of its investment value. Note that when the currency overlay program sustains a loss due to a depreciating U.S. dollar, underlying Non-U.S. equity values should be positively impacted. Conversely, in an appreciating U.S. dollar environment, the currency-hedging program will have a gain, while underlying Non-U.S. equity values should be negatively impacted. Due to currency market movements in the previous three months, the currency hedges maturing in early February realized a loss and -$42.4 million was transferred from cash to LACERA's passive currency overlay account. The hedged Non-U.S. Equity portfolio lost -4.0% net of fees, or approximately -$383.7 million during the month. A change in currency valuation is one of many variables that influences returns for a hedged Non-U.S. Equity portfolio. Cash flow from the currency-hedging program and the related equity portfolio can both deliver positive or negative results in a given period due to the staggered rolling of multiple futures contracts across three months.

ACTIVE SEARCHES

This section is intended to keep the Board of Investments apprised of active investment-related searches that include Requests for Proposal (RFP), Information (RFI), and Quote (RFQ). At this time, there are four searches currently underway.

The first is a targeted search requesting information from select investment management firms that have an offering in the relative value Hedge Fund category. Candidate firms have been identified in conjunction with LACERA's Hedge Fund Advisors. Responses have been submitted to LACERA. Staff will conduct due diligence and possibly make recommendations to the Board in the second quarter of 2018.

The second search currently underway is an RFI for active U.S. small capitalization equity investment management services. The RFI was issued in July with responses due in August. The review process is currently in the due diligence phase and a recommendation is scheduled for the April Board meeting.

The third search is an RFP issued for active U.S. and non-U.S. public equity emerging managers to oversee direct mandates in separate accounts. The RFP was issued in October and manager responses were due in November. The review process is underway and a recommendation is expected to be made in the third quarter of 2018.

The fourth search is for a private equity secondary advisor. The Board has approved minimum qualifications for this external service provider and the RFP was released in January 2018. The review process is underway and a recommendation is expected to be made in the second quarter of 2018.

UPDATES

This section provides a brief synopsis of recent developments, near-term work priorities and upcoming projects.

Total Fund

- In conjunction with Meketa, a Total Fund strategic asset allocation study is in process with BOI presentations scheduled monthly through the remainder of the fiscal year.
- The asset allocation glide path previously approved by the Board continues to be implemented.

Public Equity

- Staff is finalizing contract negotiations and preparing for conversion of public market commingled strategies into separate account structures.

Private Equity

- A personnel search has been launched for a Senior Investment Officer to focus on secondary activity, co-investments, and alternative private equity structures.

Fixed Income

- Implementation is underway for the structural changes and manager transitions approved by the Board in February.
- A review of the securities lending program is scheduled for the June meeting of the Fixed Income/Hedge Funds/Commodities Committee.

Real Estate

- Staff continues to work on a performance attribution analysis project with the Real Estate Consultant.
- A structure review is scheduled for the April Real Estate Committee meeting.

Commodities

- A structure review is scheduled for the September meeting of the Fixed Income/Hedge Funds/Commodities Committee.

Hedge Funds

- A direct portfolio is being built with individual manager recommendations occurring throughout 2018.

Corporate Governance

- The recently adopted *Corporate Governance Principles* policy is being translated into LACERA's proxy voting platform to implement the new policy and execute proxy votes this proxy season.

- Assessment of public markets managers' ESG practices continues to be refined, with takeaways integrated into LACERA's public market manager searches and monitoring.

OPEB

- An update on the new asset allocation and associated investment policy statement is scheduled for the April BOI meeting.

COMPLIANCE MONITOR

Evaluating the Fund's investment portfolios against established policies and guidelines is an integral part of the ongoing portfolio management process and is commonly referred to as compliance. The Fund's portfolio is implemented in a nuanced way across multiple asset categories, so LACERA utilizes a multi-faceted approach to evaluate compliance. A summary of compliance activities across the Total Fund identifying advisory notifications where appropriate is provided on a calendar quarter basis. Compliance categories include allocation target weights, portfolio policies such as the use of leverage, and guidelines for various items such as types of permissible holdings. The next report is scheduled to be provided as part of the March CIO Report.

INVESTMENT MANAGER MEETINGS

The purpose of this section is to promote transparency and governance best practices through the timely listing of manager meeting requests that the staff and/or consultant(s) receive from either the Chief Executive Officer (CEO) or a member of the Board of Investments.

In the normal course of business, the CEO or a Board member might recommend that staff meet with a specific manager; there might even be a subsequent discussion regarding a specific manager. If a third communication about the manager takes place within a rolling one-year period, LACERA's Investment Policy Statement directs that the full Board be notified of the requests. This process is designed to preserve the integrity of the decision-making process. Such contact would be reported in this section.

There are no contacts to report this month.

MARCH FORECAST

The economic backdrop has evolved in recent weeks as concerns over inflation, the possibility of an additional rate increase and the introduction of new tariffs has heightened uncertainty in the markets. Looking at inflation and the possibility of an additional rate hike, last month's employment report featured a much stronger than expected increase in average hourly earnings, suggesting that this dynamic might have started to shift. The possibility that faster wage growth might lead to more rapid tightening from the Fed likely contributed to the sharp selloff in stocks.

The possibility of additional tightening was not the only concern for the markets. In the U.S., there has been some concern around tariffs on imports of steel and aluminum. The fear is that the tariffs will lead to more severe measures and retaliation from other countries. While tariffs are nothing new, the tone of the debate shows that some nuances in international trade negotiations may be changing. It is too early to know if, and how, global trade may change, and which asset categories and geographies may be relative winners and losers from any potential shifts in global trade. The uncertainty may simply add to the increased market volatility. Over the past month, the markets may have begun to digest the concerns of rate hikes, inflation, and tariffs.

During the month of March, the S&P 500 stock index was down -2.69% while the Bloomberg Barclays Global Aggregate bond index was up by 1.06%. The increased level of market volatility and the broader decline in growth assets made for a challenging March. As of publication of this report, the Total Fund will likely have its second negative month after having fifteen positive months.

Attachments

JG:cq

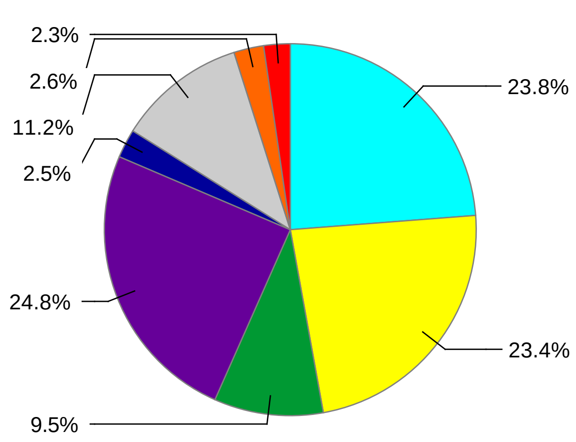
Attachment 1

LACERA'S ***ESTIMATED*** TOTAL FUND

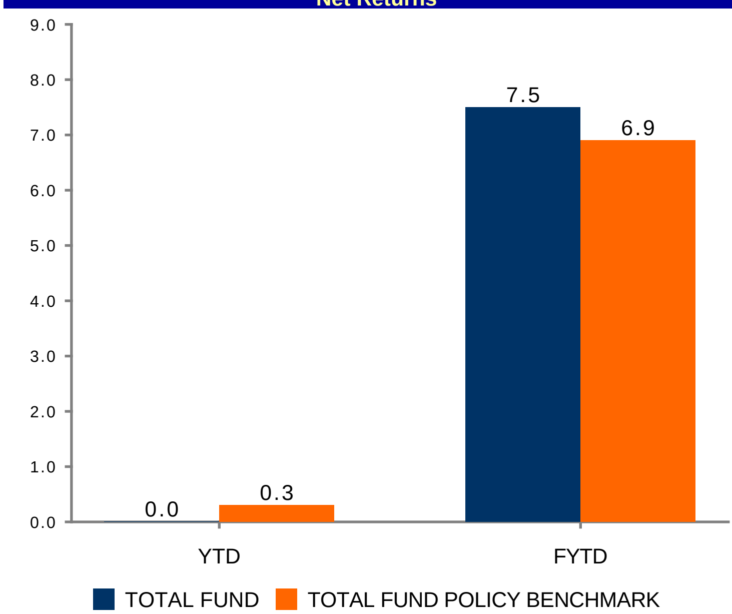
February 28, 2018

	Market Value (millions)	Actual % Total Fund	Target % Total Fund	TOTAL RETURNS (NET) YTD	FYTD	3 Year	5 Year	10 Year
U.S. EQUITY	**13,196.9**	**23.8**	**22.4**	**1.2**	**12.2**	**10.2**	**14.2**	**9.7**
RUSSELL 3000 (DAILY)				1.4	12.7	10.6	14.4	9.8
Non-U.S. EQUITY (Hedged)	**12,972.6**	**23.4**	**21.0**	**-0.1**	**11.1**	**7.3**	**8.2**	**3.8**
CUSTOM MSCI ACWI IMI N 50%H				-0.0	11.0	6.8	7.8	3.6
PRIVATE EQUITY [1]	**5,270.7**	**9.5**	**10.0**	**0.0**	**10.4**			
PRIVATE EQUITY TARGET [2]				2.1	8.5			
FIXED INCOME	**13,793.1**	**24.8**	**26.6**	**-1.3**	**0.5**	**2.7**	**2.9**	**5.0**
FI CUSTOM INDEX				-1.9	-0.5	1.7	2.1	4.1
REAL ESTATE [1]	**6,233.4**	**11.2**	**11.0**	**0.0**	**3.8**			
REAL ESTATE TARGET				1.3	4.7			
COMMODITIES	**1,401.8**	**2.5**	**2.8**	**0.1**	**9.3**	**-3.2**	**-6.8**	**-6.8**
Bloomberg Commodity Index Total Return				0.2	7.6	-4.7	-8.1	-8.3
HEDGE FUNDS [3]	**1,418.0**	**2.6**	**4.2**	**2.3**	**5.3**	**3.6**	**4.9**	
HEDGE FUND CUSTOM INDEX [3]				1.0	4.0	5.4	5.3	
CASH	**1,268.0**	**2.3**	**2.0**	**0.2**	**0.8**	**0.8**	**0.6**	**0.7**
Citigroup 6 M Treasury Bill Index				0.2	0.8	0.5	0.3	0.4
TOTAL FUND [1]	**55,554.5**	**100.0**	**100.0**	**0.0**	**7.5**			
TOTAL FUND POLICY BENCHMARK				0.3	6.9			

Asset Allocation



Net Returns



[1] Returns for private equity and real estate are calculated on a quarterly basis and are not updated intra quarter. Therefore, 3-, 5- and 10-year returns are only calculated at quarter-end for private equity and real estate. In addition, the Total Fund's returns are based on the latest available quarterly returns for these two asset classes.

[2] Rolling ten-year return of the Russell 3000 plus 500 basis points (one-quarter lag).

[3] One-month lag. Performance included in the Total Fund beginning 10/31/11

These are preliminary returns

Periods greater than 1-year are annualized

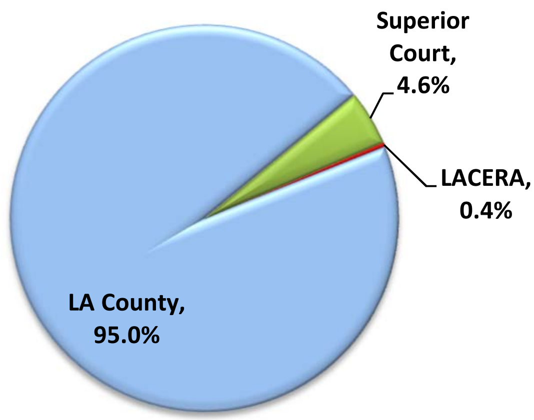
Attachment 2

OPEB MASTER TRUST

February 28, 2018

Fund Name		Inception Date	Market Value (millions)	Trust Ownership	Month	3 Month	FYTD	1 Year	3 Year	Since Incept.
Los Angeles County:	Gross	Feb-2013	$839.0	95.0%	-3.36	2.23	10.35	15.45	7.56	6.30
	Net				-3.36	2.22	10.32	15.41	7.52	6.26
	Net All				-3.36	2.21	10.30	15.37	7.45	6.21
LACERA:	Gross	Feb-2013	$3.2	0.4%	-3.29	2.22	10.41	15.55	7.61	6.33
	Net				-3.29	2.21	10.38	15.51	7.57	6.29
	Net All				-3.31	2.16	9.90	14.78	6.90	5.89
Superior Court:	Gross	Jul-2016	$40.5	4.6%	-3.39	2.26	9.92	14.61	---	12.91
	Net				-3.40	2.25	9.90	14.57	---	12.88
	Net All				-3.40	2.24	9.78	14.40	---	11.86
	TRUST OWNERSHIP TOTAL:		**$882.7**	**100.0%**						

Trust Ownership



Allocation		Inception Date	Market Value (millions)	Allocation %	Month	3 Month	FYTD	1 Year	3 Year	Since Incept.
OPEB Global Equity:	Gross	Mar-2014	$714.8	81.0%	-4.14	2.71	12.66	19.00	8.85	8.46
	Net				-4.14	2.70	12.63	18.95	8.81	8.42
Benchmark: MSCI ACWI IMI Net					-4.17	2.64	12.45	18.61	8.47	8.08
Excess Return (Gross - Benchmark)					*0.04*	*0.07*	*0.21*	*0.39*	*0.38*	*0.38*
OPEB Enhanced Cash:	Gross	Feb-2013	$167.9	19.0%	0.10	0.34	0.91	1.33	0.94	0.70
	Net				0.10	0.33	0.88	1.28	0.89	0.64
Benchmark: Citigroup 6 M T-Bill Index					0.11	0.32	0.77	1.01	0.53	0.34
Excess Return (Gross - Benchmark)					*-0.01*	*0.02*	*0.14*	*0.32*	*0.41*	*0.35*

These are preliminary returns

Periods greater than 1-year are annulized

ATTACHMENT 3

PUBLIC INVESTMENT-RELATED SEARCHES APPLICANTS

This document identifies firms who have pro-actively submitted an application to LACERA in response to a publicly posted request. These publicly posted requests are commonly referred to as searches and may include minimum qualifications. When an external firm submits an application to a search, LACERA is in a quiet period with the applying firm while the search is active.

The following firms have responded to a request for information regarding an active U.S. small capitalization equity mandate:

AB L.P.
Aberdeen Asset Management Inc
American Century Investment Management, Inc.
Aristotle Capital
Brandywine Global Investment Management, LLC
Brown Advisory LLC
ClearBridge Investments
Cooke & Bieler, LP
Cornerstone Capital Management Holdings LLC
Cortina Asset Management
Cramer Rosenthal McGlynn, LLC
FIAM LLC
Fisher Investments
Hotchkis and Wiley Capital Management, LLC
Investment Counselors of Maryland, LLC
Kayne Anderson Rudnick Investment Management, LLC
LMCG Investments, LLC
Macquarie Investment Management
Martingale Asset Management
Matarin Capital
Mesirow Financial Investment Management Inc.
MFS Institutional Advisors, Inc
PanAgora Asset Management, Inc
Quantitative Management Associaties LLC
Ranger Investment Management
River Road Asset Management, LLC
Rothschild Asset Management Inc
Systematic Financial Management, L.P.
The Boston Company Asset Management LLC
Tributary Capital Management, LLC
Victory Capital Management Inc
Voya Investment Management
Wellington Management Company LLP
Wells Capital Management, Inc.

Westfield Capital Management Company, L.P.
William Blair Investment Management, LLC
Ziegler Capital Management, LLC

The following firms have responded to a request for proposal regarding an active emerging manager equity mandate:

361 Capital
AltraVue Capital
AMP Wealth Management
Applied Research Investments
Arabesque Asset Management
Ativo Capital Management
Blackcrane Capital, LLC
Bowling Portfolio Management
Bridge City Capital, LLC (BBC)
Business Technology Associates
Cedar Street Asset Management
Compass Group LLC
CornerCap Investment Counsel
Decatur Capital Management
Denali Advisors
Dundas Global Investors
Eastern Shore Capital Management
Empiric Institutional LLC
Global Alpha Capital Management
Goelzer Investment Management, Inc.
Granahan Investment Management
Granite Investment Partners
High Pointe Capital Management LLC
Hillcrest Asset Management
Isthmus Partners, LLC
Marietta Investment Partners
Mark Asset Management
Martin Investment Management LLC
Maryland Capital Management (MCM)
Matarin Capital Management
Metis Global Partners
Monarch Partners
New Amsterdam Partners LLC
Oak Associates LTD
OakBrook Investments LLC
Osmosis Investment Management US LLC

Pacific Ridge Capital Partners, LLC
Pacific View Asset Management LLC
Redwood Investments
RVX Asset Management, LLC
Seamans Capital Management
Semper Augustus Investments Group LLC
Spyglass Capital Management LLC
Summit Global Investments
Sustainable Insight Capital Management
Union Square Park Capital Management LLC

The following firms have responded to a request for proposal regarding a private equity secondary advisor:

Campbell Lutyens & Co. Inc.
Citigroup
Credit Suisse
Elm Capital USA Ltd
Evercore Group L.L.C.
Greenhill Cogent, LP
Houlihan Lokey
Lazard
Melting Point Solutions
Park Hill Group
Setter Capital, Inc.
Triago Americas, Inc.

JG: cq

LACERA

March 19, 2018

TO: Each Member
Board of Investments

FROM: Fixed Income/Hedge Funds/Commodities Committee:
Wayne Moore, Chair
Herman Santos, Vice Chair
Ronald Okum
Joseph Kelly
David Green, Alternate

Fixed Income Staff:
Vache Mahseredjian, CFA, CAIA, FRM, ASA, Principal Investment Officer
Robert Santos, Investment Officer
Esmeralda Del Bosque, Investment Officer
Adam Cheng, CFA, Senior Investment Analyst

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **CASH PROGRAM REVIEW**

RECOMMENDATION

Change the cash sweep vehicle from the State Street Institutional Liquid Reserves Fund to the State Street Institutional U.S. Government Money Market Fund.

BACKGROUND

On March 5, 2018, the Fixed Income/Hedge Funds/Commodities Committee ("Committee") unanimously approved the recommended change to the sweep component of LACERA's Cash Program. The recommendation is intended to maintain a conservative approach in the management of the sweep vehicle to ensure liquidity and stability in times of market stress. In 2016, new SEC rules governing money market funds went into effect. The cash sweep vehicle, State Street's Institutional Liquid Reserve Fund (ILR), was impacted and converted from a fixed NAV to a floating NAV. Moreover, under certain circumstances, prime funds like the ILR are allowed to impose liquidation fees and redemption gates. State Street manages an alternative fund, the U.S. Government Money Market Fund (GovMM), which is not subject to the new rules. Given the added protections, switching from ILR to GovMM is advisable. This change is in line with a Meketa recommendation made during its review of Fund operations.

Along with the recommendation, Staff also provided an overview of the cash portfolio managed by JP Morgan (JPM). JPM continues to outperform and meet its objectives.

OPTIONS AVAILABLE TO THE BOARD

The Board may wish to approve, modify, or reject the recommendation.

DELIBERATIONS AND OPINIONS EXPRESSED BY THE COMMITTEE

Committee members asked questions about the following topics on March 5:

- Redemption costs associated with exiting the ILR
    - *There are no redemption fees associated with ILR.*

- The current floating NAV of the Institutional Liquid Reserve Fund
    - *As of March 16, 2018, the ILR had an NAV of $1.0.*

RISKS OF ACTION AND INACTION

If the Board approves the recommendation, the expected yield on the sweep vehicle will slightly decline. Offsetting that risk is the stability of a fixed NAV, no fees on redemptions, and no gates during times of distress.

If the Board does not approve the recommendation, the sweep vehicle could potentially face fees on redemptions and gates during times of distress. In addition, the swept cash could experience losses if NAV falls below $1.

CONCLUSION

The Committee approved changing LACERA's sweep vehicle from the State Street Institutional Liquid Reserve Fund to the State Street U.S. Government Fund. This change provides both risk reduction and increased liquidity for swept cash.

Attachment

Noted and Reviewed:

Jonathan Grabel
Chief Investment Officer

ATTACHMENT

February 23, 2018

TO: Fixed Income/Hedge Funds/Commodities Committee:
Wayne Moore, Chair
Herman Santos, Vice Chair
Ronald Okum
Joseph Kelly
David Green, Alternate

FROM: Vache Mahseredjian, CFA, CAIA, FRM, ASA, P.I.O. VM
Robert Santos, Investment Officer RS
Esmeralda Del Bosque, Investment Officer EDB
Adam Cheng, CFA, Sr. Investment Analyst AC

FOR: March 5, 2018 Committee Meeting

SUBJECT: **CASH PROGRAM REVIEW**

RECOMMENDATION

Change the cash sweep vehicle from the State Street Institutional Liquid Reserves Fund to the State Street Institutional U.S. Government Money Market Fund.

EXECUTIVE SUMMARY

Staff reviewed the cash management program to ensure that it continues to comply with LACERA's Cash Investment Policy. The review consisted of an examination of the cash portfolio's strategic objectives, performance, and guidelines—with particular emphasis on parameters relating to liquidity, interest rate risk, credit risk, and diversification. This review is part of staff's ongoing evaluation of portfolios and investment managers. Staff is in discussions with JP Morgan (JPM) to fine-tune the cash investment guidelines.

In light of recent regulations governing money market funds, staff recommends changing the sweep vehicle used to invest cash flows that arrive after JPM's daily investment deadline. The current sweep vehicle is the State Street Institutional Liquid Reserves (ILR) Fund. Staff recommends switching to the State Street Institutional U.S. Government Money Market (GovMM) Fund. This change coincides with an earlier Meketa recommendation.

Staff considers the change in sweep vehicle to be an operational function, and LACERA's Investment Policy Statement (IPS) delegates day-to-day operational decisions to the CIO—followed up by written notification to the Board. However, the language in the IPS is unclear, so staff is taking a conservative interpretation and seeking Committee, and then Board approval. Staff will endeavor to clarify the IPS language in the next update, following the Board's asset allocation decision scheduled for May.

INTRODUCTION

LACERA's asset allocation has a 2% target weight for cash, and management of cash assets is governed by LACERA's Cash Investment Policy. Among the key objectives listed in this policy are:

- Preserve principal by investing in high quality, short-term fixed income instruments.
- Generate income and maintain adequate liquidity to: 1) pay benefits, 2) rebalance asset classes, and 3) satisfy capital calls from LACERA's investment managers.
- Diversify with respect to maturity, sector, industry, and issuer.
- Outperform the benchmark: The Citigroup 6 Month U.S. Treasury Bill Index

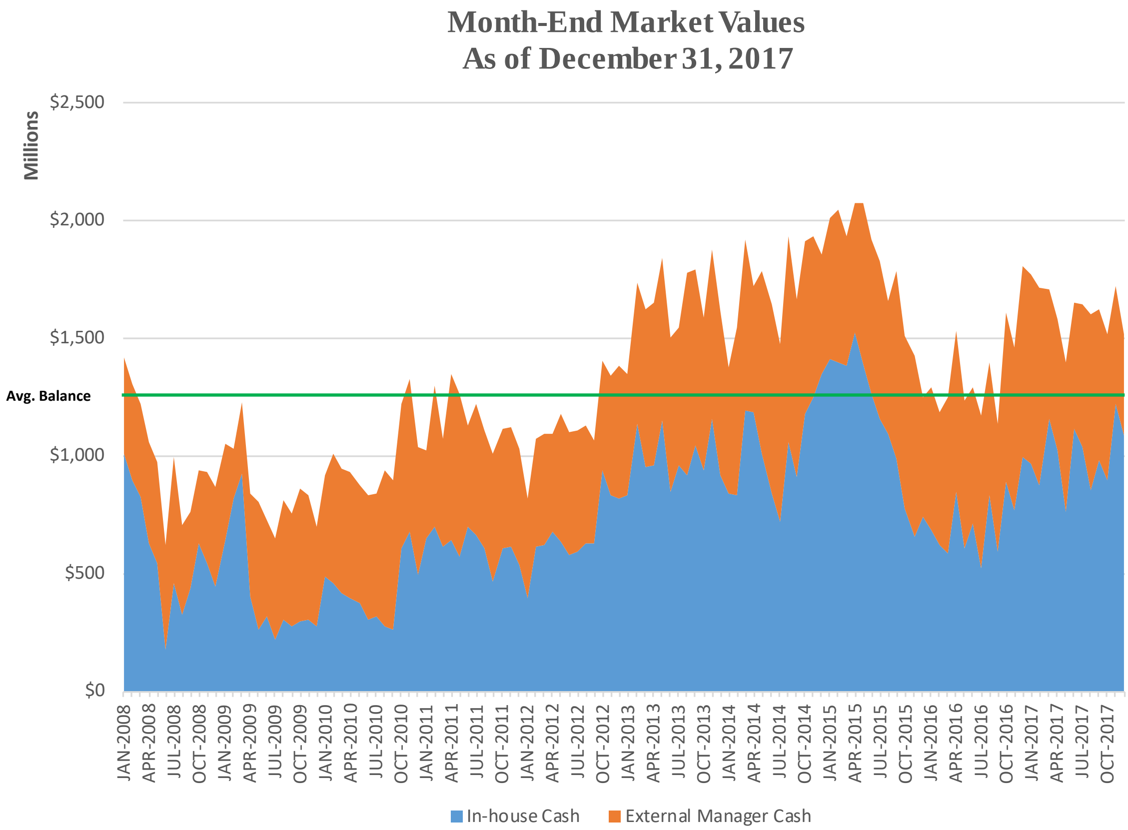
All cash activity such as employee/employer contributions, benefit payments, manager funding or liquidation, asset allocation rebalancing, and numerous operating or administrative transactions flow through the cash portfolio, so maintaining adequate daily liquidity is paramount. The primary source of cash is LACERA's 2% allocation ("In-House" cash); in addition, when LACERA's active managers have un-invested cash, that cash flows into the portfolio that is actively managed by J.P. Morgan Asset Management (JPM). JPM has a daily cutoff time of 11:30 a.m. PST, so any cash flows that arrive after that deadline are "swept" into a money market fund managed by State Street and returned the next morning. On average, the JPM portfolio has accounted for 92% of total cash, and the State Street sweep vehicle has comprised the remaining 8%.

MARKET VALUE

Over the past 10 years, the JPM portfolio's month-end market value has averaged $1.3 billion, ranging from $624 million to $2.1 billion. As of December 31, 2017, this portfolio had a market value of $1.5 billion, consisting of $1.1 billion of In-House Cash and $0.4 billion of external managers' cash.[1] **CHART 1** shows how the balances have fluctuated over the past 10 years.

[1] External manager cash by asset class: Fixed Income ($223 million), Equities ($81 million), Real Estate ($44 million), Private Equity ($29 million), Hedge Funds ($32 million), and Commodities ($19 million).

CHART 1



PERFORMANCE

TABLE 1 on the following page summarizes the JPM cash portfolio's annualized return and risk.

Over the past 10 years, the portfolio has outperformed its benchmark by an average of 30 bps annually, net-of-fees.[2] Since JPM started managing the portfolio in September of 2012, the annualized standard deviation has been 0.12%, slightly above the 0.09% level of the benchmark. Note that the average standard deviation over the past 10 years is considerably higher, at 1.37%, reflecting the experience of the 2008 financial crisis. Following that experience, the Board issued an RFI for a cash manager, hired JPM, and instituted tighter guidelines to reduce risk.

[2] JP Morgan's management fee is 5 bps per year.

TABLE 1
ANNUALIZED RETURN AND RISK[A] (Ended December 31, 2017)

PORTFOLIO	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept: 9/12
LACERA Enhanced Cash (Gross)	1.18%	0.81%	0.63%	0.63%	0.84%	0.62%
LACERA Enhanced Cash (Net)	1.13%	0.76%	0.58%	0.58%	0.78%	0.57%
Citigroup 6-Month U.S. T-Bill	0.88%	0.46%	0.31%	0.26%	0.48%	0.30%
Difference (Net)	0.25%	0.30%	0.27%	0.32%	0.30%	0.27%
Standard Deviation	---	0.12%	0.13%	0.18%	1.37%	0.12%
Standard Deviation (Benchmark)	---	0.10%	0.10%	0.10%	0.20%	0.09%

[A] *Source: State Street and Zephyr StyleADVISOR*

TABLE 2 shows the JPM portfolio's key characteristics alongside those of the benchmark, the Citigroup 6-month T-Bill Index, as of December 31, 2017. Note that the portfolio has a lower duration than the benchmark (0.31 vs. 0.49), indicating that it has less interest rate risk.

The portfolio does have greater credit risk than the benchmark, as shown by the spread duration measure. This is because the benchmark consists exclusively of Treasury Bills, whereas the portfolio also invests in high quality, short-term debt instruments such as corporate bonds, certificates of deposit, commercial paper, and asset-backed securities. The allocation to non-Treasury securities is responsible for the portfolio's 22 bps yield advantage over the Index (1.73% vs. 1.51%). Over the long run, this yield differential has been the primary source of incremental return.

TABLE 2
CHARACTERISTICS, CREDIT QUALITY, AND SECTOR ALLOCATION
(as of 12/31/17)

Portfolio Characteristics	Portfolio	Benchmark*
Duration (yrs)	0.31	0.49
Spread Duration (yrs)	0.25	0.00
Average Yield (%)	1.73	1.51
Average Life (yrs)	0.36	0.49
Average Credit Quality	A+	AAA

Credit Quality	Portfolio	Benchmark*
Treasuries	22.4%	100.0%
AAA /AA/A	77.6%	0.0%
Total	100.0%	100.0%

Sector Allocation	Portfolio	Benchmark*
Commercial Paper	36.4%	0.0%
Treasuries	22.4%	100.0%
Corporates	17.8%	0.0%
Certificates of Deposit	11.2%	0.0%
Cash	7.1%	0.0%
Agencies	3.3%	0.0%
Other **	1.8%	0.0%
Total	100.0%	100.0%

* Citigroup 6-Month US Treasury Bill Index
** Consists of Time Deposits, Non-Corporate Credit, & ABS

INVESTMENT GUIDELINES

Staff periodically revisits the cash program's investment guidelines, including the terms of the State Street cash sweep vehicle. The market environment is constantly changing and new regulations alter the landscape, so the review ensures that key investment parameters remain up-to-date and consistent with LACERA's Cash Policy.

With regard to the JPM portfolio, staff and the manager recently collaborated to streamline and update the investment guidelines in order to provide the requisite flexibility for a portfolio that requires daily liquidity. A few fine-tuning adjustments were made, but the core, conservative guidelines governing liquidity, interest rate risk, and credit risk remain unchanged.[3]

The State Street sweep vehicle, ILR, is a very short-term "prime[4]" institutional money market fund and is even more conservative than the JPM portfolio: as of December 31, 2017, its weighted average maturity was 18 days.

In October of 2016, new SEC rules governing money market funds went into effect. These rules require prime money market funds to adopt a floating net-asset-value (NAV) as opposed to the prior approach, which used a fixed $1 NAV. The floating nature of the NAV means that assets invested in the fund can decline in value. Moreover, under certain circumstances, prime funds are allowed to impose liquidation fees and redemption gates.

In contrast, money market funds such as GovMM that invest exclusively in U.S. Government securities are not subject to the new rules, so their NAVs will not fall below $1, and they are not subject to redemption fees or gates. GovMM's interest rate risk is comparable to the ILR, but GovMM has essentially no credit risk. For this reason, its yield is approximately

[3] The same guidelines apply to the OPEB cash portfolio managed by JPM.
[4] Prime funds are general purpose funds that invest in U.S. dollar-denominated money market instruments.

25 bps less than that of the ILR fund.[5] Given the added protections, staff recommends switching from ILR to GovMM. This change is in line with a Meketa recommendation made during its review of Fund operations.

Staff views the change in sweep vehicle to be an operational function, and LACERA's IPS delegates day-to-day operational decisions to the CIO, provided the Board receives written notification of such actions. However, language in different sections of the IPS is somewhat inconsistent. Therefore, staff is taking a conservative interpretation and seeking the Committee's approval. If the Committee approves, the matter will be forwarded to the Board.

Staff will endeavor to clarify the language in the IPS during the next IPS update, following the Board's asset allocation decision scheduled for May.

CONCLUSION

Staff reviewed the cash management program to ensure that it continues to comply with the Cash Investment Policy. The program is operating smoothly and performance has met expectations. JPM has achieved the objectives of preserving capital and providing liquidity while adding incremental yield, and State Street's ILR fund has been an effective late money sweep vehicle.

Given the revised rules governing money market funds, transitioning from State Street's ILR to the GovMM fund is advisable. The investment environment has been benign for the past several years, so switching to the more conservative sweep vehicle before the next market disruption is warranted.

Noted & Reviewed:

____
Jonathan Grabel
Chief Investment Officer

[5] The ILR fund's 7-day yield was 1.51% as of 12/31/17, versus 1.25% for the GovMM fund. Both funds have the same expense ratio of 12 bps.

March 22, 2018

TO: Each Member
Board of Investments

FROM: Fixed Income/Hedge Funds/Commodities Committee
Wayne Moore, Chair
Herman Santos, Vice Chair
Joseph Kelly
Ronald Okum
David Green, Alternate

James Rice, CFA
Senior Investment Officer

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **HEDGE FUNDS OF FUNDS PORTFOLIO GUIDELINE CHANGES RECOMMENDATION**

RECOMMENDATION

Adopt the changes to the guidelines for the two diversified hedge fund of funds portfolios managed by Grosvenor Capital Management and Goldman Sachs Asset Management.

BACKGROUND

On March 5, 2018, staff presented proposed changes to two diversified hedge fund of funds portfolios managed by Grosvenor Capital Management and Goldman Sachs Asset Management. The changes are noted in the attachment to the staff cover memo to the Committee. The Committee voted to advance this item to the Board of Investments for approval.

The following documents enclosed are the cover memo to the Committee (**Attachment**), the redline changes to the Grosvenor Capital Management guidelines (**Attachment 1**), and the redline changes to the Goldman Sachs Asset Management guidelines (**Attachment 2**).

OPTIONS AVAILABLE TO THE BOARD

The changes proposed will allow generally for a modestly less liquid portfolio to potentially enhance returns and lower fees. If the Board does not approve the proposed changes, staff will consult with the Committee and propose an alternative plan or keep the guidelines as they are.

DELIBERATIONS AND OPINIONS EXPRESSED BY THE COMMITTEE

Some of the opinions expressed by Committee members during its deliberation and staff's response include the following:

There was a question about the impetus for the recommendation and staff responded that approval of the recommendation would serve to align policies between the direct hedge fund portfolio guidelines which were changed in December 2017 and the guidelines for the fund of funds portfolios.

A question was raised about how the asset allocation study currently underway may impact this decision. Staff responded that it is premature to foretell any board-approved changes from the asset allocation study, and that the proposed guidelines could be changed again in the future to adapt to any new asset allocation if necessary. The timing of any changes, if approved, would occur from future portfolio construction adjustments initiated by Grosvenor Capital Management and Goldman Sachs Asset Management and are likely to result in only marginal changes in the near future.

There were additional questions raised about some of the other recommended changes to the Grosvenor guidelines. In all cases, these are consistent with LACERA's higher level hedge fund policies. Changes to leverage constraints are proposed to align them with overall LACERA level guidelines that exist for the direct and Goldman portfolios. Increasing leverage limits to select strategy categories, such as relative value, could help improve diversification of the portfolio due to the low correlation of some funds in these strategies. Staff also stated that a number of changes are the result of aligning the strategy category names with Grosvenor's classification, allowing for a slightly more concentrated portfolio structure and modifying the way some of the objectives are measured.

RISKS OF ACTION AND INACTION

If the Board approves the revisions, the fund of funds portfolios will be allowed to have a modestly less liquid profile than the existing portfolios which could make it more difficult to raise cash from the hedge fund program over the short term.

If these items are not approved, the higher liquidity requirements may result in lower returns in the portfolios than would otherwise be available since much of the higher returning opportunities require a longer time horizon than the most liquid strategies. Additionally, not approving this could result in higher fees for the hedge fund program because funds often offer lower fee terms in exchange for an investor accepting less liquidity, such as a longer initial lock-up period.

CONCLUSION

Staff has proposed guidelines changes to the two diversified fund of fund portfolios, generally to allow for a modestly more illiquid portfolio in order to enhance portfolio returns or to lower fees. The Fixed Income/Hedge Funds/Commodities Committee reviewed and advanced these documents to the Board for approval at its March 2018 meeting.

Attachments

Noted and Reviewed:

Jonathan Grabel
Chief Investment Officer

JR:ct:mm

February 22, 2018

TO: Each Member
Fixed Income/Hedge Funds/Commodities Committee

FROM: James Rice, CFA
Senior Investment Officer–Hedge Funds

FOR: March 5, 2018 Fixed Income/Hedge Funds/Commodities Committee

SUBJECT: **HEDGE FUNDS OF FUNDS PORTFOLIO GUIDELINE CHANGES RECOMMENDATION**

RECOMMENDATION

Advance the changes to the guidelines for the two diversified hedge fund of funds portfolios managed by Grosvenor Capital Management and Goldman Sachs Asset Management to the Board of Investments for approval.

BACKGROUND

LACERA's Hedge Funds Program ("Program") includes two diversified fund of fund portfolios that are each managed separately by Grosvenor Capital Management ("GCM") and Goldman Sachs Asset Management ("GSAM"). As part of the agreement with each manager, each portfolio is subject to its own written investment guidelines covering such areas as portfolio risk, return and diversification objectives, strategy allocations, liquidity constraints, leverage limits by strategy category, and downside risk expectations.

As part of the review of the Annual Investment Plan and the Objectives, Policies and Procedures at the end of 2017, the Committee advanced and the Board of Investments approved certain changes to the direct hedge fund portfolio guidelines, generally allowing for a more illiquid portfolio. Similar to the changes approved in 2017 for the direct portfolio, staff is recommending additional changes to the guidelines that govern the funds of funds portfolios so that additional latitude is also allowed to invest in a modestly more illiquid portfolio. Even with the proposed changes, both portfolios and the overall Program would still comply with the broad illiquidity risk mitigation policies established in LACERA's Investment Policy Statement. Staff brings these investment guideline changes for Committee advancement and Board approval as the proposed changes allow for modestly greater risk in the management of the portfolios for which commensurate returns are expected.

DISCUSSION

Both sets of guidelines have been updated to propose changes to the liquidity profile of each diversified hedge fund portfolio. In general, both managers will be expected to maintain 65% of the portfolio capital to be available within 12 months, down from 80%.

Individual hedge funds fall on a spectrum of varying levels of liquidity. LACERA's guidelines attempt to mitigate some of the risks of illiquidity while still acknowledging the inherent illiquid nature of many hedge funds assets. Fund illiquidity is often a component of hedge fund structures so that, during market downturns, managers can acquire lower priced positions or avoid selling positions in that environment by preventing possibly steep demands from fund investors to redeem capital at the same time. With more illiquid positions, realized portfolio volatility may decrease modestly as less liquid securities also exhibit lower volatility because their market values are less tied to the higher volatility associated with securities priced in more active markets.

As part of the potential expansion of less liquid investments in the GCM portfolio, the proposed guideline (**Attachment 1**) change is increasing the maximum investment in the Grosvenor Special Opportunities Fund ("GSOF") from 5% of the portfolio to 10%. This Grosvenor-managed fund is a less liquid fund that invests in higher-returning, lower-market-correlation, co-investment type hedge fund opportunities. Currently, LACERA is not charged any additional fee for investments in GSOF beyond the fund of funds management fee that is paid on the entire portfolio. LACERA has a consent right before any new investment is made into GSOF, enabling an evaluation should any fee terms change for future allocations to GSOF.

Additionally, the GSAM guidelines (**Attachment 2**) have been modified to allow for more investment in funds that have longer locked structures. In the proposed revision, up to 10% of the portfolio may be subject to locks greater than two years, but in no cases may GSAM invest in funds with locks that exceed three years. Currently, lock-ups are limited to two years. This proposed change is intended to allow this hedge fund portfolio more flexibility to invest in less liquid funds which may be expected to have higher returns than other more liquid hedge funds. Additionally, allowing for less liquid fund structures may also allow for lower fees as funds sometimes offer a tradeoff of lower fees for a longer lock-up period.

Elsewhere in the GCM document, a number of other changes have been proposed that are intended to modify the guidelines to reflect GCM's current strategy definitions, to reflect a desired portfolio with slightly more concentration and to modify some practices for measuring objectives or risk constraints while still operating within LACERA's higher level policies.

A redline version of the proposed guidelines with highlighted changes from the current guidelines are attached for each portfolio.

CONCLUSION

Staff and its hedge fund of funds managers have proposed modifications to the guidelines that govern the two diversified fund of funds portfolios. Staff recommends the Committee to advance both of these to the Board for approval.

Attachments

Noted and Reviewed:

Jonathan Grabel
Chief Investment Officer

JR:jr:mm

Grosvenor Capital Management

San Gabriel Fund, L.P. (the "Fund")

INVESTMENT OBJECTIVES, INVESTMENT STRATEGY AND APPROACH, PERFORMANCE OBJECTIVES AND PORTFOLIO CONSTRAINTS (THE "GUIDELINES")

~~April 2015~~February 2018 - PROPOSED

May only be amended with the consent of the Fund's sole investor.

I. INVESTMENT OBJECTIVES

The Fund's investment objectives are: (i) to generate a superior absolute and risk-adjusted rate of return, with low performance volatility and low correlation with global equity and fixed-income markets, over a full market cycle; and (ii) to preserve capital during challenging market environments.

II. INVESTMENT STRATEGY AND APPROACH

Grosvenor Capital Management, L.P. ("**Grosvenor**"), in its capacity as the Fund's general partner, seeks to achieve the Fund's investment objectives by allocating the Fund's assets to the discretionary investment authority of third-party investment management firms (each, an "**Investment Manager**") that invest, both long and short, in a wide range of "alternative" investment strategies[1]. Grosvenor's investment approach for the Fund is designed to achieve broad diversification across global capital markets and strategies.

The Fund allocates its assets to Investment Managers by investing in limited liability private investment vehicles (each, a "**Portfolio Fund**") managed by them.

Subject to prior approval by the Fund's sole investor (which approval is required prior to any such initial or additional investment), the Fund may invest in one or more single-strategy, multi-manager investment funds or accounts for which Grosvenor serves as investment manager and which invest all or substantially all of their assets in Portfolio Funds, and may bear its *pro rata* share of the usual and customary expenses of any such investment fund or account, provided that (i) the Fund does not directly or indirectly bear any fees payable to Grosvenor or any of its affiliates in connection with any such investment; and (ii) neither Grosvenor nor any of its affiliates has an equity or other economic interest in the investment manager or investment adviser of any Portfolio Fund in which such investment fund or account invests. Each such investment vehicle or account is defined as a "**Grosvenor-Managed Portfolio Fund**" for purposes of this document and is considered a Portfolio Fund for purposes of this document.

In addition, subject to prior approval by the Fund's sole investor (which approval is required prior to any such initial or additional investment), Grosvenor may from time to time request that an Investment Manager form and/or manage a Portfolio Fund for primary or exclusive investment by accounts managed by Grosvenor, including the Fund. In the case of any such Portfolio Fund that is sponsored and/or controlled by Grosvenor (each, a "**Grosvenor-Controlled Portfolio Fund**"), such Portfolio Fund will retain the investment management or investment advisory services of a party other than Grosvenor and its affiliates. Each Grosvenor-Controlled Portfolio Fund shall be considered a Portfolio Fund for purposes of this document, except where otherwise expressly provided.

The Fund will not directly invest in the types of financial instruments in which a Portfolio Fund invests (other than in respect of any in kind distribution received by the Partnership from an underlying Portfolio Fund).

To the extent that Grosvenor does not use the Partnership's assets for the purposes discussed above, it invests such assets in: bank demand deposit accounts (which may or may not be interest bearing); and/or high-quality, short-term debt instruments (and/or commingled investment products, e.g., "money market" funds, that invest in such instruments). Such investments are expected to be minimal as the Fund expects to allocate its assets primarily to Portfolio Funds, as described above.

The Fund is denominated in US Dollars.

III. PERFORMANCE OBJECTIVES[2]

Target Annualized Return (primary):	90-Day U.S. T-Bills plus 500 basis points
Target Annualized Return (secondary):	HFRX Global Hedge Fund Index
Target Range of Annualized Standard Deviation:	5% to 7%
Beta to the MSCI World Index:	≤ 0.20
Beta to the Barclays US Aggregate Index:	≤ 0.20
Sharpe Ratio:	≥ 1.0
Fund-Level ROR Impact of Severe Case Loss (at market)[3]:	Not more than 10%

IV. PORTFOLIO CONSTRAINTS[4]

Target number of Investment Managers[5]: ~~20 to 40~~15 to 35

Target allocation and compliance ranges to the following strategies, based on Grosvenor's definitions of strategies[6] and its classification of Portfolio Funds as pursuing such strategies[7], expressed as a % of Fund capital (at market):

Strategy	Target Allocation[8]	Compliance Range[8]
Credit:	30%	10% - 40%
Equities:	20%	5% - 40%
Multi-Strategy:	15%	0% - 30%
~~Event Driven:~~	~~2%~~	~~0% - 25%~~
Relative Value:	~~15%~~14%	0% - 30%
Macro:	13%	0% - 20%
Commodities:	~~4%~~2%	0% - 15%
Quantitative:	5%	0% - 15%
Portfolio Hedges:	1%	0% - 10%

% ROR Impact of Severe Case Loss to a single sub-strategy[9] (at market): Not more than ~~6%~~7%

Maximum allocation to a single Portfolio Fund[10], expressed as:

% of Fund capital (at market):	~~7%~~10%
% ROR Impact of Severe Case Loss[11] (at market):	Not more than ~~3%~~4%

Leverage[12]:

Maximum leverage limits for the following exposure categories, based on Grosvenor's definitions of exposure categories[13] and its estimates of the Fund's leverage to such exposure categories[14]:

Exposure Category	Maximum
Credit:	~~3.0x~~4.0x
Event Driven:	~~3.0x~~4.0x
Equities:	4.0x
Relative Value:	~~7.0x~~8.0x
Macro:	20.0x
Other:	5.0x

Borrowing:

The Fund may not borrow for any purpose.

Portfolio Fund Liquidity Constraints[15]:

The Fund may invest in Portfolio Funds that permit voluntary redemptions/withdrawals ("**Evergreen Portfolio Funds**"),~~ and ~~Portfolio Funds that do not permit voluntary redemptions/withdrawals ("**Self-Liquidating Portfolio Funds**"), and GCM Grosvenor Special Opportunities Fund, L.P., a Grosvenor-managed portfolio fund, from which Grosvenor and its affiliates receive fees and other compensation and which offers periodic liquidity ("**GCM Special Opportunities Fund**"). GCM Special Opportunities Fund's offering documents, which will be provided to the Fund's sole investor upon each investment in the GCM Special Opportunities Fund, describe the fee and liquidity terms offered to investors, including the Fund.

Subject to prior approval by the Fund's sole investor (which approval is required prior to any such initial or additional investment), the Fund may allocate a maximum of ~~5%~~20% of its capital to Self-Liquidating Portfolio Funds. For purposes of determining the ~~5%~~20% limitation, a combination of an "at cost" and "at market" test is to be applied as follows: if the current "at cost" allocation to Self-Liquidating Portfolio Funds is less than ~~5%~~20% but the corresponding "at market" allocation is greater than ~~5%~~20%, no additional allocations to Self-Liquidating Portfolio Funds may be made until the "at market" allocation is less than ~~5%~~20%. An "at market" allocation of greater than ~~5%~~20% but an "at cost" allocation of less than ~~5%~~20% is not considered to be an exception for purposes of applying this constraint. For the avoidance of doubt, GCM Special Opportunities Fund is not considered a Self-Liquidating Portfolio Fund for purposes of confirming compliance with this constraint.

Subject to prior approval by the Fund's sole investor (which approval is required prior to any such initial or additional investment), the Fund may allocate a maximum of 10% of its capital to GCM Special Opportunities Fund. This 10% limitation shall be measured exclusively "at market" and only at the time of the initial investment or any additional investments: specifically, if the "at market" allocation is greater than 10%, no additional allocation to GCM Special Opportunities Fund may be made until the "at market" allocation is less than 10%.

The Fund may not allocate more than ~~20%~~35% of its capital to Portfolio Funds that impose "lock-ups" (measured either from the time the Fund first invests in such a Portfolio Fund or on an investment-by-investment basis in such a Portfolio Fund, as applicable, and not from the time of any capital commitment to a Portfolio Fund) of more than 12 months. For purposes of applying this constraint, the Fund's total allocation to Self-Liquidating Portfolio Funds (at market) and GCM Special Opportunities Fund (at market) is considered to be "locked-up" for more than 12 months.

With regard to the capital allocated to Evergreen Portfolio Funds, the Fund may not allocate any of its capital to Evergreen Portfolio Funds that impose "lock-ups" (measured either from the time the Fund first invests in such an Evergreen Portfolio Fund or on an investment-by-investment basis in such an Evergreen Portfolio Fund, as applicable, and not from the time of any capital commitment to an Evergreen Portfolio Fund) of more than 24 months.

Minimum ~~capital invested with~~liquidity available within one year in Portfolio Funds (after applicable "lock-ups" expire): 65%

- ~~with quarterly or more frequent liquidity: 50%~~
- ~~with annual or more frequent liquidity: 85%~~

For purposes of applying the aforementioned ~~50% and 85%~~65% on-going liquidity constraint~~s~~, the Fund's aggregate allocation to ~~both~~ Evergreen Portfolio Funds, ~~and~~ Self-Liquidating Portfolio Funds (at market), GCM Special Opportunities Fund (at market), and Side Pocket Investments (at market) (as defined below) are to be taken into consideration. Specifically:

- Evergreen Portfolio Funds' mandatory investor-level "gates" are taken into consideration (but all other types of "gates" (*e.g.,* mandatory share-class and Portfolio Fund-level "gates," and any discretionary "gates") are not).
- Self-Liquidating Portfolio Funds, GCM Special Opportunities Fund, and Side Pocket Investments are considered to have liquidity less frequent than annual. However, to the extent any portion of any such Portfolio Fund has known or stated liquidity within one year or less, such portion of such Portfolio Fund shall be considered to have annual or more frequent liquidity.

Additionally, portfolio liquidity may be subject to redemption charges and certain other considerations (see footnote 15).

Portfolio Fund Investment Restrictions:

- Transparency: Grosvenor will not invest the assets of the Fund in a Portfolio Fund unless Grosvenor reasonably determines that such Portfolio Fund provides ongoing disclosure of either position-level data or risk-exposure-level data. Position-level data includes all of a Portfolio Fund's security holdings and their amounts. Examples of risk-exposure-level data include net equity exposure, sector level net equity allocation, and net fixed income allocation by credit rating. Additionally, Grosvenor will communicate with each Portfolio Fund to understand the largest positions in such funds.

- Quantitative Risk Assessment: Grosvenor will seek to estimate and measure the quantitative risks of the Fund using a risk measurement system. Risk will be evaluated at both the Portfolio Fund level and Fund level in seeking to maintain a program that continues to operate within this policy (e.g., beta and volatility levels). Grosvenor will seek to use the system to attempt to identify unintentional risks in the Fund which are, in its reasonable opinion, designed to be reduced through diversification and to identify portfolio changes which would be designed to reduce risk while maintaining program objectives.

  Grosvenor will use other risk analyses, including scenario analysis to determine the manner in which the Fund might behave in certain unfavorable market environments, and value-at-risk type analysis to identify the potential for losses in severe downside cases.

- Operational Risk Assessment: Grosvenor will only invest the assets of the Fund in a Portfolio Fund that has been evaluated from an operational perspective, and determined by Grosvenor, in its reasonable judgment, to have sufficient control and compliance environments. In addition, unless the Fund's sole investor consents otherwise, the Fund may only invest with Portfolio Funds that are administered and custodied by independent third parties and audited by third-party auditors that are, in Grosvenor's reasonable opinion, reputable. Grosvenor will review the valuation policies of each Portfolio Fund on a periodic basis to evaluate whether such valuation policies are, in Grosvenor's reasonable judgment, sufficiently strong given the strategy and anticipated investments of the Portfolio Fund.

- Use of Placement Agents: Unless the Fund's sole investor consents otherwise, Grosvenor will not invest the assets of the Fund in any Portfolio Fund where, to Grosvenor's knowledge after due inquiry, a placement agent was used by such Portfolio Fund (or its general partner) in respect of the Fund's investment therein.

- Economic Interest Limitation: Unless the Fund's sole investor consents otherwise, Grosvenor will not invest the assets of the Fund in any Portfolio Fund where Grosvenor or any of its affiliates has an equity or other economic interest in the investment manager or investment adviser of such Portfolio Fund.

V. DESIGNATED/SIDE POCKET INVESTMENTS

Except in the following cases, the Fund is prohibited from investing with Portfolio Funds that are authorized to make illiquid or so-called "side pocket" or "designated" investments (collectively, "**Side Pocket Investments**"):

- Portfolio Fund offers the option to investors in such Portfolio Fund to not to participate in (i.e., "opt-out" of) Side Pocket Investments. In such case, Grosvenor will cause the Fund to "opt-out" of such Side Pocket Investments.
- Portfolio Fund's governing documents are silent with regard to Side Pocket Investments and Grosvenor reasonably expects that the Investment Manager of such Portfolio Fund will not make Side Pocket Investments[16].
- Although the Portfolio Fund's governing documents permit Side Pocket Investments, Grosvenor reasonably expects the Investment Manager of such Portfolio Fund will not make Side Pocket Investments[16].

VI. OTHER

The Fund generally shall invest in Portfolio Funds domiciled in the United States; provided, however, that the Fund may, with the prior consent of the Fund's sole investor, invest in a Portfolio Fund domiciled outside of the United States in the event that: (i) Grosvenor, in its reasonable judgment, believes that the terms of an investment in such non-U.S.-domiciled Portfolio Fund are superior to those of an investment in a U.S.-domiciled Portfolio Fund managed by the same Investment Manager (including with regard to investment mandate, fee and/or liquidity); (ii) a particular Investment Manager does not manage a Portfolio Fund domiciled in the United States that is equivalent to a Portfolio Fund managed by such Investment Manager that is domiciled outside of the United States; or (iii) other circumstances arise as disclosed with specificity to the Fund's sole investor.

The Fund shall not, without the prior consent of the Fund's sole investor, engage in any "transfers" of Portfolio Fund interests to or from another Grosvenor-advised fund (including, for the avoidance of doubt, "cash transfers" and "book entry transfers) in cases where investment terms (excluding capacity rights) are being transferred along with such interests. For purposes of this paragraph, "transfers," "cash transfers" and "book entry transfers" are as defined in **Schedule C** of the Fund's limited partnership agreement, dated September 22, 2011.

Notes:

[1]Grosvenor may from time to time, subject to prior consultation with and approval by the Fund's sole investor, cause the Fund to engage in hedging transactions; for example, by purchasing or selling securities or derivatives with the intent of reducing certain exposures.

[2]All performance objectives are expressed in terms of U.S. Dollars, net of all fees and expenses of the Fund and the Portfolio Funds, over a full market cycle. **NO ASSURANCE CAN BE GIVEN THAT THE FUND WILL ACHIEVE ITS PERFORMANCE OBJECTIVES OR AVOID SIGNIFICANT LOSSES**.

For purposes of the measuring the Fund's Beta objective to the MSCI World Index: if the realized Beta of the Fund on a trailing 3-year basis should exceed 0.20, Grosvenor shall seek to modify the portfolio to reduce the Forward-Looking Estimate ("FLE") Beta included in Grosvenor's Risk Based Allocation Report ("RBA") to 0.20 or less; otherwise the FLE Beta may not exceed 0.30.

[3] Fund-Level ROR Impact of Severe Case Loss is defined as the weighted sum of the Severe Case Losses of the Portfolio Funds in which the Fund invests, assuming perfect positive correlation of such Portfolio Funds that pursue a particular sub-strategy (see notes 6 and 7 below) and a 40% average correlation among the sub-strategies pursued by the Portfolio Funds in which the Fund invests. Grosvenor may from time to time modify either or both of the foregoing assumptions using its reasonable discretion, and will promptly notify the Fund's sole investor of any such modification.

For purposes of this performance objective, the Severe Case Loss of a Portfolio Fund is defined as Grosvenor's assessment of such Portfolio Fund's maximum expected potential loss over a 12- to 18-month period in the event of a debacle in the strategy(ies) pursued by such Portfolio Fund.

[4]Grosvenor will not invest the assets of the Fund in a Portfolio Fund if Grosvenor reasonably believes that, immediately after such investment, the Fund will no longer comply with these portfolio constraints.

Exceptions to these portfolio constraints are dealt with as soon as practicable, based upon the liquidity of the Portfolio Funds in which the Fund invests.

~~The portfolio constraints shall not apply during the Fund's "ramp-up" investment period (which is not expected to exceed 6 months following the date on which the Fund commences investment operations).~~

If the Fund dissolves and winds up upon the instructions of the Fund's sole investor, the investment constraints set forth in this document shall not apply during the period of such winding up.

[5]If the Fund invests in more than one Portfolio Fund managed by a particular Investment Manager, the number of Portfolio Funds managed by such Investment Manager is disregarded for purposes of determining the number of Investment Managers with which the Fund may invest; only the Investment Manager is counted for this purpose. Accordingly, if the Fund invests in more than one Grosvenor-Managed Portfolio Fund, the number of such Grosvenor-Managed Portfolio Funds is disregarded, and Grosvenor is counted as a single Investment Manager. In addition, Investment Managers of the Portfolio Funds in which the Grosvenor-Managed Portfolio Funds invest are not counted for this purpose, unless the Fund also invests directly in Portfolio Funds managed by such Investment Managers. If the Fund has submitted a request to withdraw/redeem in full from all Portfolio Funds managed by a particular Investment Manager, such Investment Manager is disregarded for purposes of determining the number of Investment Managers with which the Fund may invest.

[6]Grosvenor determines the "strategy" classification of a particular Portfolio Fund by reference to the general category of investment strategy pursued by such Portfolio Fund, as defined by Grosvenor ~~(currently, for example: "Credit", "Equities", "Multi-Strategy", "Relative Value", "Event Driven", "Macro", "Commodities", and "Portfolio Hedges")~~. Portfolio Funds are further categorized in: (i) a specific sub-category, or "sub-strategy" of such general category, as defined by Grosvenor and, if applicable, (ii) a specific ~~specialty and/or~~ region within such specific sub-category, as defined by Grosvenor. Grosvenor may modify "strategy" or "sub-strategy" classifications from time to time, using its reasonable discretion, and will promptly notify the Fund's sole investor of any such modification.

