

All persons wishing to address the Board must complete a speaker's card, stating their name and the agenda item (including "Open Forum") they wish to address. The Board may take action on items not on the agenda only if findings pursuant to the Sunshine Ordinance and Brown Act are made that the matter is urgent or an emergency.

Oakland Police and Fire Retirement Board meetings are held in wheelchair accessible facilities. Contact the Retirement Unit, 150 Frank Ogawa Plaza, Suite 3349 or call (510) 238-7295 for additional information.



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

AUDIT COMMITTEE MEMBERS

John C. Speakman
Chairman

Katano Kasaine
Member

Robert J. Muszar
Member

**In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Audit Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Audit Committee.*

REGULAR MEETING of the AUDIT / OPERATIONS COMMITTEE of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Wednesday, January 30, 2019 – 9:00 am
One Frank H. Ogawa Plaza, Hearing Room 1
Oakland, California 94612

- - - ORDER OF BUSINESS - - -

1. **Subject:** **PFRS Audit Committee Meeting Minutes**
From: **Staff of the PFRS Board**

Recommendation: **APPROVE** November 28, 2018 Audit Committee meeting minutes.
2. **Subject:** **Administrative Expenses Report**
From: **Staff of the PFRS Board**

Recommendation: **ACCEPT** an informational report regarding PFRS administrative expenses from July 1, 2018 through November 30, 2018.
3. **Subject:** **Annual Report for Fiscal Year ending June 30, 2018**
From: **Staff of the PFRS Board**

Recommendation: **RECOMMEND BOARD APPROVAL** of printing and publication of the Annual Report of the Oakland Police and Fire Retirement System for the Fiscal Year ending June 30, 2018.
4. **Subject:** **PFRS Policy Governing the Overpayment or Underpayment of Member Benefits**
From: **Staff of the PFRS Board**

Recommendation: **DISCUSSION** regarding PFRS Policy Governing the Overpayment or Underpayment of Member Benefits.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR AUDIT COMMITTEE MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

5. **Subject:** Resolution No 7037 – Travel authorization for PFRS Board Member R. Steven Wilkinson for attendance at the 2018 Markets Group California Institutional Forum Conference (“2018 Markets Group Conference”) on December 5, 2018 in Sonoma, CA with an estimated budget of Seventy-seven Dollars (\$77.00)
- From:** Staff of the PFRS Board
-
- Recommendation:** RECOMMEND BOARD APPROVAL of Resolution No. 7037 – Travel authorization for PFRS Board Member R. Steven Wilkinson for attendance at the 2018 Markets Group California Institutional Forum Conference (“2018 Markets Group Conference”) on December 5, 2018 in Sonoma, CA with an estimated budget of Seventy-seven Dollars (\$77.00).
6. **Subject:** Resolution No 7038 – Travel authorization for PFRS board member Martin Melia to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00)
- From:** Staff of the PFRS Board
-
- Recommendation:** RECOMMEND BOARD APPROVAL of Resolution No. 7038 – Travel authorization for PFRS board member Martin Melia to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00).

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR AUDIT COMMITTEE MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

7. **Subject:** Resolution No 7039 – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00)
- From:** Staff of the PFRS Board
-
- Recommendation:** RECOMMEND BOARD APPROVAL of Resolution No. 7039 – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00).
8. **Subject:** Resolution No 7040 – Travel authorization for PFRS board member Jaime Godfrey to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of One Thousand Four Hundred Dollars (\$1,400.00)
- From:** Staff of the PFRS Board
-
- Recommendation:** RECOMMEND BOARD APPROVAL of Resolution No. 7040 – Travel authorization for PFRS board member Jaime Godfrey to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of One Thousand Four Hundred Dollars (\$1,400.00).

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR AUDIT COMMITTEE MEETING
JANUARY 30, 2019**

ORDER OF BUSINESS, continued

9. **Subject:** Resolution No 7041 – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS Conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00)

From: Staff of the PFRS Board

Recommendation: **RECOMMEND BOARD APPROVAL of Resolution No. 7041** – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS Conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00).

10. **Subject:** Resolution No 7042 – Travel authorization for PFRS board Member Katano Kasaine To Travel and Attend The 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00)

From: Staff of the PFRS Board

Recommendation: **RECOMMEND BOARD APPROVAL of Resolution No. 7042** – Travel authorization for PFRS board Member Katano Kasaine To Travel and Attend The 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00).

11. REVIEW OF PENDING AUDIT AGENDA ITEMS

12. Future Scheduling

13. Open Forum

14. Adjournment of Meeting

AN AUDIT/OPERATIONS COMMITTEE MEETING of the Oakland Police and Fire Retirement System (“PFRS”) was held on Wednesday, November 28, 2018 in Hearing Room 1, One Frank Ogawa Plaza, Oakland, California.

Committee Members Present:

- John C. Speakman, Chairman
- Robert J. Muszar, Member
- Katano Kasaine, Member

Additional Attendees:

- David Jones, Plan Administrator
- Teir Jenkins & David Low, Staff Member
- Pelayo Llamas, PFRS Legal Counsel

The meeting was called to order at 9:07 am. Member Kasaine was not present at the start of the Audit Committee meeting; she arrived at 9:18 am.

1. **PFRS Audit Committee Meeting Minutes** – Member Muszar made a motion to approve the October 31, 2018 Audit Committee meeting minutes, second by Chairman Speakman. Motion passed.

[SPEAKMAN – Y / MUSZAR – Y / KASAIN – ABSENT]
(AYES: 2 / NOES: 0 / ABSTAIN: 0)

2. **Report of the PFRS Financial Statements for the year ended June 30, 2018** – Annie Louie from Macias Gini and O’Connell presented her audit and review of the financial statements of the Oakland Police and Fire Retirement System for the year ended June 30, 2018. Member Muszar asked Ms. Louie and staff about the correct Investment Rate of Return as computed for the financial statements and for an explanation regarding why the PFRS portfolio engages in investment transactions where investment ratings fall below an investment Rating of BBB. Staff and Ms. Louie answered Mr. Muszar’s question regarding the correct rate of return for the PFRS Financial Statements through June 30, 2018 and the circumstances which allow the investments transactions for investments which fall below BBB rating. Member Muszar made a motion to recommend Board approval of the review of the PFRS financial statements for the year ended June 30, 2018, second by Chairman Speakman. Motion passed.

[SPEAKMAN – Y / MUSZAR – Y / KASAIN – ABSENT]
(AYES: 2 / NOES: 0 / ABSTAIN: 0)

3. **Administrative Expenses Report** – Teir Jenkins presented the current status of the administrative expenditures of the PFRS plan through September 30, 2018. Following his review and some committee and staff discussion, Member Muszar made a motion to accept the informational report from staff, second by Member Kasaine. Motion passed.

[SPEAKMAN – Y / MUSZAR – Y / KASAIN – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

4. **City of Oakland Travel Insurance for PFRS Board Member Travel on Board Business** – Mr. Jenkins presented his report regarding insurance available to PFRS Board members when they travel on Board business. Mr. Jenkins reported that the City of Oakland provides Participant Accident Insurance, which provides each board member (1) Accidental Death and Dismemberment insurance coverage and (2)

PFRS Audit/Operations Committee Meeting Minutes

November 28, 2018

Page 2 of 2

Accident medical Expense coverage. Following Committee discussion on the details of this coverage and the staff review of what other retirement systems do and do not provide to their Board members, Member Muszar made a motion to accept the staff report without making any Committee recommendation, and advance this matter to the PFRS Board meeting for further discussion and action, second by member Kasaine. Motion passed.

[SPEAKMAN – Y / MUSZAR – Y / KASAINE – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

5. **PFRS Policy Governing the Overpayment or Underpayment of Member Benefits**
– The Audit Committee and staff reviewed the committee's work on policy governing Overpayment and Underpayment of Member Benefits through the last meeting and discussed how Member Muszar and the PFRS Staff could work together to fine tune Member Muszar's recommendation before the next Audit Committee meeting so an updated version of his recommendation could be better prepared for committee discussion at the next PFRS Audit Committee meeting. Member Muszar was instructed to assemble his report changes and confer with staff to streamline his edits (outlined in attachment #2) for continued committee discussion at the next Audit Committee meeting. Following staff and Audit Committee discussion, Chairman Speakman said the current work would be held over until the December 2018 Audit Committee for continued review.
6. **Pending Audit Agenda List** – The PFRS Staff and Audit Committee discussed the pending Audit Agenda items list.
7. **Future Scheduling** – The next Audit Committee meeting was scheduled for December 19, 2018.
8. **Open Forum** – No Report.
9. **Meeting Adjournment** – Meeting adjourned at 10:01 am.

JOHN C. SPEAKMAN, COMMITTEE CHAIRMAN

DATE

Table 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Administrative Budget Spent to Date (Preliminary)

As of November 30, 2018

	Approved Budget								
			November 2018	FYTD	Remaining	Percent Remaining			
Internal Administrative Costs									
PFRS Staff Salaries	\$	1,084,000	\$	73,006	\$	397,042	\$	686,958	63.4%
Board Travel Expenditures		52,500		370		5,073		47,427	90.3%
Staff Training		20,000		125		331		19,669	98.3%
Staff Training - Tuition Reimbursement		7,500		-		1,640		5,860	78.1%
Annual Report & Duplicating Services		4,000		-		495		3,505	87.6%
Board Hospitality		3,600		602		1,194		2,406	66.8%
Payroll Processing Fees		35,000		-		-		35,000	100.0%
Miscellaneous Expenditures		46,700		449		2,650		44,050	94.3%
Internal Service Fees (ISF)		65,400		3,885		23,517		41,883	64.0%
Contract Services Contingency		50,000		-		1,200		48,800	97.6%
Office Construction Costs*		75,227		-		38,014		37,213	49.5%
Internal Administrative Costs Subtotal :	\$	1,443,927	\$	78,436	\$	471,156	\$	972,771	67.4%
Actuary and Accounting Services									
Audit	\$	45,000	\$	-	\$	-	\$	45,000	100.0%
Actuary		45,000		-		914		44,086	98.0%
Actuary and Accounting Subtotal:	\$	90,000	\$	-	\$	914	\$	89,086	99.0%
Legal Services									
City Attorney Salaries	\$	188,000	\$	10,895	\$	64,033	\$	123,967	65.9%
Legal Contingency		150,000		-		-		150,000	100.0%
Legal Services Subtotal:	\$	338,000	\$	10,895	\$	64,033	\$	273,967	81.1%
Investment Services									
Money Manager Fees	\$	1,301,900	\$	87,362	\$	259,432	\$	1,042,468	80.1%
Custodial Fee		124,000		-		29,125		94,875	76.5%
Investment Consultant (PCA)		100,000		-		25,000		75,000	75.0%
Investment Subtotal:	\$	1,525,900	\$	87,362	\$	313,557	\$	1,212,343	79.5%
Total Operating Budget	\$	3,397,827	\$	176,693	\$	849,660	\$	2,548,167	74.99%

*Carry Forward from FY 2017-2018

Table 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Cash in Treasury (Fund 7100) - Preliminary

As of November 30, 2018

	November 2018
Beginning Cash as of 10/31/2018	\$ 7,480,589
Additions:	
City Pension Contribution - November	\$ 3,735,083
Investment Draw (Incoming Wire) - 11/1/2018	1,000,000
Misc. Receipts	5,060
Total Additions:	\$ 4,740,144
Deductions:	
Pension Payment (October Pension Paid on 10/1/2018)	(4,548,467)
Expenditures Paid	(224,825)
Total Deductions	\$ (4,773,292)
Ending Cash Balance as of 11/30/2018*	<u><u>\$ 7,447,440</u></u>

* On 12/01/2018, November pension payment of appx \$4,564,000 will be made leaving a cash balance of \$2,883,000

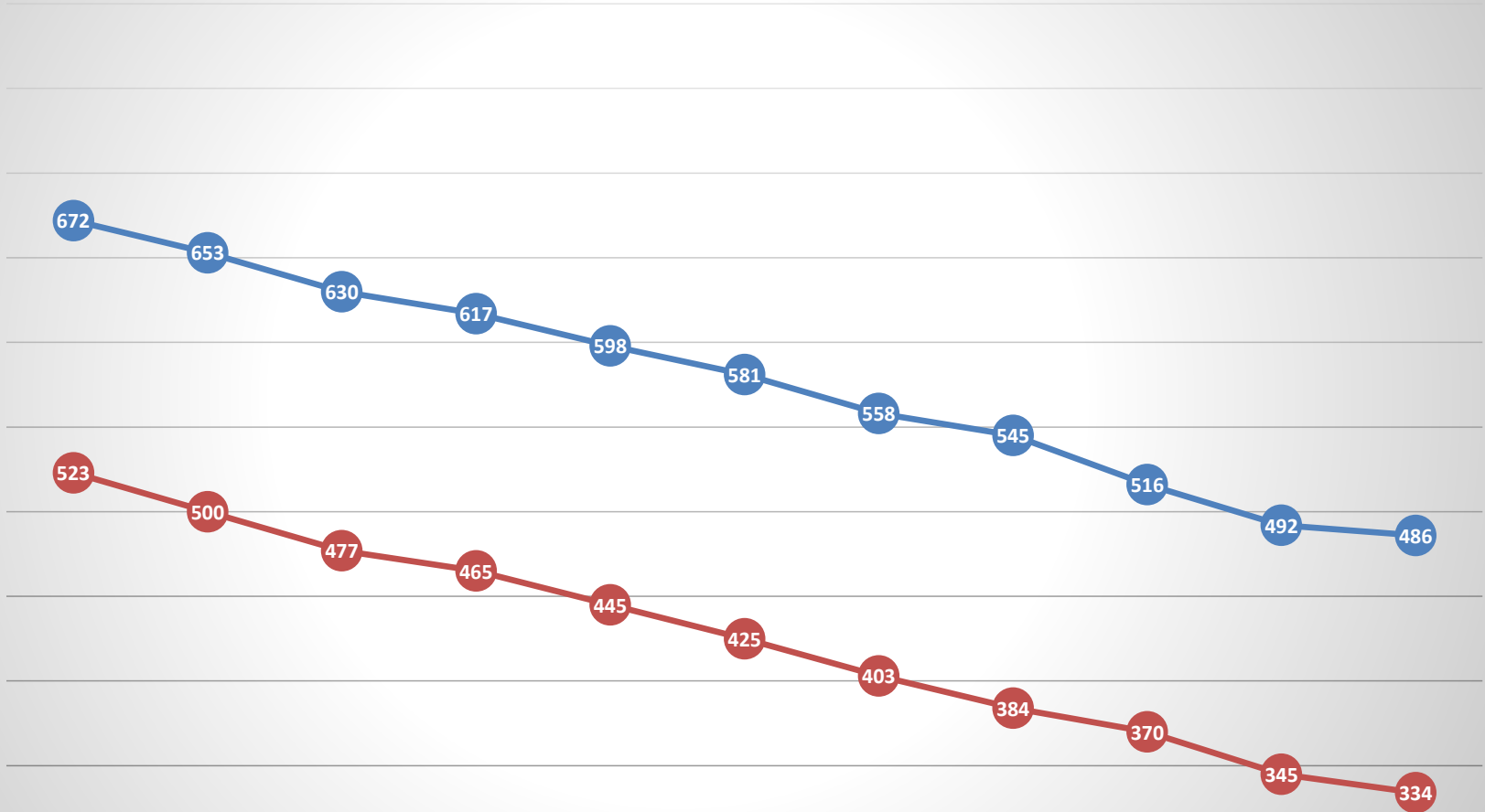
Table 3
CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Census
As of November 30, 2018

