AGENDA

A REGULAR MEETING OF THE CREDIT AND RISK MITIGATION COMMITTEE AND BOARD OF INVESTMENTS*

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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

8:00 A.M., WEDNESDAY, DECEMBER 12, 2018**

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

- I. CALL TO ORDER
- II. APPROVAL OF MINUTES
 - A. Approval of the Minutes of the Credit and Risk Mitigation Committee of September 12, 2018.
- III. PUBLIC COMMENT
- IV. NON-CONSENT ITEMS
 - A. Recommendation as submitted by Vache Mahseredjian, Principal Investment Officer: That the Committee advance the Investment Grade Bond Structure Review--Part 2. (Memo dated November 30, 2018)
 - B. Recommendation as submitted by Vache Mahseredjian: That the Committee advance the Credit Structure Review--Part 1. (Memo dated November 30, 2018)
 - C. Recommendation as submitted by Robert Santos, Investment Officer: That the Committee advance the Fixed Income Emerging Manager Search. (Memo dated November 27, 2018)

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V. ITEMS FOR STAFF REVIEW

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

VII. 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. Other Managers/Assets re Investment Grade Bond Structure Review Number of Managers: 2
- B. 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. Other Managers/Assets re Credit Structure Review Number of Managers: 3

VIII. ADJOURNMENT

*The Board of Investments has adopted a policy permitting any member of the Board to attend a standing committee meeting open to the public. Members of the Board of Investments who are not members of the Committee may attend and participate in a meeting of a Committee but may not vote on any matter discussed at the meeting. The only action the Committee may take at the meeting is approval of a recommendation to take further action at a subsequent meeting of the Board.

**Although the meeting is scheduled for 8:00 a.m., it can start anytime thereafter, depending on the length of the Board of Investment meeting preceding it. Please be on call.

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 day notice before the meeting date.

MINUTES OF THE REGULAR MEETING OF THE CREDIT AND RISK MITIGATION COMMITTEE

OF THE BOARD OF INVESMENTS*

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION 300 N. LAKE AVENUE, SUITE 810, PASADENA, CALIFORINA 91101 *8:00 A.M., WEDNESDAY SEPTEMBER 12, 2018

PRESENT: Wayne Moore, Chair

Herman Santos, Vice Chair

Ronald Okum

Joseph Kelly

David Green, Alternate

MEMBERS AT LARGE: Michael Schneider

Shawn Kehoe

Gina Sanchez

David Muir

STAFF, ADVISORS, PARTICIPANTS

Jonathan Grabel, Chief Investment Officer

Jude Perez, Principal Investment Officer

James Rice, Principal Investment Officer

Meketa Investment Group Leo Festino, Managing Principal Credit Risk & Mitigation September 12, 2018 Page 2 of 3

Tim Filla, Vice President

I. CALL TO ORDER

The meeting was called to order at 8:00 a.m., in the Board Room of the Gateway Plaza.

II. APPROVAL OF MINUTES

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

Mr. Moore made a motion, seconded by Mr. Santos to approve the minutes of the special meeting of March 5, 2018. The motion passed unanimously.

III. PUBLIC COMMENT

There were no requests from the public to speak.

V. NON – CONSENT

A. Recommendation as submitted by James Rice, Principal Investment Officer: That the Committee approve the 2019 Hedge Funds 2019 Investment Plan (Memo dated September 12, 2018)

Mr. Santos made a motion, seconded by Mr. Okum to approve the 2019 Hedge Funds 2019 Investment Plan. The motion passed unanimously.

B. Recommendation as submitted by James Rice, Principal Investment Officer: That the Committee approve the 2019 Hedge Funds Objectives, Policies & Procedures. (Memo dated September 12, 2018)

Mr. Santos made a motion, seconded by Mr. Okum to approve the 2019 Hedge Funds Objectives, Policies & Procedures. The motion passed unanimously.

Credit Risk & Mitigation September 12, 2018 Page 3 of 3

C. Recommendation as submitted by Jude Perez, Principal Investment Officer and Ted Wright, Principal Investment Officer: That the Committee approve the Cash Overlay Manager Search Minimum Qualifications and Scope of Work. (Memo dated September 12, 2018)

Mr. Santos may a motion, seconded by Mr. Okum to a approve the Cash Overlay Manager Search Manager Search Minimum Qualifications and Scope of Work. The motion passed unanimously.

VI. GOOD OF THE ORDER

(For information purposes only)

There was nothing to report.

VII. ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at approximately at 8:35 a.m.

November 30, 2018

TO: Each Member

Credit and Risk Mitigation Committee

FROM: Vache Mahseredjian, CFA, CAIA, FRM, ASA

Principal Investment Officer

Jeff Jia

Senior Investment Analyst

FOR: December 12, 2018 Committee Meeting

SUBJECT: INVESTMENT GRADE BOND STRUCTURE REVIEW—PART 2

RECOMMENDATION

Advance the Structure Review for Investment Grade Bonds to the Board of Investments ("Board") for approval.

BACKGROUND

Attached is Part Two of a structure review for Investment Grade Bonds ("IG Bonds"). Part One was approved in January of this year, prior to the triennial Asset Allocation Study conducted in May that placed assets into four functional categories: 1) Growth, 2) Credit, 3) Real Assets and Inflation Hedges, and 4) Risk Reduction and Mitigation. Given this new framework, the investment grade segment—dominated by interest rate risk—of LACERA's fixed income composite resides within the Risk Reduction and Mitigation category, whereas the segment dominated by credit risk has been transferred to the Credit category. This structure review is for the investment grade segment and follows the same presentation format introduced by our Private Equity colleagues last month. The main theme underlying staff's recommendations is continued risk reduction. (There is a separate Committee item on today's agenda dedicated to a structure review for the Credit portion.)