[7]Grosvenor classifies Portfolio Funds as pursuing particular "strategies" or "sub-strategies" using its reasonable discretion and may from time to time reclassify Portfolio Funds as pursuing particular "strategies" or "sub-strategies" using its reasonable discretion. Grosvenor may classify a particular Portfolio Fund as pursuing a particular "strategy" or "sub-strategy" even though such Portfolio Fund may not invest all of its assets in such "strategy" or "sub-strategy."

[8]The target allocation and compliance range for a particular strategy is the Fund's expected average long-term allocation to such strategy based on relatively "normal" market environments. Grosvenor will use discretion to opportunistically manage the Fund to achieve the Fund's performance objectives, subject to the Fund's portfolio constraints. Accordingly, there may be periods, perhaps extended periods, when allocations to particular strategies are not consistent with their respective target allocation or compliance range.

[9]%ROR (Rate of Return) Impact of Severe Case Loss, in the case of a sub-strategy, is defined as the capital weighted aggregate of the Severe Case Losses of the Portfolio Funds that pursue such sub-strategy, as defined by Grosvenor~~ (currently, for example: "Long/Short Credit", "Long-biased Credit", "Structured Credit", "Event Driven", "Low-directional Hedged Equity", "Long-biased Hedged Equity", "Activists", "Multi Strategy", "Convertible Arbitrage", "Volatility Arbitrage", "Statistical Arbitrage", "Fixed Income Arbitrage", "Discretionary Macro", "Systematic Macro", "Discretionary Commodities", "Systematic Commodities", "Dedicated Short Equity", "Tail Risk Protection", "Dedicated Short Credit", "Synthetic Short Equity")~~. For this purpose, the Severe Case Loss of a Portfolio Fund is defined as Grosvenor's assessment of such Portfolio Fund's maximum expected potential loss over a 12- to 18-month period in the event of a debacle in the strategy(ies) pursued by such Portfolio Fund. For Equities, the ~~aggregate~~ %ROR Impact of Severe Case Loss ~~for Low-directional Hedged Equity, Long-biased Hedged Equity, and Activists Portfolio Funds is netted against the aggregate %ROR Impact of Severe Case Loss for Dedicated Short Equity Portfolio Funds,~~ is aggregated by region.

[10]Portfolio Funds managed by the same Investment Manager are treated separately for this purpose. The restrictions set forth under "Maximum allocation to a single Portfolio Fund" do not apply to investments in Grosvenor-Managed Portfolio Funds.

[11]%ROR Impact of Severe Case Loss, in the case of a Portfolio Fund, is defined as the Severe Case Loss of the Portfolio Fund weighted by the capital allocated to such Portfolio Fund. For this purpose, the Severe Case Loss of a Portfolio Fund is defined as Grosvenor's assessment of such Portfolio Fund's maximum expected potential loss over a 12- to 18-month period in the event of a debacle in the strategy(ies) pursued by such Portfolio Fund.

[12]Leverage is defined as the total long notional exposure of the underlying Portfolio Funds plus the total short notional exposure of the underlying Portfolio Funds (excluding the short exposure relating to relative value strategies), divided by total Fund capital. Notional exposure related to tail-risk protection strategies is excluded from the calculation of leverage. Notional exposure does not necessarily equate to "at-risk" capital.

[13]Grosvenor maintains the following "exposure categories:" (1) Relative Value: for example, convertible arbitrage, credit arbitrage (correlation, credit volatility, and intra-credit), statistical arbitrage, fixed income arbitrage, volatility arbitrage, and MBS arbitrage; (2) Credit: for example, corporate credit (bank loans, distressed), mortgage securities/structured products among others, in each case across regions; (3) Event Driven: for example, merger arbitrage, special situations, and post-restructured equities; (4) Equities: for example, U.S. hedged equities, European hedged equities, Japanese hedged equities, Developed Asia ex-Japan hedged equities and emerging markets hedged equities; (5) Macro: for example, macro equities, currencies, and commodities; and (6) Other: for example, reinsurance. Grosvenor may modify "exposure categories" from time to time, using its reasonable discretion, and will promptly notify the Fund's sole investor of any such modification.

[14]Grosvenor estimates the Fund's exposure to specific exposure categories on a "look through" basis based upon the most recent exposure information provided to Grosvenor from time to time by the Investment Managers of the Portfolio Funds in which the Fund invests, which information is not necessarily current as of the time Grosvenor makes such estimates. Grosvenor receives strategy and/or asset class exposure information from all Investment Managers with which the Fund invests. Investment Managers provide such information to Grosvenor in varying levels of detail, specificity and completeness, and generally do not provide complete position level transparency to Grosvenor. In cases where Grosvenor determines that the information provided by a particular Investment Manager is not sufficiently detailed, specific and/or complete for purposes of determining the Fund's exposure to particular exposure categories, Grosvenor analyzes such information (and, where it considers it appropriate, augments such information) based on: (i) conversations with the Investment Manager regarding the information it has provided; (ii) Grosvenor's historical knowledge of the Investment Manager and the manner in which it, and/or other Investment Managers that pursue comparable strategies, has historically invested; and/or (iii) such other assumptions, estimates and factors as Grosvenor considers to be appropriate under the particular facts and circumstances (including potential sources of information provided by parties other than the Investment Managers). In these cases, Grosvenor estimates information based on Grosvenor's judgment, including good faith

consideration of factors of the types listed above. While Grosvenor does not utilize any such estimate if it has reason to believe that such estimate is inaccurate, each such estimate is inherently imprecise.

[15]Except as otherwise expressly described above (including, for the avoidance of doubt, in Section IV), for purposes of testing and verifying the Fund's compliance with Portfolio Fund Liquidity Constraints, Grosvenor shall base such testing and verification exclusively on those provisions of the governing documents of the Portfolio Funds in which the Fund invests that specify the liquidity available to the Fund, as an investor in such Portfolio Funds, under ordinary circumstances, and Grosvenor shall not take into account any of the following considerations in connection with such testing and verification: (i) the payment of withdrawal/redemption proceeds is subject to the settlement provisions of the governing documents of such Portfolio Funds from which withdrawals/redemptions are made (a Portfolio Fund's governing documents may provide, for example, that the Portfolio Fund will pay a substantial portion of withdrawal/redemption proceeds within a particular number of days after the effective date of a withdrawal/redemption but may hold back the remaining proceeds until the Portfolio Fund is able to finalize its net asset value as of such effective date (which finalization may not take place until completion of such Portfolio Fund's annual audit for the year in which the withdrawal/redemption took place); (ii) withdrawals/redemptions from such Portfolio Funds may be subject to suspension; (iii) withdrawals/redemptions from such Portfolio Funds may be subject to withdrawal/redemption charges; (iv) notice deadlines with respect to withdrawals/redemptions from such Portfolio Funds; and (v) the Fund, as a withdrawing/redeeming investor from such Portfolio Funds, may be required to continue to participate in certain illiquid investments and/or so-called "side pocket" or "designated investments" held by such Portfolio Funds from which the Fund has otherwise determined to withdraw/redeem until such Portfolio Funds determine to distribute the proceeds of such investments.

[16]In making such determinations, Grosvenor relies exclusively on conversations with and/or reports provided by the Investment Manager of the relevant Portfolio Fund. Grosvenor ordinarily assumes that an Investment Manager of a Portfolio Fund will not make Side Pocket Investments for such Portfolio Fund unless the governing documents of such Portfolio Fund expressly authorize such Investment Manager to make such investments for such Portfolio Fund. Furthermore, in cases where the governing documents for a Portfolio Fund authorize the Investment Manager to make Side Pocket Investments, Grosvenor may, after speaking with such Investment Manager, assume that such Investment Manager will not make such Side Pocket Investments. In either case, the Investment Manager of a Portfolio Fund may maintain that it has the authority to make, and may in fact make, Side Pocket Investments for such Portfolio Fund regardless of whether the governing documents of such Portfolio Fund expressly authorize such Investment Manager to make such investments.

The sole investor hereby consents and agrees to the above Guidelines:

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

By:____
Name:
Title:

Acknowledged By:

Grosvenor Capital Management, L.P.

By:____
Name: Paul Meister
Title: Vice Chairman

ATTACHMENT 2

Goldman Sachs Asset Management

Liquidity Guidelines

Manager will select Portfolio Funds for the Account subject to the following liquidity guidelines (measured at the time of investment and based on Manager's available estimates of the net asset values of the Portfolio Funds in the Account):

(i) No more than 20% of the Account's net asset value to be made up of Portfolio Funds with an unexpired "hard" lock-up period of one year or greater based on the offering documentation provided to Manager with respect to such Portfolio Funds or as otherwise agreed to in writing by the applicable Advisors. For the avoidance of doubt, Manager may select Portfolio Funds with "soft" lock-ups (i.e., with early redemption penalties).

(ii) At least 75% of the Account's net asset value to be made up of Portfolio Funds that provide for ~~regular~~full or partial redemptions ~~dates~~ at least quarterly under normal circumstances, based on the offering documentation provided to Manager with respect to such Portfolio Funds or as otherwise agreed to in writing by the Advisors. The right of an Advisor to impose mandatory investor-level gates shall be considered for purposes of compliance with this liquidity guideline. Lock-ups with respect to such Portfolio Fund, and the right of an Advisor to impose fund-level gates or suspend redemptions, distribute assets in kind, segregate assets, or otherwise limit redemptions, shall not be considered for purposes of compliance with this liquidity guideline.

(iii) At least ~~80~~65% of the Account's net asset value to be made up of Portfolio Funds that can be liquidated within one year based on the offering documentation provided to Manager with respect to such Portfolio Funds or as otherwise agreed to in writing by the Advisors. Redemption notice periods, payment periods and the right of an Advisor to impose mandatory investor-level gates shall be considered for purposes of compliance with this liquidity guideline. Lock-ups with respect to such Portfolio Fund, and the right of an Advisor to impose fund-level gates or suspend redemptions, distribute assets in kind, segregate assets, or otherwise limit redemptions, shall not be considered for purposes of compliance with this liquidity guideline.

(iv) No more than 10% allocated~~tions~~ to Portfolio Funds with a "hard" lock-up period of greater than two years based on the offering documentation provided to Manager with respect to such Portfolio Funds or as otherwise agreed to in writing by the applicable Advisors. Lock-up periods for Portfolio Funds are not to exceed three years.

April 3, 2018

TO: Each Member
Board of Investments
Board of Retirement

FROM: Audit Committee
Michael S. Schneider, Chair
Vivian H. Gray, Vice Chair
Herman B. Santos, Secretary
David Green
Shawn R. Kehoe
Joseph Kelly

FOR**:** Board of Investments Meeting on April 11, 2018
Board of Retirement Meeting on April 12, 2018

SUBJECT: **Updates to Audit Committee Charter**

RECOMMENDATION:

It is recommended your Board approve the proposed updates to the Audit Committee Charter.

BACKGROUND

The Institute of Internal Auditors (IIA) recommends that Audit Committees formally define their purpose, authority, and responsibilities in a charter. In addition, the IIA recommends periodic reviews of the charter to ensure it is aligned with industry best practices and organizational changes. LACERA's Audit Committee Charter (Charter) was established in 2004, and has been updated several times, most recently in November 2017.

The IIA has not updated its model audit committee charter subsequent to the November 2017 Charter. However, staff is proposing additional wording to the Charter's "*Audit Committee Composition and Consultant"* section. Specifically, the revisions address the election of a new member when a Board Member resigns from the Audit Committee (Committee) prior to the completion of their term. The Committee approved this update during its last meeting on March 21, 2018. Refer to Attachment A, of the Charter, with the proposed revisions.

CONCLUSION

Staff recommends that your Board approve the updated Audit Committee Charter.

Attachment:
A: Proposed 2018 AC Charter

ATTACHMENT A

LACERA
Los Angeles County Employees Retirement Association

Audit Committee Charter

March 2018

2018

AUDIT COMMITTEE CHARTER

AUDIT COMMITTEE CHARTER

I. PURPOSE

In November 2003, the Los Angeles County Employees Retirement Association's Board of Retirement and Board of Investments established the LACERA Audit Committee.

The purpose of this "Audit Committee Charter" is to govern the Audit Committee that assists the Boards of Retirement and Investments (Boards) in fulfilling their fiduciary oversight responsibilities for the financial reporting process, the system of internal controls, the audit processes, and the organization's method for monitoring compliance with laws and regulations. The Audit Committee Charter is a living document and may be amended for procedural and administrative matters upon majority vote of the Audit Committee.

II. AUTHORITY

The Audit Committee has the authority to conduct or authorize investigations into any matters within its scope of responsibility.

It shall have the following authorities:

A. Meet with LACERA's officers, Internal Auditors, External Auditors, or consultants as necessary.

B. Seek any information it requires from employees, all of whom are directed to cooperate with the Committee's requests, or consultants, as necessary.

C. Resolve any disagreements or coordinate between Management, Internal Audit, and/or External Audit.

D. Oversee the work of Internal and External Audit, and any other consultants hired to assist the Audit Committee in fulfilling its fiduciary duties.

E. Make recommendations to the Boards regarding:

   1. The appointment, compensation, and work of the External Auditor employed to audit LACERA's financial statements.
   2. The appointment, compensation, and work of accountants or other consultants to perform audits, reviews, or investigations related to financial or operational matters (when the cost is expected to exceed the Chief Executive Officer's discretionary allowance for such contracts).
   3. Such other matters as the Committee encounters in its work.

III. AUDIT COMMITTEE COMPOSITION AND CONSULTANT

The Audit Committee will consist of the chair and vice-chair of the Boards of Retirement and Investments, plus one additional Board member elected annually by each Board, for a total of four to six members[1]. Board chairs and vice-chairs that leave Board service will be replaced automatically on the Audit Committee, when the Board replaces its missing officer while other Committee membership remains intact. If any elected Audit Committee member leaves Board service, or resigns from the Audit Committee prior to the completion of their term, the Board of the departing member, will elect a new Audit Committee member at the next regularly scheduled Board meeting. If Audit Committee voting results in a tie, the Committee will forward the recommendation to the appropriate Board for consideration and final decision.

The Committee shall have the authority to approve the hiring of the audit consultant as an advisor. The audit consultant will be designated as the audit technical and financial expert, to advise the Committee on audit and financial matters. The audit consultant's contract will be for three years with the option for the Audit Committee to choose to extend the contract for an additional two-year period.

At the first Committee meeting of each calendar year, the Committee shall elect a Chairman, Vice Chair and Secretary, each to serve for a term of one year or until his or her successor is duly elected and qualified, whichever is less. In the event of a vacancy in the office of chair, the vice chair shall immediately assume the office of chair for the remainder of the term. In the event of a vacancy in the office of vice chair or secretary, the Committee shall elect one of its members to fill such vacancy for the remainder of the term, at its next regular meeting.

IV. AUDIT COMMITTEE MEETINGS

The Audit Committee will conduct regular meetings at least three times per year, with authority to convene additional meetings, as circumstances require. All Committee members are expected to attend each meeting.

Regular meeting notices and agendas will be posted at least 72 hours in advance of the regular meetings, and will be made available to the public in accordance with the Ralph M. Brown Act (Government Code Sections 54950, et seq.). Public documents referred to in the agenda will be made available for review at the office of the staff secretary to the Committee. The Committee will invite members of management, Internal Auditors, External Auditors, and/or others to attend meetings and provide pertinent information, as necessary.

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[1] The number of Committee members is dependent upon the designated Chair and Vice Chair appointments to the Boards of Retirement and Investments. If both Boards were to elect the same individuals to the positions of Chair and/or Vice Chair, the Audit Committee would be comprised of four or five Board Members.

Special meetings of the Committee may be called in the manner provided by Government Code Section 54956(a). The Committee will have such other powers as provided in the Brown Act.

Robert's Rules of Order, except as otherwise provided herein, shall guide the Committee in its proceedings; however, the chair of the Committee shall have the same rights to vote and participate in discussions as any other member of the Committee without relinquishing the chair. The order of business shall be as determined by formal action of the Committee. Four members of a six-member Audit Committee or three members of a four or five-member Audit Committee, excluding the audit consultant, constitute a quorum.

The secretary of the Committee shall cause to be recorded in the minutes the time and place of each meeting of the Committee, the names of the members present, all official acts of the Committee, the votes given by members except when the action is unanimous, and when requested by a member, that member's dissent or approval with his or her reasons, and shall cause the minutes to be written forthwith and presented for approval at the next regular meeting.

V. RESPONSIBILITIES

The Audit Committee will carry out the following responsibilities to fulfill their fiduciary oversight responsibilities:

A. Internal Audit

1. Approve the Internal Audit Charter.
2. Ensure the independence of Internal Audit.
3. Approve the Annual Audit Plan and all major changes to the Plan. Review and monitor Internal Audit's activity relative to its Plan.
4. Review, with the Chief Audit Executive (CAE), Internal Audit's resource plan, activities, and organizational structure.
5. Monitor Internal Audit's recommendations to ensure Management has adequately addressed the risk(s) identified, either through implementing a new policy, procedure, or process, or accepting the associated risk.
6. Review and discuss engagement reports to take the following action(s):
   a. accept and file report and/or,
   b. instruct staff to forward report to Boards or Committees and/or,
   c. provide further instruction to staff.

B. Chief Audit Executive

Since the CAE reports to the Chief Executive Officer (CEO) for administrative purposes, but to the Audit Committee for functional purposes, the Audit Committee will be responsible for the following:

1. Make recommendations to both Boards regarding the appointment, discipline, dismissal, and/or removal of the CAE, which will be addressed by the Boards in a joint meeting. Both Boards will make the final decisions as to the appointment, discipline, dismissal, and/or removal of the CAE. The CEO has authority to administer minor discipline, which is limited to counseling memos and written warnings, with notice of such discipline to be provided to the Committee and the Boards at their next meetings. Consideration by the Boards and the Committee concerning the appointment, discipline, dismissal, and/ or removal of the CAE will be made in executive session under Government Code Section 54957(b).
2. Perform the CAE's annual assessment with qualitative input from the CAE and CEO. The Committee's discussion regarding the CAE's annual performance evaluation will be made in executive session under Government Code Section 54957(b).
3. Administer the CAE's annual salary adjustment using the Boards' established compensation structure.

C. External Audit

1. Make recommendations to the Board of Retirement regarding the appointment, compensation, and the work of the External Auditor.
2. Oversee the work of the External Auditor, including review of the External Auditor's proposed audit scope and approach, as well as coordination with Internal Audit and Management.
3. Review the findings and recommendations of the External Auditor, Management's responses, and actions taken to implement the audit recommendations.
4. Approve all non-compliance work.

D. Monitoring the Financial Reporting Process

1. Review significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas, recent professional and regulatory pronouncements, and understand their impact on the financial statements.
2. Review with Management and the External Auditors the results of the audit, including any difficulties encountered.
3. Review the annual financial statements, consider whether they are complete, consistent with information known to Committee members, and reflect appropriate accounting principles.

4. Review with Management and the External Auditors all matters required to be communicated to the Committee under *Generally Accepted Auditing Standards.*

E. Monitoring Management's System of Internal Controls

1. Consider the effectiveness of LACERA's internal control system, including information technology security and control.
2. Understand the scope of Internal and External Auditors' review of internal control over financial reporting, and obtain reports on significant findings and recommendations, together with Management's responses.

F. Monitoring Management's System of Compliance

1. Annually, review the effectiveness of Management's system of compliance with laws, regulations, policies, and procedures that are business critical.
2. As needed, review the findings of any examinations by regulatory agencies, and any auditor observations.
3. Annually, review Management's process for communicating LACERA's Code of Ethics to company personnel, and for monitoring compliance therewith.
4. Annually, review reported activity to ensure issues of fraud, noncompliance, and/or inappropriate activities are being addressed.

G. Conflicts and Ethics

Audit Committee members must comply with the BOR, BOI, and LACERA's Code of Ethics. Specific to the Audit Committee:

1. Avoid actual or potential conflict of interest or ethics issues. Members will notify the Audit Committee Chair and Vice Chair, the CEO, and Legal Counsel of such issues concerning themselves and other Audit Committee members related to the business of the Audit Committee.
2. Review reports received relating to conflict of interest and ethics issues, and if appropriate, make a recommendation to the Boards.

H. Other Responsibilities

1. Report to the Boards as needed about the Audit Committee's activities, issues, and related recommendations.
2. Provide an open avenue of communication between Internal Audit, the External Auditors, Management, and the Boards.
3. Perform other activities related to this Charter as requested by the Boards
4. Review and assess the adequacy of the Committee's Charter annually, requesting the Boards' approval for proposed changes, and ensure appropriate disclosure as may be required by law or regulation.

5. Communicates public disclosures related to the purpose, authority, function, and responsibility of the Audit Committee.

VI. APPROVAL

This Audit Committee Charter ("AC Charter") was reviewed by the Audit Committee on March 21, 2018, and approved by the Board of Investments and Board of Retirement on April 11, 2018 and April 12, 2018, respectively. This AC Charter is thereby effective April 12, 2018 and is hereby signed by the following persons who have authority and responsibilities under this Charter.

David Green *Chair, Board of Investments*	**Date**
Vivian H. Gray *Chair, Board of Retirement*	**Date**

LACERA

March 30, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: Global Real Estate Sustainability Benchmark: Sustainable Real Assets Conference April 25, 2018 in London, England

The Global Real Estate Sustainability Benchmark (GRESB) Sustainable Real Assets Conference will be held on April 25, 2018 at the Crystal London in London, England. The conference will connect global asset owners, managers, operators and professionals committed to creating sustainable and resilient buildings and infrastructure. Attendees will learn how resilience translates into opportunity for the real estate and infrastructure sectors and explore lessons learned from implementing resilience strategies.

Main conference highlights include the following:

- Resilience: what is it and why is it important for the real estate and infrastructure sectors?
- Case studies showcasing resilience leadership in the real estate and infrastructure sectors.
- What are key innovators working on right now in the world of resilience?
- How resilience translates into opportunity and risk for investors, managers and operators.

The conference meets LACERA's policy of an average of five (5) hours of substantive educational content per day. The hotel rates range from $375.00 to $550.00 plus applicable resort fees and taxes and the registration fee to attend is $700.00.

If the registration fee is insufficient to pay the cost of the meals provided by the conference sponsor, LACERA must reimburse the sponsor for the actual cost of the meals, less any registration fee paid. Otherwise, the attendee will be deemed to have received a gift equal to the value of the meals, less any registration fee paid, under California's Political Reform Act.

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Board members at the Global Real Estate Sustainability Benchmark: Sustainable Real Assets Conference on April 25, 2018 in London, England and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.

RH/lg

Attachment

<u>Program ~ April 25, 2018</u>

The Crystal London – 1 Siemens Brothers Way, London E16 1GB, UK

8:30 a.m. ~ Registration & Networking

9:00 a.m. ~ Introduction by GRESB and Welcome by Siemens

9:30 a.m. ~ Session 1: Resilience: what is it and why is it important for the real estate and infrastructure sectors?

With the frequency, size and cost of disasters increasing due to climate change, population growth and urbanization, the imperative to manage the resilience of real assets is accelerating

- The scope of the resilience challenge facing real estate and infrastructure sector globally.
- How close we are to a globally agreed definition of what constitutes resilient real estate and infrastructure portfolios and assets.
- How a focus on resilience can both capture opportunity and protect against downside risks
- How resilience fits into a broader vision of "Sustainable Real Assets"

10:15 a.m. ~ Coffee and Networking

10: 45 a.m. ~ Session 2: How resilience translates into opportunity and risk for investors, managers and operators

We have reached a point where investors are now actively asking for greater transparency about resilience from their managers. This session will bring together leading institutional investors and investment managers to explore:

- What criteria investors are using to recognize resilient real estate and infrastructure investments?
- The current transparency gap between investors and their managers on resilience.
- The links between resilience and financial performance.
- What leading real estate and infrastructure managers and operators are doing to understand and manage resilience?
- The most reliable indicators of reliance leadership / the capacity of an entity to manage resilience.

12:05 p.m. ~ Option GRESB Resilience Module

12:20 p.m. ~ Lunch

1:20 p.m. ~ Session 3: Case studies displaying resilience leadership in the real estate and infrastructure sectors.

Investors, real estate and infrastructure companies and funds are taking concrete action to address the challenge of resilience and capture opportunities. This fast-paced session will present a series of case studies that highlight:

- What a resilience organization / resilient leadership looks like.
- Lessons learned from implementing resilience strategies.
- The quality of an entity that allows it to deal with major disasters and still have continuity of businesses.
- Examples of how to score and communicate resiliency risk to investors.
- Examples of resilience design features.

3:00 p.m. ~ Coffee & Networking

3:30 p.m. ~ Session 4: What are key innovators working on right now in the world of resilience?

Some of the best minds in our sector are working to finding solutions to address the resilience challenge. The industry conversation started several years ago and exciting new projects and approaches have emerged. This session will:

- Examine key innovations in the field of resilience.
- Consider the role of technology in tackling the resilience challenge.
- Explore how to capture quantitative data to understand and manage resilience risks at asset level.

4:45 p.m. ~ Closing & Key Takeaways

5:00 p.m. ~ Networking

Speakers & Moderators

Caroline Field

Caroline Field is a Principal with more than 20 years' experience in engineering consultancy for the built environment. Caroline currently leads MMI's Resilience Practice Area; assisting clients to develop a comprehensive approach to resilience for both cities and organizations.

Caroline is Chair for the new British Standard on City Resilience and Co-Chair for the American Society of Civil Engineers Infrastructure Resilience Division (IRD) Social Science, Policy, Economics, Education and Decision (SPEED) Committee. The SPEED committee is developing white papers on sustainability and resilience and non-physical resilience metrics for infrastructure projects.

Caroline is a Chartered Engineer with the Institute of Civil Engineers in the UK, a licensed professional engineer in California and a member of the American Society of Civil Engineers. She is a Principal Member of the Register for Security Engineers and Specialists (RSES).

Sander Paul van Tongeren, Managing Director, GRESB

Sander Paul is Managing Director and co-founder of GRESB. Before joining GRESB, Sander Paul worked for 6 years as Head of Sustainability Real Estate and Infrastructure at APG Asset Management. Before APG he worked as a Portfolio Manager at CBRE Global Investors (formerly known as ING Real Estate) managing a pan-European office fund and two pan-European industrial funds.Sander Paul holds a Master's degree in Business Economics as well as an Executive Master degree of Finance and Control from the University of Amsterdam and a Master of Studies in Real Estate from the Amsterdam School of Real Estate.

Jonathan Brasse

Jonathan Brasse is the senior editor for PEI Media's Real Estate Group, which comprises the group's real estate publications, PERE and Real Estate Capital. Jonathan leads the group's editorial team and is responsible for setting the agendas for the print and online editions of both publications as well as all associated publications.

He joined PEI in 2009 and has assumed various reporting and editing roles since, including responsibility for PERE's coverage of the private real estate markets in Asia. He has a BA from the University of Kent and is an NCTJ qualified journalist.

Beth Ambrose, Director Upstream Sustainability Services, JLL

Beth leads the Sustainability Strategy & Implementation team within the 35-strong sustainability consulting team at JLL, providing strategic advice to a range of leading property companies, REITs, investors and corporate occupiers with European portfolios.
She also oversees the innovative Productive Buildings Advisory service, which pulls together a

cross-departmental team from JLL's Workplace Strategy, Technology and Sustainability disciplines.
With her 15 years of experience in corporate sustainability and responsible investment she has significant understanding of best practices in the integration of sustainability factors into business and investment decision-making, and a long- term perspective on the evolution of sustainability reporting initiatives, including CDP, EPRA / Inrev, GRI, IR, DJSI / FTSE4Good, UN PRI, GRESB, UK CRC and UK mandatory carbon reporting. She has also developed significant expertise in the interface between wellbeing and the workplace, focusing her time over the past few years increasingly in this key area.
Previous positions include the Research Programme Manager for The Climate Group, and Director of Research for Europe at the SRI research house Innovest Strategic Value Advisors, now part of MSCI.

Peter van den Tol, Fund Manager Listed Real Estate EU, MN Services

Peter is Fund Manager European Listed Real Estate Securities at MN, one of the largest pension administrators and asset managers in the Netherlands. Peter's core activities are Listed Real Estate Investing and continuously improving portfolio compositions, with a future proof perspective. 'At MN we manage the portfolios of our institutional clients with the aim of long term value creation and with a focus on both people and the environment. By actively engaging with companies on ESG policies, ambitions and actions, we seek to provide both financial and social returns for our stakeholders.'

Michael Brooks, CEO, REALPAC

Michael Brooks is the CEO of REALPAC and is responsible for the Associations' strategic planning, policy formulation, and government relations, national and international liaison with associations in the USA, UK, Asia and Australia via membership in the Real Estate Equity Securitization Alliance and has been the catalyst to REALPAC's growth over the past 15 years. Michael is a former Associate Professor at Ryerson University.

Michael has led the market and regulatory transformation in Canada, with effective representation for the REIT vehicle on cross-border and domestic tax issues and capital market and regulatory issues nationally and internationally. He has been the driving force behind the development of the REALPAC sustainability platform, including its Green Lease, Green Lease Tenant Guide, Corporate Social Responsibility guidelines and industry outreach with various national and international organizations. Michael is the former Treasurer, Executive Committee and Board member of the Canada Green Building Council.

Ashley Hegland, Sustainable Development Advisor, Swire Properties Limited

Ashley Hegland has been working with Swire Properties to develop its recently launched global sustainable development strategy – SD2030 – and its supporting governance system. His work with Swire Properties has been focused on building a strategy that both identifies innovation opportunities and mitigates risk across the company's global assets.
Over the past 18 years in the Asia-Pacific region, Ashley has advised blue chip MNC's, including HSBC, Wal-Mart, China Light and Power (CLP), and Shangri-La Hotel Group on sustainability strategy, ESG risk analysis, and stakeholder management.

Jorge Chapa, Head of Market Transformation, GBCA

Jorge ensures that the GBCA's product and service offerings continue to improve Australia's built environment – delivering more sustainable and liveable places and communities.

He also continues drive the evolution of our Green Star tool and draws upon a wealth of industry experience, an architecture degree from the University of Monterrey in Mexico and a Masters in Design Science from the University of Sydney.

LACERA

March 30, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: Request Approval for International Travel Prior to Completing the Education and Travel Policy Requirement

At its February 14, 2018, the Board approved to waive the Education and Travel Policy requirement, Section 705.07 D. 4, for Trustee Sanchez, which requires a trustee to successfully complete the State Association of County Retirement Systems (SACRS) Public Pension Investment Management Program or the University of Pennsylvania Wharton School of Business Portfolio Concepts and Management course prior to attending an international investment conference and in its place approved attendance and travel reimbursements at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California.

Since the Boards approval, Mrs. Sanchez accepted an invitation to participate on a panel discussion at the State Association of County Retirement Systems (SACRS) Spring Conference on May 15-18, 2018; and therefore, will not be able to attend the UCLA Anderson Executive Education – Corporate Governance Program (UCLA Program) on May 15-17, 2018. In lieu of the May UCLA Program, Mrs. Sanchez will be attending the next UCLA Program on September 25-27, 2018 in Los Angeles, California.

Mrs. Sanchez requests that your Board permit international attendance at the 2018 Sustainable Real Assets Conference in London on April 25, 2018 prior to her completing the UCLA Program in September. The Sustainable Real Assets Conference in London will be placed for approval at the April Board meeting as a separate item.

Section 705.18 of the Education and Travel Policy provides, "For good cause presented in writing, and in the exercise of its sound discretion, the Board of Retirement or the Board of Investments may waive compliance with specific requirements of this Policy when in the best interest of LACERA."

IT IS THEREFORE RECOMMENDED YOUR BOARD:

Approve international attendance for Trustee Sanchez at the 2018 Sustainable Real Assets Conference in London on April 25, 2018 prior to her attendance at the UCLA Anderson Executive Education – Corporate Governance Program on September 25-27, 2018 in Los Angeles, California.

RH/lg
Attachment

LACERA

February 6, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of February 14, 2018

SUBJECT: Request to waive Education and Travel Policy requirement and in its place approve attendance at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California

Board member, Gina Sanchez, requests that your Board waive the Education and Travel Policy requirement, Section 705.07, D. 4, that requires a Board member to successfully complete the State Association of County Retirement Systems (SACRS) Public Pension Investment Management Program or the University of Pennsylvania Wharton (Wharton) School of Business Portfolio Concepts and Management course and in its place accept attendance at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California.

Ms. Sanchez has a long career in investment management and is the founder and CEO of Chantico Global, LLC, as well as a contributor and guest host for CNBC. She has more than 20 years of experience managing asset allocation mandates for mutual funds and foundations, and consulting with pension funds and family offices. Given her extensive expertise in this industry, the SACRS or Wharton courses will not likely add materially to Ms. Sanchez's knowledge, and therefore they would not serve the purpose of the Education and Travel Policy requirement. Attending the UCLA Anderson Executive Education Program would be more beneficial to Mrs. Sanchez and to LACERA in helping provide a useful educational foundation for her LACERA Board service.

At its October 2017 meeting, the Board of Investments approved the UCLA Anderson Executive Education Program. A copy of the conference agenda is attached for reference.

IT IS THEREFORE RECOMMENDED YOUR BOARD:

Waive the Education and Travel Policy, Section 705.07 D. 4, for Trustee Sanchez and in its place approve attendance at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California; and approve reimbursement of all costs associated with the conference according to LACERA's Education and Travel Policy.

RH/lg
Attachment

L//.CERA

March 27, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: The 5th Annual Hispanic Heritage Foundation (HHF) Investors Group Conference
June 28-29, 2018 in New York, New York

The 5th Annual Hispanic Heritage Foundation Investors Group Conference will be held on June 28-29, 2018 at the White & Case LLP Office in New York, New York. HHF Investors Group supports increasing diversity within institutional investment management. Further, seeks to facilitate access to capital for diverse managers by creating connections through educational programs. The conference will feature industry leaders and topical investment themes.

Main conference highlights include the following:

- Consultant and Foundation Case Studies on How Partnership Have Increased Allocations to Diverse Managers
- Investing in Latin America
- Blockchain for Institutional Investors
- HBS Case Study on Private Equity Led by An HBS Professor with Experience in Private Equity

The conference will be issuing the agenda mid-May and will mirror last year's meeting agenda, which met LACERA's policy of an average of five (5) hours of substantive educational content per day. The conference will be held at the White & Case LLP Office and attendees are responsible for their hotel accommodations. The hotel rates range from $345.00 to $450.00 plus applicable resort fees and taxes and the registration fee to attend is $500.00.

If the registration fee is insufficient to pay the cost of the meals provided by the conference sponsor, LACERA must reimburse the sponsor for the actual cost of the meals, less any registration fee paid. Otherwise, the attendee will be deemed to have received a gift equal to the value of the meals, less any registration fee paid, under California's Political Reform Act.

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Board members at the 5th Annual Hispanic Heritage Foundation Investors Group Conference on June 28-29, 2018 in New York, New York and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.

RH/lg

Attachment

Hispanic Heritage
FOUNDATION

2017 Annual Conference

June 21-22, 2017
Chicago, Illinois

Agenda

Wednesday, June 21	
1:00 PM – 1:45 PM	Registration & Refreshments
1:45 PM – 2:15 PM	Welcome Remarks
2:15 PM – 3:15 PM	Personal Experiences of Trustees in Driving Change
3:30 PM – 4:15 PM	Board Governance & Fiduciary Responsibilities
4:30 PM – 5:15 PM	Consultants
6:00 PM – 8:00 PM	Reception, Dinner, Keynote Remarks

Thursday, June 22	
8:15 AM – 9:00 AM	Continental Breakfast & Morning Remarks
9:00 AM – 9:40 AM	Shareholder Activism
9:40 AM – 10:20 AM	Asset Allocation & Risk Management
10:40 AM – 11:20 AM	Equities
11:20 AM – 12:00 PM	Fixed Income
12:00 PM – 1:00 PM	Lunch & Keynote Remarks
1:00 PM – 1:40 PM	Real Estate & Real Assets
1:40 PM – 2:20 PM	Breakout Session: Hedge Funds or Private Markets (including Venture Capital)
2:40 PM – 3:20 PM	Regional, Community, & Impact Investing
3:20 PM – 4:00 PM	Specialized, Emerging, & Diverse Manager Programs
4:00 PM – 4:30 PM	Trustee Reflections & Next Steps

LACERA

March 15, 2018

TO: Each Member
Board of Investments
Board of Retirement

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018
Board of Retirement Meeting of April 12, 2018

SUBJECT: National Association of Corporate Directors – Technology Symposium
July 12-13, 2018 in Palo Alto, California

The National Association of Corporate Directors (NACD) - Technology Symposium will take place on July 12-13, 2018 at the Four Seasons Hotel in Palo Alto, California. The NACD Technology Symposium will empower directors with advanced insights on how the latest technology trends from Silicon Valley are shaping the future of your organization from data analytics to cybersecurity to privacy practices.

The main conference highlights include the following:

- Cognitive Computing & Predictive Analytics
- Corporate Venturing and Innovation in Silicon Valley
- The New Face of Risk Management
- Board Leadership in the Digital Era

The conference meets LACERA's policy of an average of five (5) hours of substantive educational content per day. The standard hotel rate at the Four Seasons Hotel is $565.00 per night plus applicable taxes and the registration fee to attend is $3,495.00.

If the registration fee is insufficient to pay the cost of the meals provided by the conference sponsor, LACERA must reimburse the sponsor for the actual cost of the meals, less any registration fee paid. Otherwise, the attendee will be deemed to have received a gift equal to the value of the meals, less any registration fee paid, under California's Political Reform Act.

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Board members at the National Association of Corporate Directors - Technology Symposium on July 12-13, 2018 in Palo Alto, California and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.

RH/lg
Attachment

NACD Technology Symposium **Agenda**

JULY 12–13, 2018 | THE FOUR SEASONS | PALO ALTO, CA

DAY 1. THURSDAY, JULY 12

7:30 a.m. – 8:30 a.m.

Registration and Breakfast

8:30 a.m. – 8:45 a.m.

Program Welcome and Overview

Erin Essenmacher
Director, Ghandi Brigade; Chief Programming Officer, NACD

8:45 a.m. – 9:30 a.m.

Keynote

Technology guru and CES whisperer explores critical future trends on the horizon and how these new ideas will impact your businesses and boardroom.

Shelly Palmer
CEO, The Palmer Group LLC

9:30 a.m. – 9:45 a.m.

Networking Break

9:45 a.m. – 10:05 a.m.

Short Take: IoT and Innovation at Scale

Sandra Lopez
Vice President, General Manager, Intel

10:05 a.m. – 10:25 a.m.

Short Take: Blockchain

Glenn Gow
Marketing Partner, Clear Ventures; Director, acuteIQ; Cryptocurrencies Advisor

10:25 a.m. – 10:40 a.m.

Short Take: AI, A Director's Lens

10:40 a.m. – 11:00 a.m.

Short Take: Cognitive Computing & Predictive Analytics

11:00 a.m. – 11:15 a.m.

Networking Break

11:15 a.m. – 12:00 p.m.

In Conversation with Mike Daniels

Mike Daniels
Director, BlackBerry, Mercury Systems, CACI International, Northern Virginia Technology Council, Virginia Chamber of Commerce; Chair, Invincea, Logistics Management Institute

12:00 a.m. – 1:15 p.m.

Networking Lunch

1:15 p.m.

Buses Depart for Plug and Play

1:30 p.m. – 1:40 p.m.

Arrival & Check-in at Plug and Play

Please be seated in the EXPO hall.

1:40 p.m. – 1:45 p.m.

Welcome and Introductions

1:45 p.m. – 2:30 p.m.

Corporate Venturing and Innovation in Silicon Valley Presentation

2:30 p.m. – 2:55 p.m.

Silicon Valley Ecosystem presented by Plug and Play

2:55 p.m. – 3:10 p.m.

Networking Break

3:10 p.m. – 3:45 p.m.

Tour of Plug and Play

3:45 p.m. – 4:45 p.m.
Start-up Presentations

5:00 p.m.
Buses Depart for Four Seasons

6:30 p.m. – 8:30 p.m.
Peer Exchange and Networking Dinner

Day 2. FRIDAY, JULY 13

7:00 a.m. – 8:00 a.m.
Breakfast

8:15 a.m.
Buses Depart for Silicon Valley Stop #2

8:30 a.m. – 11:30 a.m.
Tour and Presentation – Stop #2
Location to be announced.

11:30 a.m.
Buses Depart for Four Seasons

11:45 a.m. – 1:15 p.m.
Networking Lunch and Keynote

Jia Jiang
Founder, Wuju Learning Inc.; TED Speaker

1:15 p.m. – 2:45 p.m.
The New Face of Risk Management
The impact of digital technology on value creation and company valuations across industries is vast, with estimates of the global digital economy accounting for 22% of the world's economy in 2015, forecast to grow to 25% in 2020. While digital first emerged as a marketing tactic and progressed into the operational efficiency domain, it is now a major strategic imperative evolving at a staggering pace. This session, broken into three sections, will look at digital revolution and its implications on three fronts – strategy and business model disruption, legal and regulatory implications, and the new landscape of reputation risk.

Nora Denzel
Director, Ericsson Inc., Advanced Micro Devices Inc., Talend, NACD Northern California Chapter

Christa Steele
Owner, Boardroom Consulting LLC

2:45 p.m. – 3:00 p.m.
Networking Break

2:45 p.m. – 4:00 p.m.

Board Leadership in the Digital Era

Drawing on findings from both findings of the 2018 Edelman Trust Barometer and Investor Survey we'll discuss changing stakeholder expectations, fueled in large part by the fallout of digital transformation. How does this impact the way boards think about transparency, culture and stewardship?

Erin Essenmacher
Director, Ghandi Brigade; Chief Programming Officer, NACD

JT Kostman
CEO, Applied AI; Director, Reimagine Holdings, Jocata

Shelly Palmer
CEO, The Palmer Institute LLC

4:00 p.m. – 4:30 p.m.

Insights into Action: Tying it All Together

Successfully navigating the disruptive forces impacting businesses today is every leader's biggest challenge. In this session, thought leaders and directors share leading practices that boards can utilize to better prepare their organizations for the opportunities and risks appearing on the horizon.

4:30 p.m.

Program Adjourns

RESERVE YOUR SEAT TODAY
NACDOnline.org/Education

Attendance at the entire course is mandatory for NACD Fellowship® credit.
Please make your travel plans accordingly.

NACD®
NATIONAL ASSOCIATION OF CORPORATE DIRECTORS

LACERA

March 22, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: The 2018 Fortune Brainstorm Tech Conference
July 16 –18, 2018 in Aspen, Colorado

The 2018 Fortune Brainstorm Tech Conference will be held on July 16-18, 2018 at the Aspen Institute in Aspen, Colorado. This conference will provide a unique blend of the power of Fortune 500 companies, top emerging entrepreneurs of the tech world, and the most important investors who finance them.

Main conference highlights include the following:

- Transportation Logistics
- Industries Most Affected by Technology
- Discuss Intersections of Tech with Other Industries, Including Entertainment

The conference will be issuing the agenda mid-May and will mirror last year's meeting agenda, which met LACERA's policy of an average of five (5) hours of substantive educational content per day. The registration fee is $6,500 and participation is subject to approval. The conference will be held at the Aspen Institute and attendees are responsible for their hotel accommodations. The discounted hotel rates range from $364.00 to $550.00 plus applicable resort fees and taxes.

If the registration fee is insufficient to pay the cost of the meals provided by the conference sponsor, LACERA must reimburse the sponsor for the actual cost of the meals, less any registration fee paid. Otherwise, the attendee will be deemed to have received a gift equal to the value of the meals, less any registration fee paid, under California's Political Reform Act.

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Board members at the 2018 Fortune Brainstorm Tech Conference on July 16 –18, 2018 in Aspen, Colorado and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.

RH/lg

Attachment

Brainstorm Tech 2017

WHEN **July 17-19, 2017** WHERE **Aspen, CO**

2017 AGENDA

CONFERENCE TRACKS

INTELLIGENCE
Sponsored by KPMG

FINANCE
Sponsored by RBC Capital Markets

TALENT
Sponsored by Cornerstone OnDemand

IOT
Sponsored by Flex

MONDAY, JULY 17, 2017

6:30 AM

MAROON BELLS BIKE RIDE

Hosted by NYSE
Annual 25-mile bike ride through Maroon Bells, cycling to Maroon Lake with a special photo-op stop and then downhill back to the Aspen Meadows.

7:30 AM

CATHEDRAL LAKE HIKE (Challenging)

Hosted by NYSE
Master a high-altitude trail through delicate tundra to visit an alpine lake and take in breathtaking views of the Continental Divide. 1,300 ft. elevation gain in 6 miles.

8:30 AM

RED MOUNTAIN HIKE (Challenging)

Hosted by NYSE
Enjoy the magnificent views of the incredible Elk Mountain Range and the town of Aspen as you take on this 3-mile ascent and return on the same trail.

8:30 AM

ROARING FORK RIVER RAFTING

Soak up Aspen's beautiful scenery and wildlife from the Roaring Fork River while traversing exceptional class III whitewater rapids. Good for beginner and expert paddlers.

9:00 AM

MAROON BELLS HIKE (Moderate)

Hosted by NYSE
Take advantage of a special photo op at the top of Maroon Lake and then enjoy a moderate 3-mile hike down to East Maroon Portal.

9:30 AM

ANDERSON PARK YOGA

Stretching, concentration, and peace at Anderson Park at Aspen Meadows, led by local instructor Erica Behrens.

9:30 AM

RIM TRAIL HIKE (Moderate)

Hosted by NYSE
Hike both up and downhill over a series of switchbacks to the top for spectacular views of the Continental Divide, Wildcat Ranch and all of Snowmass Village. Total hike is 3 miles.

10:00 AM

ASPEN ART TOUR

Visit the newly opened Marianne Boesky Gallery for a viewing of the current exhibition, and gain special access to a private tour of the Aspen Art Museum.

2:00 PM

OPENING REMARKS

Clifton Leaf, Editor-in-Chief, Fortune, and Co-chair, Brainstorm HEALTH
Adam Lashinsky, Executive Editor, Fortune, and Editorial Director, Brainstorm TECH

2:05 PM

FULL THROTTLE ON SELF-DRIVING CARS

Autonomous vehicle technologies are improving every day and virtually every automaker is racing to get them right. These companies are rapidly buying startups specializing in software, robotics, AI, mapping, cameras, and a host of other fields to forge entirely new alliances that seemed unthinkable only a few years ago. We'll look at some of the best partnerships and hear how things are going.

Tim Kentley-Klay, CEO, Zoox
Kyle Vogt, CEO, Cruise Automation, a subsidiary of GM
Interviewer: Erin Griffith, Senior Writer and Co-chair, Brainstorm TECH, Fortune

2:35 PM

RISE OF THE ROBOTS

Robotics is becoming part of just about every industry: manufacturing, health care, retail, agriculture. Robots are becoming more capable (and in some cases, more lifelike) and are well on their way to deeper integration into our daily lives. Should we celebrate or worry? Join us for a conversation about whether humans should embrace future robots or fear the evolution of machines.

Yoky Matsuoka, Chief Technical Officer, Nest Labs
Interviewer: Michal Lev-Ram, Senior Writer and Co-chair, Brainstorm TECH, Fortune

3:00 PM

DELL CHARTS ITS DIGITAL FUTURE

How can large technology companies reinvent themselves to keep up with the pace of innovation? Find out more from the corporate leaders who orchestrated the largest buyout since the 1930s—all in the name of digital transformation.

Michael Dell, CEO, Dell Technologies
Egon Durban, Managing Partner and Managing Director, Silver Lake
Interviewer: Alan Murray, Chief Content Officer, Time Inc. and President, Fortune

3:25 PM

CAPTURING INSTAGRAM'S NEXT MOMENT

More than 40 billion photos and videos are shared each day by more than 700 million users of Instagram, which is owned by Facebook. What does it mean for users, marketers, and our collective self-esteem?

Marne Levine, Chief Operating Officer, Instagram
Interviewer: Andrew Nusca, Digital Editor and Co-chair, Brainstorm TECH, Fortune

3:50 PM

HOW BIG IS BIKE SHARE IN CHINA? BIG.

By some estimates, there are already more than 2 billion bikes in use around the world. By 2050, that number could be as high as 5 billion. China alone accounts for an estimated 400,000 bike-share bikes in use. In other words, the bike-sharing market is big—really big. Hear from a young CEO in the sector who believes that continued exponential growth is a sure thing.

Davis Wang, CEO, Mobike
Interviewer: Clay Chandler, International Editor, Time Inc.

4:05 PM

PRICELINE'S NEXT DESTINATION

Find out what drives the chief executive who leads the world's largest travel agency and oversees a business designed to serve anyone, going anywhere, at any time.

Glenn Fogel, CEO, Priceline Group
Interviewer: Adam Lashinsky, Fortune

4:30 PM

QUALCOMM'S NEXT QUEST

Can the colossus of smartphone chips crack the Chinese market? Will its $38 billion merger with NXP help fend off Intel? And what about Apple? We talk with the CEO.

Steve Mollenkopf, CEO, Qualcomm
Interviewer: Andrew Nusca, Fortune

4:55 PM

THE PERILS OF STOCK PICKING IN TECH

Always volatile, mega-cap tech stocks have been swinging wildly of late, the latest crop of IPOs have disappointed, and most "unicorns" are staying private. They're up massively one moment and decimated the next. We get rapid-fire commentary on buys, sells and trends from a panel of stock-picking veterans.
Mark S. Mahaney, Managing Director, Internet, RBC Capital Markets
Brent Thill, Managing Director, Internet/Cloud Research Team, Jefferies Technology Group
*Moderator:*Erin Griffith, Fortune

5:15 PM

NEW REALITIES FOR STAR WARS

What if *Star Wars* happened not in a galaxy far, far away but literally leapt off the screen, immersing you in the universe? Hear from one of the most celebrated visual-effects gurus about how technology can let creativity flourish, and from the leader of ILMxLAB about how Lucasfilm is dedicating itself to new methods of storytelling and immersive entertainment.

Vicki Dobbs Beck, Executive in Charge, ILMxLAB
John Knoll, Chief Creative Officer/Senior Visual Effects Supervisor, Industrial Light and Magic, Lucasfilm
Interviewer: Michal Lev-Ram, Fortune

5:45 PM

RECEPTION

Hosted by Expa

6:45 PM

KEYNOTE CONVERSATION: THE BUSINESS BATTLEFIELD

Retired General Stanley McChrystal weighs in on today's political climate and how executives should lead in the modern era.

Gen. Stanley McChrystal (Ret.), Founder, McChrystal Group
Interviewer: **Adam Lashinsky**, Fortune
Introduction: **Rich Battista**, President and CEO, Time Inc

7:30 PM **DINNER**

TUESDAY, JULY 18, 2017

8:00 AM

BREAKFAST ROUNDTABLES

CAN YOU DISRUPT YOURSELF?
Intelligence Track hosted by KPMG
Leaders of big companies are learning from the methods of cutting-edge startups to leverage new technologies and increase entrepreneurship inside their own enterprises. The discussion will focus on disruption from within rather than disruption by new entrants.

Lak Ananth, CEO, Next47
Peggy Johnson, Executive Vice President, Business Development, Microsoft
Mike McNamara, CEO, Flex
Siobhan McFeeney, Vice President, Business Transformation, Pivotal
Mark Papermaster, Chief Technical Officer, Advanced Micro Devices
David Wadhwani, CEO, AppDynamics
Moderator: **Barb Darrow**, Senior Writer, Fortune

RETAIL BRICKS VS. CLICKS
In the world of direct-to-consumer, it's easier than ever to shop for clothing, shoes, cosmetics, eyeglasses, dinner kits, active wear—even mattresses. The customer service and personalization of these direct-to-consumer entities can exceed the efforts of the finest brick-and-mortar department stores. A new generation of businesses is taking off fast. Find out who's in, who's winning, and who's next.

Laura Behrens Wu, CEO, Shippo
Julie Bornstein, COO, Stitch Fix
Daniel Broukhim, Co-CEO, FabFitFun
Jennifer Goldfarb, President, ipsy
Philip Krim, CEO, Casper
Fritz Lanman, CEO, Class Pass
Moderator: **Andrew Nusca**, Fortune

TRENDS IN TECH—THE VC VIEW
Finance Track hosted by RBC Capital Markets
An all-star panel of venture capitalists debates the trends that have come to dominate an industry: valuations and unicorns, the bubble (or not), and the next big platform.

Maha Ibrahim, General Partner, Canaan Partners
Vincent Letteri, Director, KKR
Rebecca Lynn, General Partner, Canvas Ventures
Mood Rowghani, General Partner, Kleiner Perkins
Moderator: **Erin Griffith**, Fortune

THE FUTURE OF EMPLOYMENT
*Talent Track hosted by **Cornerstone OnDemand***
How do workers engage with employers as technology is dramatically changing the nature of their relationship? We explore.

Roy Bahat, Head, Bloomberg Beta
Michael Chui, Partner, McKinsey Global Institute
Penny Pritzker, Chairman, PSP Capital, Former U.S. Secretary of Commerce
Anne Marie Slaughter, CEO, New America
Hemant Taneja, Managing Director, General Catalyst
Tony Xu, CEO, DoorDash
Moderator: **Michal Lev-Ram**, Fortune

MARKETING: RIGHT MESSAGE, RIGHT TIME
Technology has given marketers more tools to reach customers than ever before, but the basics are just as important today, if not more so. How are today's marketing leaders balancing medium and message?

Stephanie Georges, Senior Vice President Corporate Strategy and Marketing, Digital Globe
Steve Lucas, CEO, Marketo
Marc Mathieu, CMO, Samsung Electronics America
JB Osborne, CEO, Red Antler
Ragy Thomas, CEO, Sprinklr
Heather Zynczak, CMO, Pluralsight
Moderator: **Aaron Pressman**, Senior Writer, Fortune

9:00 AM **MOVE TO BRAINSTORM TENT**

9:15 AM **HOW TARGET STAYS ON TARGET**

Brian Cornell is remaking America's third-largest retailer. When the makeover is complete, what can customers expect from one of the nation's most recognized stores?

Brian Cornell, CEO, Target
Interviewer: **Andrew Nusca**, Fortune

9:45 AM

A NEW INDUSTRIAL REVOLUTION

Hear from the woman spearheading the digital transformation in rail, mining, marine power, and drilling at General Electric.

Jamie Miller, Senior Vice President, GE; CEO, GE Transportation
Interviewer: **Brian O'Keefe**, International Editor, Fortune

10:10 AM

BREAK

10:40 AM

SHOP TALK WITH AMAZON

In conversation with the leader of Amazon's signature retail business.

Jeff Wilke, CEO, Worldwide Consumer, Amazon
Interviewer: **Adam Lashinsky**, Fortune

11:05 AM

TOWN HALL: FIXING INEQUALITY IN SILICON VALLEY

The treatment of women in the technology business has become topic No. 1 in boardrooms, HR departments, and investment committees. An all-new Brainstorm TECH format moves beyond simply acknowledging widespread discrimination to focusing on solutions. Also on the agenda: The need to improve diversity and inclusion across the board in Silicon Valley.

Linda Kozlowski, Chief Operating Officer, Etsy
Leanne Meyer, Director, Leadership Development, Tepper School of Business, Carnegie Mellon
Adam Miller, CEO, Cornerstone OnDemand
Laura Weidman Powers, CEO, Code2040
Jonathan Sposato, Chairman, PicMonkey
Moderator: **Emily Chang**, Anchor and Executive Producer, Bloomberg TV

11:45 AM

THE SMART MONEY SPEAKS

What's the next big thing? On what industry, idea, or trend is worth betting big? Hear from an all-star panel of financiers, who will share what they're seeing, and the changes they're watching out for.

Kirsten Green, Managing Director, Forerunner Ventures
Anton Levy, Managing Director and Global Head, Internet and Technology, General Atlantic
David Trujillo, Partner, TPG
Moderator: **Erin Griffith**, Fortune

12:10 PM

MOVE TO LUNCH ROUNDTABLES

12:20 PM

LUNCH ROUNDTABLES

INNOVATING WITH PURPOSE

*Talent Track hosted by **Cornerstone OnDemand***

Every business needs to take the long view when it comes to employees—and that means knowing not only what they need on Day One but also what will keep them there: a great culture, as well as opportunities for growth and for making a positive impact on the broader community and world. Why is purpose important? How do you inject it into your business plan? What's best for your business? Find out here.

Lorna Borenstein, CEO, Grokker
Shernaz Daver, Chief Marketing Officer, Udacity
Dawn Lyon, Senior Vice President, Corporate Affairs and Chief Reputation Officer, Glassdoor, Inc.
Clara Shih, CEO, Hearsay System
Moderator: **Aaron Pressman**, Fortune
Wrap Up Remarks: **Adam Miller**, CEO, Cornerstone OnDemand

DO YOU HAVE AN AI STRATEGY?

*Intelligence Track hosted by **KPMG***

Artificial intelligence isn't a technology—it's a capability that cuts across every product and industry. In the future, AI will be like electricity. Are you ready?

George Babu, Co-founder and Chief Product Officer Kindred
Zachary Bogue, Co-managing Partner, Data Collective
Hilarie Koplow-McAdams, Board Member, Tableau Corp.
George Kurtz, CEO, CrowdStrike
Rao Mulpuri, CEO, ViewGlass
Moderator: **Andrew Nusca**, Fortune
Introduction: **Cliff Justice**, Principal, Innovation and Enterprise Solutions, KPMG

BEFORE, DURING, AND AFTER THE IPO

*Finance Track hosted by **RBC Capital Markets***

Externally the initial public offering is seen as a milestone of success, but executives who have been through the process know that it's much more complicated. We assemble leaders at different points in their journeys to discuss the markets and the meaning of an IPO in 2017.

Lise Buyer, Partner, Class V Group
Frank Calderoni, CEO, Anaplan
Greg Schott, Chief Executive Officer, MuleSoft
Dana Settle, Managing Partner, Greycroft Partners
Moderator: **Erin Griffith**, Fortune

INFORMAL NETWORKING LUNCH
Aspen Meadows Reception Center

1:30 PM

MOVE TO AFTERNOON ROUNDTABLES

1:45 PM

AFTERNOON ROUNDTABLES

GLOBAL HEALTH: BETTER, FASTER, STRONGER
*Intelligence Track hosted by **KPMG***
Money is pouring into the health care and life sciences industries as regulations shift, technologies improve, and founders set their sights on solving world-changing global problems. But with things like digestible sensors, electronic pharmaceuticals, patient management systems, wearables, 3D printed biological materials, optogenetics, and more, technology is more important than ever. Hear from executives, entrepreneurs, and investors share.

Adrian Aoun, CEO, Forward
Daniel Chao, CEO, Halo Neuroscience
Arun Gupta, CEO, Quartet
Lisa Maki, CEO, PokitDok
Moderator: **Clifton Leaf**, Fortune

TANGLED IN RED TAPE
Regulatory and government bureaucracies can stifle any business, but some CEOs have been successful at learning how to deftly navigate them. Executives from a diverse set of industries—from health to cannabis—will discuss their strategies.