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Retiree	353	205	558
Beneficiary	133	129	262
<i>Total Retired Members</i>	486	334	820
<i>Total Membership:</i>	486	334	820

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Service Retirement	322	176	498
Disability Retirement	150	144	294
Death Allowance	14	14	28
<i>Total Retired Members:</i>	486	334	820
<i>Total Membership as of November 30, 2018:</i>	486	334	820
<i>Total Membership as of June 30, 2018:</i>	492	345	837
<i>Annual Difference:</i>	-6	-11	-17

Oakland Police and Fire Retirement System Pension Plan Membership Count As of November 30, 2018 (FY 2009 - FY 2019)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 FYTD
Police	672	653	630	617	598	581	558	545	516	492	486
Fire	523	500	477	465	445	425	403	384	370	345	334
Total	1195	1153	1107	1082	1043	1006	961	929	886	837	820



A G E N D A R E P O R T

TO: Oakland Police and Fire
Retirement Board

FROM: David Jones

SUBJECT: Approve Printing and Distribution of PFRS
Annual Report for the Fiscal Year ended
June 30, 2018

RECOMMENDATION

The PFRS Annual Report for the Fiscal Year ended June 30, 2018 has been completed and is submitted here for Board approval for Printing and Distribution.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

Attachment(1):

- DRAFT Annual Report of the Oakland Police and Fire Retirement System for the Fiscal Year Ended June 30, 2018

PFRS Board Meeting
January 30, 2019

ATTACHMENT 1

CITY OF OAKLAND

POLICE & FIRE RETIREMENT SYSTEM



ANNUAL REPORT

Fiscal Year Ended June 30, 2018



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-Layout: David Low, Retirement Systems, City of Oakland
-Print Production: City of Oakland Copy Services

SECTION 1

INTRODUCTION

POLICE RETIREE



*Henry Tarabochia, Jr., retired Police Officer
with the Oakland Police Dept from 1951-1972.*

LETTERS OF TRANSMITTAL

CITY OF OAKLAND



150 FRANK H. OGAWA PLAZA, 3RD FLOOR · OAKLAND, CALIFORNIA 94612-2021

Finance Department
Treasury Bureau
Retirement Unit

(510) 238-3307
FAX (510) 238-7129
TDD (510) 839-6451

January 22, 2019

Oakland City Council
1 Frank H. Ogawa Plaza
Oakland, CA 94612

Honorable Mayor Schaaf and Members of the City Council:

In compliance with Ordinance Number 713 C.M.S., I am pleased to present the annual report of the Oakland Police and Fire Retirement System for the fiscal year ended June 30, 2018. Provided in this report are the Plan's Financial Information, Investment Performance, and Actuarial Valuation for the corresponding year.

The members of the Board express their appreciation to the Mayor and City Council, City Manager, City Attorney, the various City Agencies and Departments and the members of their staff for their cooperation and assistance.

Respectfully submitted,

A handwritten signature in black ink, which appears to read "Walter L. Johnson, Sr." The signature is fluid and cursive.

Walter L. Johnson, Sr., President
Oakland Police and Fire Retirement System

LETTERS OF TRANSMITTAL

CITY OF OAKLAND



150 FRANK H. OGAWA PLAZA, 3RD FLOOR · OAKLAND, CALIFORNIA 94612-2021

Finance Department
Treasury Bureau
Retirement Unit

(510) 238-3307
FAX (510) 238-7129
TDD (510) 839-6451

January 22, 2019

Oakland Police and Fire Retirement Board
150 Frank H. Ogawa Plaza, Suite 3349
Oakland CA 94612

Board of Trustees:

I am pleased to present the Annual Report of the Oakland Police and Fire Retirement System for the fiscal year ending June 30, 2018.

ACCOUNTING SYSTEM

The accompanying financial statements have been prepared in compliance with the City Charter and in accordance with the accounting and reporting requirements of the Governmental Accounting Standards Board (GASB).

The method for recording revenues and expenses is on an accrual basis. Revenue is taken into account when earned, regardless of the date of the collection, and expenses are recorded when the corresponding liabilities are incurred instead of when payment is made. Amortization of bond premiums and discounts are over the life of the investment security and actuarial reserves are funded via the entry age normal cost method.

ADDITIONS

Additions to the plan includes all income received into the Plan for the Fiscal Year. Pension Plan's sources of income include items such as contributions and investment income. Total additions for the fiscal year ended June 30, 2018 were \$80,315,420. This amount includes net investment income of \$35,435,113. Net investment income includes appreciation or

LETTERS OF TRANSMITTAL

depreciation in fair value of investments, interest income and dividend income less investment expenses during the fiscal year. As of June 30, 2018 all the System's members are retired.

On July 30, 2012, the City deposited \$210 million from the issuance of Pension Obligation Bonds into the System. As a result of a funding agreement entered into between the System's Board and the City of Oakland no additional contributions are required until July 1, 2017. The City contributed \$44,860,000 in the year ended June 30, 2018.

DEDUCTIONS

Total deductions to the plan in the fiscal year ended June 30, 2018 were \$57,542,007. This amount includes deductions of \$55,998,595 for pension payments to members and qualified beneficiaries.

RESERVES AND FUNDING

The Police and Fire Retirement System most recent actuarial study values the Plan as of July 1, 2017. Details regarding this actuarial study can be found in Section 4 of this annual report.

As of the most recent actuary study dated July 1, 2017, the System's Unfunded Actuarial Liability is approximately \$340.1 million and the System had a Funded Ratio of 52.4 percent on a Market Value of Assets (MVA) basis. During fiscal year 2018, the City of Oakland contributed \$44.86 million to the System. The next required City contribution is projected to be approximately \$44.82 million in FY 2018-2019.

INVESTMENTS

The Police and Fire Retirement System Investment Policy is used as a guideline for all investment activities. The Investment Policy includes an asset allocation plan. The plan consists of six asset classes: Domestic Stocks, International Stocks, Fixed Income Instruments, Credit, Covered Calls and Crisis Risk Offset (CRO). In addition, the Policy also allocates among the different investment management styles.

LETTERS OF TRANSMITTAL

In November 2006, Oakland voters passed Measure M, which modified the City Charter to allow the PFRS Board to invest in non-dividend paying stocks and to switch the asset allocation structure from 50% equities and 50% fixed income to the Prudent Person Standard. During the fiscal year that ended June 30, 2011, the allocation was 70% equities and 30% fixed income.

Total Investment Income resulted in a gain of \$35,302,268 in fiscal year 2018. The actual time-weighted annual investment return for fiscal year 2018 was 10.5%. GASB requires that investments be reported at fair value. The appreciation (depreciation) in fair value of investments held by PFRS is recorded as an increase (decrease) in investment income based on the valuation of investments at year-end.

The historical annualized money-weighted rates of return on the portfolios are as follows:

	Total Returns %		
	1 Year	3 Year	5 Year
Total Fund	10.6%	7.6%	8.9%

ACKNOWLEDGEMENTS

The compilation of this report reflects the combined efforts of the Retirement System Administration Staff, the Board of Trustees, and various professional consultants. Its intent is to provide complete and reliable information to the beneficiaries of the Plan, to serve as a basis for making management decisions, and to ensure compliance with legal provisions affecting the administration of the Plan.

Respectfully submitted,



David Jones
Plan Administrator

MEMBERS OF THE BOARD OF ADMINISTRATION



Jaime T. Godfrey
Vice President
Bank Representative



Walter L. Johnson, Sr.
President
Community
Representative



John C. Speakman
Fire Department
Representative



R. Steven Wilkinson
Insurance
Representative

Plan Administrator
David Jones
Treasury Administrator

Legal Advisor, City of Oakland
Pelayo Llamas
Deputy City Attorney



Robert J. Muszar
Police Department
Representative

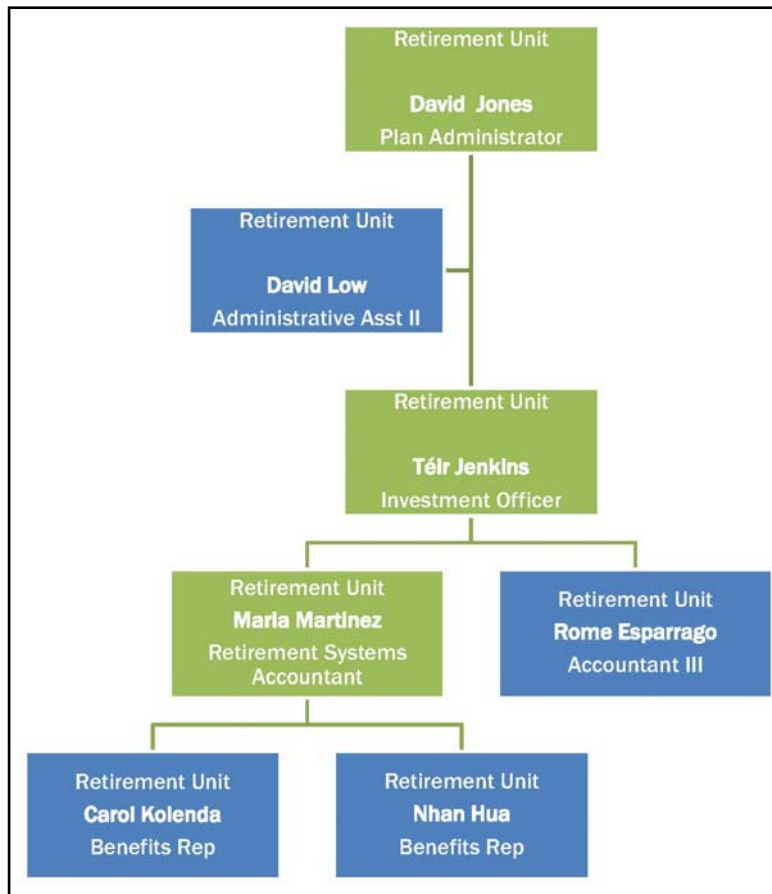


Katano Kasaine
Mayoral
Designate



Martin J. Melia
Alternating Police / Fire
Representative

ADMINISTRATIVE STAFF



PROFESSIONAL SERVICES

Over the past year the Board of Administration has engaged the following consultants to assist in making investments and in developing a sound retirement plan:

Actuary	Cheiron, Inc.
Auditors	Macias Gini & O'Connell LLP
Custodial Service	The Northern Trust Company
Investment Consultant	Pension Consulting Alliance, Inc.

A complete list of Investment Professionals is included on page 49 of this Annual Report.

BOARD MEETING INFORMATION

Meeting Location 1 Frank H. Ogawa Plaza, Oakland, CA 94612

Date Last Wednesday of each month

For more information, visit our website at www.oaklandca.gov.

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SECTION 2

FINANCIAL

FIRE RETIREE



John Korte, Retired Captain of Fire with the Oakland Fire Department from 1959 through 1994.

INDEPENDENT AUDITOR'S REPORT

For The Years Ended June 30, 2018 and 2017



Independent Auditor's Report

Board of Administration
Oakland Police and Fire Retirement System
Oakland, California

We have audited the accompanying financial statements of the Oakland Police and Fire Retirement System (System), a pension trust fund of the City of Oakland, California (City), as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2018 and 2017, and the changes in its financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Macías Gini & O'Connell LLP
2121 N. California Boulevard, Suite 750
Walnut Creek, CA 94596

www.mgocpa.com

INDEPENDENT AUDITOR'S REPORT

For The Years Ended June 30, 2018 and 2017

Emphasis of Matter

As described in Note 1, the financial statements present only the System and do not purport to, and do not, present fairly the financial position of the City of Oakland as of June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedule of changes in the employer's net pension liability and related ratios, the schedule of employer contributions, and the schedule of investment returns as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the System's financial statements. The introduction section, investment section, and actuarial section as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Macias Gini & O'Connell LLP

Walnut Creek, California
November 9, 2018

Management's Discussion & Analysis

As management of the Oakland Police and Fire Retirement System (System), we offer readers of the System's financial statements this narrative overview and analysis of the financial activities of the System for the fiscal years ended June 30, 2018 and 2017. We encourage readers to consider the information presented here in conjunction with the System's financial statements that follow this section. This discussion and analysis is presented in the following sections:

- Organizational Overview and Highlights
- Financial Statement Overview
- Financial Analysis: 2018 vs. 2017
- Financial Analysis: 2017 vs. 2016
- Requests For Additional Information

ORGANIZATIONAL OVERVIEW AND HIGHLIGHTS

The City of Oakland City Charter established the System and provides for its funding. Accordingly, the System is an integral part of the City of Oakland (City) and its operations have been reported as a Pension Trust Fund in the City's basic financial statements. The System is a closed, single employer, defined benefit pension plan that provides retirement, disability and survivor benefits for eligible sworn safety employees of the City. The System serves the City's sworn employees hired prior to July 1, 1976 who have not transferred to the California Public Employees' Retirement System (CalPERS). The System is governed by a board of seven trustees: the Mayor or his/her designate, three Mayoral appointees approved by the City Council, an elected active or retired member of the Police Department, an elected active or retired member from the Fire Department, and an elected member position which alternates between the Police Department and Fire Department membership. Trustees receive no compensation.

The System has been funded by periodic employee and City contributions at actuarially determined amounts sufficient to accumulate the necessary assets to pay benefits when due as specified by the City Charter, unless the Board and the City have agreed to other funding options. In accordance with the City Charter, active members hired after July 1, 1951, and prior to July 1, 1976, contribute a percentage of their earned salaries based upon entry age as

determined by consulting actuaries. During the years ended June 30, 2018 and 2017, the employee contribution rates was 0% for both years. The City Charter limits employee contributions to 13.00% of earned salaries. Employee contributions are refundable with interest at 4.00% if an employee elects to withdraw from the System upon termination with the City. There are no active participants in the Plan as of June 30, 2018 and 2017.