The presentation begins with a review of the role of IG Bonds, as defined within the revised Investment Policy Statement that was approved by the Board last month, followed by a summary of recent Board actions designed to reduce and segment risk. After a discussion of the market environment, the presentation hones in on portfolio performance. The fixed income composite under the old structure outperformed its benchmark over the past 1, 3, 5, 10, and 20 years. However, performance was volatile during the 2008 Global Financial Crisis, underperforming its benchmark by 6% in 2008 and rebounding by 8% in 2009. Most

Each Member, Credit and Risk Mitigation Committee November 30, 2018 Page 2 of 3

of the 2008 underperformance is attributable to credit risk from "Plus" sectors in Core Plus strategies such as high yield, emerging market debt, and non-agency mortgage-backed securities. This high level of volatility is contrary to fixed income's risk reduction role.

Under the new asset allocation, most of the credit risk is moved to the Credit category, which is intended to house LACERA's credit exposures. The expectation for IG Bonds within Risk Reduction and Mitigation category is to experience less volatile performance in the next crisis.

Staff's report also examines recent performance at the strategy level and the manager level. Based on the analysis, staff recommends one major structural change along with manager-specific recommendations. The structure review concludes with a list of initiatives that the team will focus on in the coming months and a recap of methods that staff uses for manager monitoring and due diligence.

Recommendations

Given the continued focus on risk reduction, staff recommends increasing the Core allocation and deemphasizing Core Plus. Recall that in the structure review earlier this January, the Board approved increasing the Core allocation from 35% to 45%. After transferring credit-sensitive mandates to the Credit category, the IG Bonds composite consists of only Core and Core Plus strategies at 65% and 35%, respectively. Pursuing further risk reduction, today's recommendation is to **increase Core to 80% and reduce Core Plus to 20%**.

This change is warranted on risk reduction grounds and structural "fit" subsequent to the Board's adoption of the Bloomberg Barclays U.S. Aggregate Bond Index ("Aggregate Index") as the benchmark in September. Unlike the prior benchmark, the Aggregate Index excludes below investment grade sectors such as high yield and emerging market debt—sectors often used by Core Plus managers.

Most of the increased allocation to Core is intended to be indexed; this would raise indexed assets from under 40% to almost 65%. Aside from dramatically reducing active risk, the increased allocation to indexing will also reduce average fees. Staff anticipates that the recommended changes will reduce average annual fees for IG Bonds from nine to approximately six basis points.

The report also makes manager-specific recommendations: move Dodge & Cox from Core to Core Plus and reduce assets for some managers in order to accommodate the reduced Core Plus target.

Meketa has reviewed staff's report and concurs with the recommendations (Attachment 1).

¹ Please refer to the Presentation's Appendix section for information on the Index.

CONCLUSION

Staff conducted a structure review for IG Bonds and recommends certain changes intended to reduce risk and better align with the new benchmark. The main structural change is to increase the Core allocation target to 80% and decrease the Core Plus target to 20%. Staff also recommends some manager allocation changes in order to implement the new structure.

Attachments

Noted and Reviewed:

Jonathan Grabel

Chief Investment Officer

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VM: JJ



MEMORANDUM

To: LACERA Board of Investments

From: Stephen McCourt, Leandro Festino, Tim Filla

Meketa Investment Group

Date: December 12, 2018

Re: Fixed Income Structure Review

Meketa Investment Group has reviewed the Fixed Income Review and agrees with staff's recommendations to: 1.) Adjust the Core and Core Plus allocation targets, 2.) Adjust the manager allocations accordingly, and 3.) Re-Categorize Dodge & Cox as Core Plus. Fixed Income (Investment Grade Bonds) falls under the Risk Reducing and Mitigating functional overlay which was part of the new strategic asset allocation approved in May 2018.

Meketa worked with staff to review Fixed Income opportunities in the current market environment and performance of the asset class on the composite and manager levels. Staff compiled a list of observations based on this research. We agree with staff's conclusion that the proposed Fixed Income allocation of 80% Core and 20% Core Plus will reduce the overall risk profile of the composite and also lower the potential tracking error within the Investment Grade Bond allocation. We also agree with Staff's proposal to re-categorize Dodge & Cox as a Core Plus manager based on its high tracking error.

In conclusion, we concur with staff's insight and proposed changes in the Fixed Income Structure Review. We would be pleased to elaborate on this recommendation at the upcoming Board meeting in December, and assist both staff and the Board during the coming months in matters related to this reveiw. In the meantime, if you have any questions or would like additional information, please call us at (760) 795-3450.

SM/TF/LF/srt

ATTACHMENT 2

Investment Grade Bonds (Fixed Income) Structure Review: Part 2

Credit and Risk Mitigation Committee

December 12, 2018

Vache Mahseredjian, CFA, CAIA, FRM, ASA – Principal Investment Officer Jeff Jia – Senior Investment Analyst

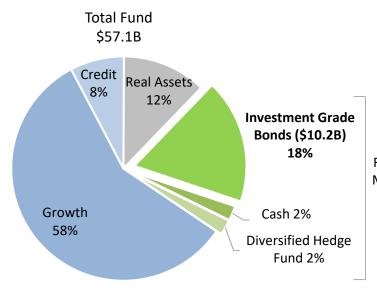
LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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- II. Recent Board Actions to Reduce and Segment Risk
- III. Review of New Strategic Asset Allocation
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- V. Fixed Income Performance Review
 - A. Observations on Composite Performance
 - B. Observations on Manager Performance
- VI. Advance to Board
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- IX. Appendices



Role of Investment Grade Bonds (Fixed Income)