Stephanie Copeland, Executive Director, Office of Economic Development, State of Colorado
Brad Garlinghouse, CEO, Ripple
Brad Hargreaves, CEO, Common
Othman Laraki, CEO, Color Genomics
Kyle Sherman, CEO, Flowhub
Moderator: **Jeff Roberts**, Law and Policy Reporter, Fortune

USER EXPERIENCE IS EVERYTHING
*IoT Track hosted by **Flex***
The way a product or service looks, feels, functions, and lasts—it all has an

effect on a customer's happiness. We gather some of the world's best design and product minds to discuss the lessons they've learned about creating positive user experiences.

Gadi Amit, Principal Designer, NewDealDesign
Diego Rodriguez, Partner and Global Managing Director, IDEO
James Siminoff, CEO, Ring
April Underwood, Vice President, Product, Slack
Moderator: **Brian O'Keefe**, Fortune
Introduction: **Jeannine Sargent**, President, Innovation and New Ventures, Flex

2:45 PM

MOVE TO BRAINSTORM TENT

3:00 PM

GUARDIANS OF THE CYBER GALAXY

In the mad scramble to beat back digital baddies, businesses have few places to turn for trusted advice. Who better to teach this mixed martial art than its masters? Join a former NSA honcho, one of the world's top bug bounty bosses, and a hacker turned entrepreneur as they dish on what you need to know to protect your network, your data, and your job.

Keith Alexander, CEO, IronNet Cybersecurity; Former Director, NSA**
Oren Falkowitz, CEO, Area 1 Security**
Mårten Mickos, CEO, HackerOne**
Moderator: **Robert Hackett**, Writer, Fortune

3:25 PM

BEYOND BROADCAST

Two top media executives share how they're navigating the rapidly changing world of what, where, why, and how we watch—on screens large and (very) small.

Charlie Collier, President, AMC and Sundance TV
Mike Hopkins, CEO, Hulu
Moderator: **Michal Lev-Ram**, Fortune

3:50 PM

DEMO: STRONGER, FASTER, SMARTER WITH NEUROSTIMULATION

Daniel Chao, CEO, Halo Neuroscience
Interviewer: **Brian O'Keefe**, Fortune

4:00 PM

THE WWE'S DIGITAL PEDIGREE

Sixteen million YouTube followers and its No. 1 sports channel—that's the WWE. The duo that lead the brand and discover its talent share their strategies for success and fan engagement around the globe.

Paul "Triple H" Levesque, Executive Vice President, Talent, Live Events, and Creative, WWE
Stephanie McMahon, Chief Brand Officer, WWE
Moderator: **Michal Lev-Ram**, Fortune

4:25 PM

TOYS GO HIGH TECH

What happens when you turn a Google veteran loose at the country's biggest toy company? We sit down with new Mattel CEO Margaret Georgiadis to find out what's in store for Barbie, Hot Wheels, and more.

Margo Georgiadis, CEO, Mattel
Interviewer: **Clifton Leaf**, Fortune

4:45 PM

THE NEW PLAYER IN PUBLISHING

What happens when you encourage athletes to go beyond the soundbite to speak for themselves? How will fans react? We look at The Player's Tribune, a new media company founded by Derek Jeter and built on first-person accounts from the folks on the field.

Jaymee Messler, President, The Players' Tribune
Richard Sherman, Cornerback, Seattle Seahawks; Contributor: The Players' Tribune
Moderator: **Andrew Nusca**, Fortune

5:15 PM

ADJOURN

5:30 PM

RECEPTION

Residence of Laura and Gary Lauder

9:30 PM

NIGHTCAP

*Hosted by **Cornerstone OnDemand***

WEDNESDAY, JULY 19, 2017

8:00 AM

BREAKFAST ROUNDTABLES

HOW TO AVOID A TOXIC CULTURE

Speedy growth doesn't have to mean cutting corners, ignoring regulations, or creating a culture that doesn't value and welcome everyone. Entrepreneurs and execs discuss what it takes to maintain a healthy culture even as they take their company to the next level.

Blake Irving, CEO, GoDaddy
Susan Lyne, CEO, BBG Ventures
Patrick Quinlan, CEO, Convercent
Joshua Reeves, CEO, Gusto
David J. Stern, NBA Comissioner Emeritus
Cindy Whitehead, CEO, The Pink Ceiling
Moderator: **Ellen McGirt**, Senior Editor, Fortune

A LIFE OF LEARNING

How can today's workers harness new technological tools to continue learning new skills and stay on top of the rapid changes in today's economy? Join this roundtable to discuss a vital issue.

Kristen Hamilton, CEO, Koru
Michael Kassan, CEO, MediaLink
Marissa Mayer, Former President and CEO, Yahoo Inc.
Jake Schwartz, CEO, General Assembly
Bonny Simi, President, JetBlue Technology Ventures
*Moderator:***Aaron Pressman**, Fortune

HOW TO BUILD A SMARTER CITY

IoT Track hosted by Flex

We assemble experts from energy, transportation, government, finance, and other sectors to discuss the challenges and successes of connecting our urban areas.

Mike Bell, CEO, Silver Spring Networks
Robert Gaudette, Senior Vice President, Business Solutions, NRG
Gary Hallgren, President, Arity; Connected Car, Allstate

Jim McCarthy, Global Head of Innovation and Strategy, Visa
Ahmad Wani, CEO, 1Concern
Moderator: **Barb Darrow**, Fortune

CRYPTOCOINS AND THE FUTURE OF FINANCE
In the world of digital currency, ICOs—initial coin offerings—are the new IPOs. Join us to discuss a fast-growing category that's got everyone talking (and trading).

Kathleen Breitman, CEO, Tezos
Peter Smith, CEO, Blockchain
Balaji Srinivasan, CEO, 21.co
Moderator: **Jeff Roberts**, Fortune

8:50 AM

MOVE TO BRAINSTORM TENT

9:00 AM

THE FIGHT AGAINST FAKE NEWS

"There are three kinds of lies," humorist Mark Twain might have said in 2017: "Lies, damned lies, and social media." How can publishers and technology companies battle the user-generated beast they have created?
Isaac Lee, Chief Content Officer, Univision and Televisa
Andrea Mitchell, Chief Foreign Affairs Correspondent, NBC News; Host, *Andrea Mitchell Reports*, MSNBC
David Sanger, National Security Correspondent, *The New York Times*
Moderator: **Adam Lashinsky**, Fortune

9:25 AM

BIG BANKING

We'll hear from the CEO of one of the largest banks about innovation and recovering from tough times.

Timothy Sloan, CEO, Wells Fargo
Interviewer: **Adam Lashinsky**, Fortune

9:50 AM

WHY SOFI MATTERS

A fast and furious conversation with the founder of the online personal finance company.

Mike Cagney, CEO, SoFi
Interviewer: **Erin Griffith**, Fortune

10:05 AM

ON THE RECORD

On June 22, veteran technology executive Niniane Wang and five other women went public with allegations of sexual harassment by the head of Binary Capital, a VC firm that has now all but shut down. Hear Niniane on how and why she was finally able to expose this behavior, what she believes are the systemic failings that led to this and other similar incidents and, critically, her specific suggestions for what should happen next.

Niniane Wang, CEO, Evertoon
Interviewer: Michal Lev-Ram, Fortune

10:25 AM

PROTECTING WHAT MATTERS

In this era of technological quantum leaps and asymmetrical threats, the challenges of safeguarding society without damaging the freedoms it values most have never been greater. Join the former director of the Central Intelligence Agency for a frank discussion of the risks, tradeoffs, and yes, opportunities facing the U.S. and the globe.

John O. Brennan, Former Director, Central Intelligence Agency; Senior Advisor, Kissinger Associates
Interviewer: Walter Isaacson, President and CEO, Aspen Institute

11:00 AM

CLOSING REMARKS AND ADJOURN

LACERA

April 3, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: 2018 Middle East Summit
May 7- 8, 2018 in Dubai, United Arab Emirates

The 2018 Middle East Summit will be held on May 7- 8, 2018 at the Ritz Carlton, Dubai International Financial Centre Hotel. The Middle East Investment Summit features three conferences in one; Hedge Funds World, Private Equity World, and Real Estate Investment World. Each brand is designed to meet the complete needs of end-investors in the Middle.

The main conference highlights include the following:

- Pension Fund Panel: Traversing Evolving Global Political Structures and Trends
- Inflation, Reflation, Deflation - Navigating Economic Instability
- Tactical Positioning in Stabling Markets: Recovery and Reformation
- Populism, From Periphery to Power: A Renewed Anti-Globalization

The conference meets LACERA's policy of an average of five (5) hours of substantive educational content per day. The standard hotel rate at the Ritz Carlton, Dubai International Financial Centre hotel is $300.00 per night plus applicable taxes and registration fee to attend is $3,595.00.

If the registration fee is insufficient to pay the cost of the meals provided by the conference sponsor, LACERA must reimburse the sponsor for the actual cost of the meals, less any registration fee paid. Otherwise, the attendee will be deemed to have received a gift equal to the value of the meals, less any registration fee paid, under California's Political Reform Act.

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Board members at the 2018 Middle East Summit on May 7- 8, 2018 in Dubai, United Arab Emirates and approve reimbursement of all travel costs incurred in accordance with LACERA's Education and Travel Policy.

RH/lg
Attachment

MIDDLE EAST INVESTMENT SUMMIT 2018

Confirmed speakers

1. **Allan Polack,** Group CEO, **PFA, Denmark** (Pension Fund)
2. **Olivier Rousseau,** Executive Director, **Fonds de Réserve Pour les Retraites, France** (Pension Fund)
3. **Tom Tull,** Chief Investment Officer, **Employees Retirement System of Texas, USA** (Pension Fund)
4. **Martin Botha,** Director of Risk Management, **Public Investment Fund, Saudi Arabia** (SWF)
5. **Luiz Claudio Levy Cardoso,** Chief Investment Officer, **Nucleos Instituto de Seguridade Social, Brazil** (Pension Fund)
6. **Andrew McCaffery,** Global Head of Client-Driven and Multi-Manager Solutions & member Investment Management Committee**, Aberdeen Standard Investments, UK** (Asset Manager)
7. **Luis J. Roman, Ph.D.,** Senior Investment Officer, Director of Risk Management**, Massachusetts Pension Reserves Investment Management Board, USA** (Pension Fund)
8. **Andrew Allen,** Global Head of Investment Research – Real Estate, **Aberdeen Standard Investments UK** (Asset Manager)
9. **Khurram Mizra,** Head of Asset Allocation, **Osool Asset Management Company BSC, Bahrain** (Pension Fund)
10. **Nicola Bettio,** Managing Director, **KAUST Innovation Fund, Saudi Arabia** (Endowment)
11. **Antony Barker,** Former Chief Investment Officer **Santander Common Fund** and Director of Pensions **Santander UK** (Pension Fund)
12. **Mohammed A. El-Kuwaiz,** Chairman, **Capital Market Authority (CMA), Saudi Arabia** (Regulator)
13. **Bashar Zakaria**, Senior Emerging Market Analyst, **CalPERS, USA** (Pension Fund)
14. **Tiago Severo,** Lead Economist, Managing Director's Office, **Abu Dhabi Investment Authority, UAE** (SWF)
15. **Kevin Murphy,** Chief Investment Officer, **Kanoo Capital, Bahrain** (Family Office)
16. **Marinos G. Gialeli**, CEO, **Hotel Employees Provident Fund, Cyprus** (Pension Fund)
17. **Stergios Voskopoulos,** Head of Investments, **Kanoo Capital, Bahrain** (Family Office)
18. **Sharifa AlBarami,** Managing Director, **Oman Technology Fund, Oman** (SWF)
19. **Habib Al-Assaad,** Executive Co-Director**, AFAQ Group - Office of Sheikha Latifa M.b.M, UAE** (Family Office)
20. **Adil Al Zarooni,** CEO, **Al Zarooni Emirates Investments**, **UAE** (Family Office)
21. **Gina Sanchez,** CEO, **Chatico Global** and Trustee**, Los Angeles County Employees Retirement Association, USA** (Pension Fund)
22. **Joseph Kirikian**, Head of Industrials – Private Equity, **Bahrain Mumtalakat Holding Company, Bahrain** (SWF)
23. **H.E. Mr. Zulfiquar Z Ghadiyali,** CEO, **Private office H.H. Sheikh Tahnoon Bin Saeed Bin Tahnoon Al Nahyan, UAE** (Family Office)
24. **Tuba Terekli,** CEO, **WAQF IQRAA, Saudi Arabia** (Endowment)
25. **Omair Rana,** Head of Direct Investments and International Real Estate, **AWJ Holding Company, Saudi Arabi** (Family Office)
26. **Mo Bississo,** Director, **Kasamar Holdings, UAE** (Family Office)
27. **Dr. Sami Alom,** Director, **Kasamar Holdings, UAE** (Family Office)
28. **Nabil Nazer,** Chief Investment Officer, **Al Sulaiman Group, Saudi Arabia** (Family Office)

29. **Walid Hanna,** CEO, **Middle East Venture Partners, UAE** (Venture Capital)
30. **Suneel Gokhale,** Partner, **Venture Souq, UAE** (Venture Capital)
31. **Khaled Talhouni,** Partner, **Wamda Capital, UAE** (Venture Capital)
32. **Siddharth Kumar,** Director, **Imperium Capital, UK** (Family Office)
33. **Fatima A. Hussain,** Risk Manager, **Emirates Investment Authority, UAE** (SWF)
34. **Trey Goede III,** Investment Director, **Aramco Entrepreneurship Ventures, Saudi Arabia** (Venture Capital)
35. **Sasha Bernier,** Senior Vice President, **Cheltenham Investments, USA** (Family Office)
36. **Nitai Utkarsh,** Lead - Investment Strategy & Chairman's Family Office, **Hero MotoCorp, India** (Family Office)
37. **Angus Paterson,** Partner, **STC Ventures, Saudi Arabia** (Venture Capital)
38. **Fahad Alnuhait,** Director of Investments, **Dussur, Saudi Arabia** (Institutional Fund)
39. **Jean-Francois Desjacques,** CEO, **Eastinwest SA, Switzerland** (Family Office)
40. **Eric Munson,** Director**, PSP Ventures, USA** (Family Office)
41. **Christos Mastoras,** Founder and Managing Partner, **Iliad Partners, UAE** (Venture Capital)
42. **Wael Aburida,** Managing Partner, **Halo Investment Management, UAE** (Venture Capital)
43. **Chris Rogers,** Partner, **Lumia Capital, USA** (Venture Capital)
44. **Harris Fried,** CEO, **Fried Family Office, USA** (Family Office)
45. **Karim Radwan,** Director – MENA Investments, **RIMCO, UAE** (Family Office)
46. **Patrick Thiriet,** Chief Strategy Officer, **Choueiri Group, UAE** (Family Office)
47. **Noor Sweid,** Chief Investment Officer, **Dubai Future Foundation, UAE** (Endowment)
48. **Paul Kenny,** Managing Director, **AYM** & Founder, **Emerge Ventures, UAE** (Venture Capital)
49. **Omar Almajdouie,** Founding Partner, **RAED Ventures, Saudi Arabia** (Venture Capital)
50. **Abhishek Sharma,** CEO, **Foundation Holdings, UAE** (Family Office)
51. **Souhail Khoury,** Investment Associate, **Berytech Fund 2, Lebanon** (Venture Capital)
52. **Carlos Crespo,** CEO, **Nigma Family of Companies, USA** (Real Estate Private Equity Fund)
53. **Moustafa Magar,** Head of Spin off Investment, **Saudi Aramco Entrepreneurship Ventures, Saudi Arabia** (Venture Capital)
54. **Dr Ahmed Emara,** Founder, Group CEO & Managing Director, **ReYa Holding & Investor, Saudi Arabia** (Family Office)
55. **Catherine Shiang,** Managing Director, **Asia Capital Advisor, Ltd. Hong Kong** (Family Office)
56. **Dr Henry Azzam,** Director, MS Finance Program, **Suliman Olayan School of Business, American University of Beirut** & Former CEO & Chairman, **Social Security Fund of Jordan** (Academic)
57. **Hussein Sayed,** Anchor, **Bursat Al Alam, CNCB Arabia, UAE** (Expert)
58. **Rachel Pether,** Senior Advisor, **Sovereign Wealth Fund Institute, UAE** (Expert)
59. **Simon Pickett,** Investment Director, **Octopus Investments, UK** (Asset Manager)
60. **Laurent Biousse**, Director, **Aeronautics Fund, Cayman Islands** (Mutual Fund)
61. **Dr Pablo Fetter,** Former Head of Investments, **GEMS Education** & **Bahrain Mumtalakat Holding Company**
62. **Huda AlLawati,** Chief Investment Officer, **Savola Group, Saudi Arabia** (Family Office)
63. **Hamish Mair,** Managing Director and Head of Private Equity, **BMO Global Asset Management, UK** (Asset Manager)
64. **Bruno Dupire,** Head of Quantitative Research, **Bloomberg** (Expert)
65. **David Gibson Moore,** President, **Gulf Analytica &** Advisor, **Abu Dhabi Global Market (ADGM), UAE** (Expert)
66. **Harish Bisam,** Director, **Bee's Capital, Australia** (Emerging Fund)

67. **Ramu Chakravarthy,** Regional Director, **TrustPlutus, India** (Multi Family Office)
68. **Khaled Fouad,** Chief Investment Officer, **KAMCO, UAE** (Asset Manager)
69. **Hatem Samman**, CSO, **General Entertainment Authority, Saudi Arabia** (Government)
70. **Nadia Bakhurji,** Investor, **Mashael Capital** & Board Member, **Arab International Women's Forum, Saudi Arabia** (Family Office)
71. **Paul Devonshire, Savills**
72. **Hani Sabra, Atef Advisory**

Tentative speakers:

73. **Farouki Majeed,** Chief Investment Officer, **Ohio School Employees Retirement System, USA** (Pension Fund)
74. **Ashwin Vijai Kumar,** Direct Investments - Logistics & Transportation, Aviation, Aerospace, Education, **Bahrain Mumtalakat Holding Co. Bahrain** (SWF)
75. **Faiz Mayalakkara,** Director – Investments, **Emirates Investment Authority, UAE** (SWF)

Main conference agenda day one – 7 May 2018

PREDICTABLY UNPREDICTABLE

Host: Hussein Sayed, Anchor, **Bursat Al Alam, CNCB Arabia**

09.00 **Keynote: Populism, from periphery to power: a renewed anti-globalisation**

- Examining mounting political risk, reviewing macro perspectives and evaluating global fragmentation
- Assessing the ramifications of polarised political systems on asset allocation strategy, global financial markets and the overall returns outlook
- Altering strategies reflective of new administration and low volatility and high cross market correlation
- Adapting portfolio construction and the allocation of capital in political uncertainty and heightened geopolitical risk
- What can investors expect from protectionism and its impact on global growth - bracing portfolios for 'uncertainty shocks'

Ted Eliopoulos, Chief Investment Officer, **CalPERs, USA**

09.20 **Keynote: Rallying markets and stress testing portfolios: 'remain'ing in Europe under new leadership**

- Exploring the risk and realities of political shifts in continental Europe, what are the repercussions for the rest of the globe?
- Balancing portfolios with vehicles affected by the euro crisis, looking to large equity, currencies and bonds
- Withstanding the unexpected in political and market uncertainties and managing expectations
- Reviewing the current situation of France, Germany, the Netherlands and Spain
- Finding the safe havens in European markets

Olivier Rousseau, Executive Director, **Fonds de Réserve Pour les Retraites (The French Pension Reserve Fund)**

09.40 **Pension Fund Panel: Traversing evolving global political structures and trends**

- Leveraging secular inflation and downside risks, examining the geos most affected
- Highlighting 2018's exposed economic disparities, what are the real implications for investors?
- Evaluating global trade patterns, noting the growing global GDP and modest EM growth
- Considering what the bond market is offering in returns – where are the greatest opportunities?
- Examining the overall impact on investor portfolios

Ted Eliopoulos, Chief Investment Officer, **CalPERs, USA**
Allan Polack, Group CEO, PFA**, Denmark**
Olivier Rousseau, Executive Director, **Fonds de Réserve Pour les Retraites, France**
Luiz Claudio Levy Cardoso, Chief Investment Officer, **Nucleos Instituto de Seguridade Social, Brazil**
Moderator: Hussein Sayed, Anchor, **Bursat Al Alam, CNCB Arabia**

10.00 **Keynote: Politics-proofing portfolios: preparation and protection**

- Creating a globally balanced portfolio responsive to the uncertain political landscape
- Diversifying risk with internationally allocated capital

- Looking to alternatives in fixed income and equity vehicles for secure long-term investing
- Planning for the potential shock on large scale, long term investments – which asset classes have the most exposure to political risk?
- Reviewing the new relationship between asset owners and managers in 2018 and beyond

Reserved for platinum sponsor

10.20 Speed networking

10.40 Networking refreshments

11.20 Streams begin: attendees can visit any of the conferences below

EMERGING ALTERNATIVES		**MACRO TRENDS**		**ALTERNATIVE REAL ESTATE**	
11.20	Panel **Opportunities of tomorrow: the investment space of 2030** • Identifying investment themes to best maximise returns in tomorrow's opportunities • Where are the emerging alternatives yet to be explored by institutional investors? • Investing in tech and emerging innovation: identifying the opportunities in robotics, autonomous cars and AI as asset classes • Looking to the ultimate alternative alternatives: space, biotech, satellites etc. • Considering sectors including entertainment and leisure, renewable energy, disruptive tech, data **Moderator:** **Siddharth Kumar**, Director, **Imperium Capital** **Tom Tull,** Chief Investment Officer, **Employees Retirement System of Texas**	**11.20**	Interview **Global macro strategy spotlight: multi-asset approach** • Applying multi-asset strategies, considering current wider global macro themes and the breadth of global growth • Exploring cross and intra-asset allocation strategies – themes and implications • Structuring a multi-asset approach and benefits for large scale investors • Managing risk methodologies **Interviewer: Gina Sanchez,** CEO, **Chatico Global** **Khurram Mizra**, Head of Asset Allocation, **OSOOL**	**11.20**	Panel **Alternative property structures and sectors: global diversification opportunities** • Deciphering the greatest opportunities in line with global structural themes and cross border investment activity • Deliberating new ways to access the market and fight competitive capital: looking to broader co-investment or open-ended debt funds • Considering alternative assets: healthcare, storage, malls, student assets, private rented sectors, farms, hospitality and smart buildings **Omair Rana,** Head of Direct Investments and International Real Estate, **AWJ Holding Company** **Khaled Fouad,** Chief Investment Officer, **KAMCO**

	Eric Munson, Director, **PSP Ventures** **Wael Aburida,** Managing Partner, **Halo Investment Management**				**Paul Devonshire,** Head of Middle East, **Savills** **Andrew Allen,** Global Head of Investment Research – Real Estate, **Aberdeen Standard Investments**
11.40	**Where are the real diversification opportunities for investors?** • Leaving mainstream assets behind: alternatives most suited to the post-crisis environment • Diversifying fixed income portfolios with alternative allocations • Building a global platform to expand revenue streams • Matching return potential of traditional equities • Looking to emerging strategies from real estate to private equity funds to illiquid credit for redeeming opportunistic yields **Nitai Utkarsh,** Lead - Investment Strategy & Chairman's Family Office, **Hero MotoCorp**	11.40	**GCC sovereign dollar debt issuance: considerations for investors** • Reviewing what institutional investors are looking at/for • Analysing the determining factors across demographics, growth drivers, debt metrics, fiscal and financial buffers, and other idiosyncratic drivers • Comparing the GCC vs. rating peers: similarities and differences • Equating hard currency vs. local currency debt & building and liberalizing domestic debt markets • Addressing the impact of "lower for longer" oil prices **Bashar Zakaria,** Senior Emerging Market Analyst, **CalPERS**	11.40	**The 'real assets' continuum and the quest for yield** • Responding to the expanding range of investment opportunity • Exploring the emergence of alternative real estate subsectors • Reacting to rapid urbanisation and increasing risk for assets • Highlighting the outperforming assets and markets and noticing the safe havens **Luiz Claudio Levy Cardoso,** Chief Investment Officer**, Nucleos Instituto de Seguridade Social**
12.00	**Alternative allocations: achieving positive results** • Evaluating the role of alternative alternatives in asset allocation • Exploring commercial aircraft, engines and spare parts as alternative asset classes • Examining benefits of a multi-strategy alternative portfolio • Accessing risk, managing volatility and achieving positive results with aeronautics **Laurent Biousse,** Director, **Aeronautics Fund**	12.00	**Capturing premium returns: looking to private equity** • Looking to private equity as an asset class in the current macro environment • Private equity vs listed equity and access to the asset class • Reviewing the opportunities and risks • Evaluating current trends **Hamish Mair**, Managing Director and Head of Private Equity, **BMO Global Asset Management**	12.00	**Fighting the right risk/return balance in commercial real estate** • Reviewing the unique benefits of the CRE asset class • Securing differentiated, uncorrelated portfolio positioning with real estate private equity • Evaluating what should be considered when allocating capital to CRE • What role can this asset class play in portfolio diversification? • Reviewing risk management **Carlos Crespo,** CEO, **Nigma Family of Companies**

12.20	**Roundtables**		
	Visionary projects: a futurist's outlook on allocation and investment opportunities of the future **Wael Aburida,** Managing Partner, **Halo Investment Management**	**Family office: preparing for generational transition**	**Real estate investing for family offices** **Omair Rana,** Head of Direct Investments and International Real Estate, **AWJ Holding Company**
	Saudi 2030: a year in review **Huda AlLawati,** Chief Investment Officer, **Savola Group**	**Establishing and promoting healthier governance**	**The 'Gen2' portfolio manager: contemporary manager selection** **Fatima A. Hussain,** Risk Manager, **Emirates Investment Authority**
	Cryptocurrencies: safe haven or time bomb?	**Water - as good as gold?**	**Factor-based investing, does it really work?**

13.00 Networking lunch

FRONTIER AND EMERGING MARKETS		**PRIVATE EQUITY**		**REAL ESTATE**	
14.20	Panel **The next frontier: managing market myths** • Addressing market concerns: the subordinate governance structure, perceived illiquidity and small-cap deployment • Reviewing the opportunities offered in 2018 frontier markets – robust economic growth, increasing macro development and low correlation • Considering South Asian, Sub Saharan and South American geos as lucrative, front-running frontier markets **Moderator: Rachel Pether,** Senior Advisor, **Sovereign Wealth Fund Institute**	14.20	Panel **Private equity: rising above uncertainty and outsized demand** • Reviewing the private equity landscape of 2018 • Dealing with concentrated P.E demand generated by unreachable public equity and the competition for assets • Evaluating the repositioning of the asset class with threats from surging inflow and increasing levels of co-investment • Exploiting small to mid-market buyout funds and buy and build strategies **Joseph Kirikian,** Head of Industrials – Private Equity**, Bahrain Mumtalakat Holding Company** **Hamish Mair**, Managing Director and Head of Private Equity, **BMO Global Asset Management**	14.20	Panel **Remaining 'cautious' while maximising returns: buying into the global market** • Considering opportunities in a 'cooled' market and amongst fragile economic growth • Looking to the increasingly narrow property yield gap in developed economies • Exploring long lease strategies, equity vs debt and bottom-up strategies **Sasha Bernier,** Senior Vice President, **Cheltenham Investments**

14.40	**Regional spotlight: India** • Recognising the further potential in the country ranked 4th in developing Asia for FDI inflows • Capitalising on regulatory framework changes, demonetisation policy and the stable middle class • Evaluating Indian real estate: generating yield outside the developed 'gateway' cities	**14.40**	**Reacting to the threat of dry powder** • Highlighting the risks surrounding dry powder in the market • What should investors be cautious of? • Reviewing impact on direct deal flows • Mitigating uncertainties of long-term P.E investments **Stergios Voskopoulos,** Head of Investments, **Kanoo Capital**	**14.40**	**CRE: securing a competitive advantage** • Examining the niche/emerging sectors • Overcoming concerns over Brexit • Determining risks surrounding the Chinese economy • Considering North American uncertainty • Addressing the development of REITs and what means for investors in this asset class • What will the end of low interest rates mean for your real estate portfolio? **Mo Bississo,** Director, **Kasamar Holdings**
15.00	**China: bubble, bust and sense of balance** • Evaluating structural, economic and financial reforms • Reviewing reflation and growth targets, the liberalisation of capital markets, rising debt levels and threat posed by US trade agreements • Taking a passive vs active approach to China with a long-term view • Will China really open its fiscal markets? • What is next for Chinese markets and where will the growth come from?	**15.00**	**Secondary markets: a secondary advantage** • Accessing liquidity and balancing portfolios across the asset class through the secondary market – evaluating the driving trends • Gaining greater exposure to private companies through secondary transactions • Reacting to companies remaining private for longer – what does this mean for wider investor portfolios? **Dr Ahmed Emara,** Founder, Group CEO & Managing Director**, ReYa Holding & Investor**	**15.00**	**Direct deals in real estate** • Which real estate sectors are best suited to direct deals? • Reviewing the benefits and challenges of direct ownership • Where are the threats or overvalued assets in this space? • Is the direct investment trend likely to continue? **Jean-Francois Desjacques,** CEO, **Eastinwest SA**
15.10	**Allocating capital in the right geographies** • Increasing portfolio exposure to the emerging markets – have they gone too far? • What are the potential risks?	**15.10**	**Investors and asset managers: the shifting balance of power** • Reexamining the value of a collaborative manager connection	**15.10**	**Case study: Making a large single asset real estate transaction** • Reviewing the large scale, single asset process

	• Where can investors expect to look next? • Who is doing this right today? **Ramu Chakravarthy,** Regional Director, **TrustPlutus**		• Realigning the involvement of fund managers with investment goals • Reviewing the new positioning of LPs in the asset allocation process • Redefining the manager's role in the 2018 landscape and management of outperforming portfolios *Reserved for sponsor*		• Where can investors look for the next big opportunity in premium assets? *Reserved for sponsor*
MENA FOCUS		**VENTURE CAPITAL**		**INFRASTRUCTURE INVESTING**	
15.20	Panel **Geopolitical challenges across the GCC: protecting and expanding portfolios** • Reacting to regional fragmentation and stabilising risks • Debating the consequences for regional and international investors • What are the most successful investment vehicles for the current environment? • Moving forward, what might the world expect? **Moderator: Rachel Pether,** Senior Advisor, **Sovereign Wealth Fund Institute** **Mohammad Al Duaij,** CEO, **Alea Global Group** **Huda AlLawati,** Chief Investment Officer, **Savola Group**	**15.20**	Panel **Investing in tomorrow's disruptors: venture capital and the Middle Eastern investor** • What have investors learned from VC investing thus far? • Why is investing into venture capital different and to what end it stand out from other strategies? • Highlighting the spaces and areas for maximum progress • Identifying return opportunities in the Middle East and beyond • Evaluating effective exit strategies **Trey Goede III,** Investment Director, **Aramco Entrepreneurship Ventures** **Christos Mastoras,** Founder and Managing Partner, **Iliad Partners** **Patrick Thiriet,** Chief Strategy Officer, **Choueiri Group** **Paul Kenny,** Managing Director, **AYM** & Founder**, Emerge Ventures**	**15.20**	Panel **Infrastructure - the emerging investment vehicle** • Highlighting the advantage of this asset class for investors – increasing requirement for infrastructure inside and outside the developed markets • Delivering low correlation with traditional assets and securing a cash flow to rival that of long term liabilities • Determining how far infrastructure investment can diversify portfolios and offer robust inflation protection
15.40	**The Middle East: investing in the post oil era** • Considering the traditional and alternative opportunities in the Middle East	**15.40**	**Panel: Venturing beyond geopolitical trends: deploying and raising VC specific capital** • Highlighting the current fundraising challenges and evaluating the impact	**15.40**	**Clean transport: the new frontier in infrastructure investing** • Reviewing investment opportunities in green,

	• Evaluating the post oil prospects in the GCC • Implications for MENA and the international investor • Looking to emerging regions and anticipating trends for 2019 **Nabil Nazer,** Chief Investment Officer, **Al Sulaiman Group**		of currency fluctuation, cashflow generation, etc. • Noting out-performing strategies • Considering the demographical shift towards technology dependence, will the focus on innovation pay off for VC investors? **Sharifa AlBarami,** Managing Director, **Oman Technology Fund** **Omar Almajdouie**, Founding Partner, **RAED Ventures** **Walid Hanna,** CEO, **Middle East Venture Partners** **Suneel Gokhale,** Partner, **Venture Souq** **Chris Rogers,** Partner, **Lumia Capital**		environmentally friendly transportation modes • Generating value through decarbonised operations: impact on investors • Reacting to societal pressures for socially responsible investing and governance: supporting government initiatives • Deploying capital and technology at scale in underdeveloped markets • Evaluating smart investment vehicle for maximum ROI **Simon Pickett,** Investment Director, **Octopus Investments**
					GROWING ENERGY MARKETS
16.00	**Regional specific mega trends: a Middle Eastern transformation** • Understanding and reacting to the cyclical and structural trends • Assessing the projected outlook for MENA • Gauging the impact of macro-economic risks on regional specific asset classes • How will the region keep the upward trends? **Dr Henry Azzam,** Director, MS Finance Program, **Suliman Olayan School of Business, American University of Beirut &** Former CEO & Chairman, **Social Security Fund of Jordan**	**16.00**	**Case study: Ascending to the global stage** • Unearthing a start-up with international potential • Developing a regionally focused player into an international company • Reaching the optimum performance for maximum returns and scalable growth • Considering the benefits and risks for the VC, angel and seed investor **Khaled Talhouni**, Partner, **Wamda Capital**	**16.00**	**Going green and riding the renewable energy wave** • Reviewing long term value propositions in renewables • Considering the future of renewable energy markets • Discovering where the specific vehicles are for investing in wind, wave, solar and geothermal power **Fahad Alnuhait,** Director of Investments, **Dussur**
16.10	**Investment opportunities in the UAE: regional insights, trends and emerging outperformers**	**16.10**	**Investing in SMEs**	**16.10**	**The outlook for oil: drilling down the facts** • Exploring the bigger picture, addressing the macro effect of oil

	• Which sectors and asset classes are showing the most promise in the region? • How can these spaces can be most readily and effectively accessed by both regional and international investors? • Evaluating the level of anticipated returns • Looking to local tourism, business, infrastructure etc. *Reserved for sponsor*		• Uncovering the potential of regional SME investment and exploiting the space • Analysing the growth of crowdfunding and the impact for large scale, long term investors • Weighing up the risks and rewards *Reserved for sponsor*		prices on global economies and markets – reviewing investment strategy • How are GCC economies adapting to the slumped oil prices • Speculating oil value for 2018 and beyond *Reserved for sponsor*

16.20 Networking break

MANAGING RISK

Host: **Rachel Pether,** Senior Advisor, **Sovereign Wealth Fund Institute**

17.00 **Keynote:** **Administrating, acknowledging and accumulating risk in investor portfolios**

- Examining the value of well-defined risk management processes, controls and governance processes
- Adopting superior risk management capabilities
- Utiilising risk to produce enhanced and repeatable risk-adjusted returns
- What are the risk management strategies and structures of the future?

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17.20 **Keynote Interview:** **Strategies to mitigate risk for an enigmatic future**

- Reviewing best practice for the institutional investor
- Enhancing due diligence and security of risk management requirements
- Producing solid, balanced long-term risk-adjusted performance – what is overlooked or underweighted?
- Maintaining meaningful allocation to alternatives – what role will this have into 2019?

Martin Botha, Director of Risk Management, **Public Investment Fund, Saudi Arabia**
Luis J. Roman, Ph.D., Senior Investment Officer, Director of Risk Management, **Massachusetts Pension Reserves Investment Management**
Interviewer: **Rachel Pether,** Senior Advisor, **Sovereign Wealth Fund Institute**

17.40 Close of day one

18.00 After-hours networking party

Main conference agenda day two – 8 May 2018

TRANSITIONING GLOBAL PARADIGMS

Host: **Hussein Sayed,** Anchor, **Bursat Al Alam, CNCB Arabia**

09.00 **Keynote:** **Inflation, reflation, deflation - navigating economic instability**

- Examining the wider catalytic forces determining the global economic change shaping the future of the financial markets
- Overcoming today's challenges and focusing on understanding the future – preparing for tomorrow's projected opportunities
- Deploying capital in a low yield environment most effectively
- Reviewing the fluid rate of inflation and the impact on portfolios

09.20 **SWF Panel:** **Rearranging the Central Bank balance sheet: evaluating Q.E, monetary and fiscal policy**

- Reacting to the transforming monetary and fiscal policies
- Adapting to decisions made on Q.E. and meeting the challenge of the sustained low return environment
- Examining the effects on capital markets as the central banks decrease monetary stimulus
- What will the new economic cycle look like, what can investors expect at the close of 2018?

Moderator: **Hussein Sayed,** Anchor, **Bursat Al Alam, CNCB Arabia**

09.40 **Keynote:** **Tactical positioning in stabling markets: recovery and reformation**

- Reviewing regulatory reforms and the effect of long term structural trends
- Evaluating key influential factors and disruptors in 2018,
  - shrinking working age populations
  - potential growth rates in advanced economies
  - reimagined corporate governance
  - overvalued US stocks
- Assembling a winning portfolio while considering the paradigm shifts destabilising the world
- Identifying the improved global financial systems and addressing the challenges and opportunities for investors
- Generating alpha over benchmarks to meet growth objectives

Andrew McCaffery, Global Head of Client-Driven and Multi-Manager Solutions & member Investment Management Committee**, Aberdeen Standard Investments**

10.00 **Keynote:** **Preparing for the next cycle: are portfolios ready?**

- What does the post crisis cycle look like for investors 10 years on?
- Discovering the outperforming strategies and the opportunities in international markets
- Reacting to the exceeded inflation – where are the benefits?

- Avoiding previous mistakes in allocating assets

Reserved for platinum sponsor

10.20 Networking break and refreshments

11.20 Streams begin: attendees can visit any of the conferences below

SRI & ESG INVESTING: SECTOR SPOLIGHTS		ASSET ALLOCATION & PORTFOLIO CONSTRUCTION Host: **David Gibson Moore,** President, **Gulf Analytica &** Advisor, **Abu Dhabi Global Market (ADGM)**		EVOLVING HEDGE FUND LANDSCAPE	
11.20	Panel **Seeking alpha in the healthcare market** • Where are the most lucrative opportunities in developed international healthcare markets to deploy assets? • Escaping traditional investment vehicles in the space: reviewing opportunities across private equity and mutual funds • Considering alternative derivatives across biotech, medical tourism, healthcare real estate – where are the emerging spaces? **Adil Al Zarooni,** CEO, **Al Zarooni Emirates Investments** **Habib Al-Assaad,** Executive Co-Director, **AFAQ Group - Office of Sheikha Latifa M.b.M** **Dr Ahmed Emara,** Founder, Group CEO & Managing Director**, ReYa Holding & Investor**	**11.20**	Panel **Evolving allocations in the face of political ambiguity - looking to old and new risks** • Anticipating lower interest rates while reacting to emerging risks masked by excess liquidity • Evaluating the potential dollar shortage and rethinking the growing amounts of global debt • Looking at the long-term opportunities and securing portfolio resilience for the 2018 investor **Marinos G. Gialeli,** CEO, **Hotel Employees Provident Fund** **Luis J. Roman, Ph.D.,** Senior Investment Officer, Director of Risk Management, **Massachusetts Pension Reserves Investment Management**	**11.20**	Panel **Hedge funds: shock absorption for the risk-averse investor** • Reviewing the hedge fund of 2018 thus far • Capitalising on anticipated growth • Exploring alternative and outperforming hedge fund strategies • Examining the new wave of boutique funds • Why has there been evidence of lower returns? **Tom Tull,** Chief Investment Officer, **Employees Retirement System of Texas**
11.40	**EdTech: an SRI revolution**	**11.40**	**Adapting to changing market regimes: co-investing capabilities**	**11.40**	**Navigating the risk/return spectrum** • Reviewing approaches outside 'traditional' hedge fund structures

	• Evaluating the innovation trends that are driving capital into the EdTech market • Discovering the demographic forces keeping EdTech a prominent emerging alternative • Examining the new technological demands of millennial learner and the digital technologies required • Defining return potential from this growing alternative asset class **Abhishek Sharma,** CEO, **Foundation Holdings**		• Harnessing the benefits of working directly alongside other large-scale investors • Reacting quickly to co-investment opportunities • Looking to the most successful co-investment deals and transactions **Karim Radwan,** Director – MENA Investments**, RIMCO**		• Adopting diversifying return drivers from reinsurance to arbitrage • Using quantitative and factor based strategies to dilute overcrowding • Reviewing alternative beta, hedge fund of funds, to lessen downside risk
12.00	**Accelerating 'AgInvesting'** • Exploring agricultural supply chains, ecosystems, commodities and the benefits of stabilising economies • Achieving the optimum diversified global portfolio based on the current cultural needs – where are the best opportunities for FDI? • Utilising direct vs listed investment vehicles in the sector • Examining how far agricultural commodities can deliver returns resilient to inflation and offer long-term views for growth	**12.00**	**Impact investing in modern portfolio theory** • Highlighting initiatives for responsible investment and incorporating the strategy into MPT • Recognising the wider importance of impact investing - highlighting the importance and the benefits • What do the next generations of impact investors care about and what will impact investing look like in 2030? • Weighing up the implications for MENA **Habib Al-Assaad,** Executive Co-Director, **AFAQ Group - Office of Sheikha Latifa M.b.M**	**12.00**	**Paradigms shifts: the future of hedge fund allocation** • Reviewing the technological landscape ahead and the influence of contemporary structural changes and trends • Is the industry ready for computer driven hedge funds? • Will there be any effect on allocated long term institutional capital?
12.10	**ESG investing: advancing the 21st century portfolio** • Recognising the continually evolving factors/disruptors in ESG asset classes • Supplementing existing investment processes alongside clear investor enjoyment • Considering the potential material risks to security valuation and understanding the financial impact	**12.10**	**Absolute return strategies: seeking alpha in 2018** • Building intelligent portfolios based on where global influencers are focusing • Adjusting to the changing political and economic conditions • Strategies for protecting investor capital in bear markets	**12.10**	**The potential for hedge funds in an uncertain industry environment?** • Placing long term capital in this investment vehicle to achieve maximum returns • Securing 'value added' for investor satisfaction • Selecting hedge funds and allocating capital directly to the manager

	• Valuing markets and companies for initial investment opportunities *Reserved for sponsor*		• Using absolute returns to generate returns while controlling risk and reaching performance objectives *Reserved for sponsor*		*Reserved for sponsor*
12.20	**Roundtables** **Keeping the human touch relevant: robotic collaboration** **Analysing manager skill vs luck** **Aligning infrastructure asset classes with long term goals**		**Family offices: trends and opportunities in 2018** **Dr. Sami Alom**, Director, **Kasamar Holdings** **Is 60/40 still relevant?** **Public vs private equity**		**Beyond traditional indexing: innovation in ETF markets and strategy** **AI and trading – what are the implications?** **Energy sector funds and the correlation between developed market and energy growth**

13.00 Networking lunch

TECH DISRUPTION		**PORTFOLIO DIVERSIFICATION** **Host:** **David Gibson Moore,** President, **Gulf Analytica &** Advisor, **Abu Dhabi Global Market (ADGM)**		**CREDIT MARKETS**	
14.20	Panel **Digital Darwinism: the digital investor** • When technology and society evolve faster than an organisation can adapt, what are the challenges and disruptors for investment ecosystems? • Adopting digital transformation initiatives and sourcing specific human capital support • Automation and machine learning: removing emotion and biases - the impact on ROI	**14.20**	Panel **Avoiding correlated assets: achieving uncorrelated returns** • Evaluating outperforming diversifying methodologies and vehicles • Determining assets with negative correlations • Taking advantage of dry powder	**14.20**	Panel **Will the credit market bubble burst?** • Assessing the effect of uncertain equity markets and the current benign credit cycles • What does it mean for investor portfolios? • What will the landscape look like if it does?

	Siddharth Kumar, Director, **Imperium Capital** **Souhail Khoury,** Investment Associate, **Berytech Fund 2** **Moustafa Magar,** Head of Spin off Investment, **Saudi Aramco Entrepreneurship Ventures** **Moderator: Bruno Dupire,** Head of Quantitative Research**, Bloomberg**				
14.40	**Is data becoming the new oil?** • Highlighting the opportunities in generating big data • Future of data science and analytics – generating and securing data • Digitally tracing investment trends to make sounder decisions – having a 'gods eye view' of the financial markets • The impact of the 'data economy' on investors – examining old and new risks	**14.40**	**Portfolio protection in toxic, benign markets** • With the measure of volatility at an all-time low, should investors be concerned? • Examining market dangers - toxic positioning, aggressive hunt for yield and short volatility positioning • Using volatility to protect portfolios - looking for correlations • When can we expect the period of low volatility to end? **Luis J. Roman, Ph.D.,** Senior Investment Officer, Director of Risk Management, **Massachusetts Pension Reserves Investment Management**	**14.40**	**Today's credit markets: challenges and opportunities** • Evaluating key trends shaping the current environment • Reviewing investor challenges • Looking to opportunities in debt funds and distressed and private debt • Achieving higher levels of transparency, effective methods of risk management and secure governance • Understanding competition for capital in the credit markets
15.00	**The value of Blockchain: an investor's guide** • Using the cryptographic distributed ledger to secure transactions, establish smart contracts and transfer asset ownership • Leaping forward with technology, keeping strategies, risk and business models up to pace with western contemporaries • Exploring advantages of the extreme volatility of the asset classes supported by blockchain	**15.00**	**Illiquidity and creating the perfect vehicle blends** • Exploiting the 'best of both worlds' approach to incorporating illiquidity into portfolios – public vs private equity • Reconfirming the advantages of illiquidity, which assets provide the highest illiquidity premium – are there enough to go around? • What due diligence needs to be taken when adding illiquidity to portfolios	**15.00**	**EM debt: resilience and recovery** • Economic factors supporting the rise of opportunity in EM debt markets. Taking a selective and preemptive approach • Looking to commodity prices, structural reforms and cheaper currencies as stabilising fundamentals across the asset class • What are the risks for investor portfolios?

15.10	**Robotics and AI for investing** • Exploring the new world of unstructured data • Discovering how to apply artificial intelligence to finance • Considering machine Learning for investing: sentiment, alpha extraction, optimally learnt strategies **Bruno Dupire,** Head of Quantitative Research, **Bloomberg**	15.10	**Rethinking traditional diversification strategies** • Looking beyond typical strategies for optimum diversification • Facilitating the adoption of emerging approaches • Meeting the needs of individual goals • When is enough diversification enough? *Reserved for sponsor*	15.10	**US corporate debt for the foreign investor** • Reviewing the opportunities for foreign investors • Satisfying appetite for higher-yielding debt and lower risk premium in low interest rate environments • Securing the right bonds: corporate vs government – a comparison *Reserved for sponsor*
DEMOGRAPHIC CONSIDERATIONS		**MACRO TRENDS 2**		**EQUITY MARKETS**	
15.20	Panel **Population fluctuation: impact on financial markets** • Examining the implications of the aging population of the West • Discussing the effect of the rising ratio of dependent to working population and longer life expectancies • Reacting to the flood of equities and bonds due to the forced selling of retirement plans	15.20	Panel **Assessing external macro factors – what is the 'market sentiment' for the investor?** • Looking to the growing influence of the developing world on markets • Reviewing regulatory changes, developing economic cycles and technological disruption • Debating collaboration rather than competition across institutional capital	15.20	Panel **Enticing equity markets** • Where are the geographical regions and industry sectors with the most promise? • How are institutional investors using ETFs – discussing the sweet spots and new strategies to exploit these markets • Exploring the 'next generation ETF' • Utilising smart beta strategies in ETF exposure – what are the risks?

	• Reviewing the challenges met by institutional investors worldwide as a result **Tiago Severo,** Lead Economist, Managing Director's Office, **Abu Dhabi Investment Authority**				
15.40	**Emerging technology: embracing innovation** • Studying the strategies employed for investing in tech • Extrapolating geographical and investment advantages • Increasing allocation from early to growth stage to established tech companies and products: benefits and risks • Are digital and technological investments living up to the hype? **Catherine Shiang,** Managing Director, **Asia Capital Advisor, Ltd.**	**15.40**	**Climate change and the physical risks to real assets** • Appraising and mitigating risks posed by changing climates • Protecting portfolios and carbon sensitive assets from extreme climate change • Implementing climate considerations to portfolios and reviewing regulatory reforms • Considering sustainability investments for both ESG purposes and seeking higher returns	**15.40**	**The 2018 outlook for commodities** • Keeping a bullish approach for the asset class in the evolving economic landscape • Considering effects of Trump and US congress legislation stimulating growth and inflation on commodity value • Which sectors are experiencing head or tail winds – where are the largest opportunities?
16.00	**Social capital markets: the sharing economy driving overall value** • Acting upon this paradigm shift and making promising long-term investments • Capturing returns in an increasingly connected world • Accessing sharing economy exposure • Assessing sectors/industries at risk as a result of new and disruptive business models **Noor Sweid,** Chief Investment Officer**, Dubai Future Foundation, UAE**	**16.00**	**The shift from physical to tangible, how the knowledge economy is driving inflation** • Determining how far the rise and expansion of intangible assets is steering secular inflation • Shifting from physical to tangible assets, what are the risks for advanced and developing economies • What returns are investors in these environments experiencing? • Is secular stagnation here to stay?	**16.00**	**Active vs passive investing – time to take both approaches?** • Considering active vs passive approaches to generate alpha over benchmarks to meet growth objectives • Using this strategy to avoid behavioural biases • What are the advantages for employing both strategies?
16.10	**Embracing the technological revolution: preparing for a digital, millennial-run future**	**16.10**	**Establishing a modern, fixed income portfolio** • Analysing current macro factors impacting the 2018 investor and fixed income assests	**16.10**	**Accepting innovation: digital trading** • Using trading innovation to make decision based on data collection

	• Reviewing how tech-savy millennials are forcing a shift in strategies and systems • Harnessing the sense of 'trust' built between millennials and technology • Reviewing the benefits and risks of multidisciplinary managers • Preparing for the new wave of investors and managers. • Considering the impact on business models, returns and wider expectations *Reserved for sponsor*		• What signs should investors be looking out for in fluid/uncertain political and economic landscape? • Deciding the asset classes with exposure to high returns and low risk through 2018 *Reserved for sponsor*		• Reviewing how unconventional ETF allocations can absorb risks and maintain long term focus • Exploring the innovative investment tools available to discover profitable opportunities *Reserved for sponsor*

16.20 End of conference day two

16.30 Closing networking refreshments

LACERA

March 30, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: Request Approval for International Travel Prior to Completing the Education and Travel Policy Requirement

At its February 14, 2018, the Board approved to waive the Education and Travel Policy requirement, Section 705.07 D. 4, for Trustee Sanchez, which requires a trustee to successfully complete the State Association of County Retirement Systems (SACRS) Public Pension Investment Management Program or the University of Pennsylvania Wharton School of Business Portfolio Concepts and Management course prior to attending an international investment conference and in its place approved attendance and travel reimbursements at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California.

Since the Boards approval, Mrs. Sanchez accepted an invitation to participate on a panel discussion at the State Association of County Retirement Systems (SACRS) Spring Conference on May 15-18, 2018; and therefore, will not be able to attend the UCLA Anderson Executive Education – Corporate Governance Program (UCLA Program) on May 15-17, 2018. In lieu of the May UCLA Program, Mrs. Sanchez will be attending the next UCLA Program on September 25-27, 2018 in Los Angeles, California.

Mrs. Sanchez requests that your Board permit international attendance at the 2018 Middle East Summit in Dubai, United Arab Emirates on May 7- 8, 2018 prior to her completing the UCLA Program in September. The 2018 Middle East Summit in Dubai will be placed for approval at the April Board meeting as a separate item.

Section 705.18 of the Education and Travel Policy provides, "For good cause presented in writing, and in the exercise of its sound discretion, the Board of Retirement or the Board of Investments may waive compliance with specific requirements of this Policy when in the best interest of LACERA."

IT IS THEREFORE RECOMMENDED YOUR BOARD:

Approve international attendance for Trustee Sanchez at the 2018 Middle East Summit in Dubai, United Arab Emirates on May 7- 8, 2018 prior to her attendance at the UCLA Anderson Executive Education – Corporate Governance Program on September 25-27, 2018 in Los Angeles, California.

RH/lg
Attachment

LACERA

February 6, 2018

TO: Each Member
Board of Investments

FROM: Robert R. Hill RRH
Interim Chief Executive Officer

FOR: Board of Investments Meeting of February 14, 2018

SUBJECT: Request to waive Education and Travel Policy requirement and in its place approve attendance at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California

Board member, Gina Sanchez, requests that your Board waive the Education and Travel Policy requirement, Section 705.07, D. 4, that requires a Board member to successfully complete the State Association of County Retirement Systems (SACRS) Public Pension Investment Management Program or the University of Pennsylvania Wharton (Wharton) School of Business Portfolio Concepts and Management course and in its place accept attendance at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California.

Ms. Sanchez has a long career in investment management and is the founder and CEO of Chantico Global, LLC, as well as a contributor and guest host for CNBC. She has more than 20 years of experience managing asset allocation mandates for mutual funds and foundations, and consulting with pension funds and family offices. Given her extensive expertise in this industry, the SACRS or Wharton courses will not likely add materially to Ms. Sanchez's knowledge, and therefore they would not serve the purpose of the Education and Travel Policy requirement. Attending the UCLA Anderson Executive Education Program would be more beneficial to Mrs. Sanchez and to LACERA in helping provide a useful educational foundation for her LACERA Board service.

At its October 2017 meeting, the Board of Investments approved the UCLA Anderson Executive Education Program. A copy of the conference agenda is attached for reference.

IT IS THEREFORE RECOMMENDED YOUR BOARD:

Waive the Education and Travel Policy, Section 705.07 D. 4, for Trustee Sanchez and in its place approve attendance at the UCLA Anderson Executive Education – Corporate Governance Program on May 15-17, 2018 in Los Angeles, California; and approve reimbursement of all costs associated with the conference according to LACERA's Education and Travel Policy.

RH/lg
Attachment

Active U.S. Small Capitalization Equity Manager Search

Board of Investments Meeting
April 11, 2018

TED WRIGHT
PRINCIPAL INVESTMENT OFFICER, GLOBAL EQUITIES

DALE JOHNSON
INVESTMENT OFFICER

BRENDA CULLEN
INVESTMENT OFFICER

Public Equities Active U.S. Small Capitalization Equity Manager Search

Board of Investments
April 11, 2018

Ted Wright, CFA, FRM, PRM, CAIA
Principal Investment Officer – Global Equities

Dale Johnson
Investment Officer – Global Equities

Brenda Cullen
Investment Officer – Global Equities

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Manager Search Process and Transition Timeline*

Board/ Committee Approval — Jun. 2017
- RFI and Minimum Qualifications (MQs) approved by BOI

RFI Distributed — Jul. 2017
- RFI published
- Manager Search Committee established

RFIs Assessed — Aug. 2017
- MQ assessments
- Qualified RFIs scored
- Managers selected for In-House Interviews

In-House Interviews — Nov. 2017
- In-House Interviews conducted
- Manager assessments
- Managers selected for On-Site Interviews

On-Site Interviews — Jan. 2018
- On-Site Interviews conducted
- Additional organizational due diligence performed
- Final scores assigned

Recommend to BOI — Apr. 2018
- Interview recommendations presented to BOI

May 2018

- Finalist manager presentations and hire recommendations proposed to BOI

Funding — Aug. 2018
- Contract review and execution
- Assets transitioned from Index Fund to managers
- Funding of mandates

Text Color Key:

Black – manager search activity

Blue – transition activity

Gray – completed activities

*Manager search process in accordance with LACERA's Investment Policy Statement and Public Markets Search Process.

Public Equities Active U.S. Small-Cap Equity Manager Search

"What was the motivation for an active U.S. small-cap equity manager search?"

	Annualized Returns (%)			
	3 Year	5 Year	7 Year	ITD (Since Inception)
Small/Mid-Cap Composite (Gross)	10.0	14.6	12.1	11.2
Small/Mid-Cap Composite (Net)	9.3	13.9	11.4	10.5
Benchmark: Russell 2500 Index	10.1	14.3	12.2	12.9

Data based on ending market value as of December 31, 2017. Common period for performance begins from April 2010.

Public Equities Active U.S. Small-Cap Equity Manager Search

"Why the choice of an active U.S. small-cap equity manager search as opposed to mid-cap?"

- Small-cap equity market generally less efficient
- Dedicated small-cap mandates may enhance the expected risk-return profile

	eVestment Median U.S. Managers (in basis points)			
	Large-Cap	Mid-Cap	Small/Mid-Cap	Small-Cap
Outperformance Relative to Benchmark Index[1]	17	48	75	112
Typical Fee	42	57	71	75

[1] Based on gross-of-fees returns over the ten-year period ended December 31, 2017.
[2] Fees calculated based on the weighted average median fee using Public Equity managers' recent AUM as of 2017. Small-cap management fee based on AUM of $300M.

Performance and Correlation

Manager vs Russell 2000: Information Ratio[1]

April 2010 - December 2017 (*returns greater than 1 year are annualized*)

	3 years	5 years	7 years
Small/Mid-Cap Composite	0.02	0.13	0.16
Cooke & Bieler	0.66	0.46	0.80
PanAgora	0.01	0.85	1.08
QMA	0.59	0.85	1.34
Systematic	1.58	1.17	0.72

Correlation Matrix: Excess Returns vs. Benchmark[2]

April 2010 - December 2017

	Small-/Mid-Cap Composite	PanAgora	Systematic	Cooke & Bieler	QMA
Small/Mid-Cap Composite	1.00				
PanAgora	-0.11	1.00			
Systematic	0.15	0.00	1.00		
Cooke & Bieler	0.03	-0.09	0.20	1.00	
QMA	-0.05	0.47	0.07	0.07	1.00

[1] Analysis utilized Zephyr StyleADVISOR, based on monthly net-of-fee returns. Common period for performance begins from April 2010.

[2] Excess returns are based on the difference between managers' monthly net-of-fee returns and respective benchmark returns. The benchmark for the Small/Mid-Cap composite is the Russell 2500 and the benchmark for Small-Cap candidates is the Russell 2000.

Recommendation

Investment Manager	Final Score
QMA	**95**
Systematic	**93**
Cooke & Bieler	87
PanAgora	86

- Invite QMA and Systematic to interview with the Board of Investments in April.
- Meketa has independently assessed the merits of the small-cap respondents and concurs with staff's recommendation.

TABLE OF CONTENTS

April 2, 2018

TO: Each Member
Board of Investments

FROM: Ted Wright, CFA, FRM, PRM, CAIA
Principal Investment Officer – Global Equities

Dale Johnson
Investment Officer – Global Equities

Brenda Cullen
Investment Officer – Global Equities

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **PUBLIC EQUITIES ACTIVE U.S. SMALL CAPITALIZATION EQUITY MANAGER SEARCH**

RECOMMENDATION

Invite the following firms to interview with the Board of Investments (Board) for active U.S. small capitalization (cap) equity mandates: 1) Quantitative Management Associates, LLC (QMA), and 2) Systematic Financial Management, LP (Systematic).