In July 2012, the City deposited \$210 million in pension obligation bond proceeds into the System and entered into a funding agreement with the System Board, which suspended contributions until the fiscal year beginning July 1, 2017.

As of June 30, 2018, the total pension liability of \$656.2 million less the fiduciary net position of \$376.0 million results in a net pension liability of approximately \$280.2 million. The fiduciary net position as a percentage of the total pension liability is 57.3%.

As of June 30, 2017, the total pension liability of \$660.7 million less the fiduciary net position of \$353.2 million results in a net pension liability of approximately \$307.5 million. The fiduciary net position as a percentage of the total pension liability is 53.5%.

The System membership at June 30, 2018 is 837, which includes 570 retirees and 267 beneficiaries. The System membership at June 30, 2017 was 886. The following are the significant assumptions used to compute contribution requirements in the July 1, 2017 Actuarial Valuation Report:

- Select and ultimate rates, equal to 5.50% single equivalent investment rate of return
- 2.75% inflation rate, US
- 2.85% inflation rate, Bay Area
- 3.25% long-term post-retirement benefit increases

City contributions are based on spreading costs as a level percentage of the City's total uniform payroll to July 1, 2026. The System uses the entry age normal cost method for its disclosure and reporting. During fiscal year 2018, the City of Oakland contributed \$44.86 million to the System. The next required City contribution is projected to be approximately \$44.82 million in FY 2018-2019.

FINANCIAL STATEMENT OVERVIEW

This annual financial report consists of three parts – management’s discussion and analysis (this section), the financial statements and required supplementary information. The financial statements include *Statements of Fiduciary Net Position; Statements of Changes in Fiduciary Net Position; and the Notes to the Basic Financial Statements*.

The Statements of Fiduciary Net Position and the *Statements of Changes in Fiduciary Net Position* report information to assist readers in determining whether the System’s finances as a whole have improved or deteriorated as a result of the year’s activities. These statements report the net position of the System and the activities that caused the changes in the net position during the year, respectively.

The Statements of Fiduciary Net Position present information on all System assets and liabilities, with the difference between the two reported as net position restricted for pensions. Over time, increases or decreases in net position restricted for pensions may serve as a useful indicator of whether the financial condition of the System is improving or deteriorating.

While the *Statements of Fiduciary Net Position* provide information about the nature and amount of resources and obligations at year-end, the *Statements of Changes in Fiduciary Net Position* present the results of the System’s activities during the fiscal year and information on the change in the net position restricted for pensions during the fiscal year. The *Statements of Changes in Fiduciary Net Position* measure the results of the System’s investment performance as well as its additions from contributions and investment income and deductions for payment of benefits and administrative expenses. The *Statements of Changes in Fiduciary Net Position* can be viewed as indicators of the System’s progress on the set goals of fully funding all current and past service costs and possessing sufficient additional resources to pay for current refunds of contributions and administrative and investment expenses.

The *Notes to the Basic Financial Statements* and *Required Supplementary Information* provide explanations and other information that is helpful to a full understanding of the data provided in the financial statements. The *Notes to Basic Financial Statements* and *Required Supplementary Information* are found starting on page 24 and page 45, respectively.

FINANCIAL ANALYSIS: 2018 Vs. 2017

Table 1 summarizes net position restricted for pensions as of June 30, 2018 and 2017:

Table 1 Statements of Fiduciary Net Position As of June 30, 2018 and 2017				
	June 30		Change	
	2018	2017	Amount	Percentage
Assets:				
Cash and deposits	\$ 7,821,078	\$ 3,382,372	\$ 4,438,706	131.2%
Receivables	6,288,527	7,254,799	(966,272)	-13.3%
Investments	415,917,756	383,785,196	32,132,560	8.4%
Total Assets	430,027,361	394,422,367	35,604,994	9.0%
Liabilities:				
Accounts payable	94,654	22,843	71,811	314.4%
Benefits payable	4,608,511	4,763,432	(154,921)	-3.3%
Investments payable	5,188,668	5,117,934	70,734	1.4%
Accrued investment management fees	343,919	281,445	62,474	22.2%
Securities lending liabilities	43,815,338	31,033,855	12,781,483	41.2%
Total liabilities	54,051,090	41,219,509	12,831,581	31.1%
Net position:				
Restricted for pensions	<u>\$ 375,976,271</u>	<u>\$ 353,202,858</u>	<u>\$ 22,773,413</u>	6.4%

Net position restricted for pensions increased \$22,773,413 from June 30, 2017 to June 30, 2018. The main sources of this increase were from pension contribution payments from the City of Oakland of \$44.86 million. The remaining fluctuations in receivables and investments payable are primarily due to investment trading at year-end, where the outstanding balances represent investments either sold or purchased, but not yet settled.

Table 2 summarizes changes in net position restricted for pensions for the years ended June 30, 2018 and 2017:

Table 2
Statements of Changes in Fiduciary Net Position
For the Years Ended June 30, 2018 and 2017

	June 30		Change	
	2018	2017	Amount	Percentage
Additions:				
Contributions	\$ 44,860,000	\$ -	\$ 44,860,000	n/a
Net investment income/(loss)	33,435,113	50,158,795	(14,723,682)	-29.4%
Other additions	20,307	70,282	(49,975)	-71.1%
Total additions	<u>80,315,420</u>	<u>50,229,077</u>	<u>30,086,343</u>	59.9%
Deductions:				
Benefits to members and beneficiaries	55,998,595	57,375,815	(1,377,220)	-2.4%
Administrative expenses	1,490,486	1,250,620	239,866	19.2%
Other expenses	52,926	11,021	41,905	380.2%
Total deductions	<u>57,542,007</u>	<u>58,637,456</u>	<u>(1,095,449)</u>	-1.9%
Changes in net position	22,773,413	(8,408,379)	31,181,792	-370.8%
Net position restricted for pensions:				
Beginning of year	<u>353,202,858</u>	<u>361,611,237</u>	<u>(8,408,379)</u>	-2.3%
End of year	<u>\$ 375,976,271</u>	<u>\$ 353,202,858</u>	<u>\$ 22,773,413</u>	6.4%

During fiscal year 2018, the City of Oakland contributed \$44.86 million to the System. In addition, the System's net investment income for the year ended June 30, 2018 was \$35,435,113, mainly due to net appreciation in fair value of the investment portfolio as a result of robust returns on investments. The time-weighted annual returns for the year ended June 30, 2018 was 10.5%, compared to a benchmark return of 9.4% and an actuarial expected rate of return of 5.50%.

FINANCIAL ANALYSIS: 2017 Vs. 2016

Table 3 summarizes net position restricted for pensions as of June 30, 2017 and 2016:

Table 3 Statements of Fiduciary Net Position As of June 30, 2017 and 2016				
	June 30		Change	
	2017	2016	Amount	Percentage
Assets:				
Cash and deposits	\$ 3,382,372	\$ 2,535,941	\$ 846,431	33.4%
Receivables	7,254,799	8,754,618	(\$1,499,819)	-17.1%
Investments	383,785,196	403,682,657	(\$19,897,461)	-4.9%
Total Assets	<u>394,422,367</u>	<u>414,973,216</u>	<u>(20,550,849)</u>	-5.0%
Liabilities:				
Accounts payable	22,843	42,160	(\$19,317)	-45.8%
Benefits payable	4,763,432	4,833,586	(\$70,154)	-1.5%
Investments payable	5,117,934	3,108,675	2,009,259	64.6%
Accrued investment management fees	281,445	335,417	(\$53,972)	-16.1%
Securities lending liabilities	<u>31,033,855</u>	<u>45,042,141</u>	<u>(14,008,286)</u>	-31.1%
Total liabilities	<u>41,219,509</u>	<u>53,361,979</u>	<u>(12,142,470)</u>	-22.8%
Net position:				
Restricted for pensions	<u>\$ 353,202,858</u>	<u>\$ 361,611,237</u>	<u>\$ (8,408,379)</u>	-2.3%

Net position restricted for pensions decreased \$8,408,379 from June 30, 2016 to June 30, 2017. The main sources of this decrease was benefit payments of \$57,375,815. As of June 30, 2017, the System had \$2.5 million of receivables from retired members and beneficiaries for overpayments of excessive holidays and the shift differential premium. The remaining fluctuations in receivables and investments payable are primarily due to investment trading at year-end, where the outstanding balances represent investments either sold or purchased, but not yet settled.

Table 4 summarizes changes in net position restricted for pensions for the years ended June 30, 2017 and 2016:

Table 4
Statements of Changes in Fiduciary Net Position
For the Years Ended June 30, 2017 and 2016

	June 30		Change	
	2017	2016	Amount	Percentage
Additions:				
Net investment income/(loss)	\$ 50,158,795	\$ (1,418,645)	\$ 51,577,440	-3635.7%
Other additions	70,282	3,593,096	(3,522,814)	-98.0%
Total additions	50,229,077	2,174,451	48,054,626	2210.0%
Deductions:				
Benefits to members and beneficiaries	57,375,815	58,441,353	(1,065,538)	-1.8%
Administrative expenses	1,250,620	1,307,569	(56,949)	-4.4%
Other expenses	11,021	68,180	(57,159)	-83.8%
Total deductions	58,637,456	59,817,102	(1,179,646)	-2.0%
Changes in net position	(8,408,379)	(57,642,651)	49,234,272	-85.4%
Net position restricted for pensions:				
Beginning of year	361,611,237	419,253,888	(57,642,651)	-13.7%
End of year	\$ 353,202,858	\$ 361,611,237	\$ (8,408,379)	-2.3%

The System's net investment income for the year ended June 30, 2017 was \$50,158,795, mainly due to net appreciation in fair value of the investment portfolio as a result of robust returns on investments. The time-weighted annual returns for the year ended June 30, 2017 was 15.6%, compared to a benchmark return of 13.9% and an actuarial expected rate of return of 6.37%.

The System paid \$57,375,815 in pension benefits in fiscal year 2017 and \$58,441,353 in fiscal year 2016. This decrease reflects the ongoing reduction in the System's membership.

REQUESTS FOR ADDITIONAL INFORMATION

This financial report is designed to provide a general overview of the System's finances and to account for the money that the System receives. Questions concerning any of the information provided in this report or requests for additional information should be addressed to:

Retirement Systems
City of Oakland
150 Frank H Ogawa Plaza, Suite 3332
Oakland, CA 94612

Oakland Police and Fire Retirement System
Statements of Fiduciary Net Position
June 30, 2018 and 2017

	<u>2018</u>	<u>2017</u>
Assets		
Cash and Cash Equivalents	\$ 7,821,078	\$ 3,382,372
Receivables:		
Interest Receivable	671,493	355,336
Dividends Receivable	233,615	227,370
Investments Receivable	3,606,103	4,008,166
Retired Members and Beneficiaries	1,641,443	2,477,406
Miscellaneous	135,873	186,521
Total Receivables	<u>6,288,527</u>	<u>7,254,799</u>
Investments, at Fair Value:		
Short-Term Investments	4,284,853	5,575,677
Bonds	98,312,996	63,599,723
Domestic Equities and Mutual Funds	151,600,666	168,466,818
International Equities and Mutual Funds	46,770,419	44,589,992
Alternative Investments	71,132,094	70,511,003
Foreign Currency Contracts, Net	(939)	(24)
Securities Lending Collateral	43,817,667	31,042,007
Total Investments	<u>415,917,756</u>	<u>383,785,196</u>
Total Assets	<u>430,027,361</u>	<u>394,422,367</u>
Liabilities		
Accounts Payable	94,654	22,843
Benefits Payable	4,608,511	4,763,432
Investments Payable	5,188,668	5,117,934
Investment Management Fees Payable	343,919	281,445
Securities Lending Liabilities	43,815,338	31,033,855
Total Liabilities	<u>54,051,090</u>	<u>41,219,509</u>
Net Position Restricted for Pensions	<u>\$ 375,976,271</u>	<u>\$ 353,202,858</u>

See accompanying notes to basic financial statements.

Oakland Police and Fire Retirement System
Statements of Changes in Fiduciary Net Position
Years Ended June 30, 2018 and 2017

	<u>2018</u>	<u>2017</u>
Additions		
Contributions from the City	\$ 44,860,000	\$ -
Investment Income:		
Net Appreciation in Fair Value of Investments	30,072,048	45,374,031
Interest	2,625,129	1,739,884
Dividend	4,032,421	4,117,231
Less: Investment Expenses	<u>(1,427,330)</u>	<u>(1,266,028)</u>
Net Appreciation in Fair Value of Investments	<u>35,302,268</u>	<u>49,965,118</u>
Securities Lending Income:		
Securities Lending Earnings	761,396	463,930
Securities Lending Expenses	<u>(628,551)</u>	<u>(270,253)</u>
Net Securities Lending Income	<u>132,845</u>	<u>193,677</u>
Net Investment Income (Loss)	35,435,113	50,158,795
Claims and Settlements	9,145	70,282
Other Income	<u>11,162</u>	<u>-</u>
Total Additions	<u>80,315,420</u>	<u>50,229,077</u>
Deductions		
Benefits to Members and Beneficiaries:		
Retirement	34,369,814	35,050,378
Disability	19,854,675	20,550,437
Death	<u>1,774,106</u>	<u>1,775,000</u>
Total Benefits to Members and Beneficiaries	<u>55,998,595</u>	<u>57,375,815</u>
Administrative Expenses	1,490,486	1,250,620
Other Expenses	<u>52,926</u>	<u>11,021</u>
Total Deductions	<u>57,542,007</u>	<u>58,637,456</u>
Change in Net Position	22,773,413	(8,408,379)
Net Position Restricted for Pensions		
Beginning of Year	<u>353,202,858</u>	<u>361,611,237</u>
End of Year	<u>\$ 375,976,271</u>	<u>\$ 353,202,858</u>

See accompanying notes to basic financial statements.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

1. Description of the Oakland Police and Fire Retirement System

The Oakland Police and Fire Retirement System (System) is a closed, single-employer defined benefit pension plan (Plan) established by the City of Oakland (City) Charter. The System is governed by a board of seven trustees (Board); the City Mayor or his/her designate, three Mayoral appointees approved by the City Council, an elected active or retired member of the Police Department, an elected active or retired member from the Fire Department, and an elected member position which alternates between the Police Department and Fire Department membership. Trustees receive no compensation. As a result of a City Charter amendment, known as Measure R approved by the electorate on June 8, 1976, membership in the Plan is limited to uniformed employees hired prior to July 1, 1976.