Risk Reduction and Mitigation (\$12.7B) 22%

Role of Investment Grade Bonds

- Reduce Total Fund risk
- Generate income
- Provide liquidity

Risk Factors

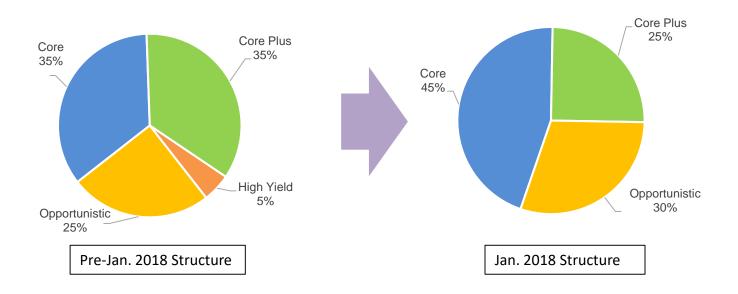
- Interest rate
- Modest credit risk

Asset Class	3Q 2018 Allocation (%)	Target Allocation (%)	Allocation Range (%)
Growth	57.8	47.0	40 – 54
Credit-Oriented Fixed Income	7.8	12.0	9 – 15
Real Assets & Inflation Hedges	12.1	17.0	14 – 20
Risk Reduction and Mitigation	22.2	24.0	18 – 30
Investment Grade Bonds	17.9	19.0	13 – 25
Diversified Hedge Fund Portfolio	2.2	4.0	0 – 6
Cash	2.1	1.0	0 – 3

Recent Board Actions to Segment and Reduce Risk

January 2018 - Fixed Income Structure Review Part 1

- Increased allocation target for the Core sub-composite from 35% to 45%
- Decreased allocation target for the Core Plus sub-composite from 35% to 25%
- Combined High Yield and Opportunistic sub-composites with an allocation range of 20% to 40%

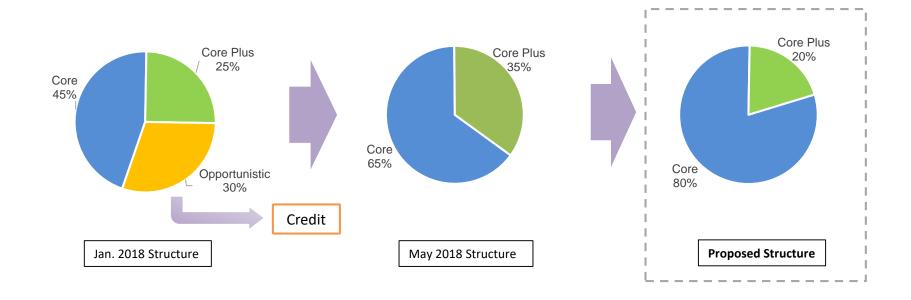




Review of New Strategic Asset Allocation

May 2018 - Total Fund Asset Allocation: categorized composite by sources of risk

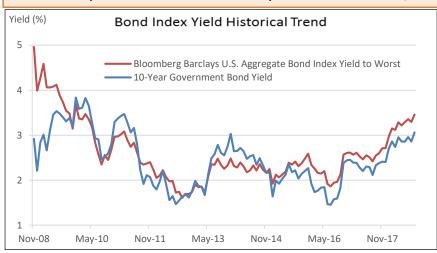


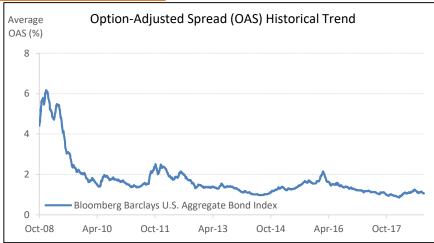




Market Environment and Opportunity

Yields and Spreads to Treasuries: low by historical standards, but have risen recently.









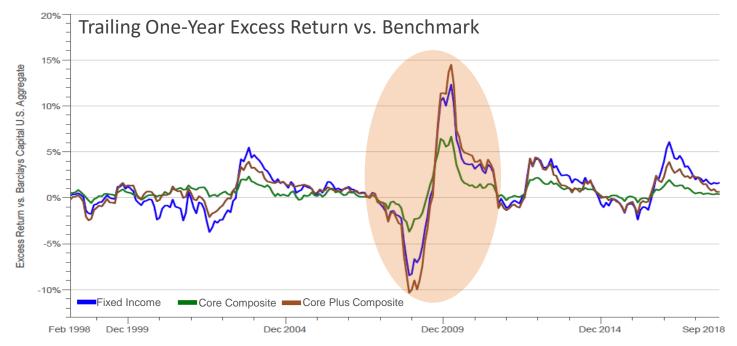


Fixed Income Performance Review

The Fixed Income Program has outperformed its benchmark over the long-term

	Annualized Return ¹				
(in %)	1 Year	3 Years	5 Years	10 Years	20 Years
Fixed Income Composite	0.4	3.7	3.5	5.8	5.5
Benchmark	-1.0	2.0	2.5	4.3	4.7
Difference	1.4	1.7	1.0	1.5	0.8

However, returns were volatile during the Great Financial Crisis

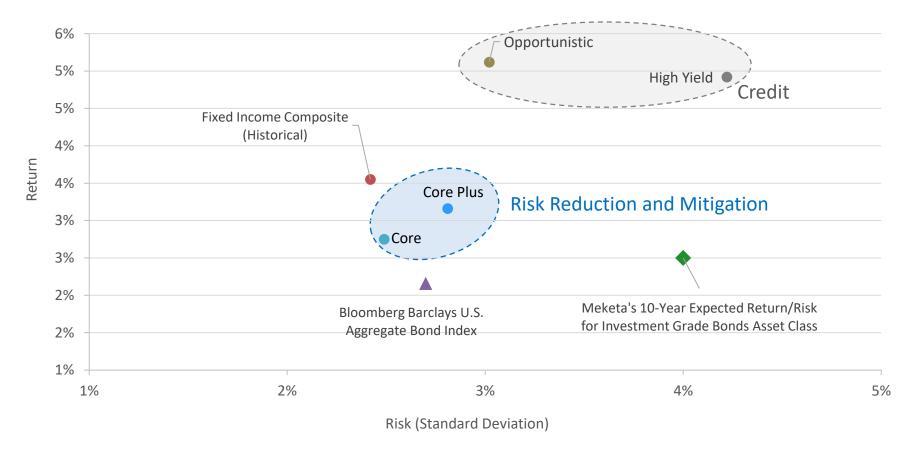


¹ Based on gross returns as of September 30, 2018. Source: Zephyr StyleADVISOR



Observations on Composite Performance

Trailing Five-Year Return and Risk





Observations on Manager Performance



Observations

- 1) All managers outperformed the benchmark over the five- and seven-year period.
- Bloomberg Barclays U.S. Aggregated Bond Index is the benchmark for all managers and the Fixed Income Composite; Dolan, whose benchmark is customized credit, is the exception.
- 3) Core managers have lower standard deviations and tracking errors than Core Plus managers.
- 4) Loomis has the highest standard deviation and tracking error.
- 5) Dodge & Cox has high tracking error but low standard deviation.