EXECUTIVE SUMMARY

On June 14, 2017, the Board authorized staff to issue a Request for Information (RFI) for active small capitalization U.S. equity managers. The purpose of this search is to identify qualified managers within the active U.S. small cap investment manager universe for potential addition to LACERA's U.S. equity composite. Small cap is generally considered a less efficient segment of the U.S. market; thus, the addition of dedicated small cap mandates may enhance the returns of the U.S. equity composite.

In July 2017, staff issued an RFI for active U.S. small cap equity managers in accordance with the Board-approved investment manager search process for public markets and the minimum qualifications (MQs) specified in LACERA's Investment Policy Statement. In an effort to narrow the universe to those managers with solid, consistent longer-term track records, the MQs included an excess return performance requirement. Thirty-eight responses were received, 27 of which met the RFI's minimum qualifications. Staff evaluated and ranked the responses using LACERA's standard two-phase assessment process: 1) evaluation of the written RFI response, and 2) in-house and on-site interviews.

The first phase, or evaluation of RFIs, confirmed the quality and consistency of each manager's performance and assessed qualitative factors historically associated with continued success. Qualitative criteria included an assessment of each manager's organization (including a review of Securities and Exchange Commission (SEC) audits and past or pending litigation); professional staff; investment philosophy, process, and research; performance, trading, and operations; and fees. Submissions were ranked based on the weighted average of each manager's qualitative (75%) and quantitative (25%) scores.

The firms with a combined qualitative/quantitative score of 75 or above were invited to continue into the second phase of the evaluation process, comprised of in-house interviews and on-site due diligence. This phase is intended to provide a deeper understanding of the firms' investment processes, familiarity with key decision-makers, and comfort with risk controls and back office functions such as operations and trading. For this part of the evaluation process, seven firms were invited for in-house interviews, four of which advanced to on-site due diligence.

Upon the completion of phase two, final scores were assigned which reflected all information gathered throughout the evaluation process **(Table 1)**. These scores were based on a critical assessment of all the criteria enumerated above in addition to a comprehensive analysis of each firm's risk management, systems, operations, and compliance functions.

Table 1: Final Scores

Investment Manager	Final Score
Quantitative Management Associates	**95**
Systematic Financial Management	**93**
Cooke & Bieler	87
PanAgora Asset Management	86

A brief summary of the two recommended finalists is included below, while a more detailed discussion of both finalist firms is located in the **Manager Assessment** section of this memo.

Quantitative Management Associates (Final Score 95). QMA has been managing U.S. equity strategies since the firm's inception in 1975 and introduced the U.S. Small Cap Core Equity strategy in 2009. Staff views the experience of the investment team, the strategy's disciplined and differentiated investment process that is both adaptive and fundamentally-based, and the firm's research-driven and team-oriented culture as key strengths. The small cap product is managed by a five-person team led by Mr. Peter Xu, Head of Research and Portfolio Management for U.S. Core Equity (24 years of investment experience) and Ms. Stacie Mintz, Managing Director and Portfolio Manager (23 years of investment experience). Mr. Xu and Ms. Mintz experienced investors with long tenures in both the industry and at QMA.

> **Systematic Financial Management (Final Score 93).** Founded in 1982, Systematic began managing assets for U.S. tax-exempt clients in the firm's Small Cap Free Cash Flow strategy in 1993. Systematic's strengths include the team's extensive experience in small cap investing and its investment process which focuses on a company's cash flow and financial strength in order to limit downside risk. The team, headed by Mr. Ken Burgess, lead Portfolio Manager (24 years of investment experience in the industry and with the strategy at the firm), is deep in talent and broad in experience. Together, they demonstrate a strong commitment to their philosophy and knowledge of small cap investing.

The remaining managers selected for on-site interviews, Cooke & Bieler and PanAgora Asset Management, were well-regarded by staff but did not rank as highly as the recommended managers after on-site interviews due to lower relative scores in operations/compliance and investment process/research, respectively. The consistency of scoring across all categories was an additional consideration in reaching this recommendation.

In sum, from a broad pool of active U.S. small cap managers all of whom passed the excess performance requirement, staff believes that it has identified two high-quality managers which exhibit the performance, organizational, and fit characteristics that could provide a benefit to LACERA's existing U.S. equity composite. From a performance perspective, both managers have consistently exceeded LACERA's excess return expectation for managers in a small cap mandate over a seven-year period. From a fit perspective, the low correlation of each manager's excess returns to those of the existing U.S. equity composite indicates that they would have a diversifying effect on the portfolio.[1] The two managers are also complementary to each other, exhibiting a low level of correlation in excess returns and differing in terms of investment philosophy and process (Systematic uses rigorous fundamental analysis in constructing concentrated, traditional value portfolios while QMA applies a quantitative process to construct less concentrated, higher-quality portfolios). Finally, both managers ranked highly on measures that have historically been associated with continued success such as soundness of philosophy, consistency of process, and quality and stability of investment personnel. Further, both firms demonstrated the back office and risk control functions that are prerequisites to managing institutional assets.

Accordingly, staff recommends inviting QMA and Systematic to interview with the Board for active U.S. small cap equity mandates.

BACKGROUND

On September 14, 2016, LACERA's general consultant, Meketa Investment Group, presented a review of LACERA's public equity program to the Board of Investments. In

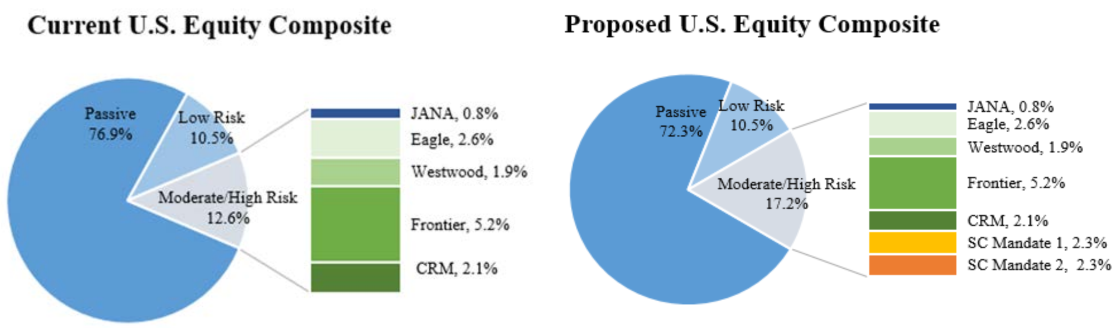
[1] Excess return correlation measures how similar a manager's excess return stream is to that of LACERA's existing U.S. equity composite.

their presentation, Meketa observed that, over the past decade, LACERA's public equities composite performance has been index-like, with the U.S. composite lagging its benchmark moderately and the non-U.S. composite offsetting the U.S. composite's underperformance.

To enhance the U.S. composite's returns, Meketa recommended that LACERA split its combined small- and mid-capitalization (SMID) mandates into separate groups. As a reminder, the majority of assets within the U.S. equity composite are passively managed (approximately 77%) with the remainder of the composite's assets invested in low risk (primarily, enhanced) and moderate-to-high risk SMID cap mandates **(Table 2)**. The rationale for the recommendation was to index the more efficient large- and mid-cap areas of the market while seeking to enhance the portfolio's excess return by hiring active small cap managers in what is generally considered the less efficient segment of the market.

Table 2: Proposed U.S. Equity Composite

$13.2 billion assets under management as of 12/31/17



Source: State Street. As of December 31, 2017.

Staff conducted an independent review and came to a similar conclusion: active management in the large- and mid-cap areas of the U.S. equity markets has been most challenged over time. Per eVestment, the median large- and mid-cap managers have outperformed their respective indices by only 17 bps and 48 bps (gross-of-fees) over the ten-year period ended December 31, 2017. [2] On a net-of-fees basis, therefore, results would be even more muted. Conversely, the median small cap manager has outperformed the index by 112 bps gross-of-fees during the same period.

LACERA's prior search for SMID equity managers in 2008 resulted in the hiring of Cramer Rosenthal McGlynn (CRM) and Westwood Investment Management (Westwood). As it has been nine years since the last SMID cap search, staff believes that it is appropriate to review the small cap universe and potentially refresh the current manager line-up.

[2] The median large cap manager is measured versus the Russell 1000 Index, the median mid cap manager is measured versus the Russell Mid Cap Index, and the median small cap manager is measured versus the Russell 2000 Index.

EVALUATION PROCESS

The active U.S. small cap equity manager search was initiated in July 2017 using the Board-approved investment manager search process for public markets and the minimum qualifications specified in LACERA's Investment Policy Statement. A detailed explanation of the two-phase evaluation process is presented in the **Evaluation Process** section of this document while a summary is provided below.

Phase one of the evaluation process consisted of a qualitative and quantitative evaluation of the RFI responses aimed at confirming the quality and consistency of each manager's performance as well as determining the prospect for each manager to enjoy continued success. AUM characteristics (such as size, quality, and concentration) and back office procedures were also reviewed to assess the risk of asset loss and the ability of each firm to manage institutional assets. Qualitative criteria included an assessment of each manager's organization; professional staff; investment philosophy, process, and research; performance, trading, and operations; and fees. A detailed presentation of each manager's ranking is shown in the section labeled **Phase One Scoring Matrix**. Submissions were ranked based on the weighted average of each manager's qualitative (75%) and quantitative (25%) scores, and the seven highest-ranked managers with scores of 75 or above were advanced to the next phase of the evaluation process. Consistent with staff's normal search procedures, phase one scores were set aside so that candidates advanced to phase two with a clean slate.

Phase two of the evaluation process consisted of in-house and on-site manager interviews. The interviews provided staff with an opportunity to further clarify RFI responses as well as gain a greater appreciation for the managers' investment processes, investment professionals, trading, operations, compliance, and other areas of potential risk or competitive advantage. In the first part of this stage, staff conducted in-house interviews at LACERA with the seven highest-scoring phase one candidates (**Table 3**).

Table 3
Firms Invited for In-House Interviews

Investment Manager	Phase One Score
Quantitative Management Associates	89
Cooke & Bieler	82
Systematic Financial Management	77
PanAgora Asset Management	77
Brandywine Global Investment Management	77
Investment Counselors of Maryland	75
Aristotle Capital Boston	75

Of the seven firms that were interviewed at LACERA's offices, the four firms with the highest scores advanced to the final round of on-site interviews for further in depth evaluation: Cooke & Bieler, PanAgora, QMA, and Systematic.

Following the on-site interviews, final scores reflecting the in-house and on-site interviews were assigned. These scores are shown in **Table 1** on page 2 of this memo in order of highest to lowest rank. While all four firms were well regarded by staff, only QMA and Systematic are recommended for Board consideration. The remaining two firms, Cooke & Bieler and PanAgora Asset Management, did not rank as highly as the recommended managers due to lower relative scores in the performance, trading, and operations areas and investment philosophy, process, and research sections, respectively.

CONCLUSION

In July 2017, staff issued an RFI for active U.S. small cap equity managers using LACERA's Board-approved investment manager search process for public markets and in accordance with the minimum qualifications specified in LACERA's Investment Policy Statement. Twenty-seven responses met the minimum qualifications. Staff evaluated the managers using the customary two-phase approach. The evaluation resulted in the identification of the following two finalists: Quantitative Management Associates and Systematic Financial Management.

The two firms are high-quality managers which utilize disciplined and unique investment processes, employ dedicated and knowledgeable investment professionals, and possess solid, long-term performance track records. With risk-adjusted returns generally in line with or slightly better than other respondents, QMA and Systematic have also scored highly on attributes that would indicate continued success and have demonstrated the organizational capability required to manage institutional assets. Finally, both managers exhibit fit characteristics that may benefit LACERA's existing U.S. equity composite.

For the reasons enumerated earlier, staff would propose hiring both managers, allocating $200-400 million to each using separate account vehicles. Under the proposed separate account structure, LACERA would retain all beneficial ownership rights, including proxy voting authority, and vote proxies of underlying securities in accordance with LACERA's *Corporate Governance Principles.* The funding for these two mandates would come from passive U.S. equity strategies, reducing the U.S. composite's weight in passive equities from 77% to 71-74% (35-75% target) and raising its weight in active equity moderate/high risk from 12% to 15-18% (10-30% target) as of December 31, 2017, depending on the amount allocated. The addition of the proposed active U.S. small cap equity mandates would be a significant milestone for LACERA in its year-long effort to allocate a dedicated proportion of its active U.S. composite to the smaller, less efficient areas of the U.S. equity market.

LACERA's general consultant, Meketa Investment Group, collaborated with staff throughout this search and concurs with conclusions reached.[3] Accordingly, staff recommends that the Board of Investments invite Quantitative Management Associates and Systematic Financial Management to interview for active U.S. small capitalization equity mandates.

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[3] Meketa's memo is included in section IX of this document labelled Meketa Memorandum.

The remainder of this presentation report is as follows:

Section II:	Evaluation Process
Section III:	Manager Assessments
Section IV:	Phase One Scoring Matrix
Section V:	Performance and Risk Analysis
Section VI - VIII:	General Manager Information (information provided by the firm about their organization, answers to additional questions, and key personnel biographies.)
Section IX:	Meketa Memorandum
Section X:	Appendix

Noted and Reviewed:

Jonathan Grabel
Chief Investment Officer

EVALUATION PROCESS

OVERVIEW

The active U.S. small capitalization (cap) equity manager search was conducted using staff's customary two-phase approach. Phase one consisted of a qualitative and quantitative evaluation of RFI responses that met the search's minimum qualifications. The factors reviewed as part of the qualitative analysis were: 1) organization, 2) professional staff, 3) investment philosophy, process, and research, 4) performance, trading, and operations, and 5) fees, while those that comprised the quantitative portion were: 1) information ratio, 2) upside capture, 3) downside capture, and 4) excess return correlation. Total phase one scores for each manager were calculated by combining each firm's qualitative score (weighted 75%) with their quantitative score (weighted 25%). A complete list of phase one scores is located behind the tab labeled **Phase One Scoring Matrix**.

In phase two of the evaluation process, staff conducted in-house interviews in LACERA's office and on-site interviews at each manager's principle place of business.

PHASE ONE: REQUEST FOR INFORMATION (RFI) EVALUATION

Phase one of the evaluation process focused on the quality and consistency of a manager's performance and attempted to assess qualitative factors that have historically been associated with continued success. For this reason, the qualitative portion of this phase was given a weight of 75%, while a 25% weight was assigned to the quantitative portion.

Qualitative Evaluation

The following four categories were used in the qualitative assessment of the RFI responses (category weights in parenthesis):

> ***Organization (15%)***
>
> The section includes a review of the firm's history, ownership structure, products offered, assets under management (AUM), capacity limits, client base, and turnover. Securities and Exchange Commission (SEC) audits and past or pending litigation were also reviewed.
>
> A firm's ownership structure is considered important for two primary reasons. First, the availability of direct ownership opportunities for employees generally improves recruitment and enhances retention. Second, privately owned firms may not have the same pressure to generate profits as firms owned by public entities and may be in a better position to manage asset growth to preserve performance. Firms that were either employee-owned and/or offer ownership opportunities for key professionals were viewed more favorably than those that were publically-owned firms or were wholly-owned subsidiaries of public firms.

Recent organizational changes were also reviewed for their potential impact on the firm, its investment team, and/or its investment process. Organizational changes that appeared to be disruptive were scored negatively.

AUM characteristics were carefully assessed because rapid growth, a base that is too large, and/or capacity limits that are not suitable, could have a negative impact on a manager's performance. Rapid growth or a large asset base may result in the dilution of a manager's best ideas or may curtail his/her ability to invest in the smallest cap securities in its universe. Conversely, a firm with insufficient assets may lack the resources needed to provide the robust risk controls, compliance, infrastructure, or personnel needed to support the investment team. Accordingly, asset growth capacity limits were key topics of discussion with firms committed to reasonable growth and capacity limits viewed more favorably.

Although the RFI minimum qualifications specified a three-year performance history, firms with a longer history of managing U.S. small capitalization equity strategies and products with longer track records were viewed more favorably.

Firms with a substantial institutional (as opposed to retail) client base were also given preference as institutional clients tend to have longer investment horizons and may therefore exert less selling pressure on illiquid small cap securities moving in and out of strategies. Material client turnover attributable to manager-related deficiencies was scored negatively.

Firms with clean SEC audits, no current or previous litigation, and no investigations were viewed more positively.

Finally, this category included a review of the firm's Form ADV reports (parts I and II), code of ethics, personal trading policies, and disaster recovery/business resumption plans. As part of the RFI response, firms are required to disclose information regarding their use of any placement agents.

Professional Staff (25%)

Skilled and experienced investment professionals are critical to the continued success of any investment strategy. Important factors in this category included portfolio manager continuity, staff turnover, size and depth of the investment/research team, and portfolio manager experience investing in the small capitalization portion of the U.S. equity market. Diversity of investment professionals was also evaluated.

The portfolio manager is primarily responsible for developing, defining, implementing, and monitoring the investment process. Analysts, traders, and research personnel also play important roles in gathering information to buy, hold, or sell decisions which ultimately determine the portfolio's performance. Therefore, well-established investment firms with seasoned professionals were viewed favorably as was low turnover within key investment professional ranks.

Further, firms with portfolio managers and research analysts responsible for multiple, dissimilar products received lower scores than those with teams that focus on a single product or related products.

Due to less extensive sell-side coverage of smaller capitalization stocks, small cap strategies, both fundamental and quantitative, require a greater degree of internal research. Accordingly, staff viewed firms with deep and experienced teams and strong internal capabilities as having a competitive advantage over those that relied primarily on external research. Additionally, products employing a unique or specialized research focus or process were viewed more favorably.

Finally, organizations with recent turnover (or reassignment) in senior management positions were viewed less favorably due to the possible negative impact on the organization's corporate culture and the potential for additional departures.

Investment Philosophy, Process, and Research (30%)

This critical category encompasses the firm's core investment principles, decision-making process (including security analysis, portfolio construction, and buy/sell disciplines), and risk controls.

Staff evaluated how investment ideas are initially identified in the security selection process. Although many U.S. small capitalization managers employ some form of quantitative screening technique to identify investment opportunities, some managers also utilize qualitative tools. Staff viewed the use of multiple approaches to idea generation more positively than approaches relying solely on a single quantitative screen.

The consistent and disciplined application of an investment process is another key determinant of a manager's ability to repeat past successes. Managers that have shown consistency in security selection, portfolio construction, and in the implementation of buy/sell disciplines as well as those who exhibit strong portfolio risk controls, were viewed more favorably than those who did not.

Due to less extensive sell-side coverage and higher trading costs of small capitalization stocks, staff sought to identify firms with strong internal research capabilities and gave preference to firms that demonstrated robust analytical methods in identifying investment opportunities and who incorporated liquidity considerations into the security selection process.

While a team approach may provide certain advantages with respect to portfolio construction and key man risk, staff generally gave preference to strategies with a clearly identified decision-maker as it is easier to gain insight into, and therefore confidence in, one person's thought process. Strategies that utilized a team-based approach were assessed to determine what advantages, if any, their approach offered.

Staff evaluated each product's style bias. Due to a higher level of volatility in the small capitalization segment of the market, strategies that were not highly stylized (i.e., neither deep value nor aggressive growth) were viewed more favorably.

Finally, firms that had a policy that address Environmental, Social, and Governance issues in the investment process were viewed more positively.

Performance, Trading, and Operations (20%)
This category assessed each manager's trading capabilities, operations, performance, compliance procedures, and risk management.

Staff verified that returns were calculated in compliance with the CFA Institute's Global Investment Performance Standards (GIPS), and that GIPS compliance was certified by an independent third party.

Large dispersions in a manager's returns between client accounts may be a concern because a prospective client cannot be certain which return history to expect. Lower dispersions in returns were preferred to large dispersions, and explanations for large differences in returns were assessed for reasonability.

As the small capitalization market is less liquid than its larger-cap counterpart, small cap stocks are more difficult and more expensive to trade. Accordingly, firms with the following characteristics were viewed favorably: traders with extensive small cap experience, risk-controlled trade processes, and processes that monitor trade costs on a regular basis.

Staff reviewed each firm's trade order management system and operations processes to understand how information flows across different groups and the types and capabilities of systems used. Firms that utilized automated systems to integrate portfolio management, trading, risk management, compliance checks, accounting, and settlement were viewed positively as such processes minimize manual errors.

Fees (10%)
This category assessed managers based on provided fee quotes. Separate accounts were preferred and managers with lower fees received higher scores.

Quantitative Evaluation
Managers received a quantitative score comprised of the four quantitative measures listed below (as calculated by Zephyr Associates'StyleADVISOR). All measures were equally weighted. Managers received a relative ranking score for each of the four components and then the scores were combined to arrive at each manager's total quantitative score.

1. ***Information Ratio*** – measures a manager's excess return per unit of excess risk incurred (i.e., how much a manager outperforms a benchmark divided by the amount of risk the manager takes relative to that benchmark). Higher

information ratios imply that investors are better rewarded per unit of risk incurred.

2. ***Upside Capture*** – the amount a manager's performance increases relative to its benchmark in a rising stock market environment. For example, if the benchmark increases 10% during a year and the manager's portfolio rises 12%, the manager's upside capture is 120%. Conversely, if the benchmark increases 10% and the manager's portfolio only rises 8%, the manager's upside capture is 80%. All else equal, a higher upside capture number is superior to a lower one.

3. ***Downside Capture*** **–** the amount a manager's performance decreases relative to its benchmark in a declining stock market environment. For example, if the benchmark falls 10% during a year but the manager's portfolio declines only 7%, the manager's downside capture is 70%. Conversely, if the benchmark falls 10% and the manager's portfolio declines 11%, the manager's downside capture is 110%. A lower downside capture figure is superior to a higher one.

4. ***Excess Return Correlation*** – the correlation of each manager's excess returns to those of LACERA's existing U.S. equity composite (Composite) may help determine its diversification benefits. Managers that exhibit a low correlation of excess returns relative to LACERA's existing managers would tend to provide greater diversification, and thus ranked higher than a manager with a higher level of correlation.

Total scores for phase one were calculated using each manager's RFI qualitative score (75% weight) and each manager's aggregate quantitative score (25% weight). Detailed manager scores are located behind the **Phase One Scoring Matrix** tab. The firms with phase one scores of 75 or higher advanced to phase two, the interview phase, of the evaluation process. Consistent with staff's normal search procedures, phase one scores were set aside so that the candidates advanced to phase two with a clean slate.

PHASE TWO: INTERVIEW PROCESS

In-House Interviews
The interviews at LACERA enabled staff to go beyond the written RFI and gain a deeper understanding of each manager's investment philosophy and process. They also provided staff with an opportunity to ask questions about the RFI, as well as to identify and evaluate each firm's competitive advantage.

Key investment decision-makers were requested to attend the interviews. Staff evaluated the managers on their ability to clearly articulate their investment philosophy, process, and capabilities and ranked them accordingly.

On-Site Interviews
The on-site interviews at each manager's office enabled staff to obtain even more in-depth knowledge about each firm. Staff met with each firm's management and other investment team members, as well as with the individuals responsible for the operations, compliance, and trading

functions. Staff reviewed each manager's investment process again, ensuring consistency with their previous presentation and RFI response.

The on-site interview also provided staff with the opportunity to assess each organization's culture and gain additional insight into the manager's values and business practices. A firm's corporate culture affects its ability to recruit and retain people, as well as employee morale. The on-site visit enabled staff to get a sense of these qualitative aspects of each firm.

Final Fee Quote

Following the on-site interviews, staff asked the two finalists, QMA and Systematic, to provide a final fee quote based on an allocation of between $200 million and $400 million. To preserve the integrity of the evaluation process and ensure that the manager negotiated in good faith, staff will withdraw any recommendation to retain a manager if the manager attempts to renegotiate their fee subsequent to this memorandum.

Final Manager Scores

Upon completion of on-site interviews, each manager received a final score. Final scores were based on all information gathered during the evaluation process. Reference checks were also conducted. Final scores are presented in **Table 1**.

Table 1

Investment Manager	Final Score
QMA	**95**
Systematic	**93**
Cooke & Bieler[1]	87
PanAgora Asset Management[2]	86

[1] Cooke & Bieler scored lower on Performance, Trading, and Operations.
[2] PanAgora Asset Management scored lower on Investment Philosophy, Process, and Research.

MANAGER ASSESSMENT

QUANTITATIVE MANAGEMENT ASSOCIATES (FINAL SCORE 95)

Organization

Quantitative Management Associates (QMA), a global asset management firm headquartered in Newark, New Jersey, is a wholly-owned subsidiary of PGIM, Inc. (formerly Prudential Investment Management) and an indirect, wholly-owned subsidiary of Prudential Financial, Inc., a publicly-held company (NYSE:PRU). QMA is a signatory to the UN Principles for Responsible Investment.

Providing U.S. equity investment management services for institutional clients since 1975, QMA managed $137.5 billion in global multi-asset solutions, quantitative equity, and equity index strategies as of December 31, 2017. The firm's U.S. Small Cap Core Equity (SCCE) strategy, initiated in 2009, had $2.0 billion in strategy assets under management as of calendar year-end. The firm estimates capacity of approximately $5.0 billion in this strategy.

Professional Staff

QMA's SCCE strategy is managed by a team of seven investment professionals based in Newark, New Jersey. Mr. Peter Xu, head of the U.S. core equity team, has over 24 years of investment experience, 23 of which have been with QMA. Mr. Xu has overall responsibility for the research and portfolio management of the SCCE strategy as well as ultimate decision-making authority for changes to its model. Mr. Xu earned a BS in Nuclear Physics (Fudan University, Shanghai), an MA in Economics (Rice University), and a PhD in Finance (University of Houston).

Ms. Stacie Mintz, managing director and portfolio manager (PM), would be the lead portfolio manager for the LACERA account. Ms. Mintz has a BA in Economics from Rutgers University, an MBA in Finance from New York University, and 25 years of investment experience (23 of which have been with QMA). Ms. Mintz's broader responsibilities include managing U.S. equity portfolios in the firm's core, long/short, and market neutral strategies as well as overseeing the implementation of, and ensuring data integrity for, the SCCE product.

The larger investment team includes ten additional PMs and research analysts with over 13 years of investment experience on average. All accounts are managed on a team basis with a heavy reliance on algorithmic portfolio construction. While the strategy's PMs do not have independent investment responsibility for specific accounts and buy/sell decisions are primarily model driven, they do provide oversight in conjunction with other members of the team by validating fundamentals and ensuring model integrity.

Investment Process

QMA believes that inefficiencies in the U.S. small cap equity space create mispriced securities that active managers with a systematic process have the ability to exploit. To capitalize on these opportunities, QMA has developed an adaptive, systematic process, based on fundamental insights that incorporates over 300 fundamental, market, and forecast data items per stock. As part of QMA's unique adaptive process, factor weights are adjusted to reflect the individual growth profile for each company using a process called contextual modeling. Simply put, the strategy's model will vary the emphasis placed on valuation, growth, and quality factors as a company's growth prospects change.

The goal of the portfolio construction process is to produce a well-diversified core portfolio with the valuation, growth, and quality characteristics capable of producing consistent levels of alpha in diverse markets. To accomplish this goal, QMA employs a three-step investment process: 1) definition of the investment universe, 2) stock selection, and 3) portfolio construction. In the first stage of the process, QMA refines a broad investment universe roughly equivalent to the Russell 3000 Index to narrow its focus to the smallest 2,000 stocks. Out-of-benchmark names can be considered as part of the opportunity set to provide a higher level of active share but in aggregate are limited to ten percent of the portfolio. Fundamental data for universe constituents is then examined to ensure integrity.

The stock selection process consists of a bottom-up fundamental analysis of all of the stocks in the small capitalization universe. Weights, adjusted for each company's individual growth profile, are assigned to each factor and resulting scores are used to rank order universe constituents. Rankings from the stock selection process are then combined with transaction cost data to obtain a cost-adjusted ranking for each stock in the universe.

A proprietary optimizer is used to construct and rebalance portfolios. Optimization inputs include cost-adjusted stock rankings and benchmark-related limits for individual security, industry, sector, size, and style exposures. The output of this process is a range of optimal portfolios that maximize expected excess returns across the risk spectrum. Portfolio managers can then select the optimized portfolio that best suits their clients' needs. To ensure diversification and avoid undesired bets, neutral exposures are maintained with respect to sectors and industries, and size and style. Active position sizes are limited and each stock's liquidity profile considered.

The result of this process as it relates to the SCCE strategy is a well-diversified portfolio of 300-500 stocks that generally tilts towards value, growth (at a reasonable price), and quality while maintaining a neutral posture relative to other, less stable sources of market risk. QMA expects the SCCE strategy to achieve an annual excess return of 3-4% with tracking error of 3-5% across a full market cycle.

QMA has a defined approach to ESG. In line with QMA's goal to add value to the portfolio, QMA focuses its research on ESG best practices that may have a positive impact on portfolio performance and may reduce portfolio risk. Its stock selection models include governance-related quality factors, such as management and board quality. It is further developing its capacity to identify and integrate investment-relevant ESG factors and is a member of the Investor Advisory Group of the Sustainability Accounting Standards Board.

Observations

QMA has managed U.S. equity strategies since its founding in 1975 and the SCCE strategy since 2009. The depth and experience of QMA's investment management team is one of the firm's competitive advantages. Mr. Xu and Ms. Mintz are seasoned, dedicated investors, each with more than two decades of investment experience, the vast majority of which was acquired together at QMA. As a whole, the team is well- qualified with an average of 18 years of investment experience

(17 years on average at QMA) and a combined seven bachelor degrees, six masters' degrees, two doctorate degrees, and two Chartered Financial Analyst (CFA) designations. The entire investment team is based in the firm's Newark, New Jersey office, a location that offers opportunities for intellectual stimulation as well as quality of life, a combination that many of the firm's urban competitors cannot provide. The tenure of the strategy's investment team as well as the firm's support staff is a testament to QMA's ability to attract and retain talented investment professionals.

QMA's quantitative approach to factor investing, based on a systematic application of financial theory further supported by fundamental analysis, is unique. The model underlying the firm's U.S. Small Cap Equity strategy analyzes over 3,000 stocks daily, assessing the attractiveness of each security using approximately 300 fundamental and market data items, each of which has solid theoretical underpinnings. The inclusion of additional data items or other proposed changes to the model are thoroughly vetted for significance by extensive testing before inclusion.

An additional competitive advantage is the adaptive nature of the strategy's model that is altered to take into account a company stage in its life cycle as well as shifting market conditions. Further distinguishing features are a proprietary algorithm that emphasizes factors associated with persistent alpha while maintaining neutrality to those that are less stable and including transaction costs and liquidity when evaluating a company's attractiveness.

Since the inception of the strategy in 2009, QMA has made several enhancements to its model and considers such changes to be a normal part of the investment process as financial markets evolve. Accordingly, research is continuously conducted to identify additional factors capable of improving the model's performance. New factors are added only after extensive back testing, not only to fully understand their significance over time but also to ensure seamless implementation. Changes to the model in the last three years include the addition of the following data items: credit quality, sales-to-price, target price ratio, and board quality.

A concern that surfaced during due diligence was that the strategy, although almost ten years old, has not yet experienced a downturn. Despite having posted solid net-of-fee performance over most major time periods and since inception (+340 basis points annualized versus the Russell 2000 index), the strategy was initiated after the financial crisis and, therefore, its performance track record does not incorporate any periods of material market stress. To gain greater comfort with how the strategy might perform in periods of dislocation, staff analyzed the performance of QMA's Midcap Core Equity strategy that was initiated in 1996. Staff observed that, while annualized performance was solid across all major periods, the strategy lagged in a few shorter intervals (e.g. 1998, 2001, 2005, 2008, 2009) when one factor, typically momentum or value, strongly dominated. To improve the strategy's performance during these periods, QMA introduced an enhancement to the model that uses the earnings yield spread across stocks in the underlying universe to assess the dispersion in valuations. The weights of value and quality factors in the model can be adjusted to reflect anticipated turning points accordingly. This enhancement is expected to smooth volatility in the strategy's performance at inflection points in the future.

An unrelated QMA strategy was a finalist in a 2012 search but was not presented to the Board due to a delay in the disclosure of an error in the strategy's model discovered after the RFP was submitted. QMA explained that the delay was due to continued analysis in determining materiality and the need to notify current clients first. All clients affected were made whole and trading costs reimbursed for all accounts, including those that had experienced gains. The strategy proposed here relies on an unrelated model and is managed by a separate team. Discussions with both the investment and compliance teams have offered staff reassurance that adequate safeguards are in place to avoid such errors in the future. A letter detailing the nature of the issue and remedies taken is appended to the end of this memo as **ATTACHMENT 1**.

In summary, QMA's investment philosophy and process for its SCCE strategy are differentiated and the firm's trading, operations, compliance, and risk functions well developed and suitable for an institutional client. The investment team is intelligent, experienced, and engaged, and provided reassurance regarding the strategy's potential behavior despite a shorter-track record.

Staff has a high degree of confidence in QMA and recommends the SCCE strategy as a finalist for LACERA's U.S. Small Cap Equity mandate.

QMα | a PGIM company

March 2, 2018

Dear LACERA:

This letter serves to provide detail surrounding certain events that occurred in early 2012 when QMA was a finalist in an unrelated search, but not presented to the Board due to a delay in disclosing an error in the underlying model after the RFP was submitted. After a thorough assessment period, all clients affected were made whole and trading costs were reimbursed including those accounts that experienced gains. Our intent is to provide you with a timeline of that period and to describe the nature and resolution of the event with clients, process enhancements, and future expectations.

Timeline

- On March 21, 2012, the Head of the International Quant Core Team informed QMA's Chief Compliance Officer that his team had identified an error in the processing of certain international portfolios. The source of the error was identified late on March 20, 2012 (as described further below), and affected portfolios from the period January 26, 2012 to March 20, 2012.
- On March 22, 2012, the affected portfolios were rebalanced with updated information.
- From March 22, 2012 to March 30, 2012, QMA senior management, including risk, compliance and legal officers, met to determine the course of action and methods of analysis to calculate the performance impact on client accounts.
- From March 30, 2012 to April 2, 2012, initial communications were made to those clients whose portfolios were affected by the error as an early alert that a potential issue in the construction of their portfolios was being reviewed. Internally, QMA determined corrective actions, formulated the portfolio variances, and calculated the basis point impact on each account's performance. We advised clients that we expected the impact analysis to take an extended period of time. No other information was provided at that time because we had not concluded our review.
- On April 4, 2012, QMA hosted LACERA Investment professionals for an onsite due diligence on QMA's Emerging Markets Core strategy. Topics of discussion included Firm overview, investment process, compliance and risk management, operations and business continuation. QMA did not initiate a discussion of the ongoing review of the international model issue during the meeting.
- On or about April 11, 2012, QMA was notified by LACERA that our participation in the final for the Emerging Markets strategy was terminated due to lack of disclosure of the error. It became clear to us, in retrospect, that regardless of materiality, pro-active disclosure of an issue with a model to a late-stage prospect is expected.
- From April 2, 2012 to the conclusion of the issue, QMA determined corrective actions, formulated the portfolio variances, and calculated the basis point impact on each account's performance.
- Between April 30, 2012 and May 2, 2012, we sent a final notification to the affected clients describing the nature of the issue, the impact to their accounts, and the corrective measures that we were taking.
- Following our notification to clients, client accounts were made whole. There were 25 accounts affected, most impacted by +/-10 bps; one outlier had a -40bp impact. As is our policy, accounts with gains retained the gain and were also reimbursed for transaction costs incurred in connection with our rebalancing of the portfolios with updated data on March 20, 2012. Accounts with a loss were reimbursed for that loss, with interest, plus transaction costs.

QMA did not lose any clients as a result of the issue, was not subject to legal action or additional due diligence by any client and subsequently received an additional investment in the strategy from one of the affected clients. We believe our communications with our clients during the resolution of this issue reinforced the trust they have in QMA.

Nature of the Issue and Remedies

On January 26, 2012 a formatting change affecting an input file used by an international portfolio construction program caused stale stock ratings to be used in the rebalancing of a number of portfolios through March 20, 2012. The impact of the stale data file on the portfolios was subtle, so it took some time for us to recognize that there was an issue.

The model that underlies the international strategies is distinct from the US model that underlies the US Small Cap Core strategy currently under consideration by LACERA. Nevertheless, once we discovered the issue with the international model, we reviewed the US model to prevent a similar issue from occurring.

As a result of the error, we also put the following additional safeguards in place:

- we established a development environment for developing, modifying and testing model changes;
- we created a tool to formalize the procedure for promoting model changes to the production environment; and
- we purchased a vendor solution for source code management to maintain version control for all of our investment management programming.

Expectations for the Future

We have controls in place to detect these issues promptly, and have a reimbursement policy that favors the client. Complex issues, such as the one in 2012, are unusual for us, and we have not had one of comparable complexity before or since that time. We have developed, and will always strive to develop, enhanced quality control and review practices to prevent and detect process errors.

That said, if any issues were to occur, minor or more extensive, we would continue to communicate quickly and clearly with our clients. We pledge to extend that same level of transparency to LACERA.

Sincerely,

Brad Zenz

Brad Zenz
Managing Director, Head of North American Sales

MANAGER ASSESSMENT

Systematic Financial Management, L.P. (Final Score 93)

Organization

Systematic Financial Management, L.P. (Systematic) was founded in 1982 and became a subsidiary of Affiliated Managers Group, Inc. in 1995. Systematic is headquartered in Teaneck, New Jersey and offers investment management services for U.S. and international equity strategies.

As of December 31, 2017, Systematic's total assets under management were $5.3 billion, of which $1.6 billion was in the Small Cap Value Free Cash Flow (SCV) product. Systematic estimates there is approximately $900 million of capacity remaining in the SCV product. Systematic is not a signatory to the UN Principles for Responsible Investment.

Professional Staff

The lead portfolio manager for the SCV product is Kenneth Burgess, CFA, Lead Portfolio Manager. He is supported by Ryan Wick, CFA, Assistant Portfolio Manager and eight other assistant portfolio managers and equity analysts. Mr. Burgess has been with Systematic for over 24 years. Mr. Wick has been with Systematic for 12 years and has over 18 years of investment experience.

The broader investment team includes eight portfolio managers (PMs), with over 22 years of experience on average, who are responsible for the investment process and research for all of Systematic's equity products. The PMs are integral to the research process as they incorporate their experiences and observations from day-to-day research, monitoring of client portfolios, performance, and markets.

Investment Process

Systematic believes that small cap stocks are inefficient due to trends in investor sentiment which move stock prices away from their "true" economic value. Sytematic seeks to exploit the inefficiencies and identify attractively valued stocks by calculating the present value of an investment's future cash flows in a consistent manner. Systematic employs a fundamental process that provides a structured and disciplined approach to evaluating stocks and constructing a portfolio. The process incorporates analyzing a company's free cash flow potential and debt levels, which provide a ballast for managing through economic cycles and swings in investor sentiment.

The process begins by evaluating stocks in the small capitalization universe represented by the Russell 2000 Index. An initial quantitative screen is applied to the universe to narrow the list of prospective investments by focusing on cash flow, debt, and current price measures. The resulting list of approximately 200 companies are then modeled and analyzed in detail. The fundamental analysis consists of reviewing historical operating results, debt coverage, balance sheet, current business model, company management, and industry trends, as well as risks and opportunities related to environmental, social, and governance (ESG) factors. Systematic also employs a third party vendor to further identify relevant ESG factors. Systematic is trying to identify well-managed, financially sound companies that are trading at a discount to fair value, are generating strong operating and free cash flow, and have a catalyst for stock price appreciation.

Next, the portfolio is constructed on a bottom-up basis and position weights are determined by conviction and contribution to overall portfolio profile of low price to cash flow and low debt metrics. The objective is to construct a portfolio of quality companies that over the long term will be best positioned to withstand swings in investor sentiment and economic cycles.

The result is a well-diversified portfolio, holding approximately 100-150 stocks, and has an expected excess return of 2-3% with an expected tracking error of 3-5%. Individual security weights are limited to 5% of the portfolio. The holding period for a stock is typically three to five years. This relatively long period helps minimize trading costs by limiting the impact from turnover.

Staff's Observations

Staff views the experience, knowledge, and depth of the Systematic portfolio management team as one of the firm's competitive advantages. During the in-house interview, staff met with Mr. Burgess and was impressed by his knowledge of small capitalization stocks and his long history with the firm. Mr. Burgess was one of the original team members on the small capitalization product at Systematic, and his unique perspective on small capitalization stocks and the strategy is a valuable asset to the firm. Staff gained further confidence in the investment team after meeting with Mr. Wick, the Assistant Portfolio Manager for the small cap product during the on-site visit. Although he is an assistant portfolio manager, he appeared to have considerable input and decision-making responsibilities on the product.

Another competitive advantage that distinguishes Systematic's product from its peers is the behavioral aspects of the fundamental investment process. Typically, behavioral insights are incorporated into quantitative investment strategies. However, Systematic takes a long-term view and attempts to identify companies that can navigate economic cycles and changes in investor sentiment.

A third competitive advantage is Systematic's long-term track record. The strategy has been active for 25 years and experienced many market cycles and environments. The knowledge and experience gained over that time has reinforced the firm's conviction in its philosophy and process and supported the execution of the strategy.

Staff's main concern about Systematic was related to investment personnel and potential key-person risk. Mr. Burgess has been with the firm for 25 years and many of the other senior investment staff have been with the firm for over 20 years. However, the firm is already developing its next group of lead portfolio managers by assigning assistant portfolio managers to each strategy and offering them partnership status. Within the SCV strategy, there is a broad range of tenure and experience to ensure continuity and refreshment.

Systematic's SCV strategy has delivered very solid performance, beating its benchmark on a net-of-fees basis for all annualized periods going back to the product's inception 25 years ago. Since inception, the strategy has outperformed the Russell 2000 Index by over 500 basis points annually. Staff has a high level of confidence in the Systematic portfolio management team, their investment process, and the SCV strategy. Therefore, staff recommends Systematic as a finalist.

PHASE ONE: TOTAL MANAGER SCORE

	MANAGERS	REQUEST FOR INFORMATION (QUALITATIVE)	RISK FACTORS (QUANTITATIVE)	TOTAL
		75%	25%	100%
1	Quantitative Management Associates LLC	70	19	**89**
2	Cooke & Bieler, LP	65	17	**82**
3	Systematic Financial Management, L.P.	66	11	**77**
4	Brandywine Global Investment Management, LLC	62	15	**77**
5	PanAgora Asset Management, Inc.	60	17	**77**
6	Aristotle Capital	60	15	**75**
7	Investment Counselors of Maryland, LLC	65	10	**75**
8	Macquarie Investment Management – Core	52	19	**71**
9	Aberdeen Asset Management Inc.	52	19	**71**
10	Matarin Capital	52	19	**71**
11	Martingale Asset Management	52	18	**70**
12	Kayne Anderson Rudnick Investment Management, LLC	54	15	**69**
13	Tributary Capital Management, LLC	54	13	**67**
14	AB L.P.	53	13	**66**
15	River Road Asset Management, LLC	53	13	**66**
16	Victory Capital Management Inc.	51	14	**65**
17	ClearBridge Investments	52	13	**65**
18	Voya Investment Management	51	12	**63**
19	American Century Investment Management, Inc.	50	11	**61**
20	Macquarie Investment Management – Value	51	9	**60**
21	Brown Advisory LLC	51	9	**60**
22	William Blair Investment Management, LLC	48	11	**59**
23	Wellington Management Company LLP	49	7	**56**
24	The Boston Company Asset Management LLC	47	9	**56**
25	Cramer Rosenthal McGlynn, LLC	49	6	**55**
26	LMCG Investments, LLC	47	8	**55**
27	Fisher Investments	44	9	**53**

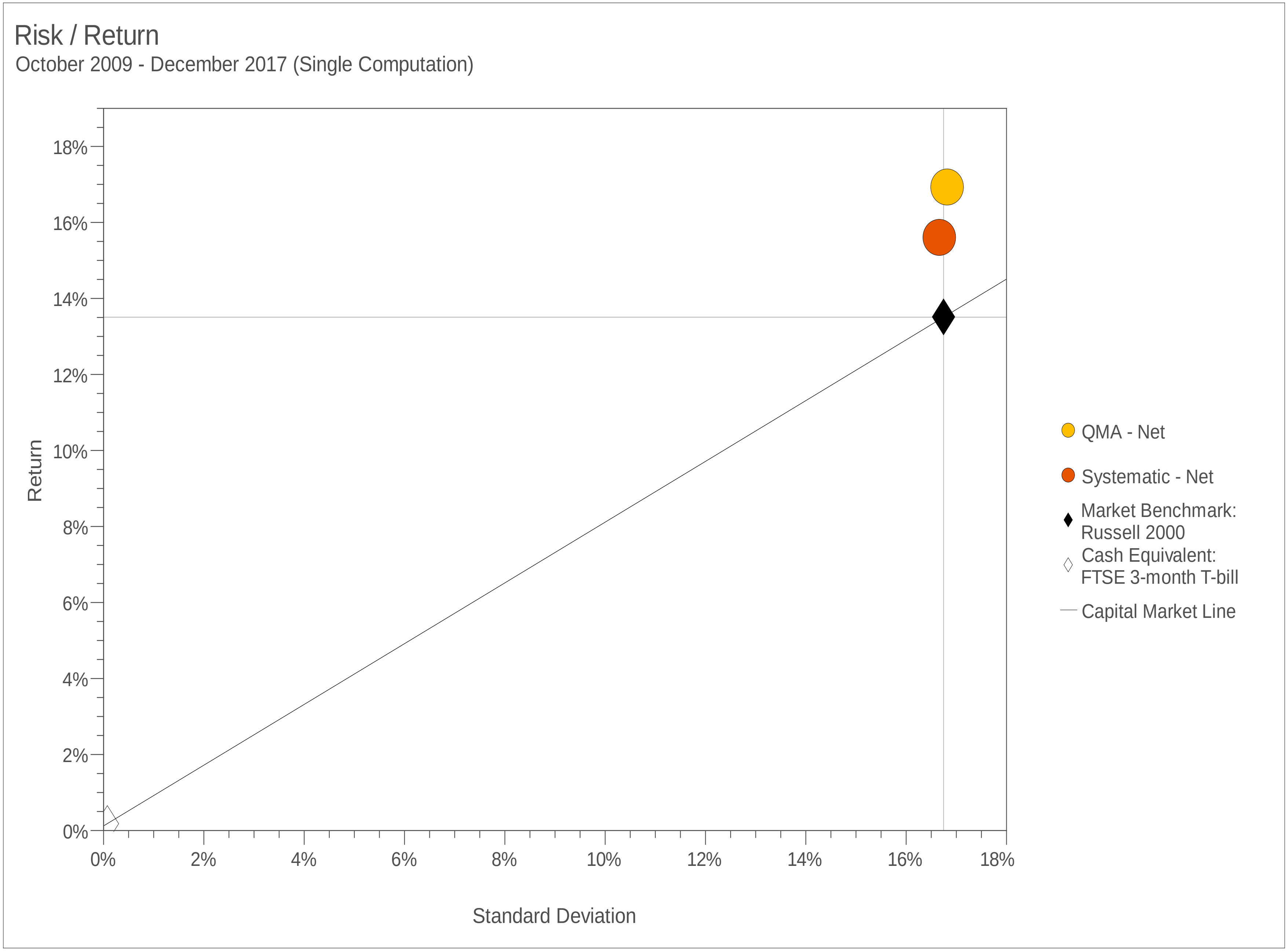
ANNUALIZED MANAGER PERFORMANCE
AS OF DECEMBER 31, 2017

MANAGERS	YEARS				
	ONE	THREE	FIVE	SEVEN	SINCE INCEPTION*
QMA (Gross-of-Fees)	13.0%	12.1%	16.9%	15.8%	17.7%
QMA (Net-of-Fees)	12.3%	11.4%	16.2%	15.0%	16.9%
Systematic (Gross-of-Fees)	25.0%	16.7%	19.0%	14.8%	15.1%
Systematic (Net-of-Fees)	23.8%	15.6%	17.9%	13.7%	14.0%
BENCHMARK					
Russell 2000 Index	14.7%	10.0%	14.1%	11.6%	
PEER UNIVERSES					
eVestment Small Cap Median	14.9%	10.6%	15.0%	12.7%	

*QMA since inception beginning October 2009. The Russell 2500 Index returned 13.5% during this time.
Systematic since inception beginning January 1993. The Russell 2500 Index returned 9.5% during this time.

CALENDAR YEAR
MANAGER PERFORMANCE
AS OF DECEMBER 31, 2017

	YEARS						
MANAGERS	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**
QMA (Gross-of-Fees)	13.0%	23.6%	0.8%	11.0%	40.0%	25.0%	1.9%
QMA (Net-of-Fees)	12.3%	22.9%	0.1%	10.2%	39.0%	24.2%	1.3%
Systematic (Gross-of-Fees)	25.0%	23.9%	2.6%	6.1%	41.5%	16.9%	-5.7%
Systematic (Net-of-Fees)	23.8%	22.7%	1.6%	5.0%	40.2%	15.8%	-6.7%
BENCHMARK							
Russell 2000 Index	14.7%	21.3%	-4.4%	4.9%	38.8%	16.4%	-4.2%
PEER UNIVERSES							
eVestment Small Cap Median	14.9%	20.6%	-2.9%	5.1%	41.5%	16.6%	-1.9%



SOURCE: Zephyr StyleADVISOR

RISK FACTORS
(Quantitative)[1]

	Managers	Information Ratio[2]	Up Capture[3]	Down Capture[4]	Excess Return Correlation[5]
		Raw Score	Raw Score	Raw Score	Raw Score
1	Quantitative Management Associates LLC	1.43	108.4%	92.2%	0.17
2	PanAgora Asset Management, Inc.	1.30	106.1%	92.5%	0.21
3	Macquarie Investment Management	0.89	99.7%	87.7%	0.20
4	Cooke & Bieler, LP	0.80	107.3%	87.3%	0.30
5	Matarin Capital	0.58	91.8%	80.1%	0.11
6	Aberdeen Asset Management Inc.	0.51	92.8%	79.9%	0.16
7	Aristotle Capital	0.47	97.3%	89.2%	0.25
8	Martingale Asset Management	0.45	79.5%	61.7%	-0.05
9	AB L.P.	0.45	100.8%	92.4%	0.29
10	Systematic Financial Management, L.P.	0.38	96.1%	89.8%	0.32
11	ClearBridge Investments	0.36	99.6%	93.3%	0.22
12	Kayne Anderson Rudnick Investment Mgmt., LLC	0.33	77.8%	61.3%	0.17
13	William Blair Investment Management, LLC	0.33	97.2%	89.3%	0.33
14	Victory Capital Management Inc.	0.32	89.3%	81.6%	0.18
15	Brandywine Global Investment Management, LLC	0.31	97.1%	90.9%	0.12
16	Voya Investment Management	0.31	92.4%	87.7%	0.23
17	Fisher Investments	0.24	95.0%	89.8%	0.38
18	Tributary Capital Management, LLC	0.22	89.3%	84.2%	0.16
19	Brown Advisory LLC	0.21	90.2%	83.5%	0.34
20	Investment Counselors of Maryland, LLC	0.18	95.3%	91.8%	0.26
21	Macquarie Investment Management	0.11	87.4%	83.3%	0.27
22	River Road Asset Management, LLC	0.03	75.9%	70.1%	0.04
23	American Century Investment Management, Inc.	-0.04	93.0%	93.0%	0.12
24	Wellington Management Company LLP	-0.05	97.2%	98.0%	0.28
25	The Boston Company Asset Management LLC	-0.07	124.0%	125.1%	0.27
26	LMCG Investments, LLC	-0.23	86.1%	88.2%	0.22
27	Cramer Rosenthal McGlynn, LLC	-0.38	89.5%	95.3%	0.23

[1] For 6.5 years ending June 30, 2017. Table is sorted by information ratio rank.
[2] The information ratio is the excess return per unit of excess risk. It is measured by dividing excess return by the excess risk.
[3] The up capture is the amount a manager's performance increases relative to the benchmark in an up equity market environment.
[4] The down capture is the amount a mangers' performance drops relative to the benchmark in a declining equity market environment.
[5] Excess return correlation measure how similar a manager's excess returns are in relation to LACERA's domestic equity composite. A lower number provides LACERA greater diversification benefits than a higher number.
SOURCE: Zephyr StyleADVISOR

QUANTITATIVE MANAGEMENT ASSOCIATES, LLC

ORGANIZATIONAL INFORMATION

As of December 31, 2017

ORGANIZATION		
HEADQUARTERS	2 Gateway Center, 6th Floor, Newark NJ 07102	
YEAR FIRM FOUNDED	1975	
WHERE MONEY IS MANAGED	1975	
OWNERSHIP STRUCTURE	LLC	
YEAR PROPOSED PRODUCT WAS INTRODUCED	2009	
ASSETS UNDER MANAGEMENT		
TOTAL FIRM ASSETS UNDER MANAGEMENT AS OF 12/31/2017	$137,529 million	
TOTAL PRODUCT ASSETS AS OF 12/31/2017	$2,026.6 million	
NUMBER OF INSTITUTIONAL CLIENTS IN PRODUCT	22 client accounts	
LARGEST ACCOUNT IN PRODUCT	$880 million	
PRODUCT ASSETS GAINED IN LAST 4 CALENDAR YEARS:	NUMBER OF NEW CLIENT ACCOUNTS	ASSETS GAINED ($MM)
2017	17	$172 million
2016	1	$110 million
2015	1	$44 million
2014	0	$0
PRODUCT ASSETS LOST IN LAST 4 CALENDAR YEARS:	NUMBER OF LOST CLIENTS	ASSETS LOST ($MM)
2017	0	$0
2016	0	$0
2015	0	$0
2014	0	$0
PROFESSIONAL STAFF		
PROPOSED LEAD PORTFOLIO MANAGER(S)	Stacie Mintz, CFA	
AVERAGE YEARS OF PORTFOLIO MANAGEMENT EXPERIENCE	24	
NUMBER OF RESEARCH ANALYSTS IN PRODUCT	10	
AVERAGE YEARS OF RESEARCH ANALYST EXPERIENCE	13	
PRODUCT PROFESSIONAL ADDITIONS FOR THE LAST 4 CALENDAR YEARS	NAME OF PROFESSIONAL	TITLE
2017		
2016		
2015		
2014		
PRODUCT PROFESSIONAL DEPARTURES FOR THE LAST 4 CALENDAR YEARS	NAME OF PROFESSIONAL	TITLE
2017		
2016	Daniel Carlucci	Portfolio Manager
2015		
2014		

Source: RFP Respondent

QUANTITATIVE MANAGEMENT ASSOCIATES, LLC
ORGANIZATIONAL INFORMATION

PROPOSED ANNUAL FEE STRUCTURE		
PROPOSED ANNUAL FEE BREAK POINTS (separate account)	Asset Based Fee: 55 bpts: First $100M 53 bpts: Next $100M 49 bpts: Thereafter	
PROPOSED EFFECTIVE FEE ON $200 MILLION (basis points)	54 bps	
PROPOSED EFFECTIVE FEE ON $200 MILLION (dollars)	$1.08 million	

Source: RFP Respondent

SYSTEMATIC FINANCIAL MANAGEMENT, L.P.

ORGANIZATIONAL INFORMATION

As of December 31, 2017

ORGANIZATION		
HEADQUARTERS	Teaneck, New Jersey	
YEAR FIRM FOUNDED	1982	
WHERE MONEY IS MANAGED	Teaneck, New Jersey	
OWNERSHIP STRUCTURE	Limited Partnership	
YEAR PROPOSED PRODUCT WAS INTRODUCED	1993	
ASSETS UNDER MANAGEMENT		
TOTAL FIRM ASSETS UNDER MANAGEMENT AS OF 12/31/2017	$5,280 M Discretionary AUM	
TOTAL PRODUCT ASSETS AS OF 12/31/2017	$1,587 M Discretionary AUM	
NUMBER OF INSTITUTIONAL CLIENTS IN PRODUCT	31 Institutional Clients	
LARGEST ACCOUNT IN PRODUCT	Approximately $620 M *(as of 12/31/2017)*	
PRODUCT ASSETS GAINED IN LAST 4 CALENDAR YEARS:	NUMBER OF NEW CLIENTS	ASSETS GAINED ($MM)
2017	2	$11 M
2016	1	$20 M
2015	0	$0 M
2014	1	$6 M
PRODUCT ASSETS LOST IN LAST 4 CALENDAR YEARS:	NUMBER OF LOST CLIENTS	ASSETS LOST ($MM)
2017	2	$36 M
2016	0	$0
2015	0	$0
2014	1	$58 M
PROFESSIONAL STAFF		
PROPOSED LEAD PORTFOLIO MANAGER(S)	Kenneth Burgess, CFA	
AVERAGE YEARS OF PORTFOLIO MANAGEMENT EXPERIENCE	22 Years	
NUMBER OF RESEARCH ANALYSTS IN PRODUCT	9	
AVERAGE YEARS OF RESEARCH ANALYST EXPERIENCE	17 Years	
PRODUCT PROFESSIONAL ADDITIONS FOR THE LAST 4 CALENDAR YEARS	NAME OF PROFESSIONAL	TITLE
2017	---	---
2016	---	---
2015	Mike Cikos, CFA	Equity Analyst
2014	---	---
PRODUCT PROFESSIONAL DEPARTURES FOR THE LAST 4 CALENDAR YEARS	NAME OF PROFESSIONAL	TITLE
2017	Elizabeth Howell, CFA	Equity Analyst
2016	---	---
2015	Christopher Hayes	Junior Analyst
2014	---	---
PROPOSED ANNUAL FEE STRUCTURE		
PROPOSED ANNUAL FEE BREAK POINTS (separate account)	Fees Below Are Based Upon Various Initial Allocation Levels If $200 M: 55bps on all assets If $300 M: 52bps on all assets If $400M or Above: 49bps on first $400M / 45bps over $400M	
PROPOSED EFFECTIVE FEE ON $200 MILLION (dollars)	$1,100,000	

Source: RFP Respondent

STAFF SUPPLEMENTAL QUESTIONS[1]

1. Please describe your investment philosophy as it relates to the active U.S. small capitalization equity product.

QMA's investment approach is grounded in the systematic application of financial theory and fundamental analysis. We believe that fundamentals drive stock prices. Prices, however, do not always follow fundamentals, which introduces opportunities to exploit pricing inefficiencies. The Quantitative Equity team seizes on such opportunities. Mispriced securities in the US small cap space may offer a particularly rich source of alpha, as less available information about small cap companies can create more efficiencies for potential exploitation.

- Our systematic, bottom-up process uses distinctive value, growth, and quality factors to identify and exploit inefficiencies that arise in markets, chief among them the behavioral biases of investors.

- As a company's growth prospects change, our adaptive, proprietary model varies the weights we place on valuation, growth, and quality factors. Our model also adapts factor weightings in extreme market conditions.