The System is exempt from the regulations of the Employee Retirement Income Security Act of 1974. The System is also exempt from federal and California income taxes.

The System is considered to be a part of the City's financial reporting entity and is included in the City's basic financial statements as a pension trust fund. The financial statements of the System are intended to present only the plan net position and changes in plan net position of the System. They do not purport to, and do not, present fairly the financial position of the City as of June 30, 2018 and 2017, and the changes in its financial position for the years then ended in conformity with accounting principles generally accepted in the United States of America. The City's basic financial statements can be obtained from Finance Department, Controller's Bureau, City of Oakland, 150 Frank H. Ogawa Plaza, Suite 6353; Oakland, California 94612.

a) **System Membership**

At June 30, 2018 and 2017, the System membership consisted of only retirees and beneficiaries. The System's membership is as follows:

	<u>2018</u>	<u>2017</u>
Retirees and beneficiaries currently receiving benefits:		
Police	492	516
Fire	<u>345</u>	<u>370</u>
Total	<u>837</u>	<u>886</u>

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

b) Basic Benefit Provisions

The City Charter establishes plan membership, contribution, and benefit provisions. The System provides that any member who completes at least 25 years of service, regardless of age, or completes 20 years of service and attains age 55, or has attained age 65, is eligible for retirement benefits. The basic retirement allowance equals 50% of the compensation attached to the average rank held during the three years immediately preceding retirement, plus an additional allowance of 1 and 2/3% of such compensation for each year of service (up to ten) subsequent to (a) qualifying for retirement and (b) July 1, 1951. However, any member retiring at age 65 with less than 20 years of service shall receive a reduced retirement allowance based upon the number of years of service. A member is eligible for early retirement benefits after 20 to 24 years of service with a retirement allowance based upon 40% to 48% of the compensation attached to the average rank held during the three years preceding retirement. Additionally, a member with 10 to 19 years of service may retire and, on or after the 25th anniversary of his/her date of employment may receive a retirement allowance based upon 20% to 38% of the compensation attached to the average rank held during the three years preceding retirement.

The System also provides for various death, disability, and survivors' benefits. Death and disability benefits are paid to eligible members who became disabled or passed away prior to retirement. If the member's death or disability is duty related, then the surviving spouse or member is paid a pension equivalent to an immediate service retirement. The duty related death or disability pension is paid at a level no less than 50% of the pay attached to the rank. If a death occurs after retirement, then a one-time payment of \$1,000 is paid to the member's designated beneficiary.

After retirement, members receive benefits based on a fixed monthly dollar amount. Pension amounts change based on changes to the compensation attached to the average rank. Upon a retiree's death, benefits are continued to an eligible surviving spouse at a two-thirds level for service and non-duty disabled retirees and at a 100% level for retirements for duty disability.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

2. Summary of Significant Accounting Policies

a) **Basis of Presentation**

The System is reported as a pension trust fund in the City's basic financial statements. The financial statements of the System present only the financial activities of the System and are not intended to present the financial position and changes in financial position of the City in conformity with accounting principles generally accepted in the United States of America.

b) **Measurement Focus and Basis of Accounting**

The financial statements are prepared on a flow of economic resources measurement focus using the accrual basis of accounting. Contributions are recognized in the period in which the contributions are due pursuant to formal commitments as well as statutory or contractual requirements, and benefits and refunds are recognized when payable under plan provisions.

c) **Methods Used to Value Investments**

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair values based on the net asset value as determined by the fund manager based on quoted market prices of fund holdings or values provided by the custodian or the applicable money manager.

d) **Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

3. Contributions

In accordance with the City Charter, active members hired after July 1, 1951, and prior to July 1, 1976, contribute a percentage of their earned salaries based upon entry age as determined by consulting actuaries. During the years ended June 30, 2018 and 2017, there were no employee contributions.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

In March 1997, the City issued pension obligation bonds and deposited \$417 million into the System to pay the City's contributions through June 2011. In accordance with an agreement entered into at the time the pension obligation bonds were issued in 1997, the City was not expected to contribute until July 2011. In the year ended June 30, 2005, the City transferred excess proceeds of \$17.7 million from the Oakland Joint Powers Financing Authority Refunding Revenue 2005 Series B Bond to fund a portion of the City's future obligation to the System.

Effective July 1, 2011, the City resumed contributing to the System. The City contributed \$45.5 million in the year ended June 30, 2012. Using the current actuarial cost method, these contributions are based on spreading costs as a level percentage of all uniformed employees' compensation through June 30, 2026. Budgeted administrative expenses are included in the City contribution rates. The City must contribute, at a minimum, such amounts as are necessary, on an actuarial basis, to provide assets sufficient to meet benefits to be paid to plan members.

On July 30, 2012, the City contributed \$210 million to the System. As a result of a funding agreement entered into between the System's Board and the City no additional contributions were required until July 1, 2017. The City resumed contributions to the System on July 1, 2017. The City contributed \$44.86 million in the year ended June 30, 2018. The next required contribution for fiscal year 2019 is \$44.82 million.

4. **Cash, Deposits and Investments**

a) Investment Policy

The System's investment policy authorizes investment in U.S. equities, international equities, U.S. fixed income instruments including U.S. Treasury notes and bonds, government agency mortgage backed securities, U.S. corporate notes and bonds, collateralized mortgage obligations, Yankee bonds and non U.S.-issued fixed income securities denominated in foreign currencies. The System's investment portfolio is managed by external investment managers, except for the bond iShares which are managed internally. During the years ended June 30, 2018 and 2017, the number of external investment managers was eleven and twelve, respectively.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

The System investments are also restricted by the City Charter. In November 2006, City voters passed Measure M to amend the City Charter to allow the System's Board to invest in non-dividend paying stocks and to change the asset allocation structure from 50% equities and 50% fixed income to the Prudent Person Standard as defined by the California Constitution.

The System's Investment Policy limits fixed income investments to a maximum average duration of 10 years and a maximum remaining term to maturity (single issue) at purchase of 30 years, with targeted portfolio duration of between 3 to 8 years and targeted portfolio maturity of 15 years. The System's investment policy allows the fixed income managers to invest in securities with a minimum rating of B- or higher as long as the portfolio maintains an average credit quality of BBB (investment grade using Standard & Poor's, Moody's or Fitch ratings).

The System's investment policy states that investments in securities known as collateralized mortgage obligations (CMOs) shall be limited to a maximum of 20% of a broker account's fair value with no more than 5% in any one issue. CMOs are mortgage-backed securities that create separate pools of pass-through rates for different classes of bondholders with varying maturities. The fair values of CMOs are considered sensitive to interest rate changes because they have embedded options.

The Investment Policy allows for each fixed income asset manager to have a maximum of 10% of any single security investment in their individual portfolios with the exception of U.S. government securities, which is allowed to have a maximum of 25% in each manager's portfolio.

The following was the Board's adopted asset allocation policy as of June 30, 2018:

Asset Class	Target Allocation
Fixed Income	31%
Credit	2
Covered Calls	5
Domestic Equity	40
International Equity	12
Crisis Risk Offset	10
Total	100%

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

The Board's target allocation does not include cash and cash equivalents, which are designated for approved administrative budget purposes.

b) Concentrations

GASB Statement No. 40 and GASB Statement No. 67 require the disclosure of investments in any one organization that represent 5 percent or more of the System's fiduciary net position. As of June 30, 2018 and 2017, the System had commingled funds issued by State Street Global Advisors that represent 9.4% and 19.5%, respectively, of its fiduciary net position.

c) Rate of Return

The money-weighted rate of return is a measure of the rate of return for an asset or portfolio of assets that incorporates the size and timing of cash flows. For the years ended June 30, 2018 and 2017, the annual money-weighted rates of return on pension plan investments, net of pension plan investment expenses, were 10.60% and 15.57%, respectively.

d) Cash and Cash Equivalents

As of June 30, 2018 and 2017, cash and cash equivalents consisted of cash in treasury held in the City's cash and investment pool as well as cash deposits held in bank and with a custodian. Funds in the City Treasury are invested according to the investment policy adopted by the City Council. Interest earned in the City Treasury is allocated monthly to all participants based on the average daily cash balance maintained by the respective funds. Information regarding the characteristics of the entire investment pool can be found in the City's June 30, 2018 basic financial statements. As of June 30, 2018 and 2017, the System's share of the City's investment pool totaled \$7,819,269 and \$3,364,627, respectively. The System also had cash not included in the City's investment pool. As of June 30, 2018 and 2017, the System's cash and cash deposits not held in the City's investment pool totaled \$1,809 and \$18,045, respectively.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

e) Hierarchy of Inputs

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The System has the following recurring fair value measurements as of June 30, 2018:

	2018			
	Level One	Level Two	Level Three	Total
Investments by fair value level:				
Short-Term Investments	\$ -	\$ 196,076	\$ -	\$ 196,076
Bonds	-	90,588,991	-	90,588,991
Domestic Equities and Mutual Funds	130,881,940	23,404	-	130,905,344
International Equities and Mutual Funds	32,161,981	-	1,718	32,163,699
Alternative Investments	71,132,094	-	-	71,132,094
Total investments by fair value level	<u>\$234,176,015</u>	<u>\$ 90,808,471</u>	<u>\$ 1,718</u>	<u>324,986,204</u>
Investments measured at net asset value (NAV):				
Short-Term Investments				4,088,777
Fixed Income Funds				7,724,005
Domestic Equities and Mutual Funds				20,695,322
International Equities and Mutual Funds				14,606,720
Securities Lending Collateral				43,817,667
Total investments measured at NAV				<u>90,932,491</u>
Total investments measured at fair value				<u>\$ 415,918,695</u>

The System has the following recurring fair value measurements as of June 30, 2017:

	2017			
	Level One	Level Two	Level Three	Total
Investments by fair value level:				
Short-Term Investments	\$ -	\$ 13,371	\$ -	\$ 13,371
Bonds	-	56,328,028	-	56,328,028
Domestic Equities and Mutual Funds	113,139,510	-	-	113,139,510
International Equities and Mutual Funds	30,965,626	-	1,690	30,967,316
Alternative Investments	70,511,003	-	-	70,511,003
Total investments by fair value level	<u>\$214,616,139</u>	<u>\$ 56,341,399</u>	<u>\$ 1,690</u>	<u>270,959,228</u>
Investments measured at net asset value (NAV):				
Short-Term Investments				5,562,306
Fixed Income Funds				7,271,695
Domestic Equities and Mutual Funds				55,327,308
International Equities and Mutual Funds				13,622,676
Securities Lending Collateral				31,042,007
Total investments measured at NAV				<u>112,825,992</u>
Total investments measured at fair value				<u>\$ 383,785,220</u>

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

f) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As described previously, the System's Investment Policy limits fixed income investments to a maximum average duration of 10 years and a maximum remaining term to maturity (single issue) at purchase of 30 years, with targeted portfolio duration of between 3 to 8 years and targeted portfolio maturity of 15 years. The weighted average duration for the System's fixed income investment portfolio excluding fixed income short-term investments and securities lending investments was 6.00 years as of June 30, 2018 and 5.36 years as of June 30, 2017.

The following summarizes the System's fixed income investments by category as of June 30, 2018 and 2017:

Short-Term Investment Duration

Investment Type	2018		2017	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Short-Term Investment Funds	\$ 4,284,853	n/a	\$ 5,575,677	n/a
Foreign Currency Exchange Contracts, Net	(939)	n/a	(24)	n/a

Long-Term Investment Duration

Investment Type	2018		2017	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Fixed Income Investments				
U.S. Government Bonds				
U.S. Treasuries	\$ 20,481,395	6.74	\$ 14,781,917	6.44
Government Agencies	29,039,194	8.85	18,609,070	7.54
Total U.S. Government Bonds	49,520,589		33,390,987	
Corporate and Other Bonds				
Corporate Bonds	48,792,407	3.99	30,208,736	3.48
Total Fixed Income Investments	\$ 98,312,996	6.00	\$ 63,599,723	5.36
Securities Lending	\$ 43,817,667		\$ 31,042,007	

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

g) Fair Value Highly Sensitive to Change in Interest Rates

The terms of a debt investment may cause its fair value to be highly sensitive to interest rate changes. The System has invested in CMOs, which are mortgage-backed bonds that pay pass-through rates with varying maturities. The fair values of CMOs are considered sensitive to interest rate changes because they have embedded options, which are triggers related to quantities of delinquencies or defaults in the loans backing the mortgage pool. If a balance of delinquent loans reaches a certain threshold, interest and principal that would be used to pay junior bondholders is instead directed to pay off the principal balance of senior bondholders, shortening the life of the senior bonds.

The following are the System's investments in CMOs at June 30, 2018:

<u>Investment Type</u>	<u>Weighted Average Coupon Rate</u>	<u>Weighted Average Maturity (Years)</u>	<u>Fair Value</u>	<u>Percent of Total Investments Fair Value</u>
Mortgage-backed securities	3.43%	25.09	\$18,704,567	4.50%

The following are the System's investments in CMOs at June 30, 2017:

<u>Investment Type</u>	<u>Weighted Average Coupon Rate</u>	<u>Weighted Average Maturity (Years)</u>	<u>Fair Value</u>	<u>Percent of Total Investments Fair Value</u>
Mortgage-backed securities	3.26%	20.80	\$12,395,659	3.23%

h) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation.

The following provides information concerning the credit risk of fixed income securities as of June 30, 2018 and 2017:

Short-Term Investment Ratings

<u>Investment Type</u>	<u>2018</u>		<u>2017</u>	
	<u>S&P Moody's/ Fitch Rating</u>	<u>Fair Value</u>	<u>S&P Moody's/ Fitch Rating</u>	<u>Fair Value</u>
Short-Term Investment Funds	Not Rated	\$4,284,853	Not Rated	\$5,575,677
Foreign Currency Exchange Contracts, Net	Not Rated	(939)	Not Rated	(24)

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

Long-Term Investment Ratings

S&P / Moody's Rating	2018		2017	
	Fair Value	Percentage of Total Fair Value	Fair Value	Percentage of Total Fair Value
AAA/Aaa	\$ 38,377,809	39.04 %	\$ 34,300,382	53.93 %
AA/Aa	24,802,989	25.23 %	4,102,659	6.45 %
A/A	11,368,132	11.56 %	7,702,447	12.11 %
BBB/Baa	14,624,173	14.88 %	9,982,306	15.70 %
BB/Ba	1,415,888	1.44 %	240,235	0.38 %
CCC/CCC	7,724,005	7.85 %	7,271,695	11.43 %
	<u>\$ 98,312,996</u>	<u>100.00 %</u>	<u>\$ 63,599,723</u>	<u>100.00 %</u>

Securities Lending Ratings

S&P / Moody's Rating	2018 Fair Value	2017 Fair Value
Not Rated	\$ 43,817,667	\$ 31,042,007

i) Custodial Credit Risk

Custodial credit risk is the risk that, in the event of a failure of a depository financial institution or counterparty to a transaction, there will be an inability to recover the value of deposits, investments, or collateral securities in the possession of an outside party.