Advance to Board

Staff proposes advancing the following recommendations

- 1. Adopt proposed Core and Core Plus allocation targets of 80% and 20%, respectively (both +/-10%), and adjust manager allocations accordingly.
- 2. Re-categorize Dodge & Cox as Core Plus.

Initiatives

- Complete fee reassessment as part of the structure review
- Rebalance assets
- Initiate emerging manager search
- Conduct feasibility study on internal asset management
- Transition Index account from commingled to separate account
- Onboard TIPS mandate for Real Assets
- Enhanced utilization of risk analytics
- Review securities lending program



Operations and Due Diligence

- Ongoing Manager Monitoring (Monthly and Quarterly)
 - Organizational changes
 - Performance Review
 - Attribution vs. Benchmark
 - Portfolio Positioning
 - Custodian Reconciliation
 - Investment Guideline Compliance
 - Manager Scorecard
- Manager Rebalancing
- Keeping abreast of market developments, benchmark changes, and new strategies
- Prospective Manager Meetings
- Quantitative Analysis
 - Utilize StateStreet, Zephyr StyleAdvisor, Bloomberg, eVestment Analytics for Manager Monitoring
- Annual Manager Contract Compliance Review Report
- On-Site Manager Due Diligence (Biennial)



Appendices



Appendix I. Historical Return/Risk by Asset Class

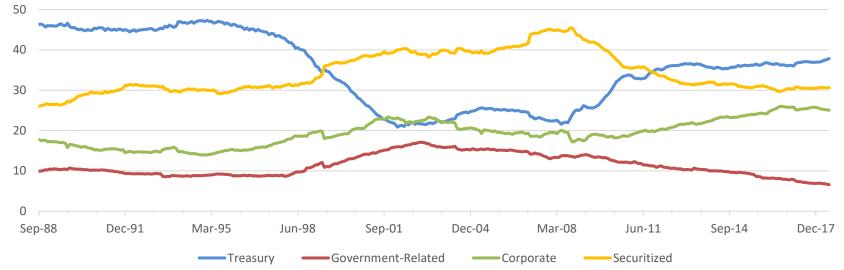
The Fixed Income Program had the lowest standard deviation of all asset classes in the trailing 10-year period.

Ten-Year Performance Table					
(in %)	Return¹	Standard Deviation ¹			
US Equity	12.0	16.1			
Non-US Equity Hedged	6.8	18.4			
Real Estate	4.5	7.0			
Fixed Income	5.8	3.7			
Private Equity	11.8	8.2			
Commodities	-4.2	18.9			
Hedge Funds	-	-			
Total Fund	7.8	9.0			

Appendix II. Bloomberg Barclays U.S. Aggregate Bond Index Characteristics and Weights

	Market Value (in \$million)	Market Value as % of Total	Number Issues	Average Yield to Worst	Average Duration (Mod. Adj.)	Average Coupon	Average Maturity	Average Option-Adj. Spread
U.S. Aggregate	20,301,820	100%	10,133	3.46	6.03	3.16	8.42	0.39
U.S. Treasury	7,723,360	38%	259	2.95	5.99	2.31	7.57	0.00
US Aggregate: Government-Related	1,277,707	6%	973	3.50	5.34	3.28	8.13	0.56
U.S. Corporate Investment Grade	5,100,420	25%	5,805	4.07	7.24	3.99	10.85	1.06
U.S. Mortgage Backed Securities	5,697,523	28%	323	3.59	5.28	3.57	7.76	0.28
Asset-Backed Securities	104,200	1%	375	3.19	2.16	2.49	2.31	0.38
CMBS: ERISA Eligible	389,374	2%	2,393	3.58	5.28	3.38	5.99	0.60

Bloomberg Barclays U.S. Aggregate Bond Index Sector Weights



Source: Barclays, Bloomberg

Weight (%)

Appendix III. Bloomberg Barclays U.S. Aggregate Bond Index Factsheet Excerpt

Description

The Bloomberg Barclays U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis.

Index Rules

- Must have at least one year to final maturity regardless of call features.
- Must have at least \$300 million par amount outstanding. Asset-backed securities must have at least \$500 million deal size and \$25 million tranche size. For commercial mortgage-backed securities, the original transaction must have a minimum deal size of \$500 million, and a minimum tranche size of \$25 million; the current outstanding transaction size must be at least \$300 million to remain in the index.
- Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade.
- Must be fixed rate, although it can carry a coupon that steps up or changes according to a predetermined schedule.
- Must be dollar-denominated and non-convertible.
- Must be publicly issued. However, 144A securities with Registration Rights and Reg-S issues are included.



November 30, 2018

TO: Each Member

Credit and Risk Mitigation Committee

FROM: Vache Mahseredjian, CFA, CAIA, FRM, ASA

Principal Investment Officer

Esmeralda V. del Bosque

Senior Investment Officer

FOR: December 12, 2018 Committee Meeting

SUBJECT: CREDIT STRUCTURE REVIEW—PART 1

RECOMMENDATION

Advance the Credit Structure Review to the Board of Investments for approval.

SUMMARY

Staff has prepared the inaugural structure review for the Credit category (**Attachment A**). Credit is one of the four functional categories created by the Asset Allocation the Board of Investments ("Board") approved in May. The category consists of bonds, loans, and similar instruments that have a contractual agreement to repay some type of debt. The primary risk is that a borrower will be unable to repay in full and on time. The category combines debt-related investments that previously resided in other parts of the LACERA portfolio: Opportunistic Fixed Income, Real Estate, Hedge Funds, and Private Equity. This report is the first of a two-part structure review: part one is a high-level analysis of actual versus target weights for the composite and its sub-components, as well as an evaluation of certain legacy managers and strategies. The report also sets out themes and initiatives that will serve as guiding principles for constructing a unified composite. Part two of the structure review will provide additional details, particularly with respect to expanding the illiquid investment portion. That report is expected in the summer of 2019, after a consultant is hired to advise on illiquid credit.