- We build broadly diversified portfolios. We focus on diversifying across keys risk factors, as well as at the stock level, to neutralize unintended portfolio risk and minimize exposures sensitive to exogenous shocks.

- QMA utilizes a systematic, repeatable process. Our model is not impacted by behavioral biases.

We believe that the result is a well-diversified, core portfolio with the valuation, growth, and quality characteristics most likely to produce alpha.

We continually seek ways to enhance our investment processes. Our belief is that periodic enhancements are necessary as markets evolve. QMA's investment professionals routinely explore both sell-side and academic research related to quantitative techniques in an effort to discover new, applicable investment ideas. Since the inception of the US Small Cap Core Equity strategy, we have introduced various enhancements and improvements to our stock selection model. We consider these enhancements a normal part of our investment process.

2. In what market environment would you expect your product to outperform/underperform?

In our experience, growth and quality exposures tend to perform better when uncertainty floods the market, while valuation performs better when investors feel more confident and are more willing to take on risk in their portfolios. Our strategy is designed to provide excess return in most market conditions through balanced exposure to valuation, growth, and quality factors. Given our risk controlled portfolio construction, we do not expect to underperform the benchmark dramatically in any market environment.

Source: RFP Respondent

Our strategy may lag when a pervasive change in sentiment pushes stock prices away from the fundamentals on which our model is based. Investors may react to extreme events by becoming overly greedy or overly fearful, and as a result prices may move away from what fundamentals would suggest. When investors turn their focus back to company fundamentals as opposed to macro events, relative performance tends to rebound.

Our strategy may also struggle at turning points in the economy. For example, at the start of a recession, analysts may be slow to revise their earnings estimates, which may mean a lag in the data we use in our stock selection model. These turning points are relatively uncommon and short-lived.

Our stock selection model is designed to adapt to changes in both company growth rates and market environments. Following the Global Financial Crisis, we introduced a new element to help the model adapt better to changes in the market environment, as indicated by the earnings yield spread. We believe the adaptive nature of our model increases the likelihood that our process will perform well in different types of environments.

There is no guarantee our expectations will be achieved.

3. Please describe how your portfolio construction process is the most efficient method for implementing your stock selection ideas.

The goal of our portfolio construction process is to produce a well-diversified, core portfolio with the valuation, growth, and quality characteristics most likely to produce alpha. The Quantitative Equity team seeks to reduce the risk of underperformance from an individual or small group of stocks through broad portfolio diversification. We also limit unintended exposures to uncompensated off-benchmark risk by constraining industry, sector, size, and style relative to the client's benchmark.

The Quantitative Equity team assesses the relative attractiveness of all securities in our universe on a daily basis. We place more emphasis on valuation for the slowest growing stocks in the universe, and more emphasis on growth expectation signals and quality signals for stocks with faster projected growth rates. From this data, we calculate a score for each security, which represents our assessment of its relative attractiveness. That score is a key input to our proprietary optimizer during portfolio construction. QMA's portfolio optimizer also systematically applies limits to active exposures of common risk factors such as industry, sector, style, and size.

The simple elegance of this approach results in a portfolio with balanced risk exposures and an emphasis on the stock selection signals we consider most likely to produce excess return for our clients.

Source: RFP Respondent

4. What do you consider the greatest risk to your active U.S. small capitalization equity portfolio?

QMA defines risk as expected long-run active risk, as measured relative to the benchmark. When prices are detached from fundamentals, our strategy may be at risk to underperform. Our experience shows that these periods occur from time to time, though they are short-lived and relatively infrequent. Prolonged periods of detachment from fundamentals are uncommon.

We believe that the adaptive nature of our model increases the likelihood that our process will perform well in many different types of environments.

Past performance is not a guarantee or a reliable indicator of future results.

5. What is your firm's competitive advantage in the U.S. small capitalization equity space?

History of QMA's Multifactor-Based Investments
Twenty years ago, when factor investing was just emerging from the blackboards of academia, QMA was deeply engaged in conversations with institutional clients about the need for higher returns from their equity allocations. We developed a proprietary quantitative stock selection model that harnessed the market's underlying return drivers to generate above-index returns with minimal increase in tracking error and risk. Our model combines the value, growth, and quality measures shown to exhibit the greatest premiums, and adaptively weights them by future growth expectations. Over time, we have made several enhancements to our model, but our approach has remained consistent.

QMA's approach to factor investing is grounded in a systematic application of financial theory and fundamental analysis, as well as an asset allocator's perspective on how the components of a portfolio fit best together. In our own research, we have found that different fundamentals are more effective for evaluating different securities and the relative value of various market segments. Markets are not static, so we adapt these factor exposures to align with individual company growth rate changes and shifting investment climates.

QMA's Advantages in Multifactor Investments
One of the strengths of our investment approach is the breadth of investment insights we generate and the quantity of information we draw on to produce them. On a daily basis we analyze a large universe of over 3,000 stocks, incorporating nearly 300 fundamental, market, and forecast data items per stock. Our research comes from solid theoretical sources. Proposed changes are vetted by extensive testing before we add them to existing model parameters.

Another point of distinction is our model itself. Factor investing has become nearly ubiquitous, with numerous managers offering single and multi-factor strategies as a way to replicate active manager returns at a lower fee. QMA's approach to factor investing is grounded in a systematic application of financial theory and fundamental analysis. Markets are not static, so we adapt these factor exposures to align with individual company growth rate changes and shifting investment climates. Our adaptive model varies the weights of valuation, growth, and

Source: RFP Respondent

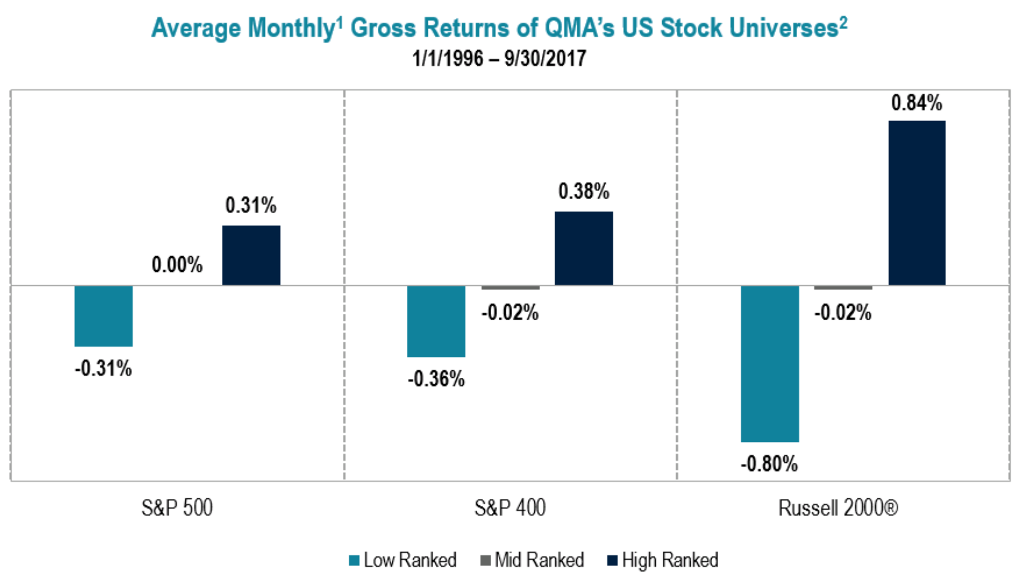
quality factors according to a company's growth rate. The model may adapt factor weightings in extreme market conditions.

We use a proprietary optimization algorithm to focus portfolio risk on potential alpha. +The process limits exposure to common risk factors, such as industry, size, and style relative to the client's benchmark. We also consider estimated transaction costs and any client-directed company or industry restrictions.

The exhibit below shows the efficacy of our multi-factor stock selection model in identifying out- and underperforming stocks in the US universe:

Multi-Factor Framework Captures Alpha Over Time

The multi-factor model is effective at identifying outperforming and underperforming stocks across the market cap spectrum



1 Based on the difference between each group of stocks' returns and the average of all stocks' returns.
2 Average monthly equal-weighted market-adjusted gross returns for all stocks in universes.
Source: QMA using data provided by FactSet. Returns are gross of management fees and are only provided to illustrate the information implicit in our stock selection methodology. Please see 'Notes to Disclosure' page for Important Information including risk factors and disclosures. Past performance is not a guarantee or a reliable indicator of future results. The Russell 2000® Index is a trademark/service mark of the Frank Russell Company. Russell® is a trademark of the Frank Russell Company.

Source: RFP Respondent

Notes to Disclosure
IMPORTANT INFORMATION

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These materials do not take into account individual client circumstances, objectives or needs. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. The information contained herein is provided on the basis and subject to the explanations, caveats and warnings set out in this notice and elsewhere herein. Any discussion of risk management is intended to describe QMA’s efforts to monitor and manage risk but does not imply low risk.

These materials are for informational or educational purposes. In providing these materials, QMA (i) is not acting as your fiduciary as defined by the Department of Labor and is not giving advice in a fiduciary capacity and (ii) is not undertaking to provide impartial investment advice as QMA will receive compensation for its investment management services. This product or service is available to ERISA plans only when represented by an Independent Fiduciary as defined by the DOL. A plan or its Independent Fiduciary will be asked to make representations in the investment management agreement or adoption agreement to enable reliance on the Independent Fiduciary exception from the definition of fiduciary in the DOL’s regulations.

The basis for the performance objective set forth within this RFI is QMA's research and its long experience in managing equity accounts that use quantitative methods to drive stock selection and portfolio construction. There can be no guarantee that this objective will be achieved. QMA has based this investment objective on certain assumptions that it believes are reasonable. There is no guarantee, however, that any or all of such assumptions will prove to be accurate in the face of actual changes in the securities market or other material changes in regional or local markets specific to this strategy. Factors that would or could mitigate against achieving this investment objective would include material changes in the economic environment and factors that are not included in our model or are underperforming in our model. The investment objective contemplated herein is over a complete market cycle which is generally between five and ten years for this strategy. The investment objective set forth above is calculated gross of management fees. Had such fees been taken into account, the investment objective indicated would be lower.

Investing in securities involves risk of loss that investors should be prepared to bear. In addition, model-based strategies present unique risks that may result in the model’s not performing as expected. These risks include, for example, design flaws in the model; input, coding or similar errors; technology disruptions that make model implementation difficult or impossible; and errors in externally supplied data utilized in models. To the extent that portfolio manager judgment is applied to model output, decisions based on judgment may detract from the investment performance that might otherwise be generated by the model. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

The financial indices referenced herein are provided for informational purposes only. The manager's holdings and portfolio characteristics may differ from those of the benchmark(s). Additional factors impacting the performance displayed herein may include portfolio-rebalancing, the timing of cash flows, and differences in volatility, none of which impact the performance of the financial indices. Financial indices assume reinvestment of dividends but do not reflect the impact of fees, applicable taxes or trading costs which may also reduce the returns shown. You cannot invest directly in an index. The statistical data regarding such indices has been obtained from sources believed to be reliable but has not been independently verified.

References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. The securities referenced may or may not be held in portfolios managed by QMA and, if such securities are held, no representation is being made that such securities will continue to be held.

These materials do not purport to provide any legal, tax or accounting advice.

Source: RFP Respondent

27Roy D. Henriksson, PhD, Chief Investment Officer, 5 years at QMA

Roy D. Henriksson, PhD, is the Chief Investment Officer of QMA. He has over twenty years of experience combining quantitative research with its practical applications in investment portfolios. Prior to joining QMA, Roy was CIO of Advanced Portfolio Management, where he designed and managed customized, risk-targeted investment portfolios for institutional clients globally. He is also currently the Co-Chairman of the Liquidity Risk Committee and Member of the Advisory Board of the International Association for Quantitative Finance (the IAQF). Previously, Roy held a variety of senior positions in research, trading and product development at a number of large investment banks. His broad product experience spans equity, fixed income, hedge funds, currency, and commodity derivatives.

Roy has published numerous articles on market-timing skill, portfolio optimization and asset allocation in leading journals. A recipient of the Graham and Dodd Award from The Financial Analysts Journal, he has held the position of Professor of Finance at the University of California, Berkeley, where he also served as Senior Consultant to Wells Fargo Investment Advisors and as an Advisor to the University of California Endowment. Roy holds a BS in Economics, a MS in Management, and a PhD in Finance, all from Massachusetts Institute of Technology.

Peter Xu, PhD, Co Head of Quantitative Equity Team, Head of US Strategies, 20 years at QMA

Peter Xu, PhD**,** is a Managing Director and Co-Head of QMA's Quantitative Equity team. His responsibilities include research on higher alpha and alternative strategies. For over 20 years, Peter has played a critical role in the evolution of QMA's quantitative models and investment process that have delivered strong performance across all of our equity strategies. He has published articles in a number of journals, including The Financial Analysts Journal, The Journal of Portfolio Management, The Journal of Asset Management, The Journal of Investing, Review of Quantitative Finance and Accounting, and others. Peter earned a BS in Nuclear Physics from Fudan University in Shanghai, an MA in Economics from Rice University, and a PhD in Finance from the University of Houston.

George N. Patterson, PhD, Co Head of Quantitative Equity Team, <1 year at QMA

George N. Patterson, PhD**,** is a Managing Director and Co-Head of QMA's Quantitative Equity team. His responsibilities include overseeing portfolio management, investment research and new product development for the US, Non-US and Value equity strategies. Prior to joining QMA, George was Managing Director, Corporate Strategy, at Axioma, Inc., focusing on identifying buy-side trends and market opportunities to foster growth at the company. He was previously Chief Investment Officer for Quantitative Investments at Bank of Montreal Global Asset Management, with responsibilities across global equities and multi-asset strategies spanning stand-alone asset allocation funds, FX overlays, retail fund of funds, and ETF-based multi-asset solutions. Prior to that, George was Co-Founder and a Managing Partner at Menta Capital LLC, a California-based quantitative equity

[1]Source: RFP Respondent

hedge fund, and a Senior Portfolio Manager in equity market neutral strategies at Barclays Global Investors. He began his career at NASA's Jet Propulsion Laboratory. George earned a BS in Physics from the Massachusetts Institute of Technology, and a PhD in Physics from Boston University.

Stacie L. Mintz, CFA, Portfolio Manager, 25 years at QMA
Stacie L. Mintz, CFA**,** is a Managing Director and Portfolio Manager for QMA, working with the Quantitative Equity team. Her responsibilities include managing US equity portfolios, including US Core, Long Short, and Market Neutral strategies, and overseeing the team responsible for implementation. Previously, Stacie was a member of the Dynamic Asset Allocation team, where she was responsible for several retail and institutional portfolios. In addition, during that time, she was responsible for managing the overall asset allocation for the Prudential Pension Plan. She earned a BA in Economics from Rutgers University, an MBA in Finance from New York University, and holds the Chartered Financial Analyst (CFA) designation.

Devang Gambhirwala, Portfolio Manager, 31 years at QMA
Devang Gambhirwala is a Principal and Portfolio Manager for QMA. Devang is primarily responsible for overseeing US Core Equity portfolios, including US Core, Long-Short and Market Neutral strategies. He is also responsible for the management of structured products. Earlier at PGIM, Inc., Devang worked as a Quantitative Research Analyst and an Assistant Portfolio Manager. He earned a BS in Computer and Information Sciences from the New Jersey Institute of Technology and an MBA from Rutgers University.

Satish Sanapareddy, CFA, Portfolio Manager, 19 years at QMA
Satish Sanapareddy, CFA**,** is a Vice President and Portfolio Manager for QMA, working with the Quantitative Equity team. His responsibilities include portfolio management and research for US Core Equity portfolios. Previously, Satish focused primarily on stock selection and portfolio construction research for the US Core Equity strategies, as well as production support for implementation of the US Core Equity strategy. Satish earned a BS in Engineering from Nagarjuna University of India and an MBA in Finance from Hull University in the UK and holds the Chartered Financial Analyst (CFA) designation.

Edward J. Lithgow, Portfolio Manager, 21 years at QMA
Edward J. Lithgow is a Vice President and Portfolio Manager for QMA, working with the Quantitative Equity team. His responsibilities include managing domestic and international indexing funds. In addition, Ed also assists with portfolio management and research for QMA's US Core Equity portfolios. Previously, he was a Quantitative Analyst for QMA's US Core Equity and Indexing teams with responsibility for optimizing portfolios and monitoring cash flows, as well as performance attribution and risk analysis. Ed also traded equities, currencies, and futures for QMA's Indexing funds. Ed earned a BS in Business Administration from Seton Hall University and an MBA in Finance from St. Joseph's University.

[1]Source: RFP Respondent

STAFF SUPPLEMENTAL QUESTIONS[1]

1. Please describe your investment philosophy as it relates to the active U.S. small capitalization equity product.

Systematic believes investors can seek the higher rates of returns associated with small cap investing without sacrificing the quality of the portfolio. A high-quality company, in our opinion, possesses superior financial strength while executing a proven business model that generates positive amounts of free cash flow and shows a catalyst for price appreciation. By focusing on companies that can retire all outstanding debt within ten years based on expected levels of free cash flow, an additional margin of safety for our clients can be achieved. We further believe that a company's value is equal to its discounted future cash flows. Though earnings and earnings forecasts are important, we believe cash flows provide the truest measure of a firm's viability and operation. Our philosophy is unchanged since the inception of this strategy.

2. In what market environment would you expect your product to outperform/underperform?

Our Small Cap Value Free Cash Flow strategy has historically outperformed in a variety of market conditions and we expect that to continue to be the case going forward. With that said, there are some particular circumstances where we believe our outperformance may be greater. Specifically, we would expect our focus on companies that we believe possess strong free cash flow and superior financial strength to provide outperformance in periods where access to the capital markets for smaller companies is somewhat limited. In such an environment, many of the companies in the benchmark will have difficulty funding their operations and growing their businesses. As a result, their stock prices will often suffer. In contrast, businesses with good financial footing and solid free cash flow are much less reliant on the capital markets for funding, and thus perform very well on a relative basis in such an environment. Additionally, our strategy should also experience good relative results at times when investors are currently, or are becoming, more risk averse. Because the companies in the portfolio are more solid financially and have a business model producing good free cash flow, they are less speculative in nature. It is precisely these types of businesses investors tend to seek out in times of uncertainty and risk aversion.

Conversely, this strategy will tend to have its greatest relative underperformance during periods of speculation, like in the lead up to the global financial crisis. These are times when risk seeking, not risk aversion, is the order of the day. In these periods, there is often easy access to capital for the majority of companies. During such times, the superior financial strength of the companies in our portfolio can go largely ignored by the marketplace as investors speculate on, and hope for, a bright future for companies with shaky current fundamentals. However, it has been our experience that often the speculation and hope does not pan out.

In the end, in our view, an investment is simply worth the present value of its future cash flows. By focusing on companies generating strong cash flow with limited debt and purchasing them at reasonable valuations, we expect to add value over the long-term.

Source: RFP Respondent

3. Please describe how your portfolio construction process is the most efficient method for implementing your stock selection ideas.

Our portfolio construction process is the most robust and efficient method for implementing our stock selection ideas because it incorporates all the information we have obtained and analyzed in our bottom up stock selection process. Individual positions are conviction weighted within the portfolio based upon our assessment of their relative risk and reward within the context of a diversified portfolio. This assessment incorporates our knowledge of the company, its industry, the overall economic environment, and importantly, the strengths and weaknesses of it as an investment relative to the other companies in the portfolio. Importantly, as company fundamentals, industry dynamics and economic trends change over time, this information is picked up in our ongoing fundamental company research and incorporated into our portfolio construction in real time.

4. What do you consider the greatest risk to your active U.S. small capitalization equity portfolio?

In absolute terms, the greatest risk to our portfolio is overall equity market risk in general. We strive to mitigate this risk through our fundamental research effort, where our goal is not only to identify securities that have upside potential, but also to minimize the risk of loss by purchasing companies with good cash flows and limited debt at a valuation discount, thereby providing a margin of safety. However, in the event of an overall equity market decline, while we may be able to reduce the size of a drawdown in our portfolio as a result of our fundamental research and portfolio construction efforts, given the fully invested nature of our strategy it is impossible to completely avoid declines in value from time to time. Historically, these declines have proven to be temporary in nature and have often provided excellent opportunities to purchase attractive securities at a discount that have led to substantial outperformance in the periods that follow.

5. What is your firm's competitive advantage in the U.S. small capitalization equity space?

We believe our competitive advantage comes from our long-term investment horizon, our focus on free cash flow and limited company debt, and the stability and experience of our investment team. The specific anomalies that we are trying to capture are related to both valuation and investor sentiment. Because investor sentiment is often driven by a short term viewpoint, security prices are driven either above or below their "true" value. This gives disciplined, long term investors like us the ability to purchase stocks that are below our estimate of their intrinsic value and sell securities that reach or exceed our estimate of their intrinsic value. Because of our focus on cash flow generation and limited debt, we believe the companies in our portfolio are less speculative in nature and are far better equipped than the average small cap stock to weather economic cycles and swings in investor sentiment. Our most critical competitive advantage is the knowledge and experience gained from executing our investment discipline for over 25 years. We have an ingrained understanding of our investment philosophy, its strengths and weaknesses, and its success throughout the multiple and varied economic cycles of the past quarter-century.

Source: RFP Respondent

Kenneth W. Burgess, CFA
Lead Portfolio Manager
Years with Firm: 25

Ken is a Managing Partner in the firm and member of the Management Committee as well as lead portfolio manager for our Small Cap Value Free Cash Flow and SMID Cap Value Free Cash Flow portfolios. He also serves as an analyst, providing research support within selected economic sectors.

Ken's investment career began in 1993, when he joined Systematic. Ken specializes in cash flow analysis and devotes his efforts to portfolio management and the analysis of small and mid cap equities. His work has included contributions to quantitative and fundamental equity analysis, portfolio management, and performance analytics.

Ken holds the Chartered Financial Analyst (CFA) designation and is a member of both the CFA Institute and New York Society of Security Analysts (NYSSA). Ken conducted his undergraduate studies at New Hampshire College, majoring in economics and finance.

Kevin McCreesh, CFA
Chief Investment Officer
Years with Firm: 22

Kevin is a Managing Partner in the firm and member of the Management Committee. In addition, as Chief Investment Officer, he has oversight responsibilities for all client portfolios. Kevin also serves as the lead portfolio manager for our Large and Small Cap Value equity portfolios. Although Kevin joined Systematic in 1996, he has been actively involved with our investment discipline since 1990.

Kevin began his investment career as an analyst in the financial planning and analysis department of IBM's semiconductor manufacturing division. As a senior analyst in Paine Webber's treasury department, and then as controller for Mitchell Hutchins Investment Advisory Unit, Kevin further honed his research and analytical skills. Prior to joining Systematic in 1996, he served as an equity portfolio manager at Mitchell Hutchins.

Kevin holds the Chartered Financial Analyst (CFA) designation and is a member of both the CFA Institute and New York Society of Security Analysts (NYSSA). He has an M.B.A. in financial management from Drexel University and a B.S. in geology from the University of Delaware.

[1]Source: RFP Respondent

Ronald M. Mushock, CFA
Portfolio Manager
Years with Firm: 21

Ron is a Managing Partner in the firm and member of the Management Committee as well as the lead portfolio manager for Mid and SMID Cap Value equity portfolios. Additionally, Ron maintains analyst responsibilities within selected economic sectors.

Ron began his career as a quantitative equity analyst with Abel/Noser. Prior to joining Systematic in 1997, Ron was a fundamental equity analyst with Standard and Poor's Equity Group.

Ron holds the Chartered Financial Analyst (CFA) designation and is a member of both the CFA Institute and New York Society of Security Analysts (NYSSA). Ron received an M.B.A. in finance and international business from New York University's Stern School of Business, and graduated Summa Cum Laude from Seton Hall University with a B.S. in finance.

Eoin E. Middaugh, CFA
Portfolio Manager
Years with Firm: 16

Eoin is a Managing Partner in the firm and member of the Management Committee as well as having lead portfolio management responsibilities for our Disciplined Value strategies. Additionally, Eoin conducts investment strategy research covering all sectors and the full market capitalization spectrum. He also conducts new product development and communicates Systematic's strategies and views to our clients and their consultants.

Eoin began his career as a consultant at Wurts & Associates, working with both defined benefit and defined contribution plan sponsors on asset allocation, investment policy, manager search and performance evaluation. He joined Systematic in 2002.

Eoin holds the Chartered Financial Analyst (CFA) designation and is a member of both the CFA Institute and the Los Angeles Society of Financial Analysts. He also served as a member of the Advisory Board to the Department of Finance at Washington State University. Eoin graduated Summa Cum Laude, earning a B.A. in business administration with an emphasis in finance from Washington State University, where he was a member of the golf team.

[1]Source: RFP Respondent

BIOGRAPHIES: KEY INVESTMENT STAFF[1]

Ryan Wick, CFA
Assistant Portfolio Manager
Years with Firm: 13

As an assistant portfolio manager, Ryan conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Ryan's research includes analyzing financial statements, building financial models, performing valuation analysis, and interviewing company management.

Ryan began his investment career at ABN AMRO in New York as an associate equity research analyst in the Industrial Manufacturing and Technologies Group covering Diversified Industrials.

Prior to joining Systematic in 2005, Ryan was an equity analyst with Axe-Houghton Associates where he conducted fundamental research coverage for small to mid cap companies in the Healthcare, Industrial and Technology sectors.

Ryan received an M.B.A. in finance from Columbia Business School and a B.A. in English from Bucknell University. He holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and New York Society of Security Analysts (NYSSA).

Aman R. Patel, CFA
Assistant Portfolio Manager
Years with Firm: 16

Aman is a partner in the firm and serves as assistant portfolio manager. In this role he conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Aman's research includes analyzing financial statements, building financial models, performing valuation analysis, and interviewing company management.

Aman began his investment career as an equity analyst in Prudential Securities' equity research department. Prior to joining Systematic in 2002, Aman further honed his research and analytical skills first as an associate analyst with UBS Warburg's healthcare equity research team, and then at Federated Investors where he completed his M.B.A. internship in investment management.

Aman received an M.B.A. in finance and strategy from Carnegie Mellon University and a B.A. in biochemistry from Rutgers University. He holds the Chartered Financial Analyst (CFA) designation.

[1]Source: RFP Respondent

Brian D. Kostka, CFA
Assistant Portfolio Manager
Years with Firm: 11

Brian is a partner in the firm and serves as assistant portfolio manager. In this role he conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Brian's research includes analyzing financial statements, building financial models, performing valuation analysis, and interviewing company management.

Brian began his investment career at UBS Investment Research as an associate research analyst covering the Consumer and Finance industries. Prior to joining Systematic in 2007, Brian was an equity analyst with Estabrook Capital, a division of BNY Asset Management, where he conducted fundamental research for the small to large cap products, as well as performed portfolio attribution analysis.

Brian received his B.S. in finance and economics from Boston College. Brian also holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute, the New York Society of Security Analysts (NYSSA) and the CFA Society of Philadelphia.

Rick Plummer, CFA
Assistant Portfolio Manager / Senior Equity Analyst
Years with Firm: 14

Rick is a partner in the firm and serves as a senior equity analyst / assistant portfolio manager. In this role he conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Rick's research includes analyzing financial statements, building financial models, performing valuation analysis, and interviewing company management.

Rick joined Systematic in 2004 following a ten-year stint with the Value Line Investment Survey. At Value Line, he served as a Senior Industry Analyst and lead editor of the firm's daily supplemental stock reports. He also spent time in Value Line's Asset Management department, working as a technology-sector consultant and portfolio manager.

Rick received his M.B.A. in finance at New York University's Stern School of Business, with Stern Scholar honors. He holds a B.A. in economics and government from Wesleyan University. He holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and New York Society of Security Analysts (NYSSA).

[1]Source: RFP Respondent

Christopher Lippincott, CFA
Senior Equity Analyst
Years with Firm: 10

As a senior equity analyst, Chris conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Chris's research includes analyzing financial statements, building financial models, performing valuation analysis, and interviewing company management.

Chris began his investment career in 1996 at Alexander, Wescott & Co. as an equity analyst covering Technology Hardware and the Electronic Supply Chain. He then moved on to Auerbach, Pollack & Richardson where he conducted fundamental research coverage for small to mid cap companies in the Technology Hardware sector. In 2000, Chris joined KeyBanc Capital Markets as the senior equity analyst covering the Electronic Supply Chain. Prior to joining Systematic in 2008, Chris was a senior industry analyst at Standard & Poor's covering Industrial Machinery, Coal Mining and Specialty Chemicals.

Chris received an M.B.A. in finance from the Fordham University Business School and a B.A. in history from Vassar College. Chris also holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and the New York Society of Security Analysts (NYSSA).

Tom LaBarbera, CFA
Senior Equity Analyst
Years with Firm: 13

As a senior equity analyst, Tom conducts quantitative research across all sectors and the full market capitalization spectrum. Tom's research includes analyzing quantitative rankings, building financial models and back testing.

Tom began his investment career in 2000 at FactSet Research Systems working in both the Consulting and Sales departments. While at FactSet, Tom worked with over 100 investment managers supporting their quantitative and fundamental research departments. Tom joined Systematic in 2005.

Tom received a B.S. in finance from Marist College. He holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and the New York Society of Security Analysts (NYSSA).

[1]Source: RFP Respondent

J Matthew Tangel, CFA
Senior Equity Analyst
Years with Firm: 10

As a senior equity analyst, Matthew conducts both quantitative and fundamental research. Matthew's research includes analyzing quantitative rankings, building financial models, back testing, and supporting all Systematic analysts with their data needs. In addition, he conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Matthew's research includes analyzing financial statements, building financial models, performing valuation analysis and interviewing company management.

Matthew began his investment career at FactSet Research Systems working in the Consulting department. Prior to joining Systematic in 2008, Matthew worked with large institutional investors, hedge funds, plan sponsors, quantitative asset management firms, small money managers and government agencies.

Matthew received his B.S. in finance from Bryant University. Matthew also holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and the New York Society of Security Analysts (NYSSA).

Jennifer Mulroy, CFA
Senior Equity Analyst
Years with Firm: 8

As a senior equity analyst, Jennifer conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Jennifer's research includes analyzing financial statements, building financial models, performing valuation analysis and interviewing company management.

Prior to joining Systematic in 2010, Jennifer was an Account Manager for SunGard APT, which provides multi-factor statistical risk models and software applications for asset managers, hedge funds and traders. Previous to her Account Manager position, she was a consultant for SunGard VPM, where she was responsible for the implementation of highly customizable portfolio accounting systems for high profile hedge funds.

Jennifer received her B.S. in chemical engineering with a minor in managerial finance from Rensselaer Polytechnic Institute in Troy, NY. Jennifer also holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and the New York Society of Security Analysts (NYSSA).

[1]Source: RFP Respondent

Mike Cikos, CFA
Equity Analyst
Years with Firm: 3

As an equity analyst, Mike conducts company-specific fundamental research within selected economic sectors spanning the market capitalization spectrum. Mike's research includes analyzing financial statements, building financial models, performing valuation analysis, and interviewing company management.

Mike began his investment career at Maxim Group as a financial advisor for high net worth individuals. Prior to joining Systematic in 2015, Mike was a Senior Research Associate with Macquarie Group. Prior to Macquarie Group, he held research positions at both buy- and sell-side firms including RS Investment Management and Sidoti & Company.

Mike received his B.A. in business administration with a major in finance from the University of Notre Dame. Mike also holds the Chartered Financial Analyst (CFA) designation, and is a member of the CFA Institute and the CFA Society San Francisco (CFASF).

[1]Source: RFP Respondent

MEMORANDUM

To: LACERA Board of Investments

From: Stephen McCourt, Leandro Festino, Tim Filla
Meketa Investment Group

Date: March 15, 2018

Re: Public Equities Active U.S. Small Cap Equity Manager Search

BACKGROUND

On September 14, 2016 Meketa presented to the Board of Investments ("BOI" or the "Board") a review of LACERA's public equity program. One of the recommendations from our review was focusing greater active management weight to smaller companies, as greater inefficiencies have historically translated to higher probability of outperformance by active managers. As a result, LACERA Staff initiated a search for domestic small cap equity managers in July, 2017.

RECOMMENDATION & OBSERVATIONS

Starting in July of last year with the issuance of the RFI, Staff led the search process. During this time, Meketa collaborated with Staff. We discussed with Staff the merits of the respondents, the short list for interviews at LACERA's office, the visits to the four managers' offices, the merits of the finalist managers, and the fees and expenses of each. Meketa independently assessed these managers through a combination of meetings at our offices, the managers' offices, and phone conversations. Overall, we concur with the recommendation that the Board should interview Quantitative Management Associates ("QMA") and Systematic Financial Management ("Systematic"). Our research suggests that these managers would be positive additions to the LACERA portfolio.

SUMMARY AND RECOMMENDATION

Staff has proposed that QMA and Systematic be invited by the Board to present their small cap equity products. We concur with the recommendation from Staff. We followed the search from its beginning, and can attest that Staff followed LACERA's existing process. Furthermore, we concur that both managers are strong options for the Board to consider, both independently and in relationship to LACERA's existing U.S. equity assets.

We look forward to discussing this matter with you at the April 11th meeting.

SM/TF/LF/srt

M E K E T A I N V E S T M E N T G R O U P
5796 ARMADA DRIVE SUITE 110 CARLSBAD CA 92008
760 795 3450 fax 760 795 3445 www.meketagroup.com

Active U.S. Small Capitalization Equity RFI Respondents

	Investment Manager	Passed Initial Screen	Reason Screen Not Passed
1	Aristotle Capital	Y	
2	Fisher Investments	Y	
3	Cortina Asset Management	N	Did not meet Excess Return MQ
4	Martingale Asset Management	Y	
5	American Century Investment Management, Inc.	Y	
6	Quantitative Management Associates LLC	Y	
7	Cramer Rosenthal McGlynn, LLC	Y	
8	Victory Capital Management Inc.	Y	
9	Cooke & Bieler, LP	Y	
10	Rothschild Asset Management Inc.	N	Did not meet Excess Return MQ
11	Cornerstone Capital Management Holdings LLC	N	Did not meet Excess Return MQ
12	River Road Asset Management, LLC	Y	
13	Macquarie Investment Management	Y	
14	Macquarie Investment Management	Y	
15	Brown Advisory LLC	Y	
16	Matarin Capital	Y	
17	Tributary Capital Management, LLC	Y	
18	Mesirow Financial Investment Management Inc.	N	Did not meet Excess Return MQ
19	FIAM LLC	N	Did not meet Excess Return MQ
20	Westfield Capital Management Company, L.P.	N	Did not meet Excess Return MQ
21	MFS Institutional Advisors, Inc.	N	Did not meet Excess Return MQ
22	Ranger Investment Management	N	Did not meet Excess Return MQ
23	Wellington Management Company LLP	Y	
24	LMCG Investments, LLC	Y	
25	Aberdeen Asset Management Inc.	Y	
26	Investment Counselors of Maryland, LLC	Y	

	Investment Manager	Passed Initial Screen	Reason Screen Not Passed
27	Brandywine Global Investment Management, LLC	Y	
28	Systematic Financial Management, L.P.	Y	
29	PanAgora Asset Management, Inc.	Y	
30	Kayne Anderson Rudnick Investment Management, LLC	Y	
31	Wells Capital Management, Inc.	N	Did not meet Excess Return MQ
32	ClearBridge Investments	Y	
33	Voya Investment Management	Y	
34	Ziegler Capital Management, LLC	N	Did not meet Excess Return MQ
35	Hotchkis and Wiley Capital Management, LLC	N	Did not meet Minimum AUM MQ
36	William Blair Investment Management, LLC	Y	
37	The Boston Company Asset Management LLC	Y	
38	AB L.P.	Y	

Active U.S. Small Capitalization Equity
Minimum Qualifications
(July 2017 RFI)

1. The organization must be registered with the U.S. Securities and Exchange Commission (SEC) as an investment adviser, unless the organization is exempt from registration due to its status as a bank or insurance company.

2. As of June 30, 2017, the investment manager must have a minimum of $600 million in total assets under management in the proposed product.

3. The proposed product must have at least a three-year performance track record as of June 30, 2017.

4. At least 60% of the proposed product's quarterly rolling one-year excess returns over the last three years ended June 30, 2017 (6 of 9 observations) must exceed the Russell 2000 Index by at least 50 basis points, net-of-fees.

In addition, the firm must conform to Global Investment Performance Standards (GIPS) for performance reporting.

March 15, 2018

TO: Each Member
Board of Investments

FROM: Jonathan Grabel
Chief Investment Officer

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **ADOPTION OF REVISED OPEB MASTER TRUST INVESTMENT POLICY STATEMENT**

RECOMMENDATION

Adopt the attached OPEB Master Trust Investment Policy Statement with the proposed revisions.

INTRODUCTION

The Board approved a new asset allocation for the OPEB Master Trust ("OPEB Trust") at the December 2017 Board of Investments ("Board") meeting. As a first step in adopting the asset allocation, staff has reviewed and drafted a revised Investment Policy Statement ("IPS") with guidance from LACERA's Legal Division and Meketa. The IPS provides an overall framework for managing the OPEB Master Trust. The purpose of the IPS is to assist the Board in effectively supervising and monitoring the assets of the OPEB Trust.

Attachment 1 contains a clean version of the proposed revised OPEB Trust IPS. **Attachment 2** contains the redlined version of the changes.

COMMENTS

As part of the recommendation in December, it was noted that in order to implement the new asset allocation, the vast majority of asset categories would be invested via BlackRock Trust Company commingled funds. The recommendation also expressed that over the next 18 months, work will be done on unitizing the LACERA Plan so that the OPEB Master Trust could invest in sleeves of LACERA's Total Fund. Therefore, modifications to the OPEB Trust IPS may be transitory and serve as an intermediate step prior to the unitization of LACERA's Total Fund. Once unitization is complete, the Board can revisit the Asset Allocation and the IPS.

As for the proposed revisions to the OPEB Trust IPS, the attached IPS is a union of the original OPEB Trust IPS, the LACERA Pension Trust IPS, and best practices in the industry. Most of the modifications to the IPS are meant to 1) reflect the new asset allocation approved by the Board including risk management via a functional overlay of the traditional asset categories, 2) accommodate the use of index funds for the asset allocation in the medium-term, and 3) allow for the implementation and management of the new allocation. Other changes to the IPS are intended to improve consistency between the OPEB Trust IPS and the LACERA Pension Trust IPS. In addition, the IPS has been updated to reflect current Board Policies and generally complies with the IPS standards published by the CFA Institute.

The revised IPS consists of a main section and two attachments. The main section contains the OPEB Trust's Investment Goals, Asset Allocation Policy, Asset Rebalancing Policy, Performance Objectives, Investment Strategy and Guidelines, Investment Management Policies, and Duties of Responsible Parties. The majority of the recommended changes are within the Investment Strategy and Guidelines section. The attachments include LACERA's policies that directly apply to the IPS: The Manager Monitoring and Annual Review Policy as well as the Securities Lending Program Policies.

INVESTMENT POLICY STATEMENT

The following outlines the recommended changes relating to the IPS:

1. ***Asset Allocation Policy (Page 5) –*** The target Asset Allocation Table has been updated to reflect the current asset allocation policy adopted by the Board at the December 2017 meeting.

2. ***Asset Allocation Rebalancing Policy (Page 7) –*** The Asset Allocation Rebalancing Policy has been incorporated from LACERA's Pension Trust IPS to improve consistency.

3. ***Investment Strategy and Guidelines (Page 8) –*** The title of "Investment Program Policies" from the original OPEB Trust IPS has been updated to "Investment Strategy and Guidelines." Functional overlay, investable asset categories, investment guideline, and implementation are defined in this section.

4. ***Correlation Matrix (page 17) –*** A correlation matrix table for the asset classes is added.

5. ***Ten-Year Annualized Return and Volatility Expectations (page 18) –*** A ten-year expected return and volatility table for each asset class is added.

6. ***Attachment B – Securities Lending Program Policy (page 23) –*** The Securities Lending Program Policy is added to monitor the actively managed mandates.

CONCLUSION

Staff has revised the OPEB Trust IPS to reflect the Asset Allocation adopted by the Board at December 2017 meeting.

A timeline for the OPEB Trust transition is shown in **Table 1**, which is the same table from the *Update on the OPEB Master Trust New Strategic Asset Allocation Implementation Plan* included in the February 2018 Board meeting material. Barring any unforeseen circumstances, the transition is scheduled to be completed by June, 2018. Concurrently, staff will work with LACERA's Legal and Accounting

Divisions, as well as State Street, to unitize the LACERA Plan over the next 18 months. Updates will be provided to the Board throughout the transition.

Table 1. OPEB Master Trust Transition to the Revised Asset Allocation

Present updated IPS to the BOI for review	April 11, 2018
Finalize Investment Management Agreement with BlackRock	April 2018
Complete Operational Updates at State Street	April 2018
Transition of Assets at BlackRock	May 2018
Complete Transition	June 2018

Staff recommends the Board adopt the attached OPEB Master Trust Investment Policy Statement with the proposed revisions.

A memorandum from Meketa concurring with the proposed changes to the IPS is attached.

Attachments

ATTACHMENT 1

OTHER POST-EMPLOYMENT BENEFITS (OPEB) MASTER TRUST FUND

INVESTMENT POLICY STATEMENT

TABLE OF CONTENTS

INTRODUCTION

The Los Angeles County Employees Retirement Association ("LACERA") has been appointed as the Investment Manager for the Los Angeles County's, LACERA's, and Los Angeles County Superior Court's Other Post-Employment Benefit Trusts, which are Participating Trusts under the LACERA Master OPEB Trust (the "Trust"). As the Trustee of the Trust, the Board of Investments for LACERA (the "Board") has the responsibility to oversee investment of the Trust assets. LACERA's investment staff ("investment staff" or "staff") provides the day-to-day oversight of the investment activities, and executes the instructions of the Board. The Trust assets may be invested collectively or may be divided into funds determined by the Trustee (each, a "Subfund"), and each Subfund shall be unitized to reflect the interest of each Participating Trust in each Subfund. The Trustee shall keep a record of the available Subfunds.

This document provides the framework for the management of the Trust's assets. The purpose of the Investment Policy is to assist the Board and staff in effectively supervising and monitoring the investment and use of Trust assets. Specifically, it addresses the following issues:

- The general goals of the investment program.
- Specific asset class allocations, targets, and ranges.
- Performance objectives.
- The investment policies and structures for the management of the assets.
- Responsible parties and duties.

The Board establishes this investment policy in accordance with applicable local, State, and Federal laws. The Board members exercise authority and control over the management of the Trust, by setting policy which the investment staff executes through the use of external investment managers. The Board oversees and guides the Trust subject to the following basic fiduciary responsibilities:

- Solely in the interest of, and for the exclusive purpose of providing other post-employment benefits to persons eligible to receive such benefits pursuant to the terms of each Participating Trust's OPEB program.
- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like objectives.
- Diversify the investments of the Trust so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances, it is clearly prudent not to do so. Diversification is applicable to the deployment of the assets as a whole.

The Trust has a long-term investment horizon, and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets. It is generally recognized that a strategic long-term asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the Trust's investment performance. This policy statement is designed to allow for sufficient flexibility in the management oversight process to capture investment opportunities as they may occur, while setting forth reasonable parameters to ensure prudence and care in the execution of the investment program.

All transactions undertaken will be for the sole economic benefit of beneficiaries and for the exclusive purpose of providing benefits to them.

This policy statement generally covers both separate account and commingled investments except where not applicable. Other LACERA policies that are indirectly associated with this IPS may also apply. Incorporated by reference and attached to this document are the following:

Attachments

A Manager Monitoring and Annual Review Policy

B Securities Lending Program Policy

INVESTMENT GOALS

The Trust's general investment goals are broad in nature. The objective shall be to efficiently allocate and manage the assets dedicated to the payment of other post-employment benefits and administrative expenses. The following goals, consistent with the above described purpose, are adopted:

- The overall goal of the Trust's investment program is to provide employees and retirees of Los Angeles County, LACERA, and Los Angeles County Superior Court with post-employment health care benefits as promised. This will be accomplished through a carefully planned and executed long-term investment program.
- Trust assets will be managed on a total return basis. While the Trust recognizes the importance of the preservation of capital, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns in the long term.
- Trust assets will be invested in an effort to maximize total return, consistent with market conditions and appropriate levels of risk and liquidity.

The Investment Policy has been designed to allow the Trust to achieve a long-term total return. Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification to meet this goal. The investment activities are designed and executed in a manner that serves the best interests of the beneficiaries of the Trust.

Investment recommendations and subsequent actions are expected to comply with "prudent expert" standards.

ASSET ALLOCATION POLICY

The asset allocation policy is predicated on a number of factors presented by the General Investment Consultant, including:

- Historical behavior and expected long-term capital market risk, return, and correlation forecasts.[1]
- An assessment of future economic conditions, including inflation and interest rate levels.
- The current and projected funded status of the Trust.
- Various risk/return scenarios.
- Liquidity requirements.
- Direction provided by the Participating Trust in connection with the investment of assets, such as liquidity needs or contribution plans.

This policy provides diversification of assets in an effort to maximize the total return of the Trust consistent with market conditions and risk control. The asset allocation modeling process identifies asset classes that the Trust may utilize and the percentage that each class represents of the Trust. Due to the fluctuation of market values, positioning within a specified range is acceptable and constitutes compliance

[1] Based on Meketa's December 2017 Presentation, the 10-year return assumption is 6.30%.

with the policy. It is anticipated that an extended period of time may be required to fully implement the asset allocation policy, and that periodic revisions will occur. The investment staff will monitor and assess the actual asset allocation versus policy and will evaluate any variation deemed significant.

The Board will implement the asset allocation policy in large part through the use of passive investment managers. All investments are subject to investment guidelines incorporated into the executed agreements with external managers or the policies established by the Board.[2] The strategic asset allocation targets and ranges for the investments of the Trust's assets are shown below:

Table 1. Asset Allocation

Asset Class	Benchmark	Target Allocation (%)	Allocation Range
Growth		50.0	+/- 10%
Global Equity	MSCI ACWI IMI	50.0	
Credit-Oriented Fixed Income		20.0	+/- 5%
High Yield Bonds	Bloomberg Barclays High Yield Index[3]	6.0	
Bank Loans	S&P /LSTA Leveraged Loan Index	10.0	
Emerging Market Local Currency Bonds	JP Morgan GB - EMGD Index	4.0	
Risk Reduction & Mitigation		10.0	+/- 5%
Cash Equivalents	Citi 6-month T-Bills Index	2.0	
Investment Grade Bonds	Bloomberg Barclays U.S. Aggregate Index	8.0	
Inflation Hedges		20.0	+/- 5%
TIPS	Bloomberg Barclays U.S. TIPS Index	6.0	
Real Estate (REITs)	DJ U.S. Select Real Estate Sec Index	10.0	
Commodities	Bloomberg Commodity Index TR	4.0	
TOTAL FUND	**Custom Benchmark[4]**	**100.0**	

The target allocation yields an expected 6.3% average annualized (geometric, or compounded) 10-year return projection, with a standard deviation of 13.84%. These projections are based on the General Investment Consultant's 10-year return, volatility, and correlation estimates for each asset class, which are included in Tables 2 and 3 at the end of the document. The estimates for each asset class are arrived

[2] Through this Investment Policy Statement, staff is authorized to implement Investment Guidelines specific to each portfolio within these constraints. Investment Guidelines falling outside these constraints require approval by the Chief Investment Officer, with notice to the Board.
[3] Bloomberg Barclays High Yield 500MM Par, 2% Issuer Capped Index.
[4] Custom Benchmark: A blended benchmark of each investment category's target allocation.

at by incorporating both quantitative and qualitative factors, and are reviewed and updated no less frequently than annually. The portfolio return and volatility estimates are based on the aggregation of these projections and LACERA's target allocation.

ASSET ALLOCATION REBALANCING POLICY

The purpose of rebalancing back to asset class targets is to ensure that the Trust's actual asset allocation does not drift from the strategic asset allocation policy. The strategic asset allocation policy has been developed after a rigorous analysis of the Board's objectives and risk tolerance. Rebalancing ensures that the Trust's desired asset allocation policy is maintained consistently over time. It, therefore, ensures that a major policy decision of the Board is implemented effectively.

In the absence of any other considerations, the optimal strategy would be to rebalance continually back to the Board-approved target asset allocation. However, rebalancing involves costs such as brokerage and other trading costs.

It shall be the policy of the Board that:

- Cash flows, into and out of the Trust, will be used to rebalance back to asset class targets whenever possible.
- The Trust's actual asset allocation should be reviewed at the end of each month when asset valuations become available. More frequent reviews may be undertaken, if appropriate. Rebalancing may take place if the weight to any asset class deviates materially from its Board-approved target weight. Rebalancing must take place when Board-approved ranges are breached. Rebalancing should be implemented by the most cost-effective means available and without market disruption.
- When rebalancing occurs, the portfolio will be rebalanced toward the Board- approved asset allocation policy targets.

Monthly, the Board shall be notified of any rebalancing that has taken place. Additionally, the Trust's quarterly investment performance report will include a direct comparison of the portfolio's actual asset allocation to the target allocation. The implementation of the rebalancing program will be undertaken by the Chief Investment Officer.

PERFORMANCE OBJECTIVES

The long-term performance objective of the Trust's total fund is to mirror its Policy benchmark gross-of-fees.

INVESTMENT STRATEGY AND GUIDELINES

The Trust will have the following functional risk overlay of the traditional asset classes:

Growth

Role in the portfolio: The primary role of assets in this category is to produce a sufficiently high level of long-term growth to provide the promised benefits.

Asset Classes: Global Equity

- **Global Equity** invests in a portfolio of global equity securities with the objective of approximating as closely as practicable the capitalization weighted rates of return of the markets in certain countries for publicly traded equity securities. The benchmark shall be the MSCI ACWI IMI Net Dividend Return Index. The full spectrum of securities may include American Depositary Receipts, Global Depositary Receipts, and other structured transactions utilizing foreign stocks and currencies.

Implementation: Index funds will be utilized to access equity market returns in a low-cost manner.

Credit-Oriented Fixed Income

Role in the portfolio: The role of Credit-Oriented Fixed Income is to produce moderate long-term total returns that provide diversification from public equities.

Asset Classes: High Yield, Emerging Markets Debt, Bank Loans

- **High Yield** invests primarily in a portfolio of debt securities with the objective of approximating the total rate of return of the Bloomberg Barclays U.S. High Yield 500MM Par, 2% Issuer Capped Index. Debt securities shall include obligations that are included in the Bloomberg Barclays U.S. High Yield 500MM Par, 2% Issuer Capped Index or which the manager believes will allow the portfolio to better track the Bloomberg Barclays U.S. High Yield 500MM Par, 2% Issuer Capped Index.

- **Emerging Markets Local Currency Debt** invests primarily in a portfolio of debt securities denominated in local currency and issued by governments and agencies of, and companies domiciled or exercising the predominant part of economic activity in, emerging markets. The full spectrum of securities may also include non-investment grade securities.

- **Bank Loans** invest primarily in U.S. dollar denominated floating rate loans which provide income that can rise with rates and inflation.

Implementation: Index and/or mutual funds will be utilized to access the credit market in a low-cost manner.

Risk Reduction & Mitigation
Role in the portfolio: The role of assets in this category is to provide diversification and risk reduction.

Asset Classes: Cash Equivalents, Investment Grade Bonds

- **Cash Equivalents** managers may invest in high quality, short-term fixed income instruments with a credit rating of at least A-2/P-2 by Moody's or S&P. The portfolio's maximum average duration is one year, and the maximum average maturity for individual securities is two years. The use of repurchase agreements will be permitted provided these agreements are adequately collateralized.

- **Investment Grade Bonds** invest primarily in a portfolio of debt securities with the objective of approximating as closely as practicable the total rate of return of the market for debt securities as defined by the Bloomberg Barclays U.S. Aggregate Bond Index.

Implementation: Index funds will be utilized to access the investment grade bonds market in a low-cost manner and an existing external manager will be utilized for Cash Equivalents.

Inflation Hedges
Role in the portfolio: The role of assets in this category is to provide a hedge against unanticipated inflation and improve total fund diversification due to anticipated low correlation of returns with other asset classes.

Asset classes: TIPS, Real Estate, Commodities

- **TIPS** exposure is achieved through investments in inflation-indexed bonds of varying maturities issued by the U.S. and non-U.S. governments, their agencies, or instrumentalities, and U.S. and non-U.S. corporations.

- **Real Estate (Real Estate Investment Trusts or REITs)** exposure is achieved through a portfolio of equity-oriented real estate investments to diversify against other asset classes and to enhance overall fund returns.

- **Commodities** invests primarily in commodity futures contracts; short-term fixed income obligations, including, but not limited to U.S. Treasury obligations; cash instruments; and/or other investments with the objective of approximating the rate of return of the Bloomberg Commodity Index Total Return.

Implementation: Index funds will be utilized to access the TIPS, REITs, and Commodities markets in a low-cost manner.

INVESTMENT MANAGEMENT POLICIES

The Trust may utilize externally managed portfolios based on specific mandates and methodologies. The external managers will be expected to acknowledge in writing that they are Trust fiduciaries and that they will have discretion and authority to determine investment strategy, security selection and timing, subject to the Policy guidelines herein and investment guidelines specific to their portfolio.

Investment managers, as prudent experts, will be expected to know specific investment guidelines for their portfolios, and to comply with these guidelines. It is each manager's responsibility to identify guidelines that may have an adverse impact on performance, and to initiate discussion with staff toward possible improvement of said guidelines.

As outlined in the Manager Monitoring and Annual Review Policy (**Attachment A**), staff, under Board supervision, is responsible for monitoring investment managers' adherence to their investment mandate, and any material changes in the managers' organization. The investment managers retained by the Trust will be responsible for informing staff of all such material changes on a timely basis. Further, staff is responsible for monitoring and evaluating manager performance on a regular basis relative to each portfolio's benchmark return and relative to a peer group of managers with similar investment mandates.

Investment managers under contract to the Trust shall have discretion to establish and execute transactions with any securities broker/dealers as needed. However, the Trust reserves the right to preclude investment managers from directing trades through certain as it deems appropriate. The investment managers must obtain the most favorable executions with respect to all of the portfolio transactions as market conditions permit.

Prohibited Transactions

The following transactions will be prohibited unless stated otherwise in the investment manager guidelines:

- Short sales.
- Selling or buying on margin.
- "Prohibited transactions" as defined under the Employee Retirement Income Security Act of 1974 (ERISA).
- Transactions that involve a broker acting as a "principal", where such broker is also the investment manager who is making the transaction.
- Any or all investment activities forbidden by SEC or other applicable governing bodies.
- No investment manager or trustee may leverage the Trust portfolio by investing more than 100% of the total market value. This measure must reflect the effective exposure associated with derivative securities. The exposure for options, when permitted by contract, must be based on an appropriate options pricing model.

Selection Criteria for Investment Managers

Criteria will be established for each manager search undertaken and will be tailored to the Trust's needs in such a search. In general, eligible managers will possess attributes including, but not limited to, the following:

- The firm must be experienced in managing investments for institutional clients in the asset class/product category/investment style specified by the Trust.

- The firm must display a record of stability in retaining and attracting qualified investment professionals, as well as a record of managing asset growth effectively, both in gaining and retaining clients.
- The firm must have an asset base sufficient to accommodate the Trust's portfolio. In general, the Trust's portfolio should make up no more than 25% of the firm's total asset base at funding. Exceptions may be made on a case-by-case basis.
- The firm must demonstrate adherence to the investment mandate sought by the Trust, and adherence to the firm's stated investment discipline.
- The firm's fees should be competitive with industry standards for the product category.
- The firm must comply with the "Duties of the Investment Managers" outlined herein.
- The firm must conform to Global Investment Performance Standards (GIPS) for performance reporting.

In addition, the Trust's assessment of investment managers will take into account the degree to which the manager's qualified investment professionals exhibit diversity, including such considerations as background, age, experience, race, gender, ethnicity, and culture.

As much as possible, the Trust intends to leverage the relationships LACERA maintains with various asset management organizations in order to take advantage of preferred pricing and capabilities. Where the needs of the Trust differ from those of LACERA, such considerations shall take precedence in the manager selection process.

Termination Criteria for Investment Managers

The Board of Investments, representing the Trust, reserves the right to terminate an investment manager for any reason. Grounds for investment manager termination may include, but are not limited to, the following:

- Failure to comply with the guidelines agreed upon for management of the Trust portfolio, including holding restricted issues.
- Failure to achieve performance objectives specified in the manager's guidelines.
- Significant deviation from the manager's stated investment philosophy and/or process.
- Loss of key personnel.
- Evidence of illegal or unethical behavior by the investment management firm.
- Lack of willingness to cooperate with reasonable requests by Board and staff for information, meetings or other material related to its portfolios.
- Loss of confidence by staff and the Board in the investment manager.
- A change in the Trust's asset allocation program which necessitates a shift of assets to another sector.

The presence of any one of these factors will be carefully reviewed by LACERA staff, but will not necessarily result in an automatic termination.

DUTIES OF RESPONSIBLE PARTIES

Duties of LACERA's Board of Investments

The Board or its designee(s) will adhere to the following in the management of Trust assets:

- Shall approve guidelines for the execution of the Trust's investment program. Only the Board in its sole discretion can delegate its decision-making authority regarding the investment program. Staff will be responsible for the timely implementation and administration of these decisions.
- Shall review the Trust's investment structure and financial performance annually and asset allocation triennially, or more frequently as the need arises. The reviews may include recommended adjustments to the long-term, strategic asset allocation to reflect any changes in applicable regulations, long-term capital market assumptions, actuarial assumptions or the Trust's financial condition.
- Shall review Trust investments quarterly or as needed to ensure that policies and guidelines continue to be met. The Board shall monitor investment returns on both an absolute basis and relative to appropriate benchmarks and peer group comparisons. The source of information for these reviews shall come from staff, consultants, the custodian and the Trust's investment managers.
- May retain investment consultants to provide such services as conducting performance reviews, asset allocation, manager reviews and investment research. The comments and recommendations of the consultants will be considered in conjunction with other available information to aid the Board in making informed, prudent decisions.
- Shall take appropriate action if investment objectives are not being met or if policies and guidelines are not being followed. Reviews for separate portfolios managed by external managers are defined in the Manager Monitoring and Annual Review Policy (**Attachment A**).
- Shall expect staff to administer Trust investments in a cost-effective manner subject to Board approval. These costs include, but are not limited to, management, consulting and custodial fees, transaction costs and other administrative costs chargeable to the Trust.
- Shall select a qualified custodian with advice from staff.
- Shall strive to avoid conflicts of interests.

Duties of the Investment Staff

The investment staff, as designated by the Board, plays a significant role in the management and oversight of the Trust. Investment staff shall be responsible for the following:

- Manage the strategic asset allocation of the Trust in accordance with agreed upon target ranges and rebalancing policies.
- Establish investment guidelines for manager portfolios that are consistent with existing policies and with Board-approved investment structure.
- Monitor external managers for adherence to appropriate policies and guidelines. Ensure that investment managers conform to the terms of their contracts.