The California Government Code requires that governmental securities or first trust deed mortgage notes be used as collateral for demand deposits and certificates of deposit at 110 percent and 150 percent, respectively, of all deposits not covered by federal deposit insurance. As the City holds cash and certificates of deposit on behalf of the System, the collateral must be held by the pledging financial institution's trust department and is considered held in the City's name. For all other System deposits, the collateral must be held by the pledging financial institution's trust department and is considered held in the System's name.

The City, on behalf of the System, does not have any funds or deposits that are not covered by depository insurance, which are either uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agent, but not in the City's name. The System does not have any investments that are not registered in the name of the System and

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

are either held by the counterparty or the counterparty's trust department or agent but not in the System's name.

j) Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchanges rates will adversely affect the fair values of an investment or deposit. Currency hedging is allowed under the System's investment policy for defensive purposes only. The investment policy limits currency hedging to a maximum of 25% of the portfolio value.

The following summarizes the System's investments denominated in foreign currencies as of June 30, 2018 and 2017:

Foreign Currency	Fair Value	
	June 30, 2018	June 30, 2017
Australian Dollar	\$ 633,313	\$ 326,618
British Pound	3,325,984	4,060,376
Canadian Dollar	614,019	640,519
Danish Krone	1,209,334	883,883
Euro	10,272,537	9,572,402
Hong Kong Dollar	2,577,428	2,626,170
Indonesian Rupiah	216,320	493,826
Japanese Yen	3,833,495	3,961,512
Mexican Peso	891,955	697,544
Norwegian Krone	233,382	-
Singapore Dollar	362,887	228,963
Swedish Krona	542,959	362,001
Turkish Lira	1,690,353	1,928,179
Total	<u>\$ 26,403,966</u>	<u>\$ 25,891,941</u>

k) Securities Lending Transactions

The System's investment policy authorizes participation in securities lending transactions, which are short-term collateralized loans of the System's securities to broker-dealers with a simultaneous agreement allowing the System to invest and receive earnings on the collateral received. All securities loans can be terminated on demand by either the System or the borrower, although the average term of loans is one week.

The administrator of the System's securities lending activities is responsible for maintaining an adequate level of collateral in an amount equal to at least 102% of market value of loaned U.S. government securities, common stock and other equity securities, bonds,

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

debentures, corporate debt securities, notes, and mortgages or other obligations. Collateral received may include cash, letters of credit, or securities. The term to maturity of the loaned securities is generally not matched with the term to maturity of the investment of the said collateral. If securities collateral is received, the System cannot pledge or sell the collateral securities unless the borrower defaults.

As of June 30, 2018 and 2017, management believes the System has minimized its credit risk exposure to borrowers because the amounts held by the System as collateral exceeded the securities loaned by the System. The System's contract with the administrator requires it to indemnify the System if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities borrowed) or fails to pay the System for income distributions by the securities' issuers while the securities are on loan.

The following summarizes investments in securities lending transactions and collateral received at June 30, 2018 and 2017:

Securities Lending as of June 30, 2018			
Investment Type	Fair Value of Loaned Securities		
	For Cash Collateral	For Non-Cash Collateral	Total
Securities on Loan for Cash Collateral			
U.S. Government and Agencies	\$11,585,884	\$ -	\$ 11,585,884
U.S. Corporate Bonds	3,197,728	-	3,197,728
U.S. Equities	28,094,792	1,395,896	29,490,688
Non - U.S. Equities	3,492	966,061	969,553
Total Investments in Securities Lending Transactions	<u>\$42,881,896</u>	<u>\$ 2,361,957</u>	<u>\$ 45,243,853</u>
Collateral Received	<u>\$43,815,338</u>	<u>\$ 2,452,457</u>	<u>\$ 46,267,795</u>

Securities Lending as of June 30, 2017			
Investment Type	Fair Value of Loaned Securities		
	For Cash Collateral	For Non-Cash Collateral	Total
Securities on Loan for Cash Collateral			
U.S. Government and Agencies	\$ 7,676,626	\$ 2,720,649	\$ 10,397,275
U.S. Corporate Bonds	2,139,488	-	2,139,488
U.S. Equities	20,578,844	2,229,735	22,808,579
Non - U.S. Equities	-	230,450	230,450
Total Investments in Securities Lending Transactions	<u>\$30,394,958</u>	<u>\$ 5,180,834</u>	<u>\$ 35,575,792</u>
Collateral Received	<u>\$31,033,855</u>	<u>\$ 5,303,647</u>	<u>\$ 36,337,502</u>

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

I) Derivative Instruments

The Retirement System reports its derivative instruments under the provisions of GASB Statement No. 53, *Accounting and Financial Reporting for Derivatives Instruments*. Pursuant to the requirements of this statement, the Retirement System has provided a summary of derivative instrument activities during the reporting periods presented and the related risks.

As of June 30, 2018 and 2017, the derivative instruments held by the Retirement System are considered investments and not hedges for accounting purposes. All investment derivatives are reported as investments at fair value in the statements of fiduciary net position. The gains and losses arising from this activity are recognized as incurred in the statement of changes in fiduciary net position. All investment derivatives discussed below are included within the investment risk schedules, which precede this subsection. Investment derivative instruments are disclosed separately to provide a comprehensive and distinct view of this activity and its impact on the overall investment portfolio.

Valuation methods used by the System are described in more detail in Note 2C). The fair value of the exchange traded derivative instruments, such as futures, options, rights, and warrants are based on quoted market prices. The fair values of forward foreign currency contracts are determined using a pricing service, which uses published foreign exchange rates as the primary source. The fair values of swaps are determined by the System's investment managers based on quoted market prices of the underlying investment instruments.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

The tables below present the notional amounts, the fair values, and the related net appreciation (depreciation) in the fair value of derivative instruments that were outstanding at June 30, 2018 and 2017:

As of and for the Year Ended June 30, 2018			
Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Forwards			
Foreign Currency Exchange Contracts	\$ -	\$ 345	\$ -
Options			
Equity Contracts	238	(195,759)	382,413
Swaps			
Swaps	320,900	(19,038)	(39,278)
Total	<u>\$ 321,138</u>	<u>\$ (214,452)</u>	<u>\$ 343,135</u>

As of and for the Year Ended June 30, 2017			
Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Options			
Equity Contracts	\$ 322	\$ (261,715)	\$ 257,171
Swaps			
Credit Contracts	190,000	13,371	1,266
Total	<u>\$ 190,322</u>	<u>\$ (248,344)</u>	<u>\$ 258,437</u>

Counterparty Credit Risk

The System is exposed to credit risk on non-exchange traded derivative instruments that are in asset positions. As of June 30, 2018, the fair value of forward currency contracts to purchase and sell international currencies were \$345 and \$0, respectively. The System's counterparties to these contract held credit ratings of A or better, as assigned by one or more of the major credit rating organizations (Moody's, S&P, and/or Fitch).

Custodial Credit Risk

The custodial credit risk disclosure for exchange traded derivative instruments is made in accordance with the custodial credit risk disclosure requirements of GASB Statement No. 40. At June 30, 2018 and 2017, all of the System's investments in derivative instruments are held in the System's name and are not exposed to custodial credit risk.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

Interest Rate Risk

The tables below describe the maturity periods of the derivative instruments exposed to interest rate risk at June 30, 2018 and 2017.

Derivative Interest Rate Risk as of June 30, 2018

Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Forwards			
Forward Foreign Currency Exchange Contracts	\$ 345	\$ 345	\$ -
Options			
Equity Contracts	(195,759)	(195,759)	-
Swaps			
Credit Contracts	(19,038)	-	(19,038)
Total	<u>\$ (214,452)</u>	<u>\$ (195,414)</u>	<u>\$ (19,038)</u>

Derivative Interest Rate Risk as of June 30, 2017

Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Options			
Equity Contracts	\$ (261,715)	\$ (261,715)	\$ -
Swaps			
Credit Contracts	13,371	-	13,371
Total	<u>\$ (248,344)</u>	<u>\$ (261,715)</u>	<u>\$ 13,371</u>

Foreign Currency Risk

At June 30, 2018 and 2017, the System is not exposed to foreign currency risk for its derivative instruments.

Contingent Features

At June 30, 2018 and 2017, the Retirement System held no positions in derivatives containing contingent features.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

5. Net Pension Liability

The components of the net pension liability of the City at June 30, 2018 and 2017, are as follows:

	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Total pension liability	\$ 656,193,314	\$ 660,669,941
Less: Plan fiduciary net position	<u>(375,976,271)</u>	<u>(353,202,858)</u>
City's net pension liability	<u>\$ 280,217,043</u>	<u>\$ 307,467,083</u>
Plan fiduciary net position as a percentage of the total pension liability	57.3%	53.5%

a) **Actuarial Method and Assumptions**

The total pension liability as of June 30, 2018 was determined based on an actuarial valuation as of July 1, 2017, using the entry age normal actuarial cost method and the following actuarial assumptions, applied to all periods included in the measurement.

Investment Rate of Return	5.50%
Inflation Rate, U.S.	2.75%
Inflation Rate, Bay Area	2.85%
Long-term Post-Retirement Benefit Increases	3.25%

Measurements as of the June 30, 2018 are based on the fair value of assets as of June 30, 2018 and the total pension liability as of the valuation date, June 30, 2017, updated to June 30, 2018. There were no significant events between the valuation date and the measurement date. The update procedures included the additional liability due to assumption changes and the addition of interest cost offset by actual benefit payments. There are no active members of the Plan, and thus no service cost.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

Mortality rates for healthy lives were based on the CalPERS Healthy Table from the 2012-2015 Experience Study, excluding the 15-year projection using 90% of Scale MP-2016. Mortality rates for disabled lives were based on the CalPERS Industrial Disability Mortality Table from the 2012-2015 Experience Study, excluding the 15-year projection using 90% of Scale MP-2016. The mortality tables are projected to improve with MP-2017 generational mortality improvement tables, with improvements projected from a base year of 2014 (the mid-point of the CalPERS base tables).

The total pension liability as of June 30, 2017 was determined based on an actuarial valuation as of July 1, 2016, using the entry age normal actuarial cost method and the actuarial assumptions as described above for the July 1, 2016 valuation, except for the assumed investment rate of return was 6.37%. Measurements as of June 30, 2017 are based on the fair value of assets as of June 30, 2017 and the total pension liability as of the valuation date, June 30, 2016, updated to June 30, 2017. The City entered into new Memorandums of Understanding (MOUs) for Police members between the valuation date and the measurement date, increasing Police retirees' Cost of Living Adjustments (COLAs). The update procedures included the addition of interest cost offset by actual benefit payments.

Mortality rates for healthy lives were based on the CalPERS Healthy Table from the 2006-2011 Experience Study, excluding the 20-year projection using Scale BB. Mortality rates for disabled lives were based on the CalPERS Industrial Disability Mortality Table from the 2006-2011 Experience Study, excluding the 20-year projection using Scale BB. The mortality tables are projected to improve with MP-2014 mortality improvement tables, with improvements projected from a base year of 2009 (the mid-point of the CalPERS base tables).

The actuarial assumptions used in the July 1, 2017 and 2016 valuations were based on the results of actuarial experience studies for the periods July 1, 2014 through June 30, 2017 and July 1, 2011 through June 30, 2014, respectively.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major class included in the pension plan's target asset allocation as of June 30, 2018 and 2017 are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	
	June 30, 2018	June 30, 2017
Fixed Income	3.40%	2.90%
Domestic Equity	5.75	6.25
International Equity	6.80	7.25
Covered Calls	5.25	6.21
Crisis Risk Offset	4.40	4.40
Cash	2.25	2.25

b) Discount Rate

The discount rates used to measure the total pension liability were 5.50% and 6.37% as of June 30, 2018 and 2017, respectively. The projection of cash flows used to determine the discount rate assumed that the City would contribute to the Plan based on its July 1, 2012 funding agreement with the System. This agreement suspends City contributions until the fiscal year beginning July 1, 2017, after which they will resume, based upon the recommendation of the actuary, with a City Charter requirement that the Plan's liabilities be fully funded by July 1, 2026. A cash flow projection showed that the projected fiduciary net position would be greater than or equal to the benefit payments projected for each future period. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

c) Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the City, calculated using the discount rate, as well as what the Plan's net pension liability would be if it were calculated using a discount rate of 1-percentage-point lower or 1-percentage-point higher than the discount rate.

June 30, 2018			
	1% Decrease (4.50%)	Current Discount Rate (5.50%)	1% increase (6.50%)
City's net pension liability	\$341,960,228	\$280,217,043	\$227,411,930

June 30, 2017			
	1% Decrease (5.37%)	Current Discount Rate (6.37%)	1% increase (7.37%)
City's net pension liability	\$370,692,306	\$307,467,083	\$253,656,787

6. Reserves

Retired Member Contribution Reserve represents the total accumulated transfers from active member contributions and investments, less payments to retired members and beneficiaries.

Employer Reserve represents the total accumulated employer contributions for retirement payments. Additions include contributions from the employer, investment earnings and other income; deductions include payments to retired members and beneficiaries and administrative expenses.

The aggregate total of the System's major reserves as of June 30, 2018 and 2017 equals net position restricted for pensions and comprises the following:

	2018	2017
Retired member contribution reserve	\$ 34,171,935	\$ 36,748,058
Employer reserve	341,804,336	316,454,800
Total	<u>\$ 375,976,271</u>	<u>\$ 353,202,858</u>

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

7. Administrative Expenses

The City provides the System with accounting and other administrative services. Staff salaries included in administrative expenses for the years ended June 30, 2018 and 2017 were \$1,100,074 and \$989,875, respectively. Other administrative expenses including accounting and audit services, legal fees, annual report and miscellaneous expense for the years ended June 30, 2018 and 2017 were \$390,412 and \$260,745, respectively.