DISCUSSION

The structure review follows the presentation format introduced by our private equity colleagues last month. The report begins with a review of the role of Credit, followed by a comparison of the actual versus target allocations at the composite, as well as sector level. The report then delves into the market environment and contrasts past and prospective

Each Member, Credit and Risk Mitigation Committee November 30, 2018 Page 2 of 3

returns. Next, the report highlights portfolio construction themes that will guide the construction of the composite as we transition from a collection of diverse investments into a coherent, unified portfolio.

Background

The BOI approved a new asset allocation for LACERA's Pension Trust at the May 2018 Board meeting. The new structure consists of four functional categories: 1) Growth, 2) Credit, 3) Real Assets and Inflation Hedges, and 4) Risk Reduction and Mitigation. The introduction of the Credit category allowed LACERA to group together investments that have similar risk characteristics. Credit-sensitive assets from multiple asset classes including Fixed Income, Hedge Funds, Real Estate and Private Equity were combined so they could be managed and monitored as a single composite.

The Role of Credit

As discussed in the Investment Policy Statement adopted by the Board in November, Credit's role within the Total Fund is to: 1) produce current income and moderate long-term total returns, and 2) provide incremental diversification to the Total Fund.

Credit Composite Structure

Credit is sub-divided into four categories: high yield, bank loans, emerging market debt (EMD), and illiquid Credit. As of September 30, 2018, the Credit category had a market value of approximately \$4.5 billion, representing 7.8% of LACERA's Total Fund. The following table outlines the actual percentage allocation versus target for Credit and its subcategories:

Table 1: Strategic Asset Allocation Targets and Ranges - Credit

As of 9.30.2018 Credit-Oriented Fixed Income	Actual Allocation % 7.8	Target Allocation % 12.0	Allocation Range % 9 – 15
High Yield Bonds	4.7	3.0	0 – 6
Bank Loans	1.0	4.0	0 – 6
Emerging Market Debt	0.7	2.0	0 – 4
Illiquid Credit	1.4	3.0	0 – 5

The table shows that the Credit allocation is below its range. At the sector level, high yield is above target, whereas bank loans, EMD, and illiquid credit are below. Some of the managers currently placed in the high yield category have mandates such as non-agency mortgage-backed securities that are not true corporate high yield. Given the overweight to the sector, this is an opportune time to assess whether such mandates continue to fit the new composite's objectives, as well as to review performance of all legacy managers.

Each Member, Credit and Risk Mitigation Committee November 30, 2018 Page 3 of 3

Recommendations

To address the over- and under-weights at the sector level, staff makes the following recommendations to get closer to target weights: **Reduce the allocation to high yield, increase the allocation to bank loans, and increase the allocation to emerging market debt (EMD).** The bank loan allocation can be increased by issuing an RFP in the first quarter, and the EMD allocation can be raised by increasing the funding of the two existing EMD managers.

Meketa has reviewed staff's report and concurs with the recommendations (Attachment B).

CONCLUSION

Staff conducted a Structure Review of the newly created Credit category. Specific recommendations are intended to get the composite and its sub-categories closer to target weights. An RFP for a bank loan manager will be issued in the first quarter. Part two of the Credit Structure Review will be issued next summer, after the illiquid credit consultant is hired.

Attachments

Noted and Reviewed:

Jonathan Grabel

Chief Investment Officer

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VM:EDB

Attachment A

Credit Structure Review: Part 1

Credit and Risk Mitigation Committee

December 12, 2018

Vache Mahseredjian, CFA, CAIA, FRM, ASA – Principal Investment Officer

Esmeralda V. del Bosque – Senior Investment Officer

Chad Timko – Investment Officer

Ron Senkandwa – Senior Investment Analyst

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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- VI. Initiatives
- VII. Advance to Board
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Appendices

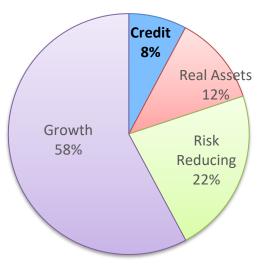
- I. Risk and Return Expectations
- II. Correlations
- III. Credit Universe



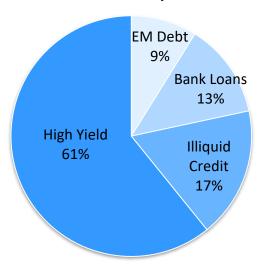
Role of Credit

Actual allocation as of September 30, 2018:

Total Fund: \$57.2 B







Role of Credit:

- Current income and moderate risk/return
- Provide incremental diversification to the Total Fund



Portfolio Structure by Sub-Category

	Actual	Target	Allocation	Current Manager/
As of 9.30.2018	Allocation %	Allocation %	Range %	Fund Count
Total Credit	7.8	12	9 - 15	30
High Yield Bonds	4.7	3	0 - 6	9
Bank Loans	1.0	4	0 - 6	2
Emerging Market Debt	0.7	2	0 - 4	2
Illiquid Credit	1.4	3	0 - 5	17*

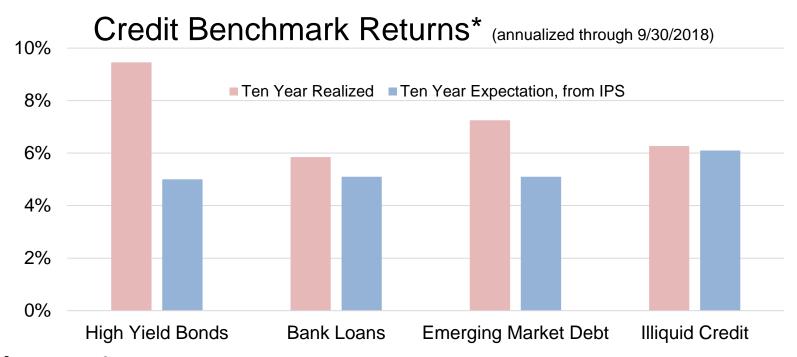
Observations

- Total Credit is below its allocation range
 - Sub categories are both above and below targets
- 2. 30 total managers may be suboptimal
- Bank Loans, with the highest target allocation, can benefit from a dedicated syndicated loan manager

^{*} The 17 Illiquid Credit manager count includes one fund of fund mandate that has multiple underlying funds. Select funds included in the count may be sold as part of an on-going private equity secondary sale.