- Ensure that due diligence and oversight of the Investment portfolios is conducted.
- Assist the Board in the evaluation of consultants to ensure that they are providing all necessary assistance to the Trust, as set forth in their service contracts.
- Conduct the manager search process, as set forth in this document, with assistance from consultants as directed by the Board.
- Manage portfolio restructurings resulting from external manager terminations with the assistance of consultants and managers, as needed.
- As directed by the Board, conduct special research required to manage the Trust more effectively.
- Report on investment activity and matters of significance at least monthly.
- Rebalance the portfolio to maintain asset allocation and/or to provide liquidity for cash needs or benefit payments. This requires delegating authority to the Chief Investment Officer to shift up to 3% of Trust's assets without Board approval. Any such action by the CIO will require notification to the Board of Investments via the monthly CIO Report.
- Maintain control over all wire transfers or movement of monies to or from all investment accounts.
- Strive to avoid conflicts of interest.
- Authorize consent to assignments of Investment Manager Agreements that are technical assignments under the Investment Advisors Act of 1940 with subsequent notification to the Board.
- Report to the entire Board if either the Chief Executive Officer (CEO) or a member of the Board of Investments has contacted the investment staff on three separate occasions over a rolling one-year period regarding a potential investment manager.

In addition to these core responsibilities, the Board has delegated to the Chief Investment Officer the following authorities. In the event the CIO is not available, and time is of the essence in making a decision, the CEO shall have the authorities identified below. In the event neither the CIO or CEO are available, a committee comprised of all available Principal and Senior Investment Officers and Assistant Executive Officers shall have these powers, provided that the committee is comprised of at least one Principal or Senior Investment Officer and one Assistant Executive Officer. The Board will receive written notification of all such actions.

- Authority to sign all investment-related consultant contracts and agreements, subsequent to Board approval. Thereafter, authority to sign all amendments and modifications with respect to such contracts and agreements, and make all decisions with respect to their day-to-day operation and implementation where the investment mandate remains substantially unchanged. The Board will receive written notification of all material actions taken.
- Authority to approve temporary variances from investment manager guidelines. The Board will receive written notification of all such actions.
- Authority to approve reductions to investment manager fee schedules. The Board will receive written notification of all such actions.

- Authority to limit or freeze manager trading activity pending discussion and action by the Board of Investments. Such actions shall be reported as an informational item as reasonably practicable to the Board of Investments and no later than the next scheduled meeting of the Board.
- Authority to take actions not otherwise specifically delegated, in concurrence with the CEO and the Chair of the Board of Investments, when deemed necessary in the best interest of the Trust and there is not time to take the action to the full Board of Investments. Such action shall be reported as an informational item as soon as reasonably practicable to the full Board and no later than the next scheduled meeting of the Board of Investments.

All investment-related contracts and agreements and all amendments and modifications to them are subject to review and approval by LACERA's Legal Office.

Duties of the Investment Managers

The investment managers shall have designated discretion to direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document; applicable Local, State and Federal statutes and regulations; and individual management investment plans and executed contracts. The investment managers shall be responsible for the following:

- Execution of a contractual agreement to invest within the guidelines established in the Investment Plan.
- Provide to the Trust proof of liability and fiduciary insurance coverage.
- Be a SEC-Registered Investment Advisor under the 1940 Act, unless LACERA has previously approved an exemption from registration, and be recognized as providing demonstrated expertise over a number of years in the management of institutional, tax-exempt assets within a defined investment specialty.
- Adhere to the investment management style and principles for which they were retained, including, but not limited to, developing portfolio strategy, performing research, developing buy, hold and sell lists, and purchasing and selling securities.
- Execute all transactions for the benefit of the Trust with brokers and dealers qualified to execute institutional orders on an ongoing basis at the best net cost to the Trust.
- Reconcile monthly accounting, transaction and asset summary data with custodian valuations, and communicate and resolve any significant discrepancies with the custodian.
- Maintain frequent and open communication with staff on all significant matters that affect the Trust, including, but not limited to, the following:
    1. Major changes in the Investment Manager's investment outlook, investment strategy and portfolio structure.
    2. Significant changes in ownership, organizational structure, financial condition or senior personnel.
    3. Any changes in the portfolio manager or other key personnel assigned to the Trust.
    4. Each significant client which terminates its relationship with the Investment Manager, within 30 days of such termination.

5. All pertinent issues which the Investment Manager deems to be of significant interest or material importance.
6. Meet with the Board or its designee(s) on an as-needed basis.

Duties of the Master Custodian
The Master Custodian shall be responsible for the following:

- Provide complete global custody and depository services for the designated accounts.
- Manage a Short-Term Investment Fund (STIF) for investment of any cash not invested by managers, and ensure that all available cash is invested. If the cash reserves are managed externally, full cooperation must be provided.
- Provide staff with portfolio performance in a timely manner, and reconcile differences with managers.
- Provide, in a timely and effective manner, a monthly report of the investment activities implemented by the investment managers.
- Calculate all income and principal realized and properly report the results in periodic statements.
- Provide monthly and fiscal year-end accounting statements for the portfolio, including all transactions; these should be based on accurate security values for both cost and market. These reports should be provided within acceptable time frames.
- Report to the Trust situations where accurate security pricing, valuation and accrued income is either not possible or subject to considerable uncertainty.
- Provide assistance to the Trust to complete such activities as the annual audit, transaction verification, corporate actions, securities litigation, or unique issues as required by the Board.
- Manage a securities lending program to enhance income if directed by the Board. If the securities lending program is managed externally, full cooperation must be provided.
- Deliver all U.S. and non-U.S. proxy voting materials to LACERA, including meeting notices, voting instruction forms, proxy statements, quarterly and annual shareholder reports and miscellaneous proxy voting materials.

Duties of Consultants
The Board and staff will consider the comments and recommendations of consultants in conjunction with other available information to make informed, prudent decisions.

General Investment Consultant
The General Investment Consultant shall be responsible for the following:

- **Conduct an asset-liability study –** work closely with LACERA's actuaries and senior investment staff to prepare a comprehensive asset-liability study, no less frequently than every three to five years.
- **Assist LACERA's investment staff with strategic investment decisions–**focus on "big-picture" total fund investment policy and structure issues.

- **Provide independent reviews–**when requested, provide independent reviews via reports to the Board on staff projects and recommendations in areas including, the investment policy and guidelines, asset class structures, and investment manager searches.
- **Calculate performance measurement–**independently from the custodian and provide quarterly performance reports to the Trust. Once a year the Consultant will make a performance presentation to the Board of Investments.
- **Research investment ideas–**provide independent, thorough research on current industry issues.
- **Educate LACERA's Investment Board**-provide educational presentations to the Board on specific issues. Education will range from informational items to critical investment policy issues.

Table 2. Correlation Matrix

Asset Class / Sub Asset Class	Cash	IG Bonds	TIPS	High Yield	Bank Loans	EM Bonds	Global Equity	REITs	Commodities
Cash Equivalents	1.00								
Investment Grade Bonds	0.05	1.00							
TIPS	0.05	0.80	1.00						
High Yield Bonds	0.00	0.20	0.30	1.00					
Bank Loans	0.05	0.00	0.20	0.80	1.00				
Emerging Market Bonds	0.05	0.50	0.50	0.70	0.40	1.00			
Global Equity	0.00	0.05	0.10	0.70	0.60	0.60	1.00		
REITs	0.05	0.15	0.20	0.70	0.55	0.50	0.70	1.00	
Commodities	0.00	0.05	0.35	0.40	0.40	0.40	0.50	0.30	1.00

Table 3. Ten-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Growth		
Global Equity	6.7	19.0
Credit-Oriented Fixed Income		
High Yield Bonds	5.0	12.5
Bank Loans	5.1	10.0
Emerging Market Bonds	5.1	13.3
Risk Reduction & Mitigation		
Cash Equivalents	1.5	1.0
Investment Grade Bonds	2.5	4.0
Inflation Hedges		
TIPS	3.0	7.5
Real Estate (REITs)	6.0	29.0
Commodities	4.4	19.5

LIST OF ATTACHMENTS

Incorporated by reference and attached to this document are the following concise policy statements.

- **A** **Manager Monitoring and Annual Review Policy**
- **B** **Securities Lending Program Policy**

Attachment A

MANAGER MONITORING AND ANNUAL REVIEW POLICY

This policy outlines and defines, in accordance with Board Policies, a process for the on-going monitoring and review of investment managers by LACERA's investment staff and to establish guidelines for scheduling manager presentations to the Board of Investments (the Board). In adopting this policy, the Board acknowledges that LACERA has developed a highly qualified and capable in-house investment staff. The staff is led by a Chief Investment Officer with asset class responsibility delegated to individual Investment Officers. This Investment Staff is responsible for and fully capable of performing the work assigned to it by the procedures discussed below.

The Board recognizes it is not necessary to meet with every investment manager annually, although from time-to-time, the Board may wish to meet with managers experiencing either performance or organizational related problems.

The following outlines the investment staff's responsibilities for monitoring and reporting back to the Board investment manager activities.

MONTHLY AND QUARTERLY INVESTMENT REPORTS

Monthly Chief Investment Officer Reports
This report will provide the Board asset class market values and target allocations, as well as preliminary performance results for calendar year-to-date, fiscal year-to-date, and three, five and ten year returns. Other information may include investment activity such as manager rebalancing and funding activity, and upcoming staff projects.

Performance Measurement Reports
The investment staff will provide quarterly performance measurement reports for the most recent calendar quarter end. Staff will supplement these written reports with oral presentations to the Board annually, alternating every six months with LACERA's general investment consultant.

Performance reports will include the Total Fund results for the trailing quarter, one-, three- and five-year periods. Composite results for all asset classes will also be reported.

Individual external manager results will also be included in this report. Manager results will include a summary page reviewing all managers' gross and net-of-fee performance results for the most recent quarter, one, three, and five years. Risk-adjusted graphs will be provided for managers with at least three years of data.

A one-page summary for each manager will also be provided in the quarterly performance report. This summary will list each manager's mandate, provide peer and benchmark relative performance and since inception results. Estimated manager fees will be included in the appendix.

ASSET CLASS STRUCTURE AND MANAGER REVIEWS

Biennially, staff will review with the Board the current strategies for implementing the public markets allocations in relation to the Board's adopted asset allocation policy. Periodically, staff may recommend the Board adopt strategy changes; however, because these are long-term investment goals, the Board and staff recognize that continually changing these strategies could negatively impact composite results.

Equity strategy papers will review the composite portfolio's active/passive allocations and any style biases or other deviations resulting from either past policy decisions or occurring from recent market trends.

Fixed income strategy papers will review the rationale for utilizing strategic and tactical allocations to the different sectors of global fixed income markets and their specific role in the composite portfolio structure. Additionally, specific sector allocations will be discussed as part of the fixed income strategic review.

Commodities strategy memos will analyze whether the asset class is fulfilling its desired objectives—diversification and inflation hedging—within the Fund. The Commodities Composite's performance will be examined, including a review of the return and risk of individual managers. Broad issues such as the potential impact of derivatives regulation or the optimum benchmark may also be addressed.

Manager reviews will include, but are not limited to, a review of each manager's investment mandate, investment process, key personnel and/or organizational structure and historical performance.

MONITORING MANAGERS BY INVESTMENT STAFF

The Board has delegated to the investment staff the fundamental responsibility of monitoring the Trust's investment managers on an on-going basis. Effectively monitoring managers can be broken into two key areas: identifying critical factors to monitor and establishing how managers will be monitored.

Staff will monitor the following critical factors: adherence to investment style, changes in key personnel, performance, organizational changes such as a sale of a firm, rapid asset growth or loss, and high staff turnover. Additionally, manager portfolios will be monitored for adherence to investment guidelines and contract compliance issues.

Managers will be monitored via periodic telephone calls and on-site visits. Each manager's performance will be reviewed monthly. In addition, portfolio characteristics will be reviewed periodically to ensure that a manager is adhering to its investment style. Such reviews will incorporate analytics from external software packages and data provided by the Trust's custodian or obtained from the investment managers.

FORMAL BOARD REVIEW OF INVESTMENT MANAGERS

Formal manager reviews may be undertaken for any of the following reasons:

- When a manager's last three consecutive quarters of one year rolling excess returns are below the calculated performance bands.

- When a manager's last three consecutive quarters of one year rolling excess returns are *above* the calculated performance bands, a manager review may be undertaken at the discretion of the Chief Investment Officer.
- At the Board's request.
- At either staff's or Consultant's recommendations.

Staff will notify the Board during performance reviews, or at other times of the year, when in staff's opinion it is necessary to conduct a manager review. Additionally, the Board may periodically decide for no particular reason to invite investment managers to undertake a formal review.

The review may entail the manager conducting a formal presentation to the Board of Investments. (Managers requested to present to the Board because of performance or organizational concerns will be asked to specifically address these issues.) They will also be asked to review the following key points:

- Investment philosophy.
- Performance results.
- Past Investment strategy and performance impact relative to the benchmark.
- Current investment strategy.
- Potential investment strategy risk.

Reviewed: November 19, 2014
Revised: November 20, 2013
Revised: November 13, 2012
Revised: January 12, 2011
Revised: March 11, 2009

ATTACHMENT B

SECURITIES LENDING PROGRAM POLICY

The Master Trust's securities lending program provides the Fund with an opportunity to earn incremental income and offset administrative expenses. The program may be managed by the Fund's custodian, and/or qualified third-party securities lending agent(s), and/or direct borrowers (principals). The operation of the securities lending program should remain transparent to the Trust's external investment managers and should not impede their investment management process.

The securities lending program consists of two separate functions. The first function is the lending of the Trust's eligible securities (U.S. and Non-U.S. equities & bonds), to approved and qualified borrowers, either through an agent or directly, subject to the terms and conditions specified in the Trust's "Securities Lending Authorization Agreement." Loans of U.S. securities must have a minimum collateralization level of 102% and loans of Non-U.S. securities must have a collateralization level of at least 105%.

The second function is the reinvestment of cash proceeds generated by the lending of the Trust's portfolio securities. This is an investment management function, and is therefore governed by the same "prudent man rules" employed by the Trust's existing investment managers. Cash proceeds may be invested in commingled funds or in separately managed accounts. Separately managed accounts will be managed in accordance with investment policies and guidelines adopted by the Board of Investments.

To maintain appropriate risk controls, staff shall continually monitor the securities lending program for compliance with the investment guidelines and policies pertaining to the reinvestment of cash proceeds. These guidelines and policies shall be periodically reviewed and, if needed, amended to incorporate any appropriate revisions.

Reviewed: November 19, 2014
Revised: November 20, 2013
Revised: November 13, 2012
Revised: June 25, 2003

ATTACHMENT 2

OTHER POST-EMPLOYMENT BENEFITS (OPEB) MASTER TRUST FUND

INVESTMENT POLICY STATEMENT

Color Key: Black – Original OPEB IPS | Blue – LACERA IPS
Red – Changes to existing language | Green – New language from external sources

TABLE OF CONTENTS

INTRODUCTION

The Los Angeles County Employees Retirement Association ("LACERA") has been ~~named~~ appointed as the Investment Manager for the Los Angeles County's, LACERA's, and Los Angeles County Superior Court's Other Post-Employment Benefit Trusts, which are Participating Trusts under the LACERA Master OPEB Trust (~~"OPEB" or the "Trust"~~ the "Trust"). As the Trustee of the Trust, the ~~LACERA~~ Board of Investments for LACERA (the "Board") has the responsibility to oversee investment of the Trust assets. LACERA's investment staff ("investment staff" or "staff") provides the day-to-day oversight of the investment activities, and executes the instructions of the Board. The Trust assets may be invested collectively or may be divided into funds determined by the Trustee (each, a "Subfund"), and each Subfund shall be unitized to reflect the interest of each Participating Trust in each Subfund. The Trustee shall keep a record of the available Subfunds.

This document provides the framework for the management of the ~~OPEB~~ Trust's assets. The purpose of the Investment Policy is to assist the Board and staff in effectively supervising and monitoring the investment and use of ~~OPEB~~ Trust assets. Specifically, it addresses the following issues:

- The general goals of the investment program.
- Specific asset class allocations, targets, and ranges.
- Performance objectives.
- The investment policies and structures for the management of the assets.
- Responsible parties and duties.

The Board establishes this investment policy in accordance with applicable local, State, and Federal laws. The Board members exercise authority and control over the management of the Trust, by setting policy which the investment staff executes through the use of external investment managers. The Board oversees and guides the Trust subject to the following basic fiduciary responsibilities:

- Solely in the interest of, and for the exclusive purpose of providing other post-employment benefits to ~~employees and retirees of the subfunds of the Master Trust.~~ persons eligible to receive such benefits pursuant to the terms of each Participating Trust's OPEB program.
- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like objectives.
- ~~To~~ Diversify the investments of the Trust so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances, it is clearly prudent not to do so. Diversification is applicable to the deployment of the assets as a whole.

The ~~OPEB~~ Trust has a long-term investment horizon, and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets. It is generally recognized that a strategic long-term asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the Trust's investment performance. This policy statement is designed to allow for sufficient flexibility in the management oversight process to capture investment opportunities as they may occur, while setting forth reasonable parameters to ensure prudence and care in the execution of the investment program.

All transactions undertaken will be for the sole economic benefit of beneficiaries and for the exclusive purpose of providing benefits to them.

This policy statement generally covers both separate account and commingled investments except where not applicable. Other LACERA policies that are indirectly associated with this IPS may also apply. Incorporated by reference and attached to this document are the following:

Attachments

A Manager Monitoring and Annual Review Policy

B Securities Lending Program Policy

~~A Cash and Cash Equivalents Investment Policy~~

- ~~*Enhanced Cash Investment*~~

~~B Global Equity Investment Policy~~

~~C Manager Monitoring and Review Policy~~

~~These are concise policy statements; more detailed strategic plans or procedures may be developed separately.~~

INVESTMENT GOALS

The Trust's general investment goals are broad in nature. The objective shall be to efficiently allocate and manage the assets dedicated to the payment of other post-employment benefits and administrative expenses. The following goals, consistent with the above described purpose, are adopted:

- The overall goal of the Trust's investment program is to provide employees and retirees of Los Angeles County, LACERA, and Los Angeles County Superior Court with post-employment health care benefits as promised. This will be accomplished through a carefully planned and executed long-term investment program.
- Trust assets will be managed on a total return basis. While the Trust recognizes the importance of the preservation of capital, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns in the long term. ~~At the request of the Plan Sponsor, a reserve of $100 million cash is established for potential immediate access.~~
- ~~The Plan Sponsor requests the remainder of the~~ Trust assets will be invested in an effort to maximize total return, consistent with market conditions and appropriate levels of risk and liquidity.

The Investment Policy has been designed to allow the Trust to achieve a long-term total return. Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification to meet this goal. The investment activities are designed and executed in a manner that serves the best interests of the beneficiaries of the Trust.

Investment recommendations and subsequent actions are expected to comply with "prudent expert" standards.

ASSET ALLOCATION POLICY

The asset allocation policy is predicated on a number of factors presented by the General Investment Consultant, including:

- ~~A projection of actuarial assets, liabilities, benefit payments, contributions and the assumed actuarial rate of return.~~
- Historical behavior and expected long-term capital market risk, return, and correlation forecasts.[1]
- An assessment of future economic conditions, including inflation and interest rate levels.
- The current and projected funded status of the Trust.
- Various risk/return scenarios.
- Liquidity requirements.

[1] Based on Meketa's December 2017 Presentation, the 10-year return assumption is 6.30%.

- Direction provided by the Participating Trust in connection with the investment of assets, such as liquidity needs or contribution plans. ~~Requests by the Plan Sponsor regarding investment of assets.~~

This policy provides diversification of assets in an effort to maximize the total return of the Trust consistent with market conditions and risk control. The asset allocation modeling process identifies asset classes that the Trust may utilize and the percentage that each class represents of the ~~total fund~~ Trust. Due to the fluctuation of market values, positioning within a specified range is acceptable and constitutes compliance with the policy. It is anticipated that an extended period of time may be required to fully implement the asset allocation policy, and that periodic revisions will occur. The investment staff will monitor and assess the actual asset allocation versus policy and will evaluate any variation deemed significant.

The Board will implement the asset allocation policy in large part through the use of passive investment managers. ~~, who will invest the assets of their portfolios.~~ All investments are subject to investment guidelines incorporated into the executed ~~investment management~~ agreements with external managers or the policies established by the Board.[2] The strategic asset allocation targets and ranges for the investments of the Trust's assets are shown below:

[2] Through this Investment Policy Statement, staff is authorized to implement Investment Guidelines specific to each portfolio within these constraints. Investment Guidelines falling outside these constraints require approval by the Chief Investment Officer, with notice to the Board.

Table 1. Asset Allocation

Asset Class	Benchmark	Target Allocation (%)	Allocation Range
Growth		50.0	+/- 10%
Global Equity	MSCI ACWI IMI	50.0	
Credit-Oriented Fixed Income		20.0	+/- 5%
High Yield Bonds	Bloomberg Barclays High Yield Index[3]	6.0	
Bank Loans	S&P /LSTA Leveraged Loan Index	10.0	
Emerging Market Local Currency Bonds	JP Morgan GB - EMGD Index	4.0	
Risk Reduction & Mitigation		10.0	+/- 5%
Cash Equivalents	Citi 6-month T-Bills Index	2.0	
Investment Grade Bonds	Bloomberg Barclays U.S. Aggregate Index	8.0	
Inflation Hedges		20.0	+/- 5%
TIPS	Bloomberg Barclays U.S. TIPS Index	6.0	
Real Estate (REITs)	DJ U.S. Select Real Estate Sec Index	10.0	
Commodities	Bloomberg Commodity Index TR	4.0	
TOTAL FUND	**Custom Benchmark[4]**	**100.0**	

The target allocation yields an expected 6.3% average annualized (geometric, or compounded) 10-year return projection, with a standard deviation of 13.84%. These projections are based on the General Investment Consultant's 10-year return, volatility, and correlation estimates for each asset class, which are included in Tables 2 and 3 at the end of the document. The estimates for each asset class are arrived at by incorporating both quantitative and qualitative factors, and are reviewed and updated no less frequently than annually. The portfolio return and volatility estimates are based on the aggregation of these projections and LACERA's target allocation.

[3] Bloomberg Barclays High Yield 500MM Par, 2% Issuer Capped Index.
[4] Custom Benchmark: A blended benchmark of each investment category's target allocation.

ASSET ALLOCATION REBALANCING POLICY

The purpose of rebalancing back to asset class targets is to ensure that the ~~Plan's~~ Trust's actual asset allocation does not drift from the strategic asset allocation policy. The strategic asset allocation policy has been developed after a rigorous analysis of the Board's objectives and risk tolerance. Rebalancing ensures that the ~~Plan's~~ Trust's desired asset allocation policy is maintained consistently over time. It, therefore, ensures that a major policy decision of the Board is implemented effectively.

In the absence of any other considerations, the optimal strategy would be to rebalance continually back to the Board-approved target asset allocation. However, rebalancing involves costs such as brokerage and other trading costs.

It shall be the policy of the Board that:

- Cash flows, into and out of the Trust, will be used to rebalance back to asset class targets whenever possible.
- The ~~Fund's~~ Trust's actual asset allocation should be reviewed at the end of each month when asset valuations become available. More frequent reviews may be undertaken, if appropriate. Rebalancing may take place if the weight to any asset class deviates materially from its Board-approved target weight. Rebalancing must take place when Board-approved ranges are breached. Rebalancing should be implemented by the most cost-effective means available and without market disruption.
- When rebalancing occurs, the portfolio will be rebalanced toward the Board- approved asset allocation policy targets.

~~At least~~ Monthly, the Board shall be notified of any rebalancing that has taken place. Additionally, ~~LACERA's~~ the Trust's quarterly investment performance report will include a direct comparison of the portfolio's actual asset allocation to the target allocation. The implementation of the rebalancing program will be undertaken by the Chief Investment Officer.

PERFORMANCE OBJECTIVES

The long-term performance objective of the Trust's total fund is to ~~match~~ mirror its Policy benchmark gross-of-fees.

INVESTMENT STRATEGY AND GUIDELINES

The Trust will have the following functional risk overlay of the traditional asset classes:

Growth

Role in the portfolio: The primary role of assets in this category is to produce a sufficiently high level of long-term growth to provide the promised benefits.

Asset Classes: Global Equity

- **Global Equity** invests in a portfolio of global equity securities with the objective of approximating as closely as practicable the capitalization weighted rates of return of the markets in certain countries for publicly traded equity securities. The benchmark shall be the MSCI ACWI IMI Net Dividend Return Index. The full spectrum of securities may include American Depositary Receipts, Global Depositary Receipts, and other structured transactions utilizing foreign stocks and currencies.

Implementation: Index funds will be utilized to access equity market returns in a low-cost manner.

Credit-Oriented Fixed Income

Role in the portfolio: The role of Credit-Oriented Fixed Income is to produce moderate long-term total returns that provide diversification from public equities.

Asset Classes: High Yield, Emerging Markets Debt, Bank Loans

- **High Yield** invests primarily in a portfolio of debt securities with the objective of approximating the total rate of return of the Bloomberg Barclays U.S. High Yield 500MM Par, 2% Issuer Capped Index. Debt securities shall include obligations that are included in the Bloomberg Barclays U.S. High Yield 500MM Par, 2% Issuer Capped Index or which BTC believes will allow the portfolio to better track the Bloomberg Barclays U.S. High Yield 500MM Par, 2% Issuer Capped Index.

- **Emerging Markets Local Currency Debt** invests primarily in a portfolio of debt securities denominated in local currency and issued by governments and agencies of, and companies domiciled or exercising the predominant part of economic activity in, emerging markets. The full spectrum of securities may also include non-investment grade securities.

- **Bank Loans** invest primarily in U.S. dollar denominated floating rate loans which provide income that can rise with rates and inflation.

Implementation: Index and/or mutual funds will be utilized to access the credit market in a low-cost manner.

Risk Reduction & Mitigation

Role in the portfolio: The role of assets in this category is to provide diversification and risk reduction.

Asset classes: Cash Equivalents, Investment Grade Bonds

- **Cash Equivalents** managers may invest in high quality, short-term fixed income instruments with a credit rating of at least A-2/P-2 by Moody's or S&P. The portfolio's maximum average duration is one year, and the maximum average maturity for individual securities is two years. The use of repurchase agreements will be permitted provided these agreements are adequately collateralized.

- **Investment Grade Bonds** invest primarily in a portfolio of debt securities with the objective of approximating as closely as practicable the total rate of return of the market for debt securities as defined by the Bloomberg Barclays U.S. Aggregate Bond Index.

Implementation: Index fundswill be utilized to access the investment grade bonds market in a low-cost manner and an existing external manager will be utilized for Cash Equivalents.

Inflation Hedges

Role in the portfolio: The role of assets in this category is to provide a hedge against unanticipated inflation and improve total fund diversification due to anticipated low correlation of returns with other asset classes.

Asset classes: TIPS, Real Estate, Commodities

- **TIPS** exposure is achieved through investments in inflation-indexed bonds of varying maturities issued by the U.S. and non-U.S. governments, their agencies, or instrumentalities, and U.S. and non-U.S. corporations.

- **Real Estate (Real Estate Investment Trusts or REITs)** exposure is achieved through a portfolio of equity-oriented real estate investments to diversify against other asset classes and to enhance overall fund returns.

- **Commodities** invests primarily in commodity futures contracts; short-term fixed income obligations, including, but not limited to U.S. Treasury obligations; cash instruments; and/or other investments with the objective of approximating the rate of return of the Bloomberg Commodity Index Total Return.

Implementation: Index funds will be utilized to access the TIPS, REITs, and Commodities markets in a low-cost manner.

INVESTMENT MANAGEMENT POLICIES

The Trust may utilize externally managed portfolios based on specific mandates and methodologies. The external managers will be expected to acknowledge in writing that they are Trust fiduciaries~~,~~ and that they will have discretion and authority to determine investment strategy, security selection and timing, subject to the Policy guidelines herein and investment guidelines specific to their portfolio.

Investment managers, as prudent experts, will be expected to know specific investment guidelines for their portfolios, and to comply with these guidelines. It is each manager's responsibility to identify guidelines that may have an adverse impact on performance, and to initiate discussion with staff toward possible improvement of said guidelines.

As outlined in the Manager Monitoring and Annual Review Policy (**Attachment A**), staff, under Board supervision, is responsible for monitoring investment managers' adherence to their investment mandate, and any material changes in the managers' organization. The investment managers retained by the Trust will be responsible for informing staff of all such material changes on a timely basis. Further, staff is responsible for monitoring and evaluating manager performance on a regular basis relative to each portfolio's benchmark return and relative to a peer group of managers with similar investment mandates.

Investment managers under contract to the Trust shall have discretion to establish and execute transactions with any securities broker/dealers as needed. However, the Trust reserves the right to preclude investment managers from directing trades through certain brokerages ~~brokerage subsidiaries of Trust or LACERA contractors~~ as it deems appropriate. The investment managers must obtain the most favorable executions with respect to all of the portfolio transactions as market conditions permit.

Prohibited Transactions

The following transactions will be prohibited unless stated otherwise in the investment manager guidelines:

- Short sales.
- Selling or buying on margin.
- "Prohibited transactions" as defined under the Employee Retirement Income Security Act of 1974 (ERISA).
- Transactions that involve a broker acting as a "principal", where such broker is also the investment manager who is making the transaction.
- Any or all investment activities forbidden by SEC or other applicable governing bodies.
- No investment manager or trustee may leverage the ~~OPEB~~ Trust portfolio by investing more than 100% of the total market value. This measure must reflect the effective exposure associated with derivative securities. The exposure for options, when permitted by contract, must be based on an appropriate options pricing model.

Selection Criteria for Investment Managers

Criteria will be established for each manager search undertaken and will be tailored to the Trust's needs in such a search. In general, eligible managers will possess attributes including, but not limited to, the following:

- The firm must be experienced in managing investments for institutional clients in the asset class/product category/investment style specified by the Trust.

- The firm must display a record of stability in retaining and attracting qualified investment professionals, as well as a record of managing asset growth effectively, both in gaining and retaining clients.
- The firm must have an asset base sufficient to accommodate the Trust's portfolio. In general, the Trust's portfolio should make up no more than 25% of the firm's total asset base at funding. Exceptions may be made on a case-by-case basis.
- The firm must demonstrate adherence to the investment mandate sought by the Trust, and adherence to the firm's stated investment discipline.
- The firm's fees should be competitive with industry standards for the product category.
- The firm must comply with the "Duties of the Investment Managers" outlined herein.
- The firm must conform to Global Investment Performance Standards (GIPS) for performance reporting.

In addition, the Trust's ~~LACERA's~~ assessment of investment managers will take into account the degree to which the manager's qualified investment professionals exhibit diversity, including such considerations as background, age, experience, race, gender, ethnicity, and culture.

As much as possible, the Trust intends to leverage the relationships LACERA maintains with various asset management organizations in order to take advantage of preferred pricing and capabilities. Where the needs of the Trust differ from those of LACERA, such considerations shall take precedence in the manager selection process.

Termination Criteria for Investment Managers
The Board of Investments, representing the Trust, ~~LACERA,~~ reserves the right to terminate an investment manager for any reason. Grounds for investment manager termination may include, but are not limited to, the following:

- Failure to comply with the guidelines agreed upon for management of the Trust portfolio, including holding restricted issues.
- Failure to achieve performance objectives specified in the manager's guidelines.
- Significant deviation from the manager's stated investment philosophy and/or process.
- Loss of key personnel.
- Evidence of illegal or unethical behavior by the investment management firm.
- Lack of willingness to cooperate with reasonable requests by Board and staff ~~LACERA~~ for information, meetings or other material related to its portfolios.
- Loss of confidence by staff and the Board in the investment manager.
- A change in the Trust's asset allocation program which necessitates a shift of assets to another sector.

The presence of any one of these factors will be carefully reviewed by LACERA staff, but will not necessarily result in an automatic termination.

DUTIES OF RESPONSIBLE PARTIES

Duties of LACERA's Board of Investments

The Board or its designee(s) will adhere to the following in the management of Trust assets:

- Shall approve guidelines for the execution of the Trust's investment program. Only the Board in its sole discretion can delegate its decision-making authority regarding the investment program. Staff will be responsible for the timely implementation and administration of these decisions.
- ~~Shall review the Trust's investment structure, asset allocation, and financial performance annually or more frequently as the need arises~~. Shall review the Trust's investment structure and financial performance annually and asset allocation triennially, or more frequently as the need arises. The reviews may include recommended adjustments to the long-term, strategic asset allocation to reflect any changes in applicable regulations, long-term capital market assumptions, actuarial assumptions or the Trust's financial condition.
- Shall review Trust investments quarterly or as needed to ensure that policies and guidelines continue to be met. The Board shall monitor investment returns on both an absolute basis and relative to appropriate benchmarks and peer group comparisons. The source of information for these reviews shall come from staff, consultants, the custodian and the Trust's investment managers.
- May retain investment consultants to provide such services as conducting performance reviews, asset allocation, manager reviews and investment research. The comments and recommendations of the consultants will be considered in conjunction with other available information to aid the Board in making informed, prudent decisions.
- Shall take appropriate action if investment objectives are not being met or if policies and guidelines are not being followed. Reviews for separate portfolios managed by external managers are defined in the Manager Monitoring and Annual Review Policy (**Attachment ~~E~~ A**).
- Shall expect staff to administer Trust investments in a cost-effective manner subject to Board approval. These costs include, but are not limited to, management, consulting and custodial fees, transaction costs and other administrative costs chargeable to the Trust.
- Shall select a qualified custodian with advice from staff.
- Shall strive to avoid conflicts of interests.

Duties of the Investment Staff

The investment staff, as designated by the Board, plays a significant role in the management and oversight of the ~~Fund~~ Trust. Investment staff shall be responsible for the following:

- Manage the strategic asset allocation of the Trust ~~fund~~ in accordance with agreed upon target ranges and rebalancing policies.
- Establish investment guidelines for manager portfolios that are consistent with existing policies and with Board-approved investment structure.
- Monitor external managers for adherence to appropriate policies and guidelines. Ensure that investment managers conform to the terms of their contracts.

- Ensure that due diligence and oversight of the Investment portfolios is conducted.
- Assist the Board in the evaluation of consultants to ensure that they are providing all necessary assistance to ~~LACERA~~ the Trust, as set forth in their service contracts.
- Conduct the manager search process, as set forth in this document, with assistance from consultants as directed by the Board.
- Manage portfolio restructurings resulting from external manager terminations with the assistance of consultants and managers, as needed.
- As directed by the Board, conduct special research required to manage the ~~Fund~~ Trust more effectively.
- Report on investment activity and matters of significance at least monthly.
- Rebalance the portfolio to maintain asset allocation and/or to provide liquidity for cash needs or benefit payments. This requires delegating authority to the Chief Investment Officer to shift up to 3% of ~~Fund's~~ Trust's assets without Board approval. Any such action by the CIO will require notification to the Board of Investments via the monthly CIO Report.
- Maintain control over all wire transfers or movement of monies to or from all investment accounts.
- Strive to avoid conflicts of interest.
- Authorize consent to assignments of Investment Manager Agreements that are technical assignments under the Investment Advisors Act of 1940 with subsequent notification to the Board.
- Report to the entire Board if either the Chief Executive Officer (CEO) or a member of the Board of Investments has contacted the investment staff on three separate occasions over a rolling one-year period regarding a potential investment manager.

In addition to these core responsibilities, ~~LACERA's Board of Investments~~ the Board has delegated to the Chief Investment Officer the following authorities. In the event the CIO is not available, and time is of the essence in making a decision, the CEO shall have the authorities identified below. In the event neither the CIO or CEO are available, a committee comprised of all available Principal and Senior Investment Officers and Assistant Executive Officers shall have these powers, provided that the committee is comprised of at least one Principal or Senior Investment Officer and one Assistant Executive Officer. The Board will receive written notification of all such actions.

- Authority to sign all investment-related consultant contracts and agreements, subsequent to Board approval. Thereafter, authority to sign all amendments and modifications with respect to such contracts and agreements, and make all decisions with respect to their day-to-day operation and implementation where the investment mandate remains substantially unchanged. The Board will receive written notification of all material actions taken.
- Authority to approve temporary variances from investment manager guidelines. The Board will receive written notification of all such actions.

- Authority to approve reductions to investment manager fee schedules. The Board will receive written notification of all such actions.
- Authority to limit or freeze manager trading activity pending discussion and action by the Board of Investments. Such actions shall be reported as an informational item as reasonably practicable to the Board of Investments and no later than the next scheduled meeting of the Board.
- Authority to take actions not otherwise specifically delegated, in concurrence with the CEO and the Chair of the Board of Investments, when deemed necessary in the best interest of the Trust and there is not time to take the action to the full Board of Investments. Such action shall be reported as an informational item as soon as reasonably practicable to the full Board and no later than the next scheduled meeting of the Board of Investments.

All investment-related contracts and agreements and all amendments and modifications to them are subject to review and approval by LACERA's Legal Office.

Duties of the Investment Managers

The investment managers shall have designated discretion to direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with this document; applicable Local, State and Federal statutes and regulations; and individual management investment plans and executed contracts. The investment managers shall be responsible for the following:

- Execution of a contractual agreement to invest within the guidelines established in the Investment Plan.
- Provide to the Trust ~~LACERA~~ proof of liability and fiduciary insurance coverage.
- Be a SEC-Registered Investment Advisor under the 1940 Act, unless LACERA has previously approved an exemption from registration, and be recognized as providing demonstrated expertise over a number of years in the management of institutional, tax-exempt assets within a defined investment specialty.
- Adhere to the investment management style and principles for which they were retained, including, but not limited to, developing portfolio strategy, performing research, developing buy, hold and sell lists, and purchasing and selling securities.
- Execute all transactions for the benefit of the Trust with brokers and dealers qualified to execute institutional orders on an ongoing basis at the best net cost to the Trust.
- Reconcile monthly accounting, transaction and asset summary data with custodian valuations, and communicate and resolve any significant discrepancies with the custodian.
- Maintain frequent and open communication with staff on all significant matters that affect the Trust, including, but not limited to, the following:
    1. Major changes in the Investment Manager's investment outlook, investment strategy and portfolio structure.
    2. Significant changes in ownership, organizational structure, financial condition or senior personnel.
    3. Any changes in the portfolio manager or other key personnel assigned to the ~~Plan~~ Trust.

4. Each significant client which terminates its relationship with the Investment Manager, within 30 days of such termination.
5. All pertinent issues which the Investment Manager deems to be of significant interest or material importance.
6. Meet with the Board or its designee(s) on an as-needed basis.

Duties of the Master Custodian

The Master Custodian shall be responsible for the following:

- Provide complete global custody and depository services for the designated accounts.
- Manage~~, if directed by the Board,~~ a Short-Term Investment Fund (STIF) for investment of any cash not invested by managers, and ensure that all available cash is invested. If the cash reserves are managed externally, full cooperation must be provided.
- Provide staff with portfolio performance in a timely manner, and reconcile differences with managers.
- Provide, in a timely and effective manner, a monthly report of the investment activities implemented by the investment managers.
- Calculate all income and principal realized and properly report the results in periodic statements.
- Provide monthly and fiscal year-end accounting statements for the portfolio, including all transactions; these should be based on accurate security values for both cost and market. These reports should be provided within acceptable time frames.
- Report to the Trust ~~LACERA~~ situations where accurate security pricing, valuation and accrued income is either not possible or subject to considerable uncertainty.
- Provide assistance to the Trust ~~LACERA~~ to complete such activities as the annual audit, transaction verification, corporate actions, securities litigation, or unique issues as required by the Board.
- Manage a securities lending program to enhance income if directed by the Board. If the securities lending program is managed externally, full cooperation must be provided.
- Deliver all U.S. and non-U.S. proxy voting materials to LACERA, including meeting notices, voting instruction forms, proxy statements, quarterly and annual shareholder reports and miscellaneous proxy voting materials.

Duties of Consultants

The Board and staff will consider the comments and recommendations of consultants in conjunction with other available information to make informed, prudent decisions.

General Investment Consultant

The General Investment Consultant shall be responsible for the following:

- **Conduct an asset-liability study –** work closely with LACERA's actuaries and senior investment staff to prepare a comprehensive asset-liability study, no less frequently than every three to five years.
- **Assist LACERA's investment staff with strategic investment decisions–**focus on "big-picture" total fund investment policy and structure issues.
- **Provide independent reviews–**when requested, provide independent reviews via reports to the Board on staff projects and recommendations in areas including, the investment policy and guidelines, asset class structures, and investment manager searches.
- **Calculate performance measurement–**independently from ~~LACERA's~~ the custodian and provide quarterly performance reports to the Trust. Once a year the Consultant will make a performance presentation to the Board of Investments.
- **Research investment ideas–**provide independent, thorough research on current industry issues.
- **Educate LACERA's Investment Board-**provide educational presentations to the Board on specific issues. Education will range from informational items to critical investment policy issues.

Table 2. Correlation Matrix

Asset Class / Sub Asset Class	Cash	IG Bonds	TIPS	High Yield	Bank Loans	EM Bonds	Global Equity	REITs	Commodities
Cash Equivalents	1.00								
Investment Grade Bonds	0.05	1.00							
TIPS	0.05	0.80	1.00						
High Yield Bonds	0.00	0.20	0.30	1.00					
Bank Loans	0.05	0.00	0.20	0.80	1.00				
Emerging Market Bonds	0.05	0.50	0.50	0.70	0.40	1.00			
Global Equity	0.00	0.05	0.10	0.70	0.60	0.60	1.00		
REITs	0.05	0.15	0.20	0.70	0.55	0.50	0.70	1.00	
Commodities	0.00	0.05	0.35	0.40	0.40	0.40	0.50	0.30	1.00

Table 3. Ten-Year Annualized Return and Volatility Expectations

Asset Class	Expected Return (%)	Volatility (%)
Growth		
Global Equity	6.7	19.0
Credit-Oriented Fixed Income		
High Yield Bonds	5.0	12.5
Bank Loans	5.1	10.0
Emerging Market Bonds	5.1	13.3
Risk Reduction & Mitigation		
Cash Equivalents	1.5	1.0
Investment Grade Bonds	2.5	4.0
Inflation Hedges		
TIPS	3.0	7.5
Real Estate (REITs)	6.0	29.0
Commodities	4.4	19.5

LIST OF ATTACHMENTS

Incorporated by reference and attached to this document are the following concise policy statements.

A Manager Monitoring and Annual Review Policy

B Securities Lending Program Policy

MANAGER MONITORING AND ANNUAL REVIEW POLICY

This policy outlines and defines, in accordance with Board Policies, a process for the on-going monitoring and review of investment managers by LACERA's investment staff and to establish guidelines for scheduling manager presentations to the Board of Investments (the Board). In adopting this policy, the Board acknowledges that LACERA has developed a highly qualified and capable in-house investment staff. The staff is led by a Chief Investment Officer with asset class responsibility delegated to individual Investment Officers. This Investment Staff is responsible for and fully capable of performing the work assigned to it by the procedures discussed below.

The Board recognizes it is not necessary to meet with every investment manager annually, although from time-to-time, the Board may wish to meet with managers experiencing either performance or organizational related problems.

The following outlines the investment staff's responsibilities for monitoring and reporting back to the Board investment manager activities.

MONTHLY AND QUARTERLY INVESTMENT REPORTS

Monthly Chief Investment Officer Reports

This report will provide the Board asset class market values and target allocations, as well as preliminary performance results for calendar year-to-date, fiscal year-to-date, and three, five and ten year returns. Other information may include investment activity such as manager rebalancing and funding activity, ~~purchases and sales of real estate assets, distributions and fundings of private equity fund investments,~~ and upcoming staff projects.

Performance Measurement Reports

The investment staff will provide quarterly performance measurement reports for the most recent calendar quarter end. Staff will supplement these written reports with oral presentations to the Board annually, alternating every six months with LACERA's general investment consultant.

Performance reports will include the Total Fund results for the trailing quarter, one-, three- and five-year periods. Composite results for all asset classes will also be reported. ~~Real Estate and Private Equity results, while included, will be one quarter in arrears and Hedge Fund results will be one month in arrears.~~

Individual external manager results will also be included in this report. Manager results will include a summary page reviewing all managers' gross and net-of-fee performance results for the most recent quarter, one, three, and five years. Risk-adjusted graphs will be provided for managers with at least three years of data.

A one-page summary for each manager will also be provided in the quarterly performance report. This summary will list each manager's mandate, provide peer and benchmark relative performance and since inception results. Estimated manager fees will be included in the appendix.

ASSET CLASS STRUCTURE AND MANAGER REVIEWS

Biennially, staff will review with the Board the current strategies for implementing the public markets allocations in relation to the Board's adopted asset allocation policy. Periodically, staff may recommend the Board adopt strategy changes; however, because these are long-term investment goals, the Board and staff recognize that continually changing these strategies could negatively impact composite results.

Equity strategy papers will review the composite portfolio's active/passive allocations and any style biases or other deviations resulting from either past policy decisions or occurring from recent market trends.

Fixed income strategy papers will review the rationale for utilizing strategic and tactical allocations to the different sectors of global fixed income markets and their specific role in the composite portfolio structure. Additionally, specific sector allocations will be discussed as part of the fixed income strategic review.

Commodities strategy memos will analyze whether the asset class is fulfilling its desired objectives—diversification and inflation hedging—within the Fund. The Commodities Composite's performance will be examined, including a review of the return and risk of individual managers. Broad issues such as the potential impact of derivatives regulation or the optimum benchmark may also be addressed.

Manager reviews will include, but are not limited to, a review of each manager's investment mandate, investment process, key personnel and/or organizational structure and historical performance. ~~Staff concerns that have not been previously broached with the Board will also be addressed at this time, although such concerns may or may not require immediate Board action.~~

MONITORING MANAGERS BY INVESTMENT STAFF

The Board has delegated to the investment staff the fundamental responsibility of monitoring the Trust's ~~LACERA's~~ investment managers on an on-going basis. Effectively monitoring managers can be broken into two key areas: identifying critical factors to monitor and establishing how managers will be monitored.

Staff will monitor the following critical factors: adherence to investment style, changes in key personnel, performance, organizational changes such as a sale of a firm, rapid asset growth or loss, and high staff turnover. Additionally, manager portfolios will be monitored for adherence to investment guidelines and contract compliance issues.

Managers will be monitored via periodic telephone calls and on-site visits. Each manager's performance will be reviewed monthly. In addition, portfolio characteristics will be reviewed periodically to ensure that a manager is adhering to its investment style. Such reviews will incorporate analytics from external software packages and data provided by the Trust's ~~LACERA's~~ custodian or obtained from the investment managers.

FORMAL BOARD REVIEW OF ~~PUBLIC MARKETS~~ INVESTMENT MANAGERS

Formal manager reviews may be undertaken for any of the following reasons:

- When a manager's last three consecutive quarters of one year rolling excess returns are below the calculated performance bands.
- When a manager's last three consecutive quarters of one year rolling excess returns are *above* the calculated performance bands, a manager review may be undertaken at the discretion of the Chief Investment Officer.
- At the Board's request.
- At either staff's or Consultant's recommendations.

Staff will notify the Board during performance reviews, or at other times of the year, when in staff's opinion it is necessary to conduct a manager review. Additionally, the Board may periodically decide for no particular reason to invite investment managers to undertake a formal review.

The review may entail the manager conducting a formal presentation to the Board of Investments. (Managers requested to present to the Board because of performance or organizational concerns will be asked to specifically address these issues.) They will also be asked to review the following key points:

- Investment philosophy.
- Performance results.
- Past Investment strategy and performance impact relative to the benchmark.
- Current investment strategy.
- Potential investment strategy risk.

Reviewed: November 19, 2014
Revised: November 20, 2013
Revised: November 13, 2012
Revised: January 12, 2011
Revised: March 11, 2009

ATTACHMENT B

SECURITIES LENDING PROGRAM POLICY

The Master Trust's securities lending program provides the Fund with an opportunity to earn incremental income and offset administrative expenses. The program may be managed by the Fund's custodian, and/or qualified third-party securities lending agent(s), and/or direct borrowers (principals). The operation of the securities lending program should remain transparent to the Trust's external investment managers and should not impede their investment management process.

The securities lending program consists of two separate functions. The first function is the lending of the Trust's eligible securities (U.S. and Non-U.S. equities & bonds), to approved and qualified borrowers, either through an agent or directly, subject to the terms and conditions specified in the Trust's "Securities Lending Authorization Agreement." Loans of U.S. securities must have a minimum collateralization level of 102% and loans of Non-U.S. securities must have a collateralization level of at least 105%.

The second function is the reinvestment of cash proceeds generated by the lending of the Trust's portfolio securities. This is an investment management function, and is therefore governed by the same "prudent man rules" employed by the Trust's existing investment managers. Cash proceeds may be invested in commingled funds or in separately managed accounts. Separately managed accounts will be managed in accordance with investment policies and guidelines adopted by the Board of Investments.

To maintain appropriate risk controls, staff shall continually monitor the securities lending program for compliance with the investment guidelines and policies pertaining to the reinvestment of cash proceeds. These guidelines and policies shall be periodically reviewed and, if needed, amended to incorporate any appropriate revisions.

Reviewed: November 19, 2014
Revised: November 20, 2013
Revised: November 13, 2012
Revised: June 25, 2003

ATTACHMENT 3

OPEB Master Trust IPS

Board of Investments
April 11, 2018

Jonathan Grabel
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Overview

- Staff worked with LACERA's Legal Division and Meketa to draft a revised OPEB Master Trust IPS that reflects the December 2017 Board Approved Asset Allocation
  - Includes Functional Asset Allocation as risk overlay on top of traditional asset categories
- The OPEB Trust IPS may serve as a transitory document
  - Changes to broader LACERA IPS are likely post 2018 Asset Allocation study
  - Unitization of the LACERA Trust
  - Reflects the medium-term use of index funds

Revisions are color-coded

- The proposed revised OPEB Trust IPS is a fusion of documents; the source of the language used is color-coded
    - Original OPEB Trust IPS (black font)
    - LACERA IPS (blue font)
    - External Sources including Meketa, the CFA Institute, and other public pension plans (green font)
    - New/Revised language (red font)

- Focus on consistency between LACERA and OPEB IPS

CFA Institute – Elements of an Investment Policy

- The CFA Institute provides institutional investors guidance on the desirable components of an IPS*

CFA Institute's Elements of an IPS	OPEB IPS
I. Scope and Purpose	✓
II. Governance	✓
III. Investment, Return, and Risk Objectives	✓
IV. Risk Management	Work in Progress

*CFA Institute. *Elements of an Investment Policy Statement for Institutional Investors.* May 2010

High-Level Review of Pertinent Changes

- Incorporated new asset classes based on Meketa's ten-year risk/return assumptions

Asset Class	Target Allocation (%)
Growth	50.0
Global Equity	50.0
Credit Oriented Fixed Income	20.0
High Yield Bonds	6.0
Bank Loans	10.0
Emerging Market Local Currency Bonds	4.0
Risk Reduction & Mitigation	10.0
Cash Equivalents	2.0
Investment Grade Bonds	8.0
Inflation Hedges	20.0
TIPS	6.0
Real Estate (REITs)	10.0
Commodities	4.0
Expected Return 10 Years	*6.3*
Standard Deviation	*13.8*

High-Level Review of Pertinent Changes (cont.)

- Added Meketa's correlation matrix and ten-year annualized return and volatility expectations table
- Adopted Meketa's recommended language for a functional risk overlay
  - Comprised of functional groupings, applicable asset categories, investment guidelines, and implementation (excerpt from IPS):

<u>Growth</u>
Role in the portfolio: The primary role of assets in this category is to produce a sufficiently high level of long-term growth to provide the promised benefits.

Asset Classes: Global Equity

- **Global Equity** invests in a portfolio of global equity securities with the objective of approximating as closely as practicable the capitalization weighted rates of return of the markets in certain countries for publicly traded equity securities. The benchmark shall be the MSCI ACWI IMI Net Dividend Return Index. The full spectrum of securities may include American Depositary Receipts, Global Depositary Receipts, and other structured transactions utilizing foreign stocks and currencies.

Implementation: Index funds will be utilized to access equity market returns in a low-cost manner.

High-Level Review of Pertinent Changes (cont.)

- Includes Asset Allocation Rebalancing language from the Pension IPS

- Added directly applicable sub-policies as attachments
  - Securities Lending Program Policy added
  - Varying opinions on inclusion of sub-policies

- Other Pension IPS sub-policies
  - Some partially apply (Public Equities)
  - Some are not applicable (Hedge Fund Policy)

OPEB Trust Implementation Plan

OPEB Trust Transition to the Revised Asset Allocation	Date
Finalize Investment Manager Agreement with BlackRock	April 2018
Complete Operational Updates at State Street	April 2018
Transition of Assets at BlackRock	May 2018
Complete Transition	June 2018

From March 2018 BOI

- Periodic updates will be provided

Final Thoughts

- Combine existing IPS with relevant LACERA Pension IPS language
    - Includes broader range of investment strategies
    - Reflects prevalence of index strategies
    - Consistency between LACERA and OPEB policies
- Working on implementation of revised Strategic Asset Allocation
- Discussing unitization with State Street

MEMORANDUM

To: LACERA Board of Investments

From: Stephen McCourt, Leandro Festino, Tim Filla
Meketa Investment Group

Date: March 21, 2018

Re: Adoption of Revised OPEB Master Trust Investment Policy Statement

BACKGROUND

During 2017, Meketa Investment Group ("Meketa" or "We") presented to the Board of Investments ("BOI" or the "Board") a review of LACERA's OPEB asset allocation, concluding late in the year with a recommendation to update the asset allocation. It is customary to also update a fund's Investment Policy Statement ("IPS") whenever the asset allocation changes. During early 2018, staff and Meketa worked to update the IPS, concluding with the recommendation for adoption that staff drafted for the April 2018 meeting.

PROCESS

Staff took the lead on drafting the updated Investment Policy Statement. The main goals were first to reflect the approved asset allocation policy, and second, to improve consistency with the Pension Fund's IPS. Overall, the document we received from staff was well drafted, updated, and represented an improvement over the current one, as it was more aligned with the Pension Fund's IPS language. We reviewed the full document and reported back to staff our findings and observations. These included cosmetic edits and recommendations (such as commas, formatting, etc.), as well as content, such as definitions provided under the Investment Strategy and Guidelines section. Staff largely incorporated our recommendations.

SUMMARY AND RECOMMENDATION

Meketa has reviewed the new draft of the OPEB's IPS, made edits and suggestions where appropriate, and collaborated with staff throughout the process. We concur with staff's recommendation for the Board to approve this new IPS. We also reviewed staff's memo about this recommendation, which nicely summarizes the key changes to the IPS. We look forward to discussing this matter with you at the April 11th meeting.

SM/TF/LF/srt

M E K E T A I N V E S T M E N T G R O U P
5796 ARMADA DRIVE SUITE 110 CARLSBAD CA 92008
760 795 3450 fax 760 795 3445 www.meketagroup.com

MEMORANDUM

To: LACERA Board of Investments

From: Stephen McCourt, Leandro Festino, Tim Filla
Meketa Investment Group

Date: April 11, 2018

Re: Pension Trust Asset Allocation

BACKGROUND

The Board of Investments is responsible for selecting an asset allocation strategy for the Pension Trust. LACERA's Investment Beliefs state that "Long-term strategic asset allocation will be the primary determinant of LACERA's risk/return outcomes" and that "Asset allocation has a greater effect on return variability than asset class investment structure or manager selection." Given the importance of asset allocation, Meketa Investment Group believes it is necessary to review asset allocation on a regular basis and in consultation with Staff, decided to conduct an asset allocation review for the Pension Trust immediately following the conclusion of the OPEB Trust asset allocation.

PROCESS

Over the past year, Meketa and Staff have conducted several educational sessions on asset allocation as well as educational sessions on potential additional asset classes/strategies. Based on feedback from those meetings and subsequent conversations with Staff, Meketa developed an initial set of asset allocation options, which are summarized below and presented in detail in the attached document.

ASSET ALLOCATION REVIEW

To highlight the trade-offs at different levels of expected return and risk as well as liquidity, Meketa developed an initial set of options for review. We also modelled a simple 65/35 portfolio, the Pension Trust's 4Q17 actual allocation, and the Pension Trust's 4Q18 policy for comparative purposes. As a starting point for the levels of expected return and risk, we utilized those of the 4Q18 policy.

	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
Growth	65.0	59.1	53.1	49.7	43.4	46.9	37.4
Global Equity	65.0	47.9	41.4	38.7	30.4	35.9	24.4
Private Equity	0.0	9.5	10.0	9.0	11.0	9.0	11.0
Opportunistic Real Estate	0.0	1.7	1.7	2.0	2.0	2.0	2.0
Credit	0.0	6.3	7.3	10.6	12.9	10.6	11.9
High Yield	0.0	2.7	3.0	3.0	4.0	3.0	3.0
Bank Loans	0.0	1.5	1.8	3.0	3.0	3.0	3.0
EM Debt	0.0	0.7	0.8	2.0	2.0	2.0	2.0
Illiquid Credit[1]	0.0	1.4	1.7	2.6	3.9	2.6	3.9
Real Assets and Inflation Hedges	0.0	11.9	12.1	17.7	21.5	17.7	21.5
Core and Value-Added Real Estate	0.0	9.4	9.3	7.7	8.5	7.7	8.5
Private Natural Resources/Commodities	0.0	2.5	2.8	4.0	6.0	4.0	6.0
Private Infrastructure	0.0	0.0	0.0	2.0	4.0	2.0	4.0
TIPS	0.0	0.0	0.0	4.0	3.0	4.0	3.0
Risk Reducing and Mitigating	35.0	22.7	27.5	22.0	22.2	24.8	29.2
Investment Grade Bonds	35.0	18.6	21.2	18.1	16.6	20.9	23.6
Diversified Hedge Fund Portfolio	0.0	2.1	4.3	3.4	5.1	3.4	5.1
Cash	0.0	2.0	2.0	0.5	0.5	0.5	0.5
10 Year Expected Return	***5.78***	***6.37***	***6.20***	***6.32***	***6.48***	***6.20***	***6.20***
Standard Deviation	*12.50*	*13.05*	*12.22*	*12.22*	*12.22*	*11.72*	*11.10*
Sharpe Ratio	***0.34***	***0.37***	***0.38***	***0.39***	***0.40***	***0.40***	***0.42***
Illiquid%	*0.0*	*14.1*	*15.4*	*19.1*	*28.0*	*19.1*	*28.0*
Estimated Weighted Avg. Fees (bps)	*16*	*79*	*90*	*100*	*138*	*100*	*137*
20 Year Expected Return[2]	***6.88***	***7.42***	***7.24***	***7.30***	***7.44***	***7.18***	***7.15***

After developing the initial set of allocations to review, we included multiple types of analyses with an emphasis on evaluating portfolio risk. The tools we utilized included Mean Variance Optimization with a functional lens, risk budgeting, value at risk, scenario analysis, both historical and theoretical, and Economic Regime Management, Meketa's proprietary factor based model.