8. Receivable from Retired Members and Beneficiaries

The City filed a lawsuit (City of Oakland v. Oakland Police and Fire Retirement System, et al., Alameda County Superior Court case number RG 11580626) in June 2011, and sought to stop the System from paying retirement benefits based on certain holidays and shift differential premium pay (7.25%) to many police retirees. The City also sought an order requiring the System to collect overpayments. The trial court ruled in favor of the City and the decision was partially upheld upon appeal. The Court of Appeal agrees that those elements were overpayments, but limited the extent to which shift differential overpayments could be recovered back from retirees.

The writ and judgment entered by the trial court after the appeals process directed the System's board to cease paying excessive holidays and the shift differential premium. In September and October 2014, the System's Board passed Resolutions No. 6819 and No. 6824 to seek 100% recovery of the combined overpayments, which totals approximately \$3.9 million. On October 28, 2015, the System's Board approved a collection methodology to recover the overpayments from police members over a 48-month period. The System began deducting these repayments from benefit disbursement commencing in June 2016. Eleven payees were granted a delayed repayment date, which will commence on May 1, 2017. Nine payees received a discharge of their debt totaling \$51,886. These actions increased fund assets by approximately \$3.3 million. As of June 30, 2018 and 2017, the receivable totaled \$1.6 million and \$2.5 million, respectively.

Notes to Basic Financial Statements

For Years Ended June 30, 2018 and 2017

9. Contingencies

- a) Retired Oakland Police Officers Association v. Oakland Police and Fire Retirement System, et al., Alameda County Superior Court Action No. RG14753080

A lawsuit was filed on December 30, 2014 by the Retired Oakland Police Officers Association (ROPOA) and several System retirees (“plaintiffs”) against the System, the System’s Board, and the City of Oakland. The lawsuit argues that Master Police Officer 5% Premium Pay (“MPO Pay”) should be considered “compensation attached to rank” and should be included in the pension pay of certain police retirees per the City of Oakland Charter. A judgment in favor of the plaintiffs was entered by the Alameda County Superior Court on June 8, 2016, granting plaintiffs’ claims. The underpayment amount to be paid by the System to some police retirees (spanning December 30, 2011 through December 18, 2015) is estimated to be between \$1.5 million and \$5 million plus interest.

The System and the City have filed an appeal of the judgment, and it is pending before the First District Court of Appeal, Case No. A148987.

- b) Retired Oakland Police Officers Association v. Oakland Police and Fire Retirement System, et al., Alameda County Superior Court Action No. RG16838274

A lawsuit was filed on November 8, 2016 by the ROPOA and several System retirees (“plaintiffs”) against the System, the System’s Board, and the City of Oakland. The lawsuit argues that police retiree holiday benefits should be calculated based on a 10-hour work day, rather than the present practice of using an 8-hour work day. The suit also alleges that police retirees’ holiday benefits should include the “floating holiday” referenced in the City’s contract with the Oakland Police Officers’ Association (OPOA) labor union for the active police officers. At its October 25, 2017 meeting, the Board began considering the broad question of how police holiday retirement benefits are being calculated and paid, including the questions asserted by plaintiffs. Trial is set to occur on February 5, 2019. The potential liability to the system is for underpayments up to \$1.6 million from November 7, 2013 to November 7, 2016, and approximately \$600,000 per year going forward, subject to salary rate adjustments which may be provided in future labor agreements.

Required Supplementary Information

For Years Ended June 30, 2018 and 2017

Schedule of Changes in the Employer's Net Pension Liability and Related Ratios (Unaudited)

	2018	2017	2016	2015	2014
<u>Total pension liability</u>					
Interest (includes interest on service cost)	\$44,320,094	\$ 44,931,829	\$42,480,394	\$ 41,262,826	\$ 42,333,496
Differences between expected and actual experience	(10,656,139)	3,027,944	6,977,470	(21,208,627)	-
Changes of assumptions	17,858,013	-	43,480,232	34,219,433	-
Benefit payments, including refunds of member contributions	<u>(55,998,595)</u>	<u>(57,375,815)</u>	<u>(58,441,353)</u>	<u>(59,007,536)</u>	<u>(57,409,113)</u>
Net change in total pension liability	(4,476,627)	(9,416,042)	34,496,743	(4,733,904)	(15,075,617)
Total pension liability – beginning	<u>660,669,941</u>	<u>670,085,983</u>	<u>635,589,240</u>	<u>640,323,144</u>	<u>655,398,761</u>
Total pension liability – ending (a)	<u><u>\$ 656,193,314</u></u>	<u><u>\$ 660,669,941</u></u>	<u><u>\$ 670,085,983</u></u>	<u><u>\$ 635,589,240</u></u>	<u><u>\$ 640,323,144</u></u>
<u>Plan fiduciary net position</u>					
Contributions – member	\$ 44,860,000	\$ -	\$ -	\$ -	\$4,441
Net investment income	35,446,275	50,158,795	(1,418,645)	15,438,586	66,392,409
Benefit payments, including refunds of member contributions	(55,998,595)	(57,375,815)	(58,441,353)	(59,007,536)	(57,409,113)
Administrative expense	(1,543,412)	(1,261,641)	(1,375,749)	(985,227)	(776,112)
Claims and settlements	<u>9,145</u>	<u>70,282</u>	<u>3,593,096</u>	<u>-</u>	<u>-</u>
Net change in plan fiduciary net position	22,773,413	(8,408,379)	(57,642,651)	(44,554,177)	8,211,625
Plan fiduciary net position – beginning	<u>353,202,858</u>	<u>361,611,237</u>	<u>419,253,888</u>	<u>463,808,065</u>	<u>455,596,440</u>
Plan fiduciary net position – ending (b)	<u><u>\$ 375,976,271</u></u>	<u><u>\$ 353,202,858</u></u>	<u><u>\$ 361,611,237</u></u>	<u><u>\$ 419,253,888</u></u>	<u><u>\$ 463,808,065</u></u>
City's net pension liability – ending (a) – (b)	<u><u>\$ 280,217,043</u></u>	<u><u>\$ 307,467,083</u></u>	<u><u>\$ 308,474,746</u></u>	<u><u>\$ 216,335,352</u></u>	<u><u>\$ 176,515,079</u></u>
Plan fiduciary net position as a percentage of the total pension liability	57%	53%	54%	66%	72%
Covered employee payroll	\$ -	\$ -	\$ -	\$ -	\$ -
Net pension liability as a percentage of covered employee payroll	N/A	N/A	N/A	N/A	N/A

Note: This is a 10-year schedule. Information for additional years will be presented when available.

Required Supplementary Information

For Years Ended June 30, 2018 and 2017

Schedule of Employer Contributions (Unaudited) (dollars in millions)

	<u>2018</u>	<u>2017</u>	<u>2016*</u>	<u>2015</u>	<u>2014</u>	<u>2013**</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Actuarially determined contribution	\$ 44.9	N/A	N/A	N/A	\$ 20.3	\$ 34.2	\$ 45.1	\$ 41.4	\$ 37.5	\$ 32.1
Contributions in relation to the actuarially determined contribution	\$ 44.9	\$ -	\$ -	\$ -	\$ -	\$ 210.0	\$ 45.5	\$ -	\$ -	\$ -
Contribution deficiency/(excess)	\$ 0.0	N/A	N/A	N/A	\$ 20.3	\$ (175.8)	\$ (0.4)	\$ 41.4	\$ 37.5	\$ 32.1
Covered employee payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.1	\$ 0.4
Contributions as a percentage of covered employee payroll	N/A	N/A	N/A	N/A	N/A	210000%	45500%	0%	0%	0%

* Although actuarial valuations were performed as of June 30, 2013, June 30, 2014 and June 30, 2015, the System did not determine Actuarially Determined Contribution for FY 2014-2016, based on the City's funding policy.

** In July 2012, the City of Oakland contributed \$210 million in Pension Obligation Bond (POB) proceeds to the Plan.

Schedule of Investment Returns (Unaudited)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Annual money-weighted rate of return net of investment expense	10.57%	15.57%	-0.75%	3.90%	16.40%	9.70%	1.40%	24.50%	17.20%	-19.90%

SECTION 3

INVESTMENT

POLICE WIDOW



Nan Prentice, Widow of Robert E. Prentice, who served as a Police Officer with the Oakland Police Department from 1951 to 1973 .

Robert and Nan had a great love of horses.

INVESTMENT CONSULTANT'S REPORT



November 26, 2018

Retirement Board
City of Oakland Police and Fire Retirement System
150 Frank Ogawa Plaza, Suite 3332
Oakland, CA 94612

Dear Board Members:

This letter reviews the investment performance of the City of Oakland Police and Fire Retirement System ("the System" or "OPFRS") for the fiscal year ended June 30, 2018. During this 12-month period, the OPFRS total investment portfolio increased 10.6% on a money-weighted, net of fees basis. The System has been effective in using its resources in a cost-effective manner to ensure that benefits continue to flow to plan participants.

Pension Consulting Alliance, LLC ("PCA") serves as OPFRS' independent investment consultant. The performance data is provided by the System's custodian, Northern Trust, and is independently calculated by PCA's performance measurement team.

A major factor influencing overall investment performance is the allocation of the OPFRS portfolio across major asset classes. The portfolio's end-of-year actual allocation remains closely aligned with policy. As of June 30, 2018, the fixed income, international equity, and cash were overweight, while domestic equity and covered calls were underweight.

Over the latest 3-year period, the OPFRS portfolio produced an annualized money-weighted, net of fee return of 7.6%, underperforming its benchmark return of 8.3%. Over the latest 5-year period, OPFRS' average annual money-weighted net return of 8.9% beat its target benchmark by 30 basis points. Longer-term outperformance results were largely attributable to specific manager performance in public equities.

OPFRS Annualized Money-Weighted Returns

As of 6/30/2018

	1 Year	3 Year	5 Year
Total Portfolio ¹	10.6	7.6	8.9
Policy Benchmark ²	9.4	8.3	8.6
Excess Return	1.2	(0.7)	0.3

Sincerely,

Pension Consulting Alliance, LLC

Pension Consulting Alliance, LLC

¹ Money-Weighted & Net of Fees. Performance since 2005 includes securities lending.

² Evolving Policy Benchmark consists of 48% Russell 3000, 12% MSCI ACWI ex U.S., 20% Bbg BC Universal, and 20% CBOE BXM

411 NW Park Avenue, Suite 401
Portland, OR 97209
Tel: 503.226.1050 Fax: 503.226.7702
www.pensionconsulting.com

List of Investment Professionals

Domestic Equity Managers:

EARNEST Partners
Northern Trust
Nuveen NWQ
Rice Hall James and Associates
State Street Global Advisors

Fixed Income Managers:

DDJ Capital Management
Reams Asset Management
Ramirez Asset Management

International Equity Managers:

Fisher Investments Institutional Group
Hansberger Global Investor
State Street Global Advisors

Investment Consultant:

Pension Consultant Alliance

Covered Calls:

Parametric Portfolio Associates, LLC.

Custodian:

Northern Trust

Security Lending:

Northern Trust

Investment Manager Fees and Other Investment Expenses

Periods ended June 30, 2018 and June 30, 2017

	2018	2017
Investment Manager Fees		
Domestic Equity Managers	\$ 530,794	\$ 440,110
International Equity Managers	271,696	242,527
Domestic Fixed Income Managers	166,811	124,085
Covered Calls	241,529	237,257
Total Investment Manager Fees	\$ 1,210,830	\$ 1,043,978
Other Investment Fees		
Custodian Fees	\$ 100,000	\$ 92,050
Investment Consulting	116,500	130,000
Asset & Liability Study	-	30,000
Total Other Investment Fees	\$ 216,500	\$ 222,050
Total Investment Fees	\$ 1,427,330	\$ 1,266,028

Largest Stock Holdings (by Market Value)
As of June 30, 2018

	Stock	Market Value
1	Apple	5,577,920
2	Microsoft Corp	4,612,483
3	Amazon	4,215,504
4	Alphabet	4,143,731
5	Facebook	2,844,845
6	Berkshire Hathaway	2,210,683
7	JPMorgan Chase & Co	2,168,610
8	Exxon Mobil	2,145,106
9	Johnson & Johnson	1,994,951
10	Bank of America	1,630,707

Note: The above schedules do not reflect holdings in index funds. A complete list is available upon request.

Largest Bond Holdings (by Market Value)
As of June 30, 2018

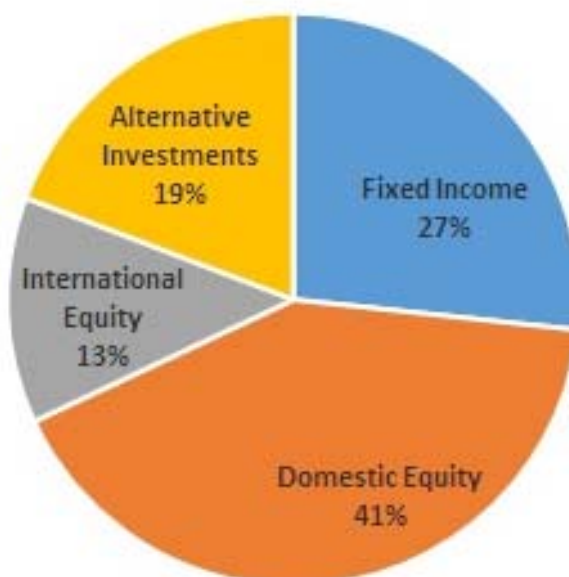
	Description	Interest Rate	Maturity Date	Market Value
1	United States Treasury	1.25%	10/31/2021	\$ 3,009,482
2	United States Treasury	2.25%	11/15/2027	2,647,382
3	United States Treasury	2.63%	5/15/2021	2,450,191
4	United States Treasury	2.50%	5/31/2020	2,398,874
5	United States Treasury	1.63%	10/31/2023	2,128,684
6	United States Treasury	2.75%	8/15/2047	1,994,399
7	United States Treasury	2.88%	4/30/2025	1,751,816
8	United States Treasury	2.50%	1/31/2025	1,310,647
9	Northwell Health, Inc.	6.15%	11/1/2043	1,300,475
10	Metropolitan Transportation Authority New York	7.34%	11/15/2039	1,177,031

Note: The above schedules do not reflect holdings in index funds. A complete list is available upon request.