Performance by Sub-Category



Observations

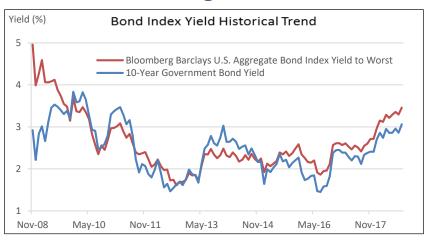
- 1. Forward expected returns are below prior realized results
- 2. Active management may deliver outperformance
- 3. Credit indices do not fully cover the universe
- 4. In a low return environment, account structures and fees are especially important

^{*} Benchmarks: High Yield Bonds: Bloomberg Barclays U.S. High Yield; Bank Loans: Credit Suisse Leveraged Loans; Emerging Market Debt: JP Morgan EMBI; Illiquid Credit: Bloomberg Barclays U.S. Aggregate +2.5%

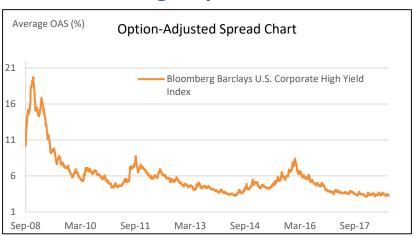


Market Environment

Low But Rising Interest Rates



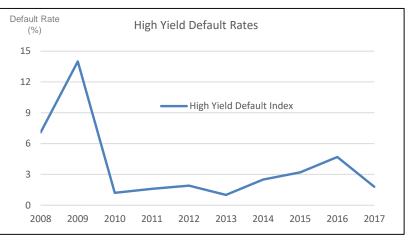
Tight Spreads



Yield Curve Flattening



Low Default Rates



Source: Moody's Analytics



Portfolio Construction Themes

Portfolio construction will emphasize:

- Allocation adjustments to move toward targets
- Manager count reduction
- Specialized active managers where markets are least efficient
- Additional types of credit including securitized and specialty finance
- Floating rate debt
- Income as the primary source of return for liquid credit
- Opportunities outside the U.S. (not just Emerging Market Debt)
- Remain fee conscious



Initiatives

Future initiatives for the Credit team include:

- Credit portfolio development
- Identifying optimal implementation approaches
- Refine Credit team due diligence process
- Credit composite guideline review
- Investment manager guideline review
- Consider additional or dedicated personnel
- Onboard a dedicated Illiquid Credit consultant
- Conduct Credit Structure Review Part 2 (2019)



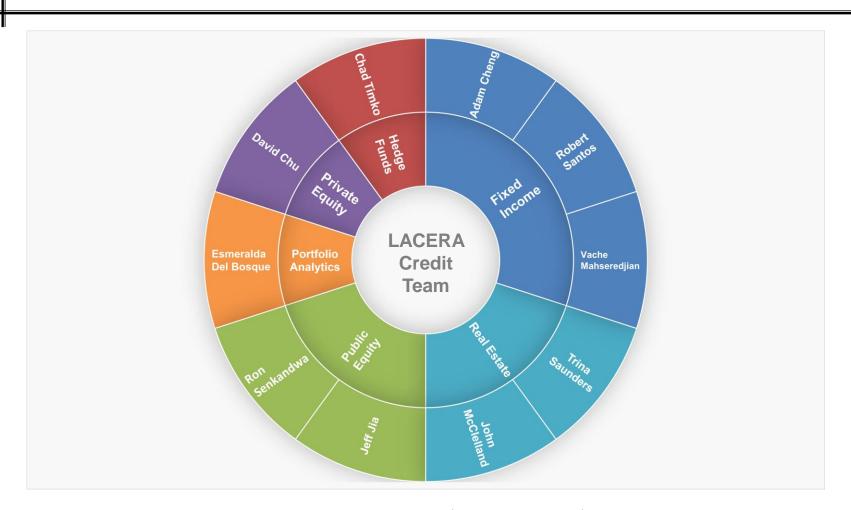
Advance to Board

Staff proposes advancing the following recommendations:

- 1. Reduce the allocation to High Yield
- 2. Increase allocation to existing Emerging Market Debt (EMD) managers
- Increase the allocation to Bank Loans
 - Issue an RFP in 1Q2019 for a dedicated syndicated Bank Loan manager



Cross Functional Credit Team



Both asset class specific and shared (credit team) responsibilities

Appendices



Appendix 1 – Risk and Return Expectations

Investment Policy Statement, Page 23:

Asset Class	Expected Return (%)	Volatility (%)
Growth	7.9	19.5
Global Equity	6.7	19.0
Private Equity	9.3	26.0
Opportunistic Real Estate	7.5	25.0
Credit-Oriented Fixed income	5.6	10.9
High Yield Bonds	5.0	12.5
Bank Loans	5.1	10.0
Emerging Markets Debt	5.1	13.3
Illiquid Credit	6.1	18.0
Real Assets & Inflation Hedges	5.8	11.5
Core & Value-Added Real Estate	4.0/6.0	12.5/19.0
Natural Resources/Commodities	7.9	23.0
Infrastructure	6.6	17.4
TIPS	3.0	7.5
Risk Reducing & Mitigating	2.8	3.5
Investment Grade Bonds	2.5	4.0
Diversified Hedge Fund Portfolio	4.0	9.9
Cash	1.5	1.0