[1] Illiquid Credit contains credit hedge funds, real estate debt, and private debt strategies. The private debt composite is composed of 40% Mezzanine, 40% Distressed, and 20% Direct Lending.

[2] Based on Meketa's 20 Year Expected Returns, which rely on reversion to historical mean returns in the 11-20 year period.

SUMMARY

The intention of this presentation is to review the asset allocation process and to facilitate discussion that will enable Meketa to produce a further refined set of asset allocation options. Mr. McCourt and Mr. Filla will be leading the presentation and along with Staff will be available to address questions from the Board.

We look forward to discussing the Pension Trust's asset allocation with you at the April 11th meeting.

TF/srt

Los Angeles County Employees Retirement Association

Pension Trust Asset Allocation Review

M E K E T A   I N V E S T M E N T   G R O U P
5796 ARMADA DRIVE   SUITE 110   CARLSBAD CA 92008
760 795 3450   fax 760 795 3445   www.meketagroup.com

1. **Background**
2. **Asset Allocation Process Overview**
3. **Asset Allocation Options**
4. **Next Steps**
5. **Appendix**
    - Capital Market Expectations
    - Fees by Asset Class
    - Scenario Inputs

Background

Background

- The Board of Investments ("The Board") is responsible for establishing investment policy and determining the asset allocation for the Pension Fund.
- LACERA's Investment Beliefs state that, "**Long-term strategic asset allocation will be the primary determinant of LACERA's risk/return outcomes**" and that "**Asset allocation has a greater effect on return variability than asset class investment structure or manager selection.**"
- Meketa Investment Group has conducted several informational sessions at regular meetings and off-sites with the Board on asset allocation over the past year in preparation for this asset allocation review.
- Meketa presented and the Board approved a set of capital markets expectations which will serve as the inputs for this analysis. The approved capital market expectations are included in the appendix.
- The goal of this session of the asset allocation review is to discuss an initial set of asset allocation options. The feedback from the Board at this meeting will be utilized to develop a more refined set of asset allocation options for the May meeting.

Asset Allocation Process Overview

Asset Allocation

What is Asset Allocation?

Asset allocation refers to the distribution of funds across various asset classes. Each asset class, by definition, exhibits different risk and return behavior. Some asset classes, such as equities, exhibit higher levels of volatility but typically offer higher return potential. Others, such as investment grade bonds, experience lower levels of volatility but offer lower return potential.

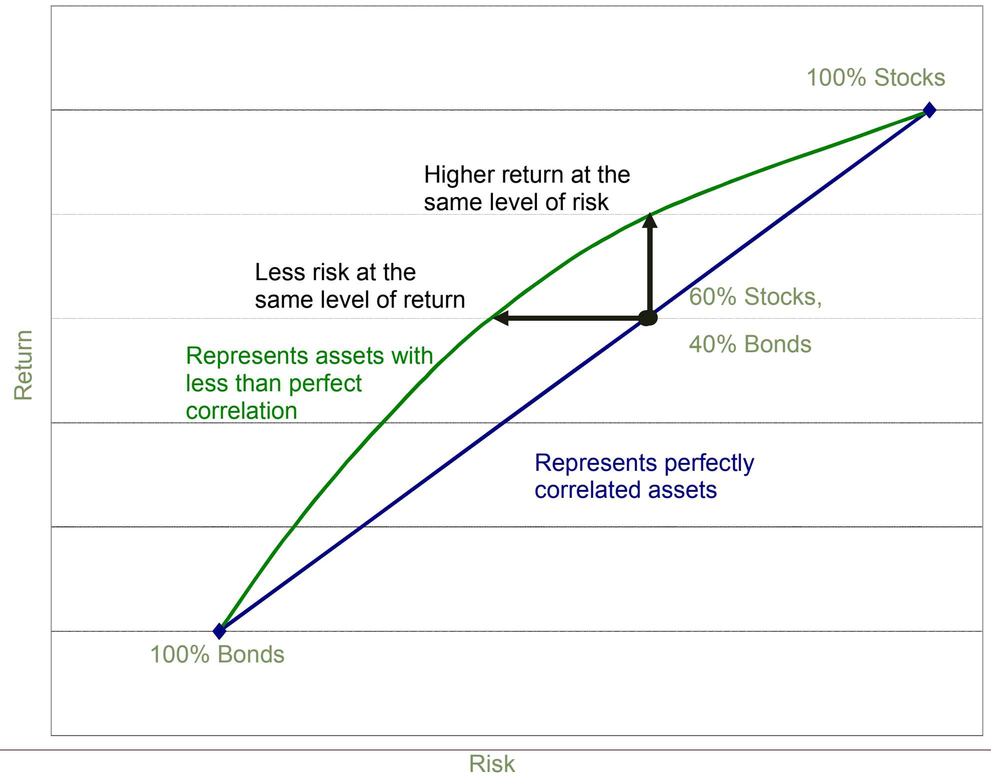
Why is Asset Allocation important?

The distribution of funds across various asset classes represents the most significant "controllable" determinant of long-term returns.

How does prudent Asset Allocation reduce overall volatility?

Each asset class behaves differently—while some asset classes are gaining in value, others may be falling. This varying behavior means that assets are not perfectly "correlated." As a result of less-than-perfect correlations, combining asset classes allows investors to take advantage of the volatility-reducing benefits of diversification.

A properly diversified Fund can expect a higher return for a given level of risk, or, alternatively, can expect lower risk for a given level of return.



Step 1: Develop Investment Objectives

Return objectives

- Produce and provide promised benefits
- Meet the 7.25% actuarial assumed rate of return target
- Maintain purchasing power by exceeding the rate of inflation

Risk objectives

- Protect promised benefits
- Provide downside protection
- Limit liability or funded status risk
- Ensure sufficient liquidity
- Diversify to protect the portfolio from a number of different risk factors

Step 2: Develop Other Investment Considerations

Time Horizon and Funding Status

Legal and Regulatory

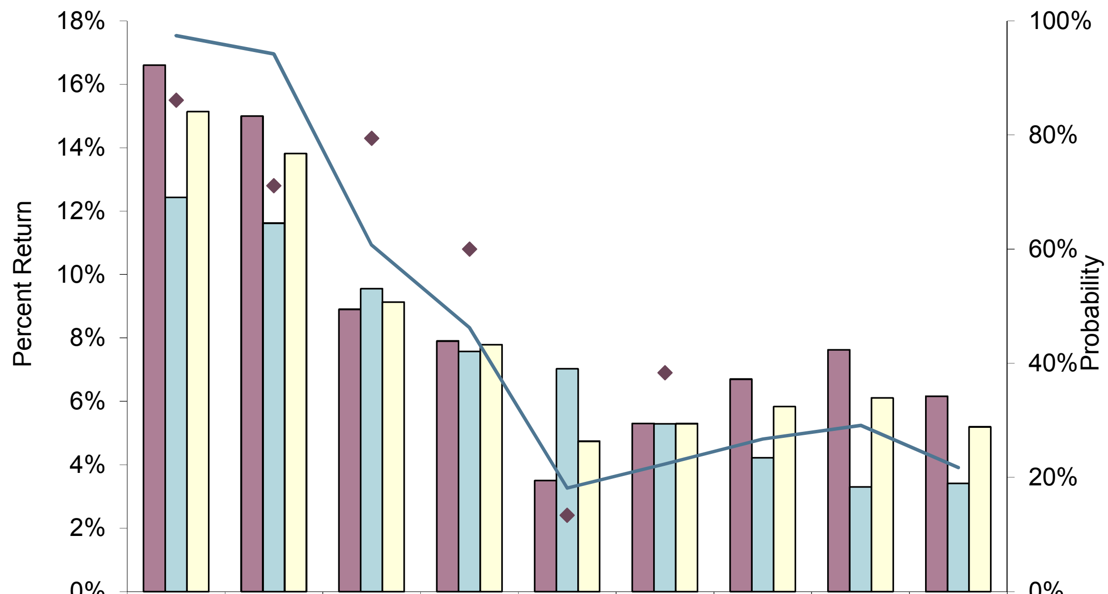
- ERISA, state laws and DOL regulations
- Prudent Investor standard
- Transparency

Geographic Restrictions

Fund Size and Resources

Leverage

The Challenge: The Secular Decline in Investment Returns[1]

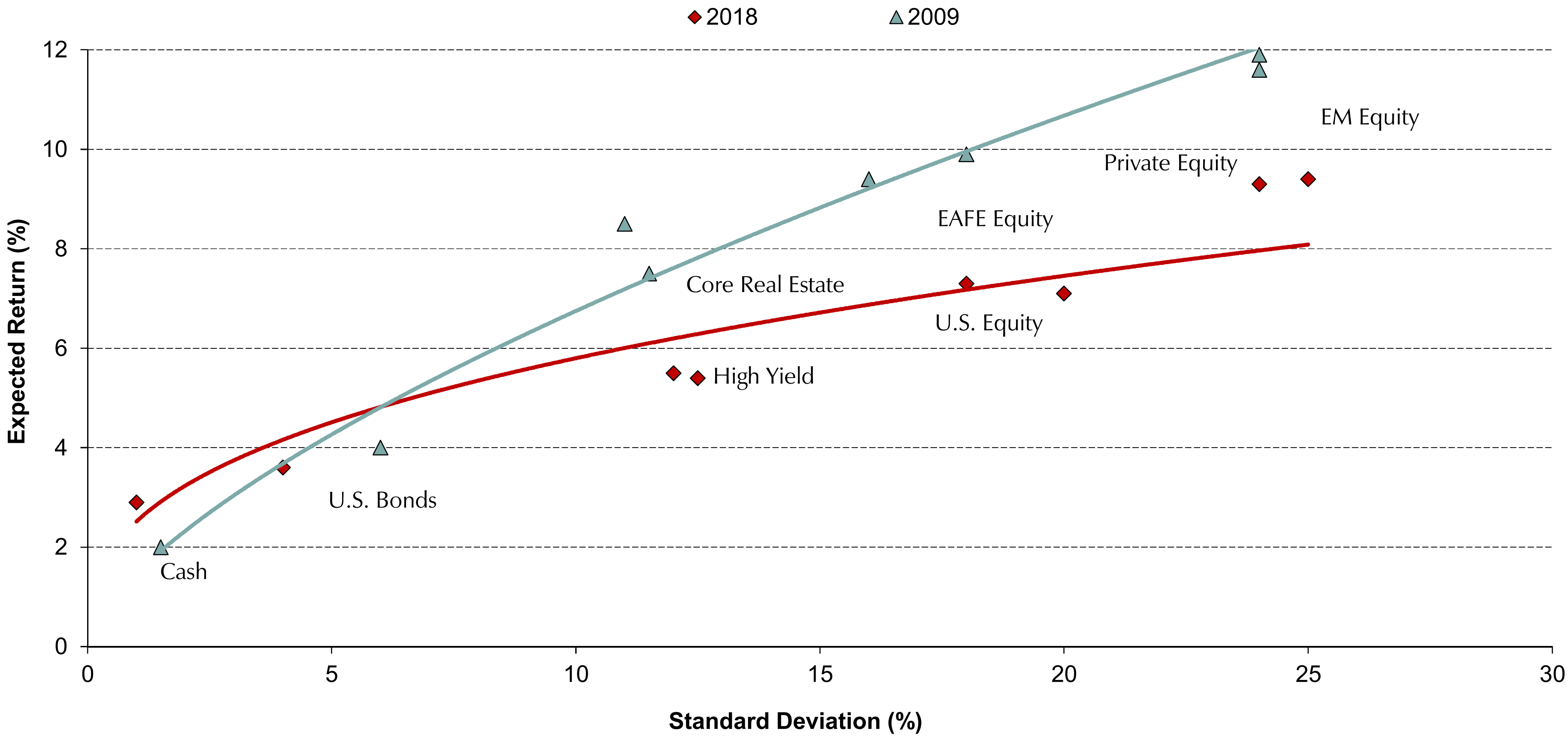


	1980	1985	1990	1995	2000	2005	2010	2015	2018
Equity Expected Return	16.6%	15.0%	8.9%	7.9%	3.5%	5.30%	6.7%	7.6%	6.2%
Bond Expected Return	12.4%	11.6%	9.6%	7.6%	7.0%	5.29%	4.2%	3.3%	3.4%
65/35 Eq/Bond Exp. Ret.	15.1%	13.8%	9.1%	7.8%	4.7%	5.3%	5.8%	6.1%	5.2%
Actual 10-year Return	15.5%	12.8%	14.3%	10.8%	2.4%	6.9%			
Probability of earning 7.5%	97%	94%	61%	46%	18%	22%	27%	29%	22%

- The chart above illustrates that a portfolio comprising of 65% domestic stocks and 35% investment grade bonds has produced diminishing expected returns as well as actual returns over the past 30 years.

[1] Expected return assumptions for 1) Bonds equals the yield of the ten-year Treasury plus 100 basis points, and 2) Equities equals the dividend yield plus the earnings yield of the S&P 500 index (using the inflation-adjusted trailing 10-year earnings). Probability calculation is for the subsequent ten years.

The Challenge: Less Return for the Same or More Risk[1]



- A positive relationship exists between long-term return expectations and the level of risk accepted. However, this relationship is dynamic and not static.

[1] Expected return and standard deviation are based upon Meketa Investment Group's 2009 and 2018 Annual Asset Study. Returns shown are Meketa's 20 Year Expected Returns.

The Challenge (continued)

- A traditional 65/35 portfolio asset allocation may not achieve LACERA's long term objectives.
- A fixed income portfolio may only earn 3%, requiring other asset classes to return 9.5% to meet a 7.25% actuarial return assumption.
- Liquid asset classes are generally priced at historically high levels, reducing forward-looking expected returns.
- Illiquid asset categories may not provide the same return premium that they have historically.
  - Higher prices reduce liquidity premium
  - Private market risk factors are similar to public markets

Asset Allocation and Risk Management

- Asset Allocation represents the conscious decision to accept and manage specific risks. Hence, asset allocation and risk management should be intricately linked with one another.
- A fund's risk cannot be summarized in a single statistic and a single model cannot incorporate all of the information required to arrive at an appropriate asset allocation.
- Use multiple tools to build a complete picture.

Risk Management – How Do You Define Risk?

- There are a number of different ways to define risk.
  - A fund's overall risks cannot be summarized in a single statistic or number like volatility or standard deviation.
  - Rather, there is a mosaic of quantitative and qualitative factors that combine to create the whole risk picture.
- Most risk management models and statistics are backward/historic looking.
- It is critical to discuss and decide which of the myriad risks are most important and what the tolerance levels for those risks are. The potential risks include:
  - losing money;
  - return volatility;
  - not achieving the expected return;
  - underperforming peers;
  - losing purchasing power; and
  - failing to meet benefit obligations.

Short-Term Versus Long-Term Risk

- *An important concern is whether to focus on long-term risks or short-term risks*. There is usually a trade-off in portfolio outcomes from an investment perspective that results from this decision.
  - The impact of short-term risks (such as an extreme equity market pullback) can be reduced by taking less equity risk in a portfolio; however, this would reduce the long-term return potential of the fund.
  - The logical way to reduce the long-term risk of not achieving a target return is to invest in "risk" assets but expect volatility along the way.
  - If we define "short-term risk" as a major stock market drawdown of 20% or more, then investors have experienced this type of short-term risk five times since World War II (see table below).

	1962	1973-1974	1987	2000-2002	2007-2009
Drawdown of S&P 500 (%)	-28	-48	-34	-49	-57
Duration of drawdown (months)	*6*	*21*	*3*	*31*	*18*
Return of 70/30 portfolio during drawdown (%)	-15	-31	-20	-27	-38
Months to Recover 70/30 portfolio losses after drawdown[1]	*9*	*16*	*14*	*27*	*24*

[1] 70% invested in the S&P 500 and 30% invested in the Barclays Aggregate.

Mean Variance Optimization ("MVO")

- MVO is the traditional starting point for determining asset allocation.
- MVO mathematically determines an "efficient frontier" of policy portfolios with the highest risk-adjusted returns as a goal for this calculation.
- All asset classes exhibit only three characteristics, which serve as inputs to the model:
  - Expected return
  - Expected volatility
  - Expected covariance (or interaction) with all other assets
- The model assumes:
  - Normal return distribution
  - Stable volatility and covariances over time
  - Returns are not serially correlated
- The MVO model tends to underestimate the risks of large negative events.

Additional Asset Allocation Approaches and Tools

- Functional-based approaches:
  - Complement MVO by understanding role of each investment in total portfolio
  - Provide a function/risk-based overlay to traditional MVO approach
  - Capital allocation utilizing functional categories (e.g., growth, income, inflation, liquidity) to determine the risk and return profile of a portfolio
- Risk-based approaches:
  - Allocation to risk targets instead of asset classes (e.g., higher risk assets receive lower capital)

  Tools:

  - Risk Budgeting
  - Value at Risk
  - Stress Testing
  - Scenario Analysis
  - Liquidity Analysis
- Factor-based approaches:
  - Focused on understanding the dynamics of macro level forces that drive returns

  Tools:

  - Economic Regime Management or ERM is Meketa's proprietary factor-based model

Asset Allocation Options

Review of Proposed Asset Allocation Policies

- Staff and Meketa Investment Group discussed several alternative policies.
- As starting points we modelled a 65/35 portfolio, the current allocation (4Q17), and the 4Q18 Policy that is reflected in LACERA's Investment Policy Statement.
- Following further consultations with Staff, we modelled two sets of alternatives based off of the 4Q18 Policy's expected return and risk:
  - Same Return: These two allocations were designed to have expected returns that match that of the 4Q18 policy, but at lower levels of risk
  - Same Risk: These two allocations were designed to have risk levels that match that of the 4Q18 Policy, but at greater levels of expected return
- The main difference between each of the A and B allocation options is that the B allocations have a higher percentage of assets in illiquid strategies.

Proposed Changes

- **Add dedicated allocations to Credit[1] categories such as;**
  - **High Yield Bonds**
  - **Bank Loans**
  - **Emerging Markets Debt**
- **Add additional Real Assets and Inflation Hedges**
  - **Private Infrastructure** provides an inflation hedge, additional diversification, and modest potential for return enhancement
  - **Private Natural Resources** adds an additional source of high expected return potential with inflation protection and diversification benefit
  - **TIPS** would further diversify the portfolio, while providing a modest hedge against any unexpected increase in inflation
- **Equitize or reduce cash**
  - Cash is the asset class with the lowest expected return and as such, any allocation to it acts as a drag on portfolio returns
  - A cash overlay is an implementation option that has the potential to improve returns while maintaining liquidity

[1] LACERA currently has assets invested in each of these categories within the Fixed Income allocation.

Asset Allocation Policies

	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
Growth	65.0	59.1	53.1	49.7	43.4	46.9	37.4
Global Equity	65.0	47.9	41.4	38.7	30.4	35.9	24.4
Private Equity	0.0	9.5	10.0	9.0	11.0	9.0	11.0
Opportunistic Real Estate	0.0	1.7	1.7	2.0	2.0	2.0	2.0
Credit	0.0	6.3	7.3	10.6	12.9	10.6	11.9
High Yield	0.0	2.7	3.0	3.0	4.0	3.0	3.0
Bank Loans	0.0	1.5	1.8	3.0	3.0	3.0	3.0
EM Debt	0.0	0.7	0.8	2.0	2.0	2.0	2.0
Illiquid Credit[1]	0.0	1.4	1.7	2.6	3.9	2.6	3.9
Real Assets and Inflation Hedges	0.0	11.9	12.1	17.7	21.5	17.7	21.5
Core and Value-Added Real Estate	0.0	9.4	9.3	7.7	8.5	7.7	8.5
Private Natural Resources/Commodities	0.0	2.5	2.8	4.0	6.0	4.0	6.0
Private Infrastructure	0.0	0.0	0.0	2.0	4.0	2.0	4.0
TIPS	0.0	0.0	0.0	4.0	3.0	4.0	3.0
Risk Reducing and Mitigating	35.0	22.7	27.5	22.0	22.2	24.8	29.2
Investment Grade Bonds	35.0	18.6	21.2	18.1	16.6	20.9	23.6
Diversified Hedge Fund Portfolio	0.0	2.1	4.3	3.4	5.1	3.4	5.1
Cash	0.0	2.0	2.0	0.5	0.5	0.5	0.5
10 Year Expected Return	***5.78***	***6.37***	***6.20***	***6.32***	***6.48***	***6.20***	***6.20***
Standard Deviation	*12.50*	*13.05*	*12.22*	*12.22*	*12.22*	*11.72*	*11.10*
Sharpe Ratio	***0.34***	***0.37***	***0.38***	***0.39***	***0.40***	***0.40***	***0.42***
Illiquid%	*0.0*	*14.1*	*15.4*	*19.1*	*28.0*	*19.1*	*28.0*
Estimated Weighted Avg. Fees (bps)	*16*	*79*	*90*	*100*	*138*	*100*	*137*
20 Year Expected Return[2]	***6.88***	***7.42***	***7.24***	***7.30***	***7.44***	***7.18***	***7.15***

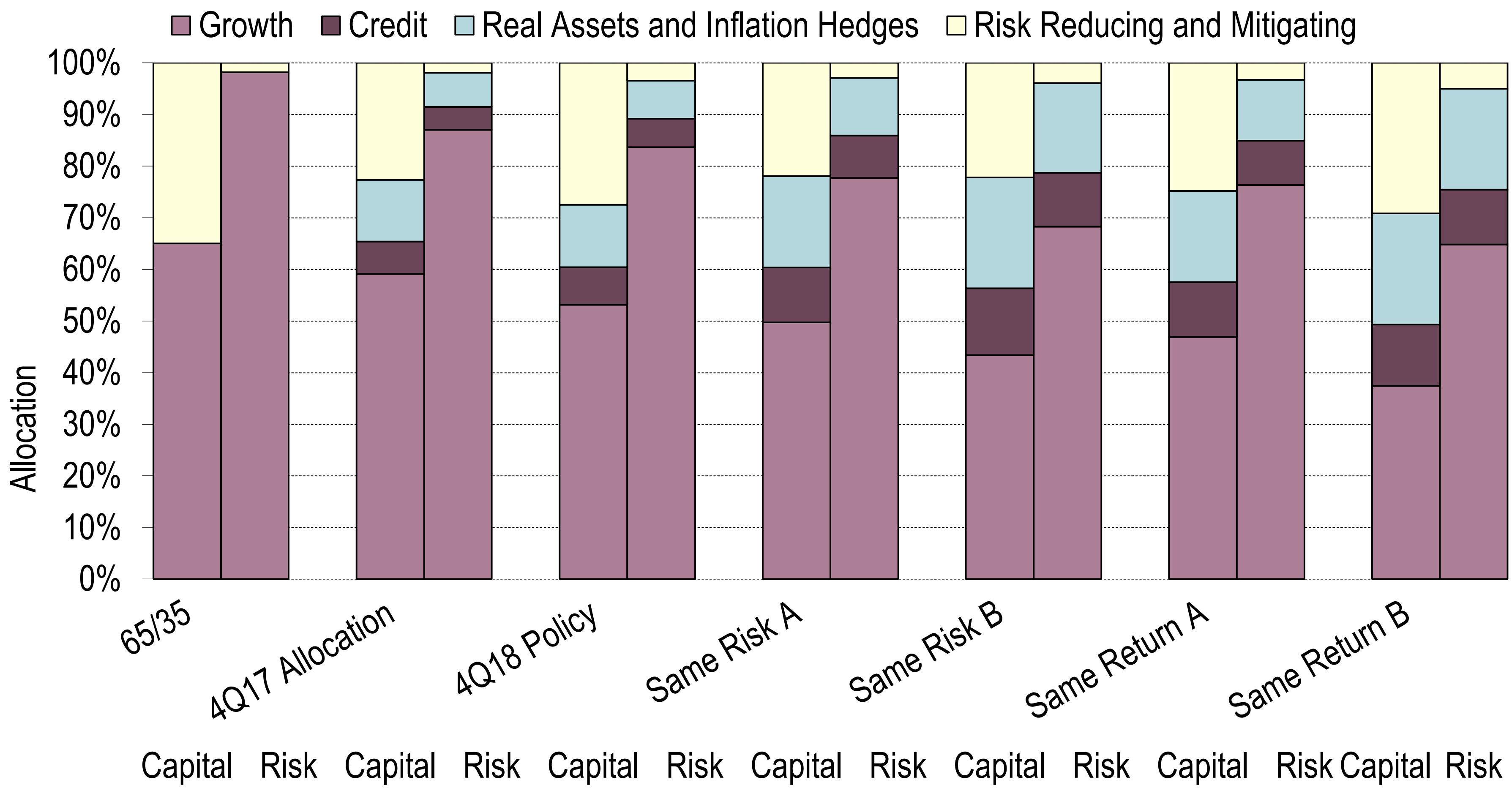
1 Illiquid Credit contains credit hedge funds, real estate debt, and private debt strategies. The private debt composite is composed of 40% Mezzanine, 40% Distressed, and 20% Direct Lending.
2 Based on Meketa's 20 Year Expected Returns, which rely on reversion to historical mean returns in the 11-20 year period.

Asset Allocation Policies – Traditional View

	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
Global Equities	65.0	47.9	41.4	38.7	30.4	35.9	24.4
Fixed Income	35.0	24.9	28.5	28.7	29.5	31.5	35.5
Real Estate	0.0	11.1	11.0	9.7	10.5	9.7	10.5
Private Equity	0.0	9.5	10.0	9.0	11.0	9.0	11.0
Commodities	0.0	2.5	2.8	2.0	1.0	2.0	1.0
Hedge Funds	0.0	2.1	4.3	3.4	5.1	3.4	5.1
Cash	0.0	2.0	2.0	0.5	0.5	0.5	0.5
New	0.0	0.0	0.0	8.0	12.0	8.0	12.0
10 Year Expected Return	***5.78***	***6.37***	***6.20***	***6.32***	***6.48***	***6.20***	***6.20***
Standard Deviation	*12.50*	*13.05*	*12.22*	*12.22*	*12.22*	*11.72*	*11.10*
Sharpe Ratio	*0.34*	*0.37*	*0.38*	*0.39*	*0.40*	*0.40*	*0.42*
Illiquid%	*0.0*	*14.1*	*15.4*	*19.1*	*28.0*	*19.1*	*28.0*
Estimated Weighted Avg. Fees (bps)	*16*	*79*	*90*	*100*	*138*	*100*	*137*
20 Year Expected Return	***6.88***	***7.42***	***7.24***	***7.30***	***7.44***	***7.18***	***7.15***

- The "New" asset categories/strategies are TIPS, Private Natural Resources and Private Infrastructure.

Risk Budgeting Analysis (Risk Allocation)



- Assets with low relative volatility, such as Investment Grade Bonds, contribute much less to risk (as defined by standard deviation) than their asset weighting implies.

MVO-Based Risk Analysis

Scenario:	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
"Worst Case" Returns[1]:							
One Year	-19.5	-19.9	-18.6	-18.5	-18.3	-17.7	-16.6
Five Years *(annualized)*	-6.4	-6.3	-5.7	-5.6	-5.5	-5.3	-4.7
Ten Years *(annualized)*	-3.0	-2.8	-2.4	-2.3	-2.1	-2.1	-1.7
Twenty Years *(annualized)*	-0.5	-0.2	0.0	0.1	0.3	0.3	0.6
Probability of Experiencing Negative Returns							
One Year	31.8	30.8	30.1	29.7	29.2	29.3	28.3
Five Years	14.5	13.0	12.2	11.7	11.1	11.2	9.9
Ten Years	6.7	5.6	4.9	4.6	4.2	4.3	3.5
Twenty Years	1.7	1.2	1.0	0.9	0.7	0.7	0.5
Probability of Achieving at least a 7.25% Return							
One Year	45.1	47.1	46.3	46.7	47.2	46.2	46.0
Five Years	39.1	43.5	41.9	42.7	43.9	41.6	41.1
Ten Years	34.7	40.8	38.6	39.8	41.4	38.2	37.6
Twenty Years	29.0	37.1	34.1	35.7	37.9	33.5	32.7

1 "Worst Case" Return Projections encompass 99th percentile of possible outcomes.

Value at Risk[1]

Scenario	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
VaR (%):							
One Month	-7.9	-8.2	-7.7	-7.7	-7.6	-7.3	-6.9
Three Months	-13.0	-13.5	-12.6	-12.5	-12.5	-12.0	-11.3
VaR ($ mm):							
One Month	-4,385	-4,564	-4,264	-4,259	-4,251	-4,079	-3,848
Three Months	-7,224	-7,497	-6,991	-6,977	-6,953	-6,674	-6,277

Conditional Value at Risk[1]

Scenario	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
cVaR (%):							
One Month	-9.1	-9.5	-8.8	-8.8	-8.8	-8.5	-8.0
Three Months	-15.0	-15.6	-14.6	-14.6	-14.5	-13.9	-13.1
cVaR ($ mm):							
One Month	-5,049	-5,256	-4,912	-4,907	-4,898	-4,700	-4,436
Three Months	-8,368	-8,688	-8,106	-8,092	-8,066	-7,743	-7,289

[1] Calculated with a 99% confidence level and based upon Meketa Investment Group's Annual Asset Study. CVaR represents the average loss past the 99th percentile.

Historical Negative Scenario Analysis[1]
(*Cumulative* Return)

Scenario:	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
Taper Tantrum (5/13 - 8/13)	-1.7	-0.2	-0.2	-0.5	0.0	-0.6	-0.2
Global Financial Crisis (4Q07 - 1Q09)	-27.0	-26.4	-23.8	-22.9	-21.1	-21.3	-17.4
Popping of the TMT bubble (4/00 - 9/02)	-20.4	-14.5	-10.5	-9.0	-6.0	-6.8	-1.1
LTCM (7/98 - 8/98)	-8.4	-7.2	-6.5	-6.8	-6.4	-6.4	-5.3
Interest Rate Spike (1994)	2.2	4.8	4.6	3.5	3.4	3.3	3.0
Crash of 1987 (9/87 - 11/87)	-13.2	-10.0	-8.6	-8.4	-7.1	-7.7	-5.6
Strong U.S. Dollar (1Q81 - 3Q82)	3.2	3.3	4.9	4.2	4.7	5.3	7.4
Stagflation (1/80 - 3/80)	-6.8	-4.3	-4.1	-4.3	-3.8	-4.3	-4.0
Stagflation (1Q73 - 3Q74)	-22.8	-17.0	-14.1	-14.2	-12.8	-12.9	-9.7

- Same Return B would have performed the best in environments of declining equity markets, due to its more conservative positioning. The 65/35 portfolio and the 4Q17 portfolio would have performed the worst in negative equity markets.
- The 4Q18 Policy would have fared the best during periods of rising rates; however, the results in those environments are dwarfed by the losses during an equity downturn.

1 See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Historical Positive Scenario Analysis[1]
(Cumulative Return)

Scenario	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
Global Financial Crisis Recovery (3/09 - 11/09)	42.1	33.1	30.3	31.0	28.5	29.5	25.1
Best of Great Moderation (4/03 – 2/04)	31.6	28.7	26.7	26.4	24.8	25.2	22.1
Peak of the TMT Bubble (10/98 – 3/00)	36.2	41.3	39.2	38.0	37.7	36.5	34.5
Plummeting Dollar (1/86 – 8/87)	75.5	61.0	55.3	53.7	47.9	51.1	42.1
Volcker Recovery (8/82 – 4/83)	37.2	29.4	27.9	27.0	24.7	26.5	23.7
Bretton Wood Recovery (10/74 – 6/75)	32.2	26.3	24.1	23.3	21.1	22.3	18.8

- The 65/35 portfolio and the 4Q17 Actual portfolio would have provided the best results in the GFC Recovery and most other positive scenarios.
- The B Policies do not capture as much of the upside in positive return scenarios, but as mentioned above they do not suffer as severe a drawdown in the negative scenarios.

[1] See the Appendix for our scenario inputs. In periods where the ideal benchmark was not yet available we used the next closest benchmark(s) as a proxy.

Stress Testing: Impact of Market Movements
(Expected Return under Stressed Conditions)[1]

What happens if (over a 12-month period):	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
10-year Treasury Bond rates rise 100 bps	4.3	5.9	5.5	5.5	5.8	5.1	5.0
10-year Treasury Bond rates rise 200 bps	2.0	4.1	3.5	3.5	3.6	3.0	2.5
10-year Treasury Bond rates rise 300 bps	-0.8	2.0	1.3	1.2	1.5	0.6	0.1
Baa Spreads widen by 50 bps, HY by 200 bps	-1.6	-1.0	-0.6	-0.6	-0.2	-0.4	0.3
Baa Spreads widen by 300 bps, HY by 1000 bps	-21.4	-21.1	-19.5	-19.1	-18.1	-18.2	-16.0
Trade Weighted Dollar gains 10%	-0.1	-0.1	0.4	0.1	0.3	0.4	1.0
Trade Weighted Dollar gains 20%	-3.1	-2.5	-2.1	-2.5	-2.3	-2.3	-1.7
U.S. Equities decline 10%	-5.8	-5.2	-4.6	-4.5	-4.1	-4.1	-3.3
U.S. Equities decline 25%	-16.0	-14.6	-13.3	-13.0	-12.1	-12.2	-10.4
U.S. Equities decline 40%	-27.8	-26.5	-24.2	-24.1	-22.5	-22.8	-19.6

- Each policy portfolio has a different sensitivity to four major risk factors: interest rates, credit spreads, currency fluctuations, and equity values.
- LACERA's primary risk factors would continue to be an equity market decline and a widening of credit spreads, no matter the policy.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

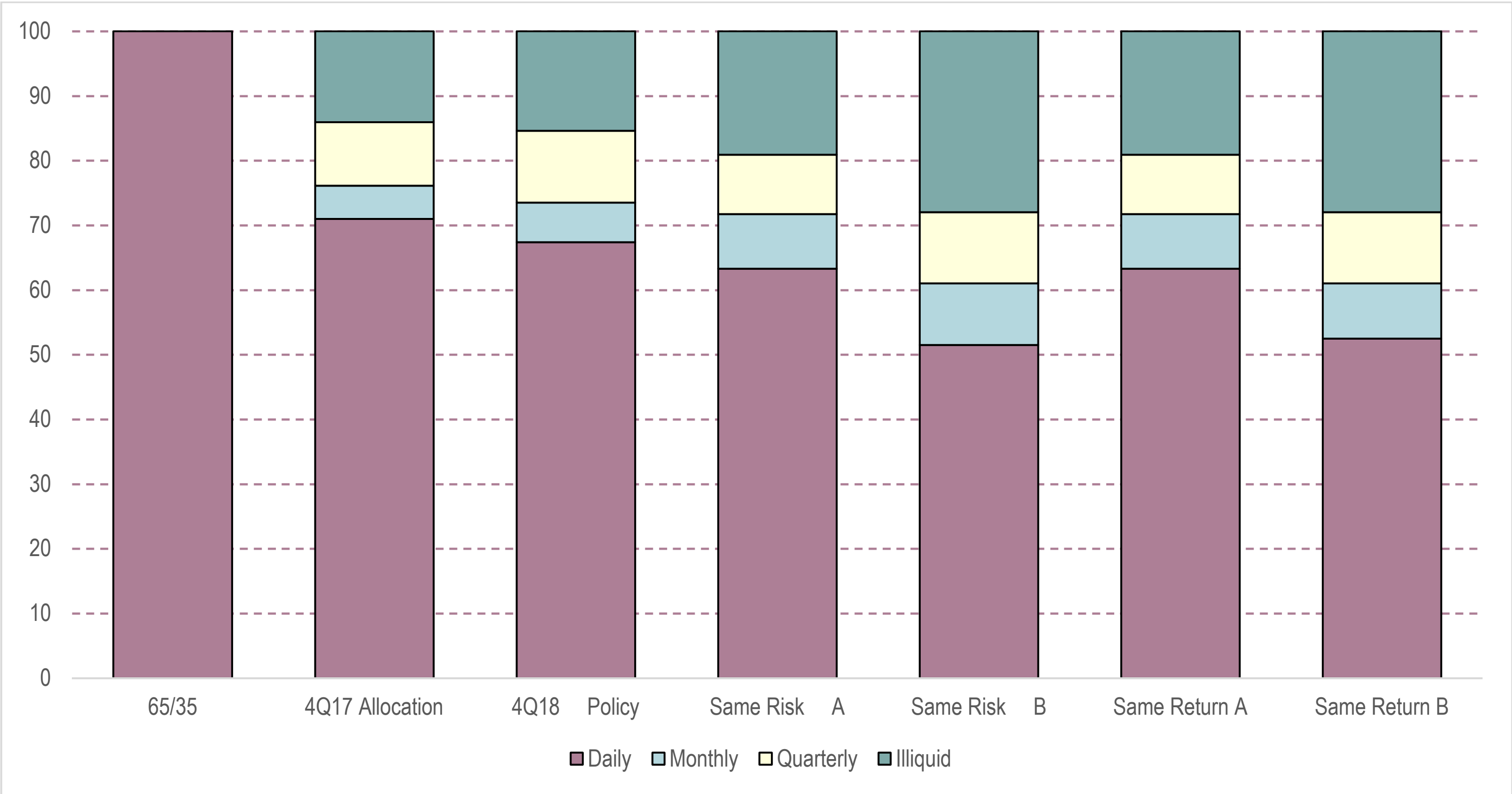
Anti-Stress Testing: Impact of Market Movements
(Expected Return under Favorable Conditions)[1]

What happens if (over a 12-month period):	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Risk A (%)	Same Risk B (%)	Same Return A (%)	Same Return B (%)
10-year Treasury Bond rates drop 100 bps	7.2	6.8	6.8	6.8	6.8	6.9	6.9
10-year Treasury Bond rates drop 200 bps	19.3	16.5	15.8	15.6	14.8	15.4	14.4
Baa Spreads narrow by 30bps, HY by 100 bps	8.8	8.6	8.1	8.2	8.1	7.9	7.5
Baa Spreads narrow by 100bps, HY by 300 bps	16.1	15.5	14.7	14.7	14.2	14.3	12.9
Trade Weighted Dollar drops 10%	8.6	7.7	7.2	7.2	6.9	7.0	6.4
Trade Weighted Dollar drops 20%	19.4	17.9	16.7	16.3	15.5	15.8	14.4
U.S. Equities rise 10%	7.3	7.0	6.7	6.6	6.5	6.4	6.0
U.S. Equities rise 30%	18.6	16.9	15.8	15.6	14.9	15.0	13.5

- Each policy portfolio has a different sensitivity to four major risk factors: interest rates, credit spreads, currency fluctuations, and equity values.

[1] Assumes that assets not directly exposed to the factor are affected nonetheless. See the Appendix for further details.

Liquidity Profile[1]



- The 4Q18 Policy and each "A" Policy has greater than 60% in daily liquid assets.
- Each "B" Policy has greater than 50% in daily liquid assets.

[1] For the purpose of this analysis Global Equity, Investment Grade Bonds, and Commodities were identified as daily liquid. High Yield Bonds, Bank Loans, and CTAs were identified as typically monthly liquid. Core Real Estate and Hedge Funds other than CTAs were all identified as typically quarterly liquid. Private Equity, Non-Core and Opportunistic Real Estate, Natural Resources, and Infrastructure are all not liquid.

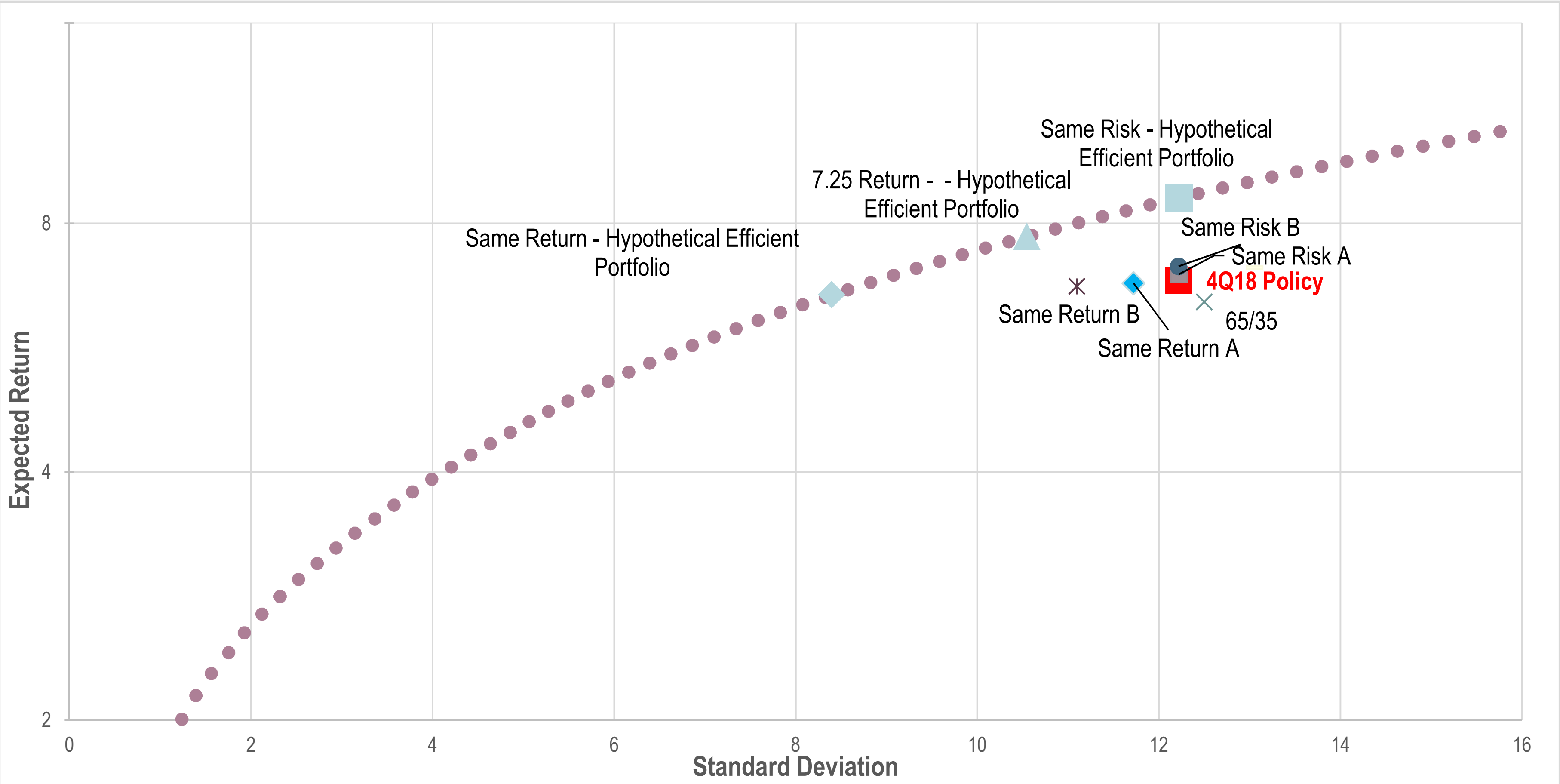
Economic Regime Management

- The Economic Regime Management (ERM) approach focuses on understanding the dynamics of the most important macro level forces that drive returns across asset classes.
- We find the most important factors to be:
  - Systemic Risk – "system-wide" risk that propagates through all asset classes (e.g., 2008)
  - Interest Rate Surprise – unexpected changes in the 10 year interest rate (related to Duration)
  - Growth Surprise – unexpected changes in the Real GDP growth rate
  - Inflation Surprise – unexpected changes in the CPI growth rate
- We focus on surprises because expectations matter.
- What was considered "low" inflation in the 1970s would be considered "high" today.
- These factors explain the majority of volatility across asset classes.
- Understanding these dynamics explain the "why" not just the "what."

Portfolio Sensitivity Comparison

- The chart above shows the resulting change in portfolio return given a one standard deviation event in the respective risk factor.

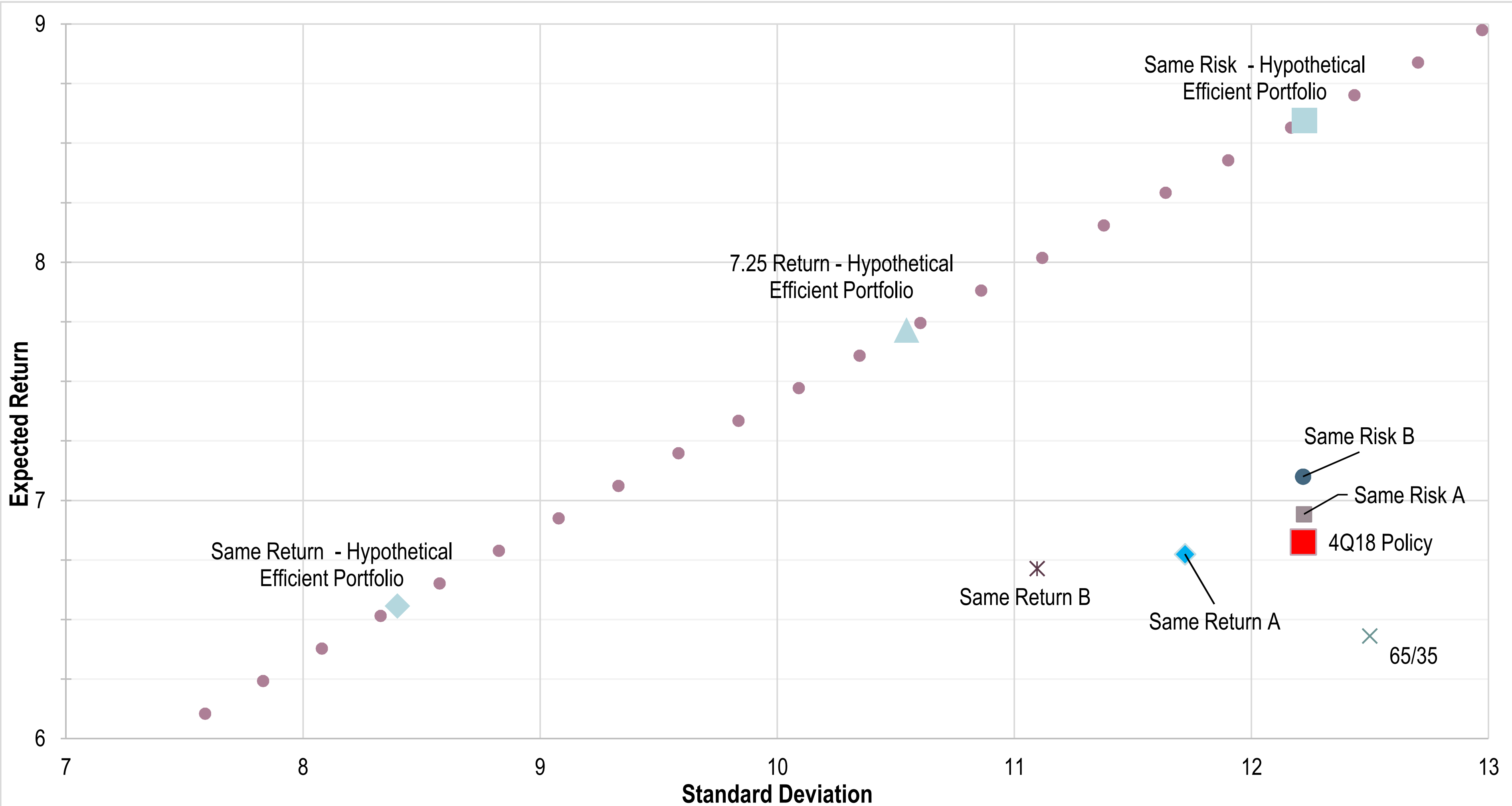
The Efficient Frontier[1]



- All of the allocations options lie fairly close to the efficient frontier and offer potentially superior risk-adjusted expected returns than the 4Q18 Policy.

[1] Returns presented are 1 Year Expected Returns.

The Efficient Frontier (continued)



- All of the proposed allocations represent an improvement relative to the 4Q18 Policy.

The Efficient Frontier (continued)

	65/35 (%)	4Q17 Actual (%)	4Q18 Policy (%)	Same Return "Efficient" (%)	Same Risk "Efficient" (%)	7.25% Return "Efficient" (%)
Growth	**65.0**	**47.9**	**41.4**	**12.0**	**18.5**	**15.3**
Global Equity	0.0	9.5	10.0	0.0	0.0	0.0
Private Equity	0.0	1.7	1.7	12.0	18.5	15.3
Opportunistic Real Estate	0.0	6.3	7.3	0.0	0.0	0.0
Credit	**0.0**	**2.7**	**3.0**	**13.0**	**10.0**	**13.5**
High Yield	0.0	1.5	1.8	0.0	0.0	0.0
Bank Loans	0.0	0.7	0.8	4.0	0.0	0.2
EM Debt	0.0	1.4	1.7	0.0	1.0	2.4
Illiquid Credit	0.0	11.9	12.1	9.0	9.0	10.9
Real Assets and Inflation Hedges	**0.0**	**9.4**	**9.3**	**18.0**	**31.5**	**24.4**
Core and Value-Added Real Estate	0.0	2.5	2.8	0.0	0.0	0.0
Private Natural Resources/Commodities	0.0	0.0	0.0	2.0	4.0	2.0
Private Infrastructure	0.0	0.0	0.0	16.0	27.5	22.4
TIPS	0.0	0.0	0.0	0.0	0.0	0.0
Risk Reducing and Mitigating	**35.0**	**22.7**	**27.5**	**56.0**	**37.0**	**44.7**
Investment Grade Bonds	35.0	18.6	21.2	23.0	0.0	5.2
Diversified Hedge Fund Portfolio	0.0	2.1	4.3	33.0	37.0	39.5
Cash	0.0	2.0	2.0	0.0	0.0	0.0
10 Year Expected Return	5.78	6.37	6.20	6.26	7.98	7.25
Standard Deviation	12.50	13.05	12.22	8.40	12.22	10.55
Sharpe Ratio	0.34	0.37	0.38	0.56	0.53	0.54
Illiquid%	0.0	14.1	15.4	31.0	52.0	41.8
Estimated Weighted Average Fees (bps)	*16*	*79*	*90*	*251*	*335*	*313*

Next Steps

Next Steps

This Meeting:

- Review the initial set of asset allocations options
- Provide guidance on target risk and expected return ranges
- Evaluate model constraints and discuss other considerations to incorporate into analysis for review at the May meeting

May Meeting:

- Review a refined set of allocation options using a variety of tools including MVO-based risk analytics, risk budgeting, scenario analysis, liquidity analysis, peer comparisons, etc.
- Potentially approve strategic asset allocation

July Off-Site Meeting:

- Discuss strategic asset allocation implementation

Appendix

Estimated Management Fees

	Active/Passive	Estimated Management Fee (bps)[1]
Growth		
Global Equity	Both	18
Private Equity	Active	440
Opportunistic Real Estate	Active	200
Credit		
High Yield	Active	44
Bank Loans	Active	60
EM Debt	Active	50
Illiquid Credit	Active	400
Real Assets and Inflation Hedges		
Core Real Estate	Active	57
Value-Added Real Estate	Active	60
Commodities	Active	36
Private Natural Resources	Active	400
Private Infrastructure	Active	400
TIPS	Passive	1
Risk Reducing and Mitigating		
Investment Grade Bonds	Both	13
Diversified Hedge Fund Portfolio	Active	400
Cash	Active	5

[1] Estimated Management Fee is based on either LACERA's current fees or an estimate provided by Meketa Investment Group.

Capital Market Expectations

Fixed Income

Asset Class	10-Year E(R) (%)	Historical Return (%)	Standard Deviation (%)
Cash Equivalents	1.5	4.0	1.0
Rate Sensitive			
Investment Grade Bonds	2.5	7.5	4.0
Long-term Government Bonds	3.0	8.3	12.5
Credit			
High Yield Bonds	5.0	9.0	12.5
Bank Loans	5.1	5.7	10.0
Emerging Market Bonds	5.1	6.3	13.3
Private Debt Composite[1]	6.1	7.6	18.0
Investment Grade RE Debt	2.7	6.0	9.0
High Yield RE Debt	7.0	6.0	23.0

Equities

Asset Class	10-Year E(R) (%)	Historical Return (%)	Standard Deviation (%)
U.S. Equity	5.7	11.7	18.0
Developed Market Equity (non-US)	6.3	8.6	20.0
Developed Market Equity (50% currency hedge)	5.8	8.2	18.0
Emerging Market Equity	9.6	10.3	26.0
Global Equity	6.7	7.2	19.0
LACERA Private Equity Composite[1]	9.3	10.9	26.0

Real Assets/Inflation Sensitive

Asset Class	10-Year E(R) (%)	Historical Return (%)	Standard Deviation (%)
TIPS	3.0	3.3	7.5
Real Estate Composite[1]	5.7	8.7	18.0
Core Private Real Estate	4.0	9.3	12.5
Value-Added Real Estate	6.0	6.9	19.0
Opportunistic Real Estate	7.5	10.0	25.0
REITs	6.0	10.6	29.0
Natural Resources Composite	7.9	10.4	23.0
Timberland	5.5	12.3	12.0
Farmland	6.5	11.7	13.0
Oil & Gas E&P	8.8	10.7	26.0
Mining	7.5	7.8	35.0
Commodities	4.4	2.4	19.5
MLPs	6.9	5.6	22.5
Infrastructure Composite[2]	6.6	-	17.4

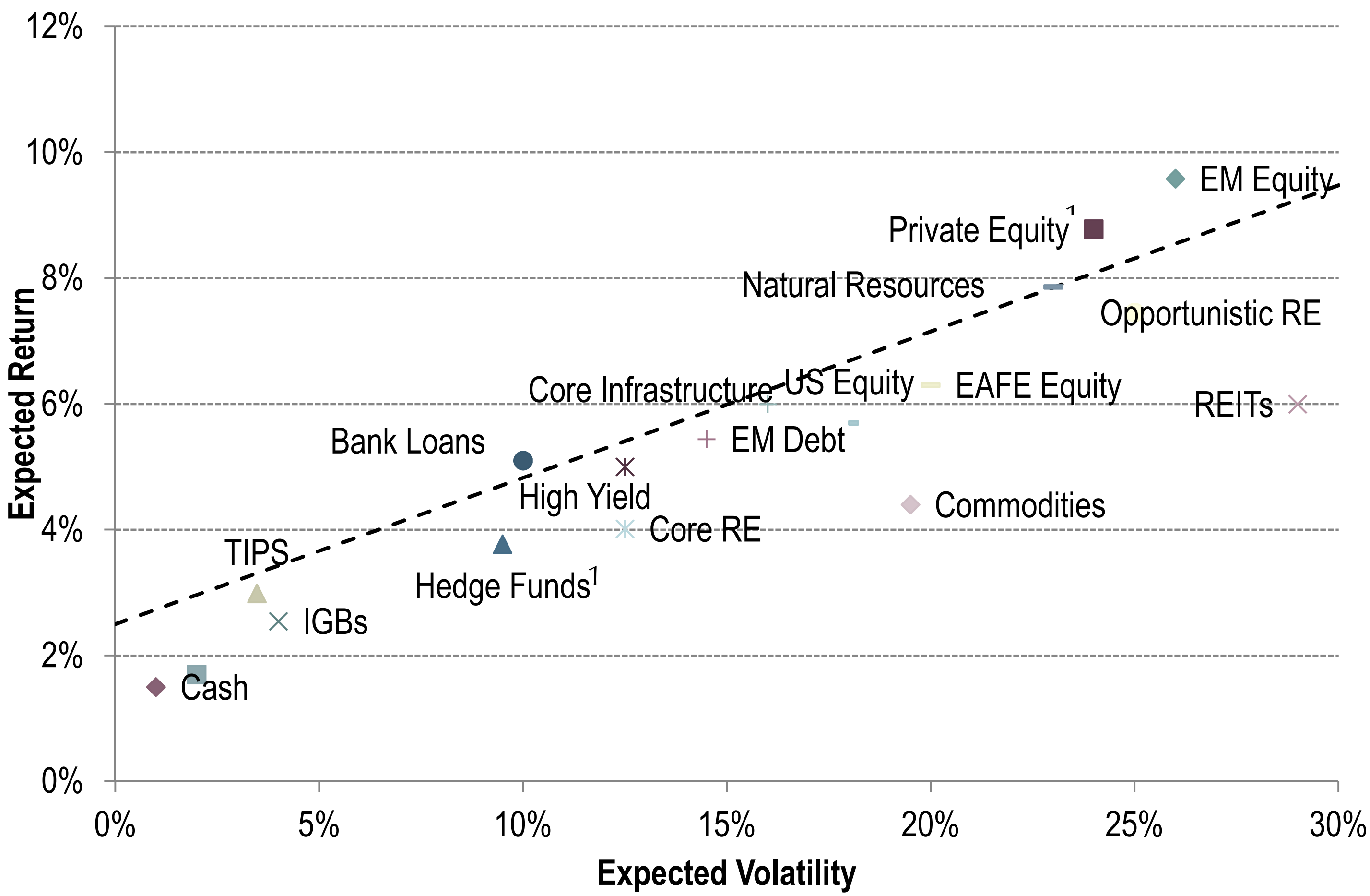
[1] Real Estate Composite is composed of 15% REITS, 30% Core, 25% Value-Added, 20% Opportunistic and 10% High Yield RE Debt.
[2] Infrastructure Composite is composed of 80% Core and 20% Non-Core.

Multi Asset Strategies

Asset Class	10-Year E(R) (%)	Historical Return (%)	Standard Deviation (%)
LACERA Hedge Fund Composite[1]	4.0	10.2	9.9
Long-Short	2.8	11.5	11.0
Event-Driven	4.6	10.5	10.0
Global Macro	3.3	10.5	8.0
CTA – Trend Following	3.0	9.6	10.0
Fixed Income/L-S Credit	4.0	7.4	10.0
Relative Value/Arbitrage	4.8	9.4	9.5
Risk Parity (10% vol)	4.5	-	11.0

[1] LACERA Hedge Fund Composite is based on LACERA's target weights and is composed of 20% Long-Short, 33% Event-Driven, 9% Global Macro, 9% CTA, 5% Fixed Income/L-S Credit, and 24% Relative Value/Arbitrage.

Expected Return and Expected Volatility[1]



1 The Hedge Fund and Private Equity Composites presented above use MIG's strategy weights and differ from the LACERA custom composites on pages 8 and 9.