Investments by Manager
Year Ended June 30, 2018

Investment Firm	Portfolio Type	Amount
Fixed Income Managers		
Reams Asset Management	Core Plus	\$ 24,503,252
Ramirez Asset Management	Core	67,064,419
DDJ	High Yield/ Bank Loans	7,724,005
Total Fixed Income		99,291,676
Domestic Equity Managers		
Northern Trust Global Investments	Large Cap Core	78,705,614
EARNEST Partners	Mid Cap Core	30,239,300
SSGA - Russell 1000 Growth Index	Large Cap Growth	10,956,107
SSGA - Russell 1000 Value Index	Large Cap Value	9,741,411
NWQ	Small Cap Value	10,567,362
Rice Hall James	Small Cap Growth	13,496,982
Transition Account	Short Term	99,935
Total Domestic Equity		153,806,711
International Equity Managers		
Hansberger Global Investors	International	16,577,293
Fisher Investments Institutional Group	International	16,296,122
State Street Global Advisors	Non-US Developed Core	14,606,720
Total International Equity		47,480,135
Alternative Managers		
Parametric	Covered Calls	71,521,568
Total Alternative Investments		71,521,568
Total Investment		\$ 372,100,089

Asset Allocation
As of June 30, 2018



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SECTION 4

ACTUARIAL

FIRE WIDOW



Dorothy Walsh, Widow of Bernard D. Walsh, who served as a Firefighter with the Oakland Fire Department from 1951 to 1968.

ACTUARY'S CERTIFICATION LETTER



Classic Values, Innovative Advice

Via Electronic Mail

December 6, 2018

Actuarial Certification

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Report for the Oakland Police and Fire Retirement System (PFRS, the Plan) as of June 30, 2018. This letter includes references to two documents produced by Cheiron for the Plan: the actuarial valuation report as of June 30, 2017 (transmitted March 15, 2018) and the GASB 67/68 report as of June 30, 2018 (transmitted October 12, 2018).

Actuarial Valuation Report as of June 30, 2017

The purpose of the annual actuarial valuation report as of June 30, 2017 is to determine the actuarial funding status of the Plan on that date and to calculate an actuarially determined contribution amount in accordance with the Plan's funding agreement with the City of Oakland. The prior review was conducted by Cheiron as of June 30, 2016.

Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution amount provides for current cost (normal cost and expected administrative expenses) plus an amount to amortize the Unfunded Actuarial Liability (UAL). All members of the Plan have retired, therefore no normal cost has been computed, and the actuarially determined contributions are equal to the unfunded liability amortization payment plus administrative expenses.

As part of the funding agreement with the City, the UAL is expected to be amortized as level percentage of overall City Safety payroll, with payments commencing in the fiscal year beginning July 1, 2017, and completed in the year ending June 30, 2026.

For actuarial valuation purposes, Plan assets are valued at actuarial value. Under this method, the Actuarial Value of Assets recognizes one-fifth of the difference between the expected asset value (based on the 6.00% return assumption for the current Plan year) and the actual market value each year. The actuarial value is restricted to fall between 90% and 110% of the market value.

The Retirement System Board is responsible for establishing and maintaining the funding policy of the Plan.

We prepared the following schedules, which we understand will be used in the Actuarial Section of the 2018 PFRS Annual Report, based on the June 30, 2017 actuarial valuation. All historical information prior to the June 30, 2013 actuarial valuation shown in these schedules is based on information reported by Bartel Associates, who served as the actuary prior to 2013.

www.cheiron.us 1.877.CHEIRON (243.4766)

ACTUARY'S CERTIFICATION LETTER

December 6, 2018

Page 2

- Statement of Actuarial Assumptions and Methods
- Summary of Participant Data
- Development of Actuarial Gain/Loss (Analysis of Financial Experience)
- Schedule of Funding Status
- Summary of Plan Provisions

The assumptions used in this report reflect the results of an experience study performed by Cheiron covering the period from July 1, 2014 through June 30, 2017, and adopted by the Board. The assumptions used are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice, in particular Standards No. 4, 27, 35, and 44.

GASB 67/68 Report as of June 30, 2018

The purpose of the GASB 67/68 report as of June 30, 2018 is to provide accounting and financial reporting information under GASB 67 for the Plan and under GASB 68 for the City of Oakland. This report is not appropriate for other purposes, including the measurement of funding requirements for the Plan.

For financial reporting purposes, the Total Pension Liability is based on the June 30, 2017 actuarial valuation updated to the measurement date of June 30, 2018. The update included the additional liability due to assumption changes, and the addition of interest cost offset by actual benefit payments.

Beginning of year measurements are based on the actuarial valuation as of June 30, 2016, updated to the measurement date of June 30, 2017. The June 30, 2018 Total Pension Liability (TPL) presented in the GASB 67/68 report was based upon the same data, plan provisions, actuarial methods, and assumptions as were used in the actuarial valuation report as of June 30, 2017.

Please refer to our GASB 67 report as of June 30, 2018 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the 2018 PFRS Annual Report based on the June 30, 2018 GASB 67/68 report:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions



ACTUARY'S CERTIFICATION LETTER

December 6, 2018

Page 3

We certify that the letter was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the Plan. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

These reports are for the use of the Plan, the participating employer, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of these reports is not an intended user and is considered a third party.

Cheiron's reports were prepared solely for the Plan for the purposes described herein, except that the Plan and its auditors may rely on these reports solely for the purpose of completing an audit related to the matters herein. These reports are not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted,
Cheiron



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SUMMARY OF ACTUARIAL VALUE, ASSUMPTIONS AND FUNDING METHODS

PURPOSE OF ACTUARIAL VALUATION

The Oakland Police and Fire Retirement System (PFRS) is a closed defined benefit pension plan. It was closed to new members on June 30, 1976. As of July 1, 2017, there are no active member. All members are retirees and beneficiaries.

The actual costs of a defined benefit plan are determined entirely by the amount of the benefit promise, the actual salaries and service of the plan participants, and how long they and their beneficiaries live to receive payments. In addition, the actuarial methodology provides a reasonable plan, or method, towards funding the expected costs of the plan. This information assists the plan trustees so they can make informed decisions regarding plan investments and how much in contributions will be required from the employer to eventually fully pay for the plan's costs.

The most recent actuarial valuation was as of July 1, 2017. The key results of the actuarial valuation are as follows:

- The actuarially determined employer contribution amount for Fiscal Year 2018-2019 is \$44.8 million, based on projecting the actuarial liabilities and the Actuarial Value of Assets (AVA) to the end of the 2017-2018 Fiscal Year. This represents a decrease of \$1.6 million from the amount determined in the prior valuation for the same fiscal year.
- During the year ended June 30, 2017, the return on Plan assets was 15.09% on a market value basis net of investment expenses, as compared to the 7.00% assumption for the 2016-2017 Plan year. This resulted in a market value gain on investments of \$26.9 million. The AVA is calculated as the expected AVA plus 20% of the difference between the Market Value and the expected AVA. This smoothed value of assets returned 8.49%, for an actuarial asset gain of \$5.0 million.
- The Plan experienced a gain on the actuarial liability of \$10.0 million, the net result of changes in the population (primarily from a higher number of beneficiary deaths than expected.) Combining the liability and asset gains, the Plan experienced a total gain of \$14.9 million.

- The Plan's smoothed funded ratio, the ratio of actuarial assets over actuarial liability, decreased from 54.0% last year to 51.2% on an AVA basis as of June 30, 2017 before any changes in assumptions. The reduction in the funded ratio is primarily the result of no contribution being made to the fund during the year. Changes in the discount rate and mortality assumptions further decreased the smoothed funded ratio from 51.2% to 49.5%.
- The Plan's funded ratio decreased from 53.7% to 52.4% on a Market Value of Assets (MVA) basis. The decrease in the Market Value funded ratio was primarily the result of the assumption changes.
- The unfunded actuarial liability (UAL) is the excess of the Plan's actuarial liability over the AVA. The Plan experienced an increase in the UAL from \$309.4 million to \$317.3 million as of July 1, 2017 before assumption changes. Changes in assumptions further increased the UAL to \$340.1 million as of July 1, 2017.
- Overall participant membership decreased compared to 2016. Twenty-eight members died, 10 of whom had their benefits continue to a surviving spouse. In addition, 25 surviving beneficiaries died. There are no active members of the Plan.
- If the contribution were determined using a projected asset value based on the current market (i.e., non-smoothed) value of assets, the contribution for FY 2018-2019 would be \$42.5 million. The contribution is smaller than that determined using the projected AVA, because the current market value reflects the full amount of recent investment gains, while under the AVA projection a portion of those gains are deferred until years after FY 2018-2019.

VALUATION SUMMARY

Table I-1 below summarizes all the key results of the valuation with respect to membership, assets and liabilities, and contributions. The results are presented and compared for both the current and prior plan year.

Table I-1
Summary of Principal Plan Results
(\$ in Thousands)

	<u>July 1, 2016</u>	<u>July 1, 2017</u>	<u>% Change</u>
<u>Participant Counts</u>			
Active Participants	0	0	
Participants Receiving a Benefit	929	886	-4.63%
Total	929	866	-4.63%
Annual Pay of Active Members	\$ 0	\$ 0	
<u>Assets and Liabilities</u>			
Actuarial Liability (AL)	\$ 672,916	\$ 673,441	0.08%
Actuarial Value of Assets (AVA)	363,550	333,373	-8.30%
Unfunded Actuarial Liability (UAL)	\$ 309,366	\$ 340,068	9.92%
Funded Ratio (AVA)	54.0%	49.5%	-4.52%
Funded Ratio (MVA)	53.7%	52.4%	-1.29%
<u>Contributions</u>			
Employer Contribution (FY2017-18)	\$ 44,860	\$ N/A	
Employer Contribution (FY2018-19)	\$ 46,366	\$ 44,821	-3.33%

ACTUARIAL DEFINITIONS

The Present Value of Projected Benefits (PVPB) is the present value of all future benefits for current plan participants.

The Actuarial Liability (AL) represents the portion of the PVPB attributable to past service. Since all participants in this plan are either retired or assumed to retire at the valuation date, the Actuarial Liability is equal to the Present Value of Projected Benefits for this plan.

The Actuarial Value of Assets is a smoothed value of assets used to even out market fluctuations in asset values.

The Unfunded Actuarial Liability (UAL) is equal to the difference between the Actuarial Liability and the Actuarial Value of Assets.

ACTUARIAL METHODS AND ASSUMPTIONS

ACTUARIAL METHODS

The actuarial funding method used to determine the System's normal cost and the unfunded actuarial liability is the **Entry Age Normal** cost method.

The normal cost rate is determined with the normal cost percentage equal to the total Projected Value of Benefits at Entry Age, divided by Present Value of Future Salary at Entry Age. Since there are no longer any active employees, the normal cost for this plan is \$0.

Actuarial Value of Plan Assets

The excess of the AL over the Actuarial Value of Assets (AVA) is the Unfunded Actuarial Liability (UAL). In accordance with the Plan's funding agreement with the City of Oakland, the UAL must be amortized by July 1, 2026, with contributions resuming in the 2017-2018 fiscal year. The projected fiscal year 2018-2019 contribution has been calculated using level percent of pay amortization, based on total projected City payroll for all Safety employees.

ACTUARIAL ASSUMPTIONS

The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period from July 1, 2014 through June 30, 2017 and adopted by the Board. More details on the rationale for the demographic and economic assumptions can be found in the Experience Analysis presented to the Board on February 28, 2018.

Rate of Return

The expected annual rates of return, net of investment expenses, on all Plan assets are shown in the table on the next page. The equivalent single discount rate for these returns using the Plan's expected projected benefit payments is 5.53%.

Benefit Payment Year	Expected Return (%)
2016 - 2026	6.000
2027	5.725
2028	5.450
2029	5.175
2030	4.900
2031	4.625
2032	4.350
2033	4.075
2034	3.800
2035	3.525
2036+	3.250

Inflation

The assumed rate of general inflation is 2.75% (entire US) and local inflation is 2.85% (Bay Area). The general inflation rate is used in the determination of the investment return assumptions. The local inflation rate is used in the determination of the growth in expenses and salaries (which determine the COLA increases).

Cost of Living Adjustments

Cost-of-living adjustments are based on salary increases for a retiree's rank at retirement.

The long-term rate of salary increase is assumed to be 3.25% (2.85% inflation plus 0.4% productivity). The following schedule (next page) shows salary increases based on the current Police and Fire contracts, which expire on June 30, 2019 and October 31, 2017, respectively. All increases shown after those dates are assumptions.

Rates of Termination, Disability and Retirement: None

Rates of Mortality for Healthy Lives (for service retirees and beneficiaries)

CalPERS Healthy Annuitant Table from the 2012-2015 Experience Study, excluding the 15-year projection using 90% of Scale MP-2016.

Post-Retirement Benefit Increases
(Based on Salary Increases for Rank at Retirement)

<u>Date of Increase</u>	<u>Police</u>	<u>Fire</u>
January 1, 2018	2.50 & 1.00%	n/a
July 1, 2018	2.00%	3.25%
January 1, 2019	2.50%	n/a
Annual Increase Starting July 01, 2019	3.25%	3.25%

Rates of Mortality for Disabled Lives (for disability retirees)

CalPERS Industrial Disability Mortality Table from the 2012-2015 Experience Study, excluding the 15-year projection using 90% of Scale MP-2016.

Mortality Improvement

The mortality tables are projected to improve with the MP-2017 generational mortality improvement tables, with improvements projected from a base year of 2014 (the mid-point of the CalPERS base tables).

Survivor Continuance

30% of disabled retirees' deaths are duty-related and thus entitle the surviving spouse to 100% continuance of the retirees' allowance.

Changes in Assumptions since the Last Valuation

The mortality rates, mortality improvement projection scales and expected annual rate of return on investments have changed based on the June 30, 2017 experience study.

Administrative Expenses

Annual administrative expenses are assumed to be \$979,164, growing at 2.85% per year.

Service Retired Participants

	Police		Fire		Total	
	Number	Total Annual Benefit	Number	Total Annual Benefit	Number	Total Annual Benefit
< 50	0	\$0	0	\$0	0	\$0
50–54	0	\$0	0	\$0	0	\$0
55–59	0	\$0	0	\$0	0	\$0
60–64	10	\$712,727	0	\$0	10	\$712,727
65–69	52	\$3,884,284	8	\$499,766	60	\$4,384,050
70–74	109	\$7,392,274	38	\$2,758,923	147	\$10,151,197
75–79	52	\$3,720,501	17	\$1,212,351	69	\$4,932,851
80–84	15	\$1,300,441	20	\$1,522,483	35	\$2,822,923
85–89	12	\$860,962	17	\$1,226,312	29	\$2,087,275
90–94	9	\$763,479	15	\$1,188,967	24	\$1,952,446
95–99	1	\$88,182	5	\$388,106	6	\$476,288
100+	0	\$0	0	\$0	0	\$0
Total	260	\$18,722,850	120	\$8,796,908	380	\$27,519,758

Disability Retired Participants

	Police		Fire		Total	
	Number	Total Annual Benefit	Number	Total Annual Benefit	Number	Total Annual Benefit
< 50	0	\$0	0	\$0	0	\$0
50–54	0	\$0	0	\$0	0	\$0
55–59	0	\$0	0	\$0	0	\$0
60–64	1	\$66,015	0	\$0	1	\$66,015
65–69	29	\$2,071,511	28	\$1,758,879	57	\$3,830,390
70–74	51	\$3,361,636	32	\$2,133,620	83	\$5,495,256
75–79	20	\$1,383,802	29	\$2,106,765	49	\$3,490,567
80–84	9	\$628,068	13	\$956,646	22	\$1,584,714
85–89	3	\$238,952	7	\$576,699	10	\$815,651
90–94	4	\$317,910	3	\$181,003	7	\$498,913
95–99	0	\$0	2	\$129,521	2	\$129,521
100+	0	\$0	0	\$0	0	\$0
Total	117	\$8,067,894	114	\$7,843,134	231	\$15,911,028

Beneficiaries

	Police		Fire		Total	
	Number	Total Annual Benefit	Number	Total Annual Benefit	Number	Total Annual Benefit
< 50	0	\$0	0	\$0	0	\$0
50–54	0	\$0	0	\$0	0	\$0
55–59	1	\$65,614	2	\$128,511	3	194,125
60–64	7	\$396,707	4	\$243,765	11	640,472
65–69	16	\$798,228	10	\$559,192	26	1,357,421
70–74	23	\$1,080,114	11	\$555,837	34	1,635,951
75–79	17	\$838,645	13	\$677,232	30	1,515,877
80–84	17	\$993,606	28	\$1,331,647	45	2,325,253
85–89	26	\$1,382,746	25	\$1,198,959	51	2,581,706
90–94	27	\$1,426,148	32	\$1,668,623	59	3,094,771
95–99	4	\$215,222	7	\$407,001	11	622,223
100+	1	\$71,395	4	\$280,232	5	351,627
Total	139	\$7,268,426	136	\$7,050,999	275	14,319,425

PARTICIPANT DATA SUMMARY

Data Summary

	July 1, 2016			July 1, 2017		
<u>Active Participants</u>	Police	Fire	Total	Police	Fire	Total
Number	0	0	0	0	0	0
Number Vested	0	0	0	0	0	0
Average Age	00.0	00.0	00.0	00.0	00.0	00.0
Average Service	00.0	00.0	00.0	00.0	00.0	00.0
Average Pay	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
<u>Service Retirees</u>						
Number	268	129	397	260	120	380
Average Age	73.6	80.0	75.7	74.3	80.2	76.1
Average Annual Benefit	\$ 68,602	\$ 73,664	\$ 70,247	\$ 72,011	\$ 73,308	\$ 72,420
<u>Disabled Retirees</u>						
Number	124	118	242	117	114	231
Average Age	73.3	74.9	74.1	73.8	75.6	74.6
Average Annual Benefit	\$ 65,477	\$ 68,757	\$ 67,076	\$ 68,956	\$ 68,799	\$ 68,879
<u>Beneficiaries</u>						
Number	153	137	290	139	136	275
Average Age	81.3	83.2	82.2	80.6	83.9	82.2
Average Annual Benefit	\$ 49,101	\$ 51,798	\$ 50,375	\$ 52,291	\$ 51,846	\$ 52,071
<u>All Inactives</u>						
Number	545	384	929	516	370	886
Average Age	75.7	79.6	77.3	75.9	80.1	77.6
Average Annual Benefit	\$ 62,416	\$ 64,355	\$ 63,218	\$ 66,006	\$ 64,030	\$ 65,181

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In Memoriam

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Retiree Deaths in Fiscal Year 2017-18

Fire Department		Police Department	
Barrieau, Richard	Retiree	Anderson, James	Retiree
Brooks, Willie	Retiree	Boyles, Donald	Retiree
Calegari, Richard	Retiree	Brown, Robert	Retiree
Cohn, Gerald	Retiree	Burke, George	Retiree
Daskam, Richard	Retiree	Byron, Thomas	Retiree
Goeppert, Howard	Retiree	Davis, Lawrence	Retiree
Hendler, Howard	Retiree	Flynn, Emory	Retiree
Herschel, Donald	Retiree	Gruen, Gerald	Retiree
Hewitt, Robert	Retiree	Hanssen, William	Retiree
Hughes, Robert	Retiree	Holmes, Edward	Retiree
Johnson, Thomas	Retiree	Horne, James	Retiree
Kenton, Thomas	Retiree	Kastanos, Thomas	Retiree
Masseti, George	Retiree	Kurlinski, Jr., Joseph	Retiree
McKay, Donald	Retiree	Lear, James	Retiree
Meyer, Howard	Retiree	Lollar, James	Retiree
Morrison, George	Retiree	Sandoval, Victor	Retiree
Morton, C. Lawson	Retiree	Spencer, Roger	Retiree
Neil, Patrick	Retiree	Stewart, Murry	Retiree
O'Leary, Gerald	Retiree		
Schoenweiler, Rolf	Retiree		
Smith, Burl	Retiree		
Strawn, Joseph	Retiree		
Thompson, Steven	Retiree		



AGENDA REPORT

TO: Oakland Police and Fire
Retirement Board

FROM: David Jones
Plan Administrator

SUBJECT: Draft policy governing the overpayment
and underpayment of PFRS member
benefits

DATE: January 22, 2019

SUMMARY

Oakland Police and Fire Retirement System ("PFRS") staff request that the PFRS Board of Administration ("PFRS Board") review and provide comments to a draft policy governing the overpayment and underpayment of member retirement allowances (the "Policy").

BACKGROUND

To develop this Policy, staff researched and reviewed the bylaws, rules and regulations, and operational policies of several public pension systems including: the San Diego City Employees' Retirement System, San Joaquin County Employees' Retirement Association, San Mateo County Employees' Retirement Association, San Jose Federated Employees' Retirement System, City of Fresno Retirement System, Fresno County Employees' Retirement Association, Sacramento Regional Transit District, and Contra Costa County Employees' Retirement Association. Staff used this research, to draft a Policy to specifically address the needs and concerns of PFRS. The Policy will guide staff in the effective and efficient resolution of overpayment and underpayment of retirement allowances to members.

At the April 25, 2018 Audit Committee meeting, staff submitted for Audit Committee review the Agenda Report addressing the Draft Policy Governing Overpayment and Underpayment of Member Retirement Allowances. Following Audit Committee discussion, a motion made by Member Muszar was passed (1) to hold this matter over until the June 2018 Audit Committee meeting for further discussion and (2) to have Committee Members submit to staff written comments by June 15, 2018 in order for them to be published with the June 2018 agenda.

On April 30, 2018, staff delivered by email the DRAFT Policy Governing Overpayment and Underpayment of Member Retirement Allowances to each Board member requesting comments be returned to staff by June 13, 2018.

At the June 27, 2018 Audit Committee meeting, the Audit Committee decided that continued work on this matter would be carried over to the August 29, 2018 Audit Committee meeting for continued discussion and editing.

PFRS Board Meeting
January 30, 2019

Board of Administration, Oakland Police and Fire Retirement System

Subject: Draft policy governing the overpayment and underpayment of PFRS member benefits

Date: January 22, 2019

Page 2

At the August 29, 2018 Audit Committee meeting, the Audit Committee decided that continued work on this matter would be carried over to the next scheduled Audit Committee meeting for continued discussion and editing. However, the September 26, 2018 Audit Committee was canceled and the work on this matter was carried over to the October 31, 2018 Audit Committee meeting for continued discussion and editing.

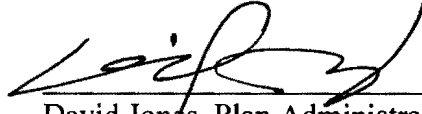
At the October 31, 2018 Audit Committee meeting, The Audit committee decided that continued work on this matter would be carried over to the next meeting when the Audit Committee will have all three committee members available to discuss this matter, which was expected to be the November 28, 2018 Audit Committee meeting.

At the November 28, 2018 Audit committee meeting, following Audit Committee discussion, Member Muszar suggested he work with staff prior to future committee discussion of the overpayment and underpayment policy to refine his suggested edits detailed in attachment 2. Upon completing these refinements, the Audit Committee would re-commence discussion on the Draft Policy Governing Overpayment and Underpayment of PFRS Member Benefits.

RECOMMENDATION

Staff recommends the PFRS Board review and provide comments to the draft Policy included as Attachment 1.

Respectfully submitted,



David Jones, Plan Administrator
Oakland Police and Fire Retirement System

Attachments (2):

1. *Draft policy governing the overpayment and underpayment of PFRS member benefits by staff.*
2. *Draft policy governing the overpayment and underpayment of PFRS member benefits – Edit version by Member Muszar*

ATTACHMENT 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT OF MEMBER RETIREMENT ALLOWANCES

I. PURPOSE

The purpose of this Policy Governing the Overpayment or Underpayment of Member ~~Benefits-Retirement Allowances~~ ("Policy") is to set forth procedures for handling the overpayment and under-payment of Retirement Allowance payments to members and beneficiaries (~~"Members"~~) of the Oakland Police and Fire Retirement System ("PFRS").

~~This Policy is designed for use when a benefit overpayment/underpayment affecting an individual or small groups of Members. The PFRS Board may implement a different correction process that it determines is appropriate under special large scale adjustments; such as court orders, charter interpretation, changes to a Memoranda of Understanding ("MOU").~~ In the event of any inconsistency between applicable law and this Policy, the law shall take precedence.

II. INTRODUCTION

The Oakland Police and Fire Retirement Board ("PFRS Board") has a fiduciary obligation to the retirement fund to conserve fund assets and protect the integrity of the fund for the benefit of all ~~members and beneficiaries ("Members") of the Oakland Police and Fire Retirement System~~ PFRS Members. ~~This duty includes maintaining the tax-qualified status of the Plan. Therefore, the PFRS Board, acting through its delegated administrative staff ("Staff"), has a duty to investigate any retirement allowance overpayments or underpayments promptly and diligently, and to recover overpayments and pay out underpayments of retirement plan benefits, unless circumstances exist that make it unreasonable to do so.~~

Members have a right to accurate and timely pension payments. Except as determined by a court of law or the PFRS Board pursuant to the Policy, no Member may receive or retain ~~benefit-retirement allowance~~ payments over the amounts to which the Member is entitled, and no Member may be deprived of ~~benefit-retirement allowance~~ payments to which the Member is entitled ~~to receive. Subject to all applicable laws, it shall be PFRS' policy to remit to a Member the amount of any underpayment of benefits, and to make every reasonable effort to recover from a Member the amount of any overpayment of benefits consistent with the Policy and the procedures established herein by the PFRS Board.~~

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
OF MEMBER RETIREMENT ALLOWANCES**

III. POLICY

It is the policy of the PFRS Board, acting through its delegated administrative staff ("Staff"), to investigate any alleged retirement allowance overpayments or underpayments promptly and diligently, and make every reasonable effort to recover overpayments and pay out underpayments of Retirement Allowances, unless the PFRS Board determines, pursuant to the terms of this Policy, that circumstances dictate otherwise.

After the discovery of an overpayment or underpayment of benefits, and after the required written notification to the affected Member, PFRS will adjust future benefit payments to the Member to reflect the correct total amount to which the Member is entitled (as indicated below). PFRS will also pay or assess the Member as appropriate for the underpayment or overpayment in a lump sum, installments, adjustments to future monthly benefit payments, or a combination of these methods to which the Members are entitled in accordance with this policy and applicable law.

Overpayment of Retirement Allowance to PFRS' Members and Beneficiaries

1. PFRS Staff will correct the Member's recurring monthly overpayment to the correct amount going forward at the earliest practical time after discovering any overpayments.
2. PFRS will take all reasonable steps to recover the full amount of all overpayments subject to the provisions of the Policy and applicable law.
3. PFRS will recover overpayments by (a) a lump sum payment from the Member, (b) periodic installment payments from the Member, or (c) offsetting the amount to be recovered against monthly benefit payments over a period of time not to exceed three years; unless the PFRS Board, in its discretion and because of legal or practical considerations, determines that another process is warranted.
4. The PFRS Board believes that considerations of cost effectiveness make it prudent and reasonable to pursue recovery of overpayments only where the cumulative total amount overpaid to the Member is \$20 or more. Accordingly, the Retirement Plan Administrator (the "Plan Administrator") is authorized to not seek recovery of any overpayments where the total amount overpaid to the Member is less than \$20.
5. The Plan Administrator shall have authority to negotiate the terms of recovering overpayments through installments, lump sums, or as offsets against monthly benefit payments for amounts below five thousand dollars (\$5,000.00). The PFRS Board must approve installment overpayment recovery agreements when the total amount of overpayment is five thousand dollars (\$5,000.00) or more. Among other things, the likelihood of collection, the cost of collection, the amount of possible recovery and documented financial hardship of the Member or Member's estate will be considered by the Plan Administrator and/or the PFRS Board when agreeing to

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
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installment recovery terms. Any forgiveness of debt above One Hundred Dollars (\$100.00) must be approved by the PFRS Board.

6. PFRS may pursue all legal remedies to collect overpayments, including making a claims against an estate or trust.
7. Upon the death of the Member before full repayment of an overpayment has been made, PFRS shall pursue a claim or claims against the Member's estate, survivors, heirs and/or beneficiaries to recover the unpaid amounts.
8. If a Member dies while making repayments to PFRS, the entire balance of the amount owed shall become due upon the Member's death and deducted from the final remittance check. Any remaining unpaid balance shall be pursued in accordance with this Policy. Overpayments due shall not be deducted from a Member's \$1,000 death benefit payment unless there is no designated qualified beneficiary. If the deceased Member has a surviving spouse who is entitled to a reduced continuation of the Member's monthly benefit, the Plan Administrator has the authority to collect a reduced monthly amount from the surviving spouse without changing the total amount owed by the deceased Member.
9. Before collecting an overpayment from the monthly retirement allowance of a Member without consent, PFRS will give at least 30-day's notice.
10. The PFRS Board adopts the following procedures for accomplishing the recovery of overpaid benefits:
 - A. **Notification of Overpayment.** Upon discovery of an overpayment, PFRS shall send a **Notice of Overpayment of Member Retirement Allowance** by certified mail, return receipt requested, or by express delivery service, to the Member advising the Member as follows:
 - i. The notice will identify the facts and circumstances of the overpayment and details showing the total amount of the overpayment.
 - ii. The notice will request payment to PFRS of the amount overpaid, subject to the provisions