Appendix 2 - Correlations

Investment Policy Statement, Page 24:

Asset Name	Growth	Credit	Real Assets	Risk Mitigating
Growth	1.00	0.65	0.41	0.14
Credit	0.65	1.00	.39	0.23
Real Assets	0.41	0.39	1.00	0.32
Risk Mitigating	0.14	0.23	0.32	1.00

Appendix 3 – Credit Universe is Broad



Private Credit Coverage Universe

DIRECT LENDING

U.S. Direct Lending

Sr. Focus
Opportunistic
Lower Middle Market (sponsored focus)
Lower Middle Market (non-sponsored focus)
Private BDCs
Industry Focused

European Direct Lending

Sr. Focus Opportunistic Lower Middle Market Country-Specific Funds

Emerging Markets Lending

Asia Lending Africa Lending CEE/Middle East Lending

Latin America Direct Lending

Pan-EM Lending

Global Direct Lending

SBIC Lending

MEZZANINE

U.S. Mezzanine

Upper Middle Market Middle Market Lower Middle Market

European Mezzanine

Structured Equity

DISTRESSED & SPECIAL SITUATIONS

Corporate Distressed

U.S. European Emerging Markets Global Single Trade

Real Estate Distressed

U.S. European Global

Cross-Asset

U.S. European Emerging Markets Global

SPECIALTY FINANCE

Consumer & SME Lending

Marketplace Finance Lender/Platform Finance

Factoring & Receivables

Regulatory Capital Relief

Royalties

Healthcare Music/Film/Media Energy & Minerals

Healthcare Lending

Venture Lending

Insurance Linked

Litigation Finance

Merger Appraisal Rights

PE Portfolio Finance

STRUCTURED CREDIT

CLO

CLO Debt CLO Multi Captive CLO Equity 3rd Party CLO Equity

CRE

Non-Agency CRE B-Piece Agency CRE B-Piece CMBS/CRE

RMBS

Consumer ABS

Esoteric ABS

Europe Structured Credit

Structured Credit Multi-Sector

REAL ESTATE CREDIT

U.S. CRE Core Lending

U.S. CRE Transitional Lending

Large Loan Middle Market Small Balance Opportunistic

U.S. CRE Bridge Lending

Large Loan Middle Market Small Balance

European CRE Lending

Bridge Lending Transitional Lending Core Lending

Emerging Markets CRE Lending

Residential Mortgages

Residential NPLs Single Family Rental Mortgage Servicing Rights Residential Origination

REAL ASSETS CREDIT

Infrastructure Lending

Sr. Focus Sub-IG Focus Mezz Focus

Energy Credit

Direct Lending
Mezzanine
Opportunistic Credit

Trade Finance

Metals & Mining Finance

Agriculture Credit

Transportation

Aviation - Leasing Aviation - Opportunistic Maritime Road & Rail

Diversified Transportation





MEMORANDUM

To: LACERA Board of Investments

From: Stephen McCourt, Leandro Festino, Tim Filla

Meketa Investment Group

Date: December 12, 2018

Re: Credit Structure Review

Meketa Investment Group has reviewed the Credit Structure Review – Part I and agrees with staff's proposals. At the composite level, Credit is currently below its target allocation by 420 basis points and staff's recommendations will bring the Credit composite's allocation closer to its target. Staff's recommendations will also bring the sub-category allocations closer to their respective targets. In addition, staff's recommendations will decrease the number of managers in the Credit portfolio, making it more efficient to monitor and manage.

The Credit overlay is part of the new strategic asset allocation approved in May 2018 and includes allocations to Emerging Market Debt, Bank Loans, High Yield Bonds, and Illiquid Credit with target allocations of 2%, 4%, 3%, and 3%, respectively. Staff recommends reducing the allocation to High Yield Bonds and increasing the allocations to Emerging Market Debt and Bank Loans to align the portfolio with these targets. The recommended actions will also serve to streamline the portfolio, by reducing the manager count within High Yield.

The Credit allocation was structured with sub-category target weights to provide improved transparency and to more specifically target differentiated risk and return characteristics. However, the structure is intended to still allow for sufficient flexibility to accommodate adjustments required in a dynamic market environment. Meketa worked with staff to review the current market environment and how it might impact the Fund's portfolio construction. Based on these discussions, Staff created a thorough list of portfolio construction themes and a set of future initiatives that will help to ensure that LACERA is positioned for success in managing the Fund's Credit assets. We believe Staff's initiatives represent a well-reasoned approach to the current market environment and should lead to continued expansion of LACERA's capabilities.

In conclusion, we agree with staff's insight and proposed changes in the Credit Structure Review – Part 1. We would be pleased to elaborate on this recommendation at the upcoming Board meeting in December, and assist both staff and the Board during the coming months in matters related to these changes. In the meantime, if you have any questions or would like additional information, please call us at (760) 795-3450.

SM/TF/LF/srt



November 27, 2018

TO: Each Member

Credit and Risk Mitigation Committee

FROM: Robert Z. Santos

Investment Officer

FOR: December 12, 2018 Committee Meeting

SUBJECT: FIXED INCOME EMERGING MANAGER SEARCH

RECOMMENDATION

Advance the Request for Proposal (RFP) for Fixed Income Emerging Managers to the Board of Investments for approval.

BACKGROUND

LACERA's Emerging Manager Policy (the Policy) was established in 1995 to gain early access to smaller investment management organizations. LACERA recognizes that smaller investment management firms may generate superior performance because of increased market flexibility associated with smaller asset bases. The Policy provides LACERA an opportunity to identify talented investment management organizations early in their development.

Initially, the Policy applied only to equity mandates and was implemented via a "manager of managers" approach. In December 2000, the Board of Investments (the Board) expanded the Policy to other asset classes such as fixed income, real estate, and private equity. For fixed income, the Board approved the direct in-house oversight approach (as opposed to "manager of managers"). Under this arrangement, staff identifies qualified investment firms through a Request-For-Proposal (RFP) process and the Board selects managers after interviewing short-list candidates. An allocation range of 0-4% of LACERA's fixed income portfolio was approved for emerging fixed income managers.