Scenario Return Inputs

Asset Class	Benchmark Used
Investment Grade Bonds	Barclays Aggregate
TIPS	Barclays U.S. TIPS
Intermediate-term Government Bonds	Barclays Treasury Intermediate
Long-term Government Bonds	Barclays Long U.S. Treasury
EM Bonds (local)	JPM GBI-EM Global Diversified Composite
Bank Loans	CSFB Leveraged Loan
High Yield Bonds	Barclays High Yield
Direct Lending - First Lien	Cliffwater Direct Lending Index
Direct Lending - Second Lien	Cliffwater Direct Lending Index
Mezzanine Debt	Cambridge Associates Mezzanine
Distressed Debt	Cambridge Associates Distressed Debt Index
Core Real Estate	NCREIF Property
Value-Added RE	NCREIF Townsend Value Added
Opportunistic RE	NCREIF Townsend Opportunistic
REITs	NAREIT Equity
Infrastructure (private)	S&P Global Infrastructure
Natural Resources (private)	S&P Global Natural Resources
Timber	NCREIF Timberland
Commodities	Bloomberg Commodity Index
U.S. Equity	Russell 3000
Public Foreign Equity (Developed)	MSCI EAFE
Public Foreign Equity (Emerging)	MSCI Emerging Markets
Private Equity	Cambridge Associates Private Equity Composite
Long-short Equity	HFRI Equity Hedge
Global Macro	HFRI Macro
Hedge Funds	HFRI Fund Weighted Composite
Private Debt	Barclays High Yield and CSFB Leveraged Loan

Negative Historical Scenario Returns - Sample Inputs

	Taper Tantrum (May - Aug 2013)	Global Financial Crisis (Oct 2007 - Mar 2009)	2008 Calendar Year	Popping of the TMT Bubble (Apr 2000 - Sep 2002)	LTCM (Jul - Aug 1998)	Asian Financial Crisis (Aug 1997 - Jan 1998)	Rate spike (1994 Calendar Year)	Crash of 1987 (Sep - Nov 1987)	Strong dollar (Jan 1981 - Sep 1982)	Stagflation (Jan - Mar 1980)	Stagflation (Jan 1973 - Sep 1974)
Cash Equivalents	0.0	3.1	1.7	9.9	0.8	2.4	3.9	1.4	24.4	2.9	13.5
Short-term Investment Grade Bonds	-0.1	8.7	5.0	21.9	1.6	3.5	0.5	2.3	29.9	-2.6	4.3
Investment Grade Bonds	-3.7	9.3	5.2	28.6	1.8	4.9	-2.9	2.2	29.9	-8.7	7.9
Long-term Corporate Bonds	-9.3	-9.4	-5.2	26.9	-0.6	5.4	-5.8	1.5	29.6	-14.1	-12.0
Long-term Government Bonds	-11.6	24.5	24.0	35.5	4.1	8.6	-7.6	2.6	28.4	-13.6	-1.8
TIPS	-8.5	9.6	-2.4	37.4	0.7	2.0	-7.5	2.8	15.6	-7.8	4.3
Global ILBs	-7.4	-1.5	-7.7	39.7	0.7	2.2	-7.9	2.9	16.5	-8.3	4.5
High Yield Bonds	-2.0	-20.7	-26.2	-6.3	-5.0	5.6	-1.0	-3.6	6.9	-2.3	-15.5
Bank Loans	0.8	-22.5	-28.8	6.3	0.7	3.3	10.3	-1.7	3.3	-1.1	-7.5
Direct Lending - First Lien	3.4	-2.1	-5.8	-0.7	-0.7	1.7	0.7	-0.2	2.0	-0.6	-4.4
Direct Lending - Second Lien	4.6	-2.9	-7.8	-1.0	-0.9	2.3	1.0	-0.3	2.6	-0.8	-5.9
Foreign Bonds	-3.2	5.3	4.4	8.5	3.5	3.3	5.3	-0.3	34.8	-6.5	-1.4
Mezzanine Debt	4.6	-25.5	-25.9	-2.0	-2.6	10.3	7.6	0.4	3.2	-1.0	-7.2
Distressed Debt	4.6	-25.5	-25.9	-2.0	-2.6	10.3	7.6	0.4	3.2	-1.0	-7.2
Emerging Market Bonds (major)	-11.5	-2.7	-9.7	6.3	-28.2	-1.8	-18.9	-9.2	-1.6	-2.6	-20.2
Emerging Market Bonds (local)	-14.3	-2.3	-5.2	7.2	-34.1	-2.4	-22.8	-11.0	-2.0	-3.2	-23.9
US Equity	3.0	-43.8	-37.0	-43.8	-15.4	3.6	1.3	-29.5	-2.3	-4.1	-42.6
Developed Market Equity (non-US)	-2.2	-49.6	-43.4	-46.7	-11.5	-5.8	7.8	-14.5	-18.0	-7.0	-36.3
Emerging Market Equity	-9.4	-45.8	-53.3	-43.9	-26.7	-31.8	-7.3	-25.3	-12.1	-6.6	-44.2
Global Equity	-0.7	-46.6	-42.2	-46.7	-14.0	-3.2	5.0	-21.5	-11.2	-5.8	-39.3
Private Equity/Debt	5.7	-25.6	-27.2	-23.4	-3.2	15.7	13.2	0.6	-2.7	-2.5	-18.2
Private Equity	5.8	-25.8	-27.6	-26.0	-3.3	16.7	14.2	0.6	-3.9	-2.7	-20.1
Private Debt Composite	4.6	-21.3	-22.5	-1.7	-2.3	8.7	6.2	0.2	3.0	-1.0	-6.9
REITs	-13.3	-61.3	-37.7	45.4	-15.3	9.8	-3.5	-19.5	2.5	-3.6	-33.9
Core Private Real Estate	3.6	-7.3	-6.5	23.6	2.3	8.5	6.4	0.7	23.9	5.5	-4.4
Value-Added Real Estate	3.8	-18.0	-13.4	177.0	1.8	11.4	11.2	1.2	44.2	9.6	-7.6
Opportunistic Real Estate	4.0	-24.7	-21.8	21.4	1.5	20.0	18.8	0.9	30.7	7.0	-5.6
Natural Resources (Private)	2.5	-26.2	-34.1	-3.9	-16.9	-7.8	12.6	-10.8	-9.4	-9.2	19.3
Timberland	1.3	25.4	9.5	-1.5	0.5	12.0	15.4	3.8	23.6	-7.4	5.5
Farmland	3.3	30.2	15.8	11.4	0.8	3.9	9.4	2.2	13.3	-4.2	3.1
Commodities (naïve)	-2.4	-31.8	-35.6	18.5	-12.0	-6.2	16.6	1.8	-16.0	-9.6	139.5
Core Infrastructure	3.7	0.2	-0.6	24.8	-0.3	6.1	-11.5	0.0	-0.2	-0.1	-0.5
Hedge Funds	-0.4	-15.6	-19.0	-2.1	-9.4	1.7	4.1	-7.8	-3.8	-1.9	-15.7
Long-Short	1.0	-24.0	-26.6	-8.8	-8.3	7.9	2.6	-10.0	-4.9	-2.5	-19.8
Hedge Fund of Funds	-0.5	-17.8	-21.4	-0.4	-7.7	0.5	-3.5	-5.7	-2.7	-1.4	-11.5

Positive Historical Scenario Returns - Sample Inputs

	Global Financial Crisis Recovery (Mar 2009 - Nov 2009)	Best of Great Moderation (Apr 2003 - Feb 2004)	Peak of the TMT Bubble (Oct 1998 - Mar 2000)	Pre-Recession (Jun - Oct 1990)	Plummeting Dollar (Jan 1986 - Aug 1987)	Volcker Recovery (Aug 1982 - Apr 1983)	Bretton Wood Recovery (Oct 1974 - Jun 1975)
Cash Equivalents	0.1	0.9	6.7	3.3	10.0	6.0	4.5
Short-term Investment Grade Bonds	4.3	2.8	5.3	4.5	13.2	15.4	5.0
Investment Grade Bonds	9.0	4.6	1.7	3.8	14.4	26.4	9.2
Long-term Corporate Bonds	28.8	11.3	-3.1	1.5	15.9	42.1	17.5
Long-term Government Bonds	2.0	4.9	-2.3	2.4	15.4	33.6	11.8
TIPS	14.3	9.1	6.3	2.2	10.2	11.5	4.1
Global ILBs	24.7	9.6	6.6	2.3	10.8	12.1	4.3
High Yield Bonds	49.1	21.8	2.1	-12.9	24.9	23.3	19.3
Bank Loans	32.9	10.1	6.1	-6.1	11.1	10.4	8.7
Direct Lending - First Lien	10.6	5.7	1.1	-1.9	5.8	5.0	5.1
Direct Lending - Second Lien	14.3	7.7	1.4	-2.5	7.8	6.7	6.8
Foreign Bonds	23.4	15.2	-7.0	15.8	44.5	32.3	17.9
Mezzanine Debt	30.8	23.7	26.8	0.7	5.4	8.2	8.3
Distressed Debt	30.8	23.7	26.8	0.7	5.4	8.2	8.3
Emerging Market Bonds (major)	27.0	20.6	49.0	-8.7	38.9	21.6	21.0
Emerging Market Bonds (local)	37.5	25.2	61.0	-10.5	48.4	26.5	25.7
US Equity	51.6	37.2	50.2	-14.7	64.8	59.3	55.1
Developed Market Equity (non-US)	60.5	56.7	53.0	-9.7	140.0	29.6	34.6
Emerging Market Equity	94.6	79.4	101.3	-15.9	126.5	52.1	53.4
Global Equity	59.9	46.2	54.8	-11.1	108.4	43.0	44.6
Private Equity/Debt	15.4	23.3	84.6	4.6	19.1	13.7	18.4
Private Equity	13.0	23.7	92.1	5.5	21.7	14.8	20.2
Private Debt Composite	27.5	20.4	21.4	0.1	5.9	7.9	8.0
REITs	82.5	44.6	-5.2	-15.6	51.8	47.4	42.5
Core Private Real Estate	-16.4	9.0	18.1	1.9	13.1	6.8	4.5
Value-Added Real Estate	-32.7	11.4	19.6	3.2	23.6	11.9	7.8
Opportunistic Real Estate	-19.0	13.6	27.9	0.4	16.7	8.6	5.7
Natural Resources (Private)	57.8	36.1	22.2	6.0	78.3	30.2	14.8
Timberland	-3.3	8.5	20.5	5.7	28.6	20.0	8.7
Farmland	5.4	9.6	10.4	3.3	15.9	11.3	5.0
Commodities (naïve)	28.9	30.6	17.1	43.5	27.6	6.2	-20.2
Core Infrastructure	2.1	8.5	33.0	0.0	1.4	0.6	0.6
Hedge Funds	20.1	22.4	52.8	-1.9	30.6	13.8	14.5
Long-Short	25.9	25.3	81.4	5.1	40.8	18.0	18.9
Hedge Fund of Funds	10.3	13.3	36.8	11.9	21.3	9.7	10.3

"Positive" Stress Test Return Assumptions - Sample Inputs[1]

	10-year Treasury Bond rates drop 100 bps	10-year Treasury Bond rates drop 200 bps	Baa Spreads narrow by 30bps, High Yield by 100 bps	Baa Spreads narrow by 100bps, High Yield by 300 bps	Trade Weighted Dollar drops 10%	Trade Weighted Dollar drops 20%	U.S. Equities rise 10%	U.S. Equities rise 30%
Cash Equivalents	0.7	0.8	0.2	0.2	1.3	2.7	1.2	1.7
Short-term Investment Grade Bonds	3.4	5.3	1.1	2.6	2.5	3.6	1.7	3.1
Investment Grade Bonds	8.5	14.4	2.7	5.0	3.4	6.6	2.3	4.6
Long-term Corporate Bonds	18.4	32.3	7.1	16.5	6.2	10.6	3.8	8.2
Long-term Government Bonds	20.5	38.0	3.4	0.5	5.1	13.0	2.8	6.9
TIPS	7.1	12.0	3.3	7.0	4.6	4.1	2.2	4.3
Global ILBs	3.1	3.0	4.5	8.5	6.5	3.9	2.7	5.8
High Yield Bonds	9.2	13.1	8.9	27.5	4.7	5.1	6.0	13.7
Bank Loans	4.4	2.2	5.0	17.5	1.9	1.3	3.7	8.6
Direct Lending - First Lien	3.2	2.0	7.6	9.4	0.7	7.7	2.9	5.0
Direct Lending - Second Lien	3.6	2.4	10.2	12.7	0.8	11.0	4.1	7.1
Foreign Bonds	8.6	16.4	4.5	9.0	11.1	12.3	3.3	7.8
Mezzanine Debt	5.8	7.2	9.8	18.5	4.5	13.1	6.6	9.9
Distressed Debt	5.8	7.4	9.9	18.9	4.8	15.2	7.2	11.2
Emerging Market Bonds (major)	7.9	12.0	8.0	17.8	6.8	12.1	6.0	12.8
Emerging Market Bonds (local)	9.1	10.0	7.3	19.6	9.0	14.9	7.1	16.0
US Equity	8.9	22.7	11.2	16.8	5.4	21.5	10.0	30.0
Developed Market Equity (non-US)	3.9	21.4	12.5	19.9	15.9	28.2	8.3	20.2
Emerging Market Equity	5.8	21.1	13.2	37.8	16.6	33.5	13.0	27.8
Global Equity	6.5	21.9	12.0	22.1	11.3	26.3	10.0	26.1
Private Equity/Debt	7.3	12.3	10.7	13.2	6.6	19.5	9.0	19.0
Private Equity	7.7	14.1	10.9	13.1	6.9	20.7	9.5	21.5
Private Debt Composite	5.4	6.3	9.9	17.5	3.9	13.5	6.3	9.8
REITs	9.0	20.4	13.6	27.4	7.9	24.0	12.2	31.7
Core Private Real Estate	5.6	8.5	5.1	8.4	3.1	10.3	3.0	3.4
Value-Added Real Estate	8.0	15.0	5.0	10.3	4.6	16.4	4.3	6.5
Opportunistic Real Estate	8.0	15.0	3.6	8.7	2.7	18.2	4.0	5.5
Natural Resources (Private)	4.0	17.9	11.6	13.7	11.4	15.5	9.4	20.7
Timberland	6.0	15.5	3.8	5.5	4.6	15.4	4.8	5.8
Farmland	5.0	9.4	8.1	8.3	4.1	13.4	4.3	5.6
Commodities (naïve)	1.5	4.0	4.4	9.2	8.6	5.4	3.6	6.4
Core Infrastructure	5.0	6.0	6.9	4.0	4.8	11.2	2.6	4.3
Hedge Funds	8.2	11.8	5.7	11.9	4.6	7.8	6.0	11.9
Long-Short	8.3	13.0	6.2	12.8	5.8	12.4	7.1	15.0
Hedge Fund of Funds	6.6	10.0	4.3	10.1	3.2	6.2	4.5	10.2

[1] Assumptions are based on performance for each asset class during historical periods that resembled these situations.

Stress Test Return Assumptions - Sample Inputs[1]

	Rates Rise 100 bp (%)	Rates Rise 200 bp (%)	Rates Rise 300 bp (%)	BBB Spreads widen by 50 bp (%)	BBB Spreads widen by 300 bp (%)	USD Gains 10% (%)	USD Gains 20% (%)	Equities Decline 10% (%)	Equities Decline 25% (%)	Equities Decline 40% (%)	Rates Fall 100 bp (%)	Rates Fall 200 bp (%)
Public Domestic Equity	10.3	9.0	6.9	6.0	-42.0	3.5	7.0	-10.0	-25.0	-40.0	10.5	8.4
Public Foreign Equity (Developed)	10.3	9.0	6.9	5.5	-33.0	-7.0	-14.0	-10.5	-26.3	-42.0	10.5	8.4
Public Foreign Equity (Emerging)	10.3	9.0	6.9	5.0	-39.0	-7.0	-14.0	-11.0	-27.5	-44.0	10.5	8.4
Long-Short Hedge Funds	6.4	7.0	6.0	6.5	-21.0	2.1	4.2	-6.0	-15.0	-24.0	6.3	5.0
Private Equity	5.2	4.5	3.5	6.0	-42.0	3.5	7.0	-8.0	-20.0	-32.0	5.3	4.2
Core Real Estate	8.7	9.6	8.7	9.5	-12.0	4.0	8.0	-5.0	-12.5	-20.0	5.5	5.2
REITs	7.9	8.0	6.0	0.5	-36.0	1.0	2.0	-9.5	-23.8	-38.0	14.9	7.4
Non-Core Real Estate	7.1	10.4	9.3	11.5	-24.0	4.0	8.0	-7.0	-17.5	-28.0	3.6	7.6
Infrastructure (private)	4.3	2.6	2.9	3.5	-24.0	3.0	6.0	-5.0	-12.5	-20.0	5.3	5.5
Natural Resources (private)	8.6	12.2	13.5	2.0	-16.5	-3.1	-6.2	-5.0	-12.5	-20.0	2.5	2.0
Natural Resources (public)	11.4	16.2	18.0	4.0	-33.0	-6.2	-12.3	-9.5	-23.8	-38.0	5.0	4.0
Commodities	8.7	4.6	-0.6	-0.5	-21.0	-15.0	-30.0	-7.0	-17.5	-28.0	1.8	-4.8
Short-Term Bonds	-6.4	-12.2	-17.9	8.0	6.0	7.0	14.0	1.0	2.5	4.0	5.1	10.9
Long-Term Government Bonds	-15.3	-33.6	-52.0	12.0	15.0	10.0	20.0	5.0	12.5	20.0	21.6	40.0
TIPS	-7.0	-15.8	-24.6	8.5	12.0	8.0	16.0	1.0	2.5	4.0	10.6	19.4
Investment Grade Bonds	-3.4	-8.6	-13.9	-0.4	-4.6	8.0	16.0	2.0	5.0	8.0	7.2	12.5
Investment Grade Corporate Bonds	-4.3	-11.4	-18.5	-1.4	-18.5	8.0	16.0	-1.5	-3.8	-6.0	9.9	17.0
Foreign Developed Bonds	-5.1	-11.8	-18.5	0.0	-3.5	-6.3	-12.6	-2.0	-5.0	-8.0	8.4	15.2
Emerging Market Bonds (external)	-2.0	-7.9	-13.9	-2.7	-25.9	5.0	10.0	-2.0	-5.0	-8.0	10.0	16.0
Emerging Market Bonds (local)	-0.8	-6.6	-12.3	1.4	-8.0	-6.3	-12.6	-3.0	-7.5	-12.0	10.7	16.4
High Yield Bonds	1.5	-2.6	-6.7	-4.9	-35.9	4.5	9.0	-6.0	-15.0	-24.0	9.7	13.8
Bank Loans	5.0	6.0	7.5	2.5	-30.0	4.5	9.0	-6.0	-15.0	-24.0	3.0	2.0
Hedge Funds	5.8	6.2	3.6	3.5	-18.0	5.0	10.0	-5.0	-12.5	-20.0	8.1	4.4
TAA	7.8	5.7	3.1	6.5	-22.2	3.2	6.4	-7.0	-17.5	-28.0	10.8	11.8
Risk Parity	6.1	2.1	-2.5	5.6	-12.0	1.6	3.3	-2.0	-5.0	-8.0	10.2	12.3

1 Assumptions are based on performance for each asset class during historical periods that resembled these situations.

Dataset for Drawdown Analysis

Asset Class	Index or Proxy Used
Short-term Bonds	Barclays 1-3 Year Gov't/Credit
U.S. Treasuries (Intermediate)	Barclays Treasury Intermediate
Investment Grade Bonds	Barclays Aggregate
Private Debt	Cambridge Associated Mezzanine and Distressed
High Yield	Barclays High Yield
U.S. Treasuries (LT)	Barclays Long US Treasury
TIPS	Barclays US TIPS
Bank Loans	CFSB Leveraged Loan Index
Infrastructure (Core Private)	Track record of common core infrastructure fund
Global Macro	HFRI Macro (Total) Index
Emerging Market Debt (Major)	JPM EMBI+ Composite
Emerging Market Debt (Local)	JPM GBI-EM Global Diversified Composite
Hedge Funds	HFRI Fund Weighted Composite
Option-based Equity	CBOE S&P 500 Put Write Index
Private Equity	Cambridge Associates Private Equity Composite
Tactical Asset Allocation	Weighted Average of Typical TAA Fund
Risk Parity	Track record of common risk parity fund
Core Private Real Estate	NCREIF Property Index
U.S. Equity	S&P 500
REITs	NAREIT Equity
Infrastructure (Public)	S&P Global Infrastructure Index
Non-Core Private Real Estate	NCREIF Closed End Value Add Fund Index
Developed Market Equity (Non-U.S)	MSCI EAFE
Emerging Market Equity	MSCI Emerging Markets

March 22, 2018

TO: Each Member
Board of Investments

FROM: Jon Grabel
Chief Investment Officer

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **BOARD OF INVESTMENTS OFFSITE TENTATIVE AGENDA FOR JULY 2018**

The Board of Investments ("BOI") is scheduled to have its next offsite at the Loews Santa Monica Hotel on Monday, July 9, 2018 and Tuesday, July 10, 2018. The following agenda is the tentative agenda for the event:

<u>Monday, July 9</u>
AM – Implementing a New Strategic Asset Allocation (Part 1)
PM – Implementing a New Strategic Asset Allocation (Part 2),
Evolving Global Social, Political and Economic Dynamics

<u>Tuesday, July 10</u>
AM – LACERA's Strategic Mission
PM – BOI July Meeting

BACKGROUND

In an effort to develop a responsive and engaging agenda, the Board Chair and Vice Chair, the Interim Deputy Chief Executive Officer, the Chief Counsel, representatives from Meketa Investment Group and the Chief Investment Officer ("Working Group") met after the March 5 BOI meeting to begin planning for the July 2018 offsite. At that meeting, the Working Group discussed the format for the offsite. Specifically, the Working Group planned for a day and a half of offsite-style discussions followed by a session on Tuesday afternoon during which the BOI can conduct its regular monthly business. The Working Group also considered various topics for the agenda. These included:

- Implementing a New Strategic Asset Allocation
- BOI Activism and Engagement
- Evolving Global Social, Political and Economic Dynamics
- Request For Proposal Process
- LACERA's Strategic Mission
- Updates on Previous Offsite Discussions

The Working Group asked the BOI to rank these ideas through a poll. The survey also included a write-in section for other ideas. Upon completion of the poll, the Working Group reconvened via a conference call. The Interim Chief Executive Officer joined the Working Group for this teleconference. The Working Group reviewed responses to the poll. The top three topics, in order of interest, were:

- Implementing a New Strategic Asset Allocation
- Evolving Global Social, Political and Economic Dynamics
- LACERA's Strategic Mission

The Working Group then considered the tentative agenda indicated above for the July BOI offsite. Following a discussion, the Board Chair and Vice Chair asked that this memorandum be prepared and submitted to the BOI at its April meeting.

Please note that implementing a new strategic asset allocation has numerous subtopics including the implications for the investment policy statement, benchmarks, liquidity and rebalancing, risk management, committees and staffing, performance reporting and the implementation timeline. Given the magnitude of this topic, the Working Group thought it best to allocate three quarters of the first day to the subject.

The materials for the offsite will be developed by Meketa and staff. Outside speakers will likely deliver presentations for the session on the evolving global social, political and economic dynamics. State Street, LACERA's custody bank, will be asked to participate in portions of the discussion on implementing a new strategic asset allocation. These third parties will be instructed to avoid sales pitches and focus their remarks on implications for the Total Fund.

Staff welcomes the Board's comments.

JG:cq

L//.CERA

April 2, 2018

FOR INFORMATION ONLY

TO: Each Member
Board of Investments

FROM: Barry W. Lew
Legislative Affairs Officer

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **Assembly Bill 2571—Race and Gender Pay Equity Policy**

BACKGROUND

Assembly Bill 2571 was introduced on February 15, 2018. AB 2571 would restrict a public investment fund from making new, additional, or renewed investments in alternative investment vehicles[1] unless the investment manager of the investment vehicle has adopted and committed to comply with a race and gender pay equity policy. The bill also would require the investment manager, beginning September 1, 2019, to submit a certified report of its efforts to comply with the policy to the public investment fund. The public investment fund would be required to disclose the pay equity information received from the investment manager at least annually in a public meeting and submit that information to the State Auditor. The bill provides that nothing in its provisions shall require a public investment fund from taking action inconsistent with its constitutional fiduciary duties.

On March 5, 2018, the Board of Investments adopted a “Watch” position on AB 2571.

DISCUSSION

Staff has been monitoring the bill and whether the California Public Employees’ Retirement System (CalPERS) and the California State Teachers’ Retirement System (CalSTRS) have taken positions on the bill.

CalPERS has not taken a position on AB 2571 and is currently monitoring the bill.

CalSTRS considered the bill at its meeting on March 29, 2018. CalSTRS staff recommended an “Oppose unless amended” position to remove restrictions on the investment authority of the board. The CalSTRS board voted to take a “Watch” position on AB 2571.

[1] Alternative investment vehicles, as defined in AB 2571, include a limited partnership, limited liability company, or similar legal structure through which a public investment fund invests in a private equity fund, venture fund, hedge fund, absolute return fund, real estate fund, joint venture, coinvestment vehicle, comingled investment, direct investment, or any other investment that is not a publicly traded security or debt fund.

CONCLUSION
Staff will continue to monitor AB 2571 and update your Board on any changes to the bill and recommend whether a new position should be adopted.

Reviewed and Approved:

Steven P. Rice, Chief Counsel

cc: Robert Hill
James Brekk
JJ Popowich
Bernie Buenaflor
Steven P. Rice
Christine Roseland
Jonathan Grabel
Christopher Wagner
Jim Rice
John McClelland
Jude Perez
Scott Zdrazil
Joe Ackler, Ackler & Associates

FOR INFORMATION ONLY

April 2, 2018

TO: Each Member
Board of Investments

FROM: Michael D. Herrera
Senior Staff Counsel

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: Selection of Securities Class Action Claims Filing Agent

We are pleased to report that the Legal Office completed its search for a firm to provide securities class action claims filing audit and filing services for LACERA. The firm we selected, Institutional Shareholder Services, Inc., is extremely well qualified, experienced and possess superior expertise in this area, which will inure to the benefit of LACERA by assisting the Legal Office in continuing to fulfill its duties under the Board's Securities Litigation Policy.

By way of background, virtually every public pension fund with significant funds invested in the securities markets is a passive member of the numerous securities class actions filed every year on behalf of defrauded investors. With a significant portion of its portfolio invested in equity and debt securities, LACERA is eligible to seek recovery of its losses stemming from corporate wrongdoing. Failing to timely and accurately file a claim in these actions after they settle can result in the fund missing out on its share of the millions of dollars recovered every year in these actions. Under the Board's Securities Litigation Policy, the Legal Office therefore implements and oversees procedures designed to ensure LACERA obtains its share of recoveries from these lawsuits, which includes active participation, as well as by filing proofs of claim to share in the resulting settlements. Since 2001, LACERA has recovered over $3 million per year through its claims filing efforts.

LACERA has historically relied on its custodians to perform this claims filing function. It was therefore included in the scope of work when LACERA retained State Street Bank ("SSB") to serve as its custodian in July 2013. However, because SSB only agreed to file claims in those cases where the class period at issue in the lawsuit is *after* SSB was engaged as LACERA's custodian, we continued using the fund's former custodian BNY Mellon to file claims in securities actions with class periods prior to SSB's engagement.

The Legal Office typically issues a request for proposals every three to five years to identify, evaluate and select qualified firms. Since it had been four years since State Street Bank ("SSB") began performing securities class action claims filing services for the fund, the Legal Office issued a request for proposals ("RFP") to identify and evaluate firms to provide this service. In addition to the fact that issuing a RFP was consistent with good practice, we knew that retaining one vendor to file all the fund's claims would result in greater efficiencies and cost savings for the fund, and avoid the potential for inconsistent or inaccurate filings in cases where the class period overlaps SSB's engagement date. The timing was also appropriate because the number and quality of firms performing this service has increased substantially over the past several years.

The Legal Office issued its RFP last year to qualified firms to provide securities class action claims filing audit and filing services for LACERA. We received and evaluated proposals from 12 firms. Assisted by input from the Executive Office and personnel from several Divisions, including Investments, Accounting, Internal Audit, and Systems, we evaluated candidates based on, among other things, experience and quality of work in representing and/or providing securities class action claims audit and filing services for other public pension systems and/or institutional investors, experience and familiarity with class action claims administrators, commitment and ability to ensure LACERA's data and assets will be secure and protected, quality of the team proposed to provide services to LACERA, information provided by references, pricing and value, and overall success, reputation and specialization in the area.

LACERA's agreement with ISS provides that the firm will identify and review all class action settlements in which LACERA has an interest, provide timely notice of those settlements to the Legal Office, submit correct and timely claims on LACERA's behalf, and provide reports regarding its efforts. ISS will perform this service for a flat fee of $25,000 for the first year, and $27,500 each year thereafter. (This is significant since many firms charge a percentage fee of as high as 7.5% of total recoveries.) Significantly, ISS will also assist LACERA in reviewing and filing claims in connection with special settlements, including mass tort, antitrust and foreign actions. By obtaining LACERA's historical trading and holdings data directly from LACERA's custodian, ISS will also be able through its RecoverMax platform, identify new cases in which the fund has in interest based on estimated losses, and provide details of the case and other relevant matters. With regard to the look-back audit, ISS will also review LACERA's prior filings to determine if it participated in all class action settlements in which it was eligible. If ISS determines that LACERA was eligible, but failed to recover to the fullest extent possible, it will assist LACERA in obtaining its share of those settlements where possible. ISS will perform this audit for a one-time fee of $15,000.

We are confident that our selection of ISS as LACERA's claims filing agent will contribute to the continued success of the Board's Securities Litigation Policy. Finally, it is significant to note that even though we did not select SSB to continue providing this service, it will not affect their primary function of serving as LACERA's master custodian.

Reviewed and Approved:

Steven P. Rice

Steven P. Rice
Chief Counsel

cc: Robert R. Hill
James Brekk
Bernie Buenaflor
John Popowich
Jonathan Grabel

MDH/kt
f:legal/seclit/BOI Update Memo ISS_ 040218

FOR INFORMATION ONLY

April 2, 2018

TO: Each Member
Board of Investments

FROM: Michael D. Herrera
Senior Staff Counsel

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: Amicus Curiae Brief in Metzler Investments GMBH, v. Corinthian Colleges, Inc., etc., 540 F.3d 1049 (9th Cir. 2008)

In September 2008, the Board of Investments authorized LACERA to join CalPERS and the U.C. Regents in filing a amicus curiae brief in support of plaintiffs in a securities fraud class action against Corinthian Colleges, Inc. ("Corinthian") where the issue of loss causation was to be decided. We retained Robbins, Geller, Rudman & Dowd, which prepared the brief on a *pro bono* basis. Although we were unsuccessful in shaping that courts view in that case, the U.S. Court of Appeals for the Ninth Circuit recently reversed its holding with respect to loss causation thereby improving institutional investors' ability to recover for securities fraud.

In Corinthian, the Ninth Circuit held plaintiffs must point to a public disclosure by defendants that they were "engaged in improper accounting practices" before they could successfully plead or prove a claim for securities fraud. LACERA, CalPERS and the Regents, with the assistance of the Robbins Geller firm, argued that the Ninth Circuit's holding in Corinthian "provides defendants a license for fraud as they become the sole arbiters of whether, when, and how they admit specific information necessary for them to be liable for their fraud." Unfortunately, the Ninth Circuit declined to reconsider its decision.

Earlier this year, the Ninth Circuit in Mineworkers' Pension Scheme v. First Solar Inc., 881 F.3d 750 (9th Cir. 2018) ("First Solar") held that loss causation "inquiry requires no more than the familiar test for proximate cause." Id. at 753. Acknowledging the arguments advanced by LACERA, CalPERS and the Regents in the Corinthian case, the court reasoned that a "plaintiff may also prove loss causation by [simply] showing that the stock price fell upon the revelation of an earnings miss, even if the market was unaware at the time that fraud had concealed the miss." Id. The Ninth Circuit's decision in First Solar thus dramatically improves the ability of institutional investors to recover for securities fraud in the Ninth Circuit.

We believe the involvement and support of LACERA and other amici in the Corinthian case played a role in ultimately shaping the Ninth Circuit's view on this issue, which highlights the important role that institutional investors play in private securities litigation and the importance of involvement when necessary and appropriate to protect LACERA's interests as a significant, long-term institutional investor.

Reviewed and Approved:

Steven P. Rice
Chief Counsel

cc: Robert P. Hill
James Brekk
Bernie Buenaflor
John Popowich
Jonathan Grabel

MDH/kt
f:legal/seclit/ BOI Memo Re Corinthian Amicus_040218

FOR INFORMATION ONLY

March 28, 2018

TO: Each Member
Board of Investments

FROM: Johanna M. Fontenot JMF
Senior Staff Counsel

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: ***Cyan, Inc., v. Beaver County Employees Retirement Fund et al.*, No. 15-1439**

We are pleased to report that the United States Supreme Court unanimously decided the *Cyan* case in favor of investors, holding that Securities Litigation Uniform Standards Act of 1998 (SLUSA) did not strip state courts of their longstanding jurisdiction to adjudicate class actions alleging only 1933 Act violations. In other words, the Court agreed that investors may continue to file class action cases brought under the Securities Act of 1933 in state court.

As you recall, LACERA participated as a named party on an amicus curiae brief in support of Respondent Beaver County Employees Retirement Fund and selected the law firm Greines, Martin, Stein & Richland LLP to prepare the brief.

In 2014, the *Cyan* case was filed in California Superior Court by one of LACERA's securities litigation monitoring firms, Robbins Geller Rudman & Dowd LLP, on behalf of Beaver County Employees Retirement Fund, a Pennsylvania fund. The class action lawsuit alleges violations of the Securities Act that govern disclosures made in registration statements and prospectuses. The complaint does not allege any state law claims. The Defendant Cyan, Inc. moved for dismissal for lack of subject matter jurisdiction and this procedural issue made its way to the U.S. Supreme Court.

The issue addressed by the U.S. Supreme Court concerned whether SLUSA was intended to eliminate state courts' concurrent jurisdiction over class actions that allege only claims under the Securities Act of 1933. The Supreme Court's ruling preserves the option to file securities class actions in state or federal court, which is important because there are certain procedural advantages to filing class actions in state court.

Reviewed and Approved:

Steven P. Rice

Steven P. Rice
Chief Counsel

L//.CERA

FOR INFORMATION ONLY

April 3, 2018

TO: Each Member
Board of Investments

FROM: Steven P. Rice SPR
Chief Counsel

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: Monthly Status Report on Board of Investments Legal Projects

Attached is the monthly report on the status of Board-directed investment-related projects handled by the Legal Division as of April 2, 2018.

Attachment

c: Robert Hill
James Brekk
John Popowich
Bernie Buenaflor
Jon Grabel
Vache Mahseredjian
John McClelland
Christopher Wagner
Ted Wright
Jim Rice
Scott Zdrazil
Christine Roseland
John Harrington
Cheryl Lu
Barry Lew
Margo McCabe
Lisa Garcia

LACERA Legal Division
Board of Investments Projects
Monthly Status Report - Pending as of April 2, 2018

	Project/ Investment	Description	Amount	Board Approval Date	Completion Date	% Complete	Notes
EQUITIES/FIXED INCOME	BlackRock Trust Company	Conversion of Designated Public Equity and Fixed Income Collective Funds to Separate Accounts	$20,800,000,000.00	January 10, 2018	In Progress	50%	Legal review and negotiation of IMA in progress; meetings with business team to discuss IMA terms; calls with Blackrock to discuss deal terms and timing; traded comments with Blackrock regarding IMA terms.
	BlackRock Financial Management	Termination Notice	n/a	February 14, 2018	Complete	100%	Termination notice sent. Transition in progress.
	BTC Intermediate Credit Bond Index Fund	Termination Notice	n/a	February 14, 2018	In Progress	50%	Legal review and drafting of notice in progress; meetings with business team to discuss terms and timing of termination.
	LM Capital	Termination Notice	n/a	February 14, 2018	Complete	100%	Termination sent. LM Capital liquidating account.

HEDGE FUNDS	AQR Liquid Enhanced Alternative Premia Fund, L.P.	Subscription	$200,000,000.00	December 13, 2017	Complete	100%	Documentation completed, executed and sent to Counsel.
	HBK Multi-Strategy Fund, L.P.	Subscription	$250,000,000.00	January 10, 2018	In Progress	75%	Legal review and negotiations in progress; negotiating side letter.
	Davidson Kempner Institutional Partners, L.P.	Subscription	$250,000,000.00	February 14, 2018	Complete	100%	Documentation completed, executed and sent to Counsel.

LACERA Legal Division
Board of Investments Projects
Monthly Status Report - Pending as of April 2, 2018

	Project/ Investment	Description	Amount	Board Approval Date	Completion Date	% Complete	Notes
PRIVATE EQUITY	JP Morgan Investment	Private Equity Emerging Manager Separate Account Investment Management Agreement	$300,000,000.00	December 13, 2017	In Progress	25%	Meetings with business team to discuss terms; final agreement is not expected until second half of the year given manager is still investing funds from prior commitment; expect to send out a draft IMA shortly.
PRIVATE EQUITY	Sinovation fund IV, L.P.	Subscription	$75,000,000.00	December 13, 2017	Complete	100%	Documentation completed, executed and sent to Counsel.
PRIVATE EQUITY	Morgan Stanley (GTB II Capital Partners)	Co-Investment Program Additional Allocation	$100,000,000.00	February 14, 2018	In Progress	25%	Legal review and negotiation of LPA amendment in progress.
REAL ESTATE	AEW Value Investors III	Subscription	$50,000,000.00	December 13, 2017	Complete	100%	Documentation completed and executed; subscription accepted by fund.
REAL ESTATE	Heitman Asia-Pacific Property Investors, L.P.	Subscription	$50,000,000.00	February 14, 2018	Complete	100%	Documentation completed and executed; subscription accepted by fund.
REAL ESTATE	AG Europe Realty Fund II	Subscription	$50,000,000.00	March 5, 2018	Complete	100%	Documentation completed, executed and sent to Counsel.

LACERA

FOR INFORMATION ONLY

April 2, 2018

TO: Each Member
Board of Investments

FROM: Michael D. Herrera
Senior Staff Counsel

FOR: Board of Investments Meeting of April 11, 2018

SUBJECT: Securities Litigation Report for Calendar Year 2017

Securities Litigation Policy

In March 2001, the Board of Investments adopted a Securities Litigation Policy to formalize the Legal Office's securities class action monitoring and evaluation function, and implement procedures designed to enhance LACERA's recovery of damages from corporate wrongdoers. As a result of its efforts and success over the years, LACERA is widely viewed as a leader in this area and its Policy has served as a model for public pension funds throughout the country. A copy of the current Policy is attached for ease of reference.

We are pleased to report that LACERA recovered over $2.3 million in securities class action settlement proceeds in calendar year 2017. Significantly, this brings the total amount recovered by the Legal Office on behalf of the fund to over $70 million since the Board first adopted its Policy in 2001. This includes recoveries obtained through the successful prosecution of securities cases, and our ongoing securities claims filing efforts. The following is a breakdown of the amounts recovered on an annual basis since 2001:

Year	Recovery	Year	Recovery
2001	$ 4,517,547.94	2010	$ 3,722,892.78
2002	$ 2,261,807.59	2011	$ 3,389,833.73
2003	$ 4,169,433.87	2012	$ 1,674,197.34
2004	$ 2,864,029.34	2013	$ 3,734,841.01
2005	$ 1,684,734.35	2014	$ 2,427,465.00
2006	$ 20,734,575.09	2015	$ 2,127,080.76
2007	$ 6,335,155.06	2016	$ 2,189,274.71
2008	$ 3,513,037.39	2017	$ 2,306,483.22
2009	$3,437.147.76	**Total**	**$ 71,089,536.94**

Background

Congress passed the Private Securities Litigation Reform Act (the "PSLRA") in 1995 to address concerns about the influence of "professional plaintiffs" and class action attorneys. To this end, the PSLRA contains provisions intended to encourage participation by sophisticated institutional investors. For example, the PSLRA contains a "lead plaintiff" provision and class notification process aimed at giving the plaintiff(s) with the largest financial interest at stake (presumably, institutional investors) the right to control the course of the litigation and to select, subject to court approval, lead counsel for the class.

Although Congress intended to encourage institutional investors to serve as lead plaintiff, the PSLRA itself does not create any such duty. However, the United States Department of Labor has since stated that "not only is a fiduciary not prohibited from serving as lead plaintiff, the Secretary believes that a fiduciary has an affirmative duty to determine whether it would be in the interest of the plan participants to do so." The Secretary also affirmed its earlier position that "it may not only be prudent to initiate litigation, but also a breach of a fiduciary's duty to not pursue a valid claim."[1]

Global Coverage

In 2010, the United States Supreme Court decided a case that significantly changed the securities litigation landscape. In *Morrison v. National Australia Bank Ltd.,* 130 S.Ct. 2869 (2010), the Supreme Court for the first time held that investors can only bring federal securities fraud claims in U.S. courts if the securities were purchased or sold in the U.S. and/or listed on a domestic exchange, regardless of where the fraud or wrongdoing occurred. As a result, investors like LACERA who purchase securities outside the U.S. and/or on a foreign exchange can no longer rely on U.S. courts to protect their interests. The Board acted quickly to adopt a "global" policy to ensure LACERA continues to meet its fiduciary duty by identifying, monitoring and evaluating securities actions in which the fund has an interest, *both foreign and domestic*, and pursuing such claims when and in a manner the Board determines is in the best interest of the fund.

Identification and Evaluation of Securities Cases

With a significant portion of its portfolio invested in equity and debt securities, LACERA is in a position to seek recovery from issuers and others who engage in wrongful acts that diminish the value of these securities. Accordingly, the Policy provides that the Legal Office shall actively identify, evaluate, and monitor securities cases on behalf of LACERA, *both foreign and domestic*, and recommend to the Board of Investments that the fund take an active role in those cases where: (i) LACERA's estimated loss is $2 million or more, or $1 million if LACERA will join with one or more other public retirement funds in pursuing such action, and; (ii) the Legal Office has determined the case to be meritorious and the best interest of the fund will be served through active involvement.

We accomplish the herculean task of identifying, monitoring and evaluating securities actions in which the fund has an interest, *both foreign and domestic*, by engaging U.S. law firms with significant securities litigation experience and expertise to serve as monitoring counsel. Through an arrangement with LACERA's custodian, the law firms obtain LACERA's trading and holdings data directly from the custodian. In cases where LACERA has suffered a significant loss, the firms will report these cases to us.

Once the Legal Office determines that a case satisfies the initial loss threshold, we will then evaluate the case to determine whether the case has merit and the best interest of LACERA will be served through active involvement. Since the Board first adopted the Policy, the Legal Office has evaluated or conducted formal requests for proposals in connection with hundreds of significant securities cases.

[1] Secretary of Laborer's Memorandum of Law as Amicus Curiae in Support of the Florida State Board of Administration's Appointment as lead plaintiff in In re Telxon Corp. Securities Litigation, 67 F.Supp.2d 803 (N.D. Ohio, 1999).

Active Participation
Since the Board adopted the Policy, LACERA has taken and continues to take an active role in securities cases, either as court-appointed lead or named plaintiff in a class action, or by opting out and bringing an individual action. We will continue to keep the Board apprised of significant developments in LACERA's pending cases under separate cover.

Additionally, in cases where LACERA is a putative class member and the outcome of the case or ruling on a significant issue could adversely impact LACERA, the Legal Office will recommend that the Board authorize LACERA to file an amicus curiae ("friend of the court") brief in support of the shareholder plaintiff(s).

Asset Recovery
Virtually every public pension fund with significant funds invested in the securities markets is a passive member of the numerous securities class actions filed every year on behalf of defrauded investors. With a significant portion of its portfolio invested in equity and debt securities, LACERA is eligible to seek recovery of its losses stemming from corporate wrongdoing. Failing to timely and accurately file a claim in these actions after they settle can result in the fund missing out on its share of the millions of dollars recovered every year in these actions. Under the Board's Securities Litigation Policy, the Legal Office therefore implements and oversees procedures designed to ensure LACERA obtains its share of recoveries from these lawsuits, which includes active participation as a lead or named plaintiff, or by filing proofs of claim to share in the resulting settlements.

LACERA has historically relied on its custodians to perform this claims filing function. As discussed in our separate memo regarding our recent search for a new claims filing agent, the Legal Office recently retained Institutional Investor Services (ISS) to perform this service for LACERA. LACERA's agreement with ISS provides that the firm will identify and review all class action settlements in which LACERA has an interest, provide timely notice of those settlements to the Legal Office, submit correct and timely claims on LACERA's behalf, and provide reports regarding its efforts.

As noted above, these efforts have resulted in the recovery by the fund of over $2.3 million in securities class action claims in 2017, and over $70 million total since the Board first adopted its Policy in 2001.

Reviewed and Approved:

Steven P. Rice

____
Steven P. Rice
Chief Counsel

Attachment
cc: Robert R. Hill
James Brekk
Bernie Buenaflor
John Popowich
Jonathan Grabel

BOARD OF INVESTMENTS
SECURITIES LITIGATION POLICY

PURPOSE

The Board of Investments adopts this policy to establish procedures and guidelines for monitoring and participating in securities class actions as appropriate to protect LACERA's interests. For purposes of this policy, a securities class action includes, but is not limited to, an action alleging claims under state and/or federal securities and antitrust laws and regulations, as well as similar claims arising under the laws and/or regulations of foreign jurisdictions.

PRINCIPLES

As a large institutional shareholder, LACERA is frequently a class member in securities class actions that seek to recover damages resulting from alleged wrongful acts or omissions of others.

The enactment by Congress of the Private Securities Litigation Reform Act ("PSLRA") in 1995 allows institutional investors and other large shareholders to seek appointment as lead or named plaintiff in a securities class action pending within the United States under U.S. federal securities laws. The lead or named plaintiff in a securities class action gains the right to supervise and control, or assist in the supervision or control, of the prosecution of such case.

Since enactment of the PSLRA, it has been demonstrated that active participation in a securities class action by large, sophisticated shareholders, particularly institutional shareholders, has resulted in lower attorney's fees and significantly larger recoveries on behalf of shareholders. The United States Securities and Exchange Commission and leaders in the legal community have commented that the governing board of a public pension system has a fiduciary duty to monitor securities class actions in which the system has an interest, and to participate as lead plaintiff where such participation is likely to enhance the recovery by members of the class.

In 2010, the United States Supreme Court in *Morrison v. National Australia Bank* ("Morrison") held that certain investor losses stemming from corporate wrongdoing cannot be pursued under federal securities laws. Specifically, the Supreme Court held that investors cannot bring or participate in a U.S. securities class action if their claims are based on securities they purchased outside the United States. As a result, investors must now identify and evaluate foreign securities actions in order to fully protect their interests, including the right to participate in such actions and share in any recovery.

STATEMENT OF FUNCTIONS AND RESPONSIBILITIES

1. Review of Class Action Filings

The Legal Office shall identify and evaluate securities class actions, brought or pending within the United States and in foreign jurisdictions, in which LACERA may have recognized losses. In this connection, the Legal Office may retain a vendor specializing in identifying and analyzing securities cases to perform this function, and to report its findings to the

Legal Office on a timely basis. The Legal Office may also select and retain one or more private law firms to identify and evaluate class action filings and, if the firm determines that LACERA's estimated loss meets the thresholds for Active Participation set forth below in Section 3(b), to report its findings to the Legal Office with a recommendation as to whether the case would be meritorious and worthy of further investigation or Active Participation by LACERA.

2. Active Case Monitoring

The Legal Office shall actively monitor each case in which the Legal Office has determined the case has merit and LACERA's estimated loss is $2 million or more. Active monitoring may include participation by the Legal Office in significant motions and in settlement discussions when permitted by the parties or the court.

3. Active Participation

The Legal Office shall recommend to the Board of Investments that LACERA take an active role in a securities class action beyond monitoring, which may include, but is not limited to, seeking appointment as a lead or named plaintiff, or opting out of the class action and pursuing an individual action, in cases where:

(a) the Legal Office, after consulting with outside counsel, has determined the case has merit and the best interests of LACERA will be served by taking such action, and;

(b) LACERA's estimated loss is $2 million or more, or LACERA's estimated loss exceeds $1 million and LACERA will join with one or more other public retirement funds in pursuing such action.

In addition, the Legal Office shall recommend to the Board of Investments that LACERA take an active role in a securities class action by filing an amicus curiae (friend-of-the-court) brief in those cases where the criteria set forth in Section 3(a) is satisfied.

Recommendations on whether to take an active role in a securities class action shall be submitted for approval, in advance, to the Board of Investments at a regularly-scheduled meeting or, where immediate approval is necessary, at a specially-called meeting. However, where the Chief Executive Officer determines that immediate approval is required in order to preserve LACERA's rights and/or interests by taking such action, and the matter cannot be timely presented for approval at a regularly-scheduled or special meeting of the Board, or where a quorum cannot be reached at such meeting, the Chief Executive Officer is authorized, after consultation with the Chief Counsel, Chief Investments Officer, and Chair of the Board of Investments, to make the decision. In the event such authority is exercised, the Chief Executive Officer shall instruct the Legal Office to concurrently notify the Board of Investments, and provide a summary of the action at the next regularly-scheduled meeting of the Board. Notwithstanding the foregoing, recommendations on whether to commence new litigation, as in the case of opting out of an existing securities class action and pursuing an individual action, shall be submitted to the Board of Investments for approval.

For purposes of this policy, a foreign securities action is defined as a lawsuit brought or pending outside the United States involving securities purchased on a foreign securities exchange by LACERA or on its behalf. Participation as a class member in a foreign securities action, if participation in such foreign action requires registration or other affirmative action by LACERA, shall be considered "Active Participation" and shall be submitted to the Board of Investments for approval.

4. Asset Recovery

LACERA's claims filing agent shall be responsible for filing all proofs of claim, including the necessary supporting documents and information, necessary to recover assets in every securities class action brought or pending within the United States and in foreign jurisdictions in which LACERA has suffered losses. In this connection, the Legal Office shall prepare, and revise as necessary, a retainer agreement and statement of work setting forth formalized claims filing procedures for the claims filing agent to follow, which shall include identifying and reviewing all class action settlements, providing timely notice of each settlement to LACERA, filing claims correctly and timely on LACERA's behalf, and providing quarterly reports regarding its efforts. The Legal Office, in consultation with the Financial Accounting and Services Division, shall monitor the performance of the claims filing agent in that regard. The claims filing agent shall submit quarterly reports on the securities litigation proceeds recovered, which information shall be shared with the Board.

5. Reports to the Board

The Legal Office shall provide the Board of Investments with annual reports covering its responsibilities under this policy. In addition, the Legal Office shall provide the Board with status reports as needed to keep the Board apprised of major developments in cases in which LACERA is a party.

6. Retention of Outside Counsel

The Legal Office shall retain one or more private law firms with demonstrated expertise and experience in prosecuting securities class actions (the "Securities Litigation Counsel") to advise and/or represent LACERA in securities actions. All retainer agreements shall be negotiated by the Legal Office and submitted for approval, in advance, to the Board of Investments at a regularly-scheduled meeting or, where immediate approval is necessary, at a specially-called meeting. However, where it is determined that immediate approval is required in order to preserve LACERA's rights and/or interests by retaining such counsel, and the matter cannot be timely presented for approval at a regularly-scheduled or special meeting of the Board, or where a quorum cannot be reached at such meeting, the Chief Executive Officer is authorized, after consultation with the Chief Counsel, Chief Investments Officer, and Chair of the Board of Investments, to make the decision. In the event such authority is exercised, the Chief Executive Officer shall instruct the Legal Office to concurrently notify the Board of Investments, and provide a summary of the action at the next regularly-scheduled meeting of the Board.

CHANGES TO CURRENT PRACTICE

The Legal Office has been monitoring securities class actions since passage by Congress of the PSLRA and has been evaluating the merits of LACERA taking an active role in such actions in which LACERA has a significant financial interest. The adoption of this policy will formalize the monitoring function being carried out by the Legal Office, and will create additional responsibilities for the Board of Investments and the Legal Office.

No additional staffing requirements or significant expense will result from the implementation of this policy.

Legal/SecuritiesLit/Securities Lit Policy_Revised_102217_FINAL

Policy Revised: November 2, 2017
Policy Revised: November 9, 2011
Policy Revised: April 29, 2010
Policy Adopted: March 28, 2001

FOR INFORMATION ONLY

March 30, 2018

TO: Each Member
Board of Investments

FROM: Scott Zdrazil
Senior Investment Officer

Dale Johnson
Investment Officer

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **COUNCIL OF INSTITUTIONAL INVESTORS BUSINESS MEETING AND PUBLIC FUNDS DIRECTOR BALLOTS**

We are pleased to report that, following nomination by the Board of Investments (BOI) at its January 10, 2018 meeting, Scott Zdrazil was elected as a director of the Council of Institutional Investors (CII) at its annual Spring Meeting (Meeting). The Meeting was held March 12-14, 2018 in Washington D.C. In addition, upon motion made and seconded by CII public fund members, Mr. Zdrazil was nominated and elected to serve CII as Treasurer.

At the March 13, 2018 meeting of public fund members of CII, members voted on candidates for the CII board of directors as well as one business-related ballot item. LACERA's vote on these items were approved by the BOI at its March 5, 2018 meeting.

At the March CII public fund members meeting, following the director elections, elections were held for officer positions (chair, co-chair, and treasurer). The chair and treasurer positions were uncontested. However, there were two nominations for co-chair. Per CII elections policy and procedures, ballots were distributed to the public fund membership for voting on Tuesday, March 20, 2018 with the election closing on Tuesday, April 3, 2018 at 5:00 pm (ET).

Consistent with LACERA policy and due to the time-sensitive nature of the vote deadline of April 3, staff consulted with the Chair of the Corporate Governance Committee to determine LACERA's vote and cast its vote accordingly. The **attachment** is LACERA's public fund director's co-chair ballot.

LEGAL AUTHORITY

The LACERA *Corporate Governance Policy* provides that the Corporate Governance Committee of the Board of Investments, "Recommends for Board of Investment approval, time-permitting, LACERA's votes in support or opposition of candidates listed on a formal member ballot and nominated to a governing board of an investor association to which LACERA has formally affiliated. In event the Committee is not scheduled to meet or lacks adequate time to agendize under the Brown Act a recommendation to the Board for vote determinations prior to a formal deadline, the Committee delegates authority to the Committee Chair to recommend consideration by the Board, time-permitting, of the votes in support or opposition of board candidates. In time-sensitive circumstances where vote deadlines do not permit such vote considerations by the Committee or the Board, the Committee delegates authority to the Committee Chair to consult with staff per Section V(C)(vi.) below on votes." (*Corporate Governance Policy*, section V(B)viii., p4).

Attachment

Noted and Reviewed:

Jon Grabel
Chief Investment Officer

ATTACHMENT

Council of Institutional Investors®
The voice of corporate governance

2018 BOARD OF DIRECTORS PUBLIC FUND CO-CHAIR BALLOT
You may vote for one candidate. Only one vote per fund will be counted.

Aeisha Mastagni, Portfolio Manager California State Teachers' Retirement System (CalSTRS)	✓
Michael Garland, Assistant Comptroller, Corporate Governance and Responsible Investment, NYC Pension Funds	

Submitted By:

Printed Name: DALE JOHNSON

Fund name: LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOC.

Date: MARCH 23, 2018

Please return ballots before 5:00 pm (ET) on Tuesday, April 3, to Michael Miller (Michael@cii.org or fax: 202.822.0801). If you have any questions please contact CII staff at 202.822.0800.

L//.CERA

FOR INFORMATION ONLY

March 27, 2018

TO: Each Member
Board of Investments

FROM: John McClelland
Principal Investment Officer – Real Estate

FOR: April 11, 2018 Board of Investments Meeting

SUBJECT: **NOTICE OF CHANGE OF OWNERSHIP STRUCTURE**
RREEF America LLC

LACERA has been notified by RREEF America LLC, one of the Fund's separate account real estate managers, that its parent company, Deutsche Bank, has completed the public listing of its asset management business in Germany. Pursuant to the attached letter, the former Deutsche Asset Management, the subsidiary that owns RREEF, is now a separately listed company and will use the name DWS. An approximate 22% position of DWS was sold by Deutsche Bank and we are advised that the bank intends to retain the remaining shares of the company for the foreseeable future.

Staff does not anticipate any change in the relationship with RREEF. The contract between LACERA and RREEF remains terminable without cause with 30-days notice. The assets RREFF manages for the Fund are 100% owned, except for the Core+ industrial fund that was seeded by LACERA last year.

Attachment

ATTACHMENT

March 23, 2018

Mr. John McClelland
Principal Investment Officer – Real Estate
Los Angeles County Employees Retirement Association
Gateway Plaza, 300 North Lake Avenue
8th Floor
Pasadena, CA 91101-4199

Re: DWS completes listing on Frankfurt Stock Exchange and launches new brand

Dear John:

We are pleased to announce we have completed the listing of our asset management business on the Frankfurt Stock Exchange. As you may know, this is the culmination of a strategic plan that was announced more than a year ago, which we believe will position us best to serve your future needs. Deutsche Bank sold 44.5 million shares in the unit, or about a 22.25 percent stake in DWS.

As part of this evolution, Deutsche Asset Management has adopted its existing European brand – DWS – globally. Established in 1956, the DWS name has long been associated with strength and stability in asset management. It is a brand we are proud to represent to our clients. DWS will continue to exemplify the core values we have upheld for decades: excellence, entrepreneurship, sustainability and integrity. These are values that will remain central to our future success and our partnership with you.

In light of this transition, I would like to inform you also of the following changes. From now on, we will communicate across all channels under the DWS identity. Our new global website at www.dws.com presents all our business units from Active, Passive and Alternatives now united under DWS. Local product information will continue to be found on the respective websites, which are being rebranded to DWS as well. In addition, our email addresses will change from “@db.com” to “@dws.com”.

It is important to note that for a period of time, legacy addresses will be redirected to the new addresses. However, we ask that you update your contact books and bookmarked webpages to reflect the change at your earliest convenience.

We look forward to this new chapter and bringing exceptional insight, strategies and solutions to you, our valued client. As always, if you have any questions, please contact your DWS client representative.

Laura R. Gaylord

Laura R. Gaylord
Managing Director

Important note
This letter is not and does not constitute an offer of, or the solicitation of an offer to buy or subscribe for, securities in the United States of America, Germany or any other jurisdiction. Securities may not be offered or sold in the United States of America absent registration or an exemption from registration under the U.S. Securities Act of 1933, as amended (the "Securities Act"). Any public offering of securities to be made in the United States of America would be made by means of a prospectus that could be obtained from the issuer and that would contain detailed information about the company and management, as well as financial statements.

There will be no public offer of the securities in the United States of America.
Subject to certain exceptions, the securities referred to herein may not be offered or sold in Australia, Canada or Japan or to, or for the account or benefit of, any national, resident or citizen of Australia, Canada or Japan.

Documents not attached are exempt from disclosure under the California Public Records Act and other legal authority.

For further information, contact:
LACERA
Attention: Public Records Act Requests
300 N. Lake Ave., Suite 620
Pasadena, CA 91101

LACERA

Documents not attached are exempt from disclosure under the California Public Records Act and other legal authority.

For further information, contact:
LACERA
Attention: Public Records Act Requests
300 N. Lake Ave., Suite 620
Pasadena, CA 91101

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