LACERA's Policy defines emerging managers as independent firms that may not have substantial assets under management (less than \$2 billion) nor a long-term investment performance record (generally, less than five years). Emerging investment managers can include, but are not limited to minority-, women-, and disabled veteran-owned organizations.

In October 2001, the Board selected four managers for the Fixed Income Emerging Manager Program (the Program): Hughes Capital, LM Capital (LM), GW Capital (GW), and Post Advisory

Group (Post). In 2003 and 2004, Post and LM, respectively, were promoted from the Program and allocated additional assets. Given these promotions, the Board subsequently hired Dolan McEniry Capital Management (Dolan), PENN Capital Management (PENN), and Pugh Capital Management (Pugh) in May 2005. Hughes Capital was terminated in June 2005 for underperformance and personnel turnover. PENN was promoted from the Program in 2012. GW was terminated in January 2016, after LACERA received notification that the firm would cease operations stemming from deteriorating returns exhibited by the firm's U.S. equity strategies. Pugh was promoted from the Program and given additional assets in February 2018. Dolan is the only firm remaining in the Program.

The table below displays the historical annualized performance of the Program.

Fixed Income Emerging Manager Program								
Annualized Returns as of September 30, 2018								
	Market		1	3	5	7	10	Since
Portfolio	Value	Qtr	Year	Years	Years	Years	Years	Inception
Emerging Manager Program (Gross)	\$347,451,825	1.19%	0.38%	3.49%	3.49%	4.19%	6.18%	5.90%
Emerging Manager Program (Net)		1.13%	0.13%	3.24%	3.23%	3.93%	5.91%	5.60%
Emerging Manager Program Custom Benchmark		0.73%	-0.40%	2.10%	2.54%	3.12%	5.13%	4.91%
Difference (Net - Benchmark)		0.40%	0.53%	1.14%	0.69%	0.81%	0.78%	0.69%

As shown above, the Program has generated solid performance results. Since its inception, the Program has outperformed its benchmark by 69 bps, annualized, net-of-fees.

MANDATE DESCRIPTION

The promotion of Pugh, a core fixed income manager, from the Program creates a vacancy. To fill this vacancy, staff will seek fixed income emerging managers specializing in highly liquid strategies whose primary risk is changes in interest rates. Managers selected will be placed in the Investment Grade Bonds component of the Risk Reduction and Mitigation asset category. These strategies will focus on traditional fixed income instruments such as U.S. Treasury, corporate, asset-backed, commercial mortgage-backed, and mortgage-backed securities rated investment grade (BBB and above). Depending upon the responses received, the strategies may also allow limited investment in plus sectors, such as high yield, emerging market debt, and non-U.S. fixed income instruments. An announcement of the RFP will be posted on LACERA's website.

Given LACERA's 0-4% allocation¹ of the fixed income portfolio to the emerging manager program, staff recommends funding selected firms a mandate size no less than \$100 million each. The amount funded will depend on the firm's total assets in the proposed strategy and total assets

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¹ Approximately \$434 million as of September 30, 2018.

Each Member, Board of Investments November 27, 2018 Page 3 of 4

under management. Based on an initial screen of the eVestment manager database, 11 firms were identified as having total firm assets under \$2 billion, of which eight offered fixed income strategies with at least \$100 million in assets. It is likely that other firms, not in the eVestment database, will respond to the RFP.

The following minimum qualifications will be the basis for screening managers.

MINIMUM QUALIFICATIONS

- 1. Emerging manager is a registered investment adviser under the Investment Advisers Act of 1940, or must provide adequate explanation as to why they are exempt from registration.
- 2. No person or entity, other than the principals or employees of an emerging manager, shall own more than a **forty-nine percent** (49%) interest of the organization.
- 3. LACERA prefers emerging managers who currently comply with the performance presentation standards set forth in the Global Investment Performance Standards (GIPS) of the CFA Institute. If the emerging manager does not currently follow the GIPS standards, then the emerging manager must make a good faith effort to comply with such standards within **one** (1) **year** of date of hire.
- 4. The firm's portfolio manager(s) must have an average of at least **five (5) years** of verifiable investment experience managing portfolios containing a similar investment style as that in the LACERA Assets to be allocated to the emerging manager.
- 5. The emerging manager must have at least \$100 Million of assets under management in the same investment style to be managed for LACERA.
- 6. The emerging manager must have no more than \$2 Billion of total assets under direct management prior to selection. The emerging manager's total assets under management should not exceed \$3 Billion subsequent to funding.
- 7. The emerging manager must have direct responsibility for managing assets utilizing the same investment style it will manage for LACERA for at least **three** (3) **other** Institutional clients besides LACERA.
- 8. LACERA's Assets must comprise no more than **thirty-three percent** (33%) of the total assets managed by the emerging manager.
- 9. The assets of any single client (other than LACERA) must comprise no more than **fifty percent** (50%) of the total assets managed by the emerging manager.

LACERA's standard due diligence procedures would be used, consisting of a questionnaire, followed by interviews. The goal is to query the fixed income community for emerging firms offering investment grade fixed income strategies, while maintaining a thorough, fair, and transparent process. Additionally, as previewed at the November Board meeting, staff will incorporate several components of the new manager scorecard in the due diligence process.

PROPOSED TIMELINE

The following table displays the anticipated timeline to complete the search process:

Phase	Steps	Timing
I	Draft and Issue RFP	January '19
II	RFP Evaluation	Feb-Mar '19
III	Manager Diligence & Finalist Recommendation	Apr-May '19
IV	Board Interviews	Jun-Jul '19

Based on this timeline, the Board will interview candidates and make its final selection during the summer of 2019. Meketa concurs with staff's proposed recommendation and, if approved, will work with staff on the search.

Noted and Reviewed:

Jonathan Grabel

Chief Investment Officer

jums

RZS:rzs

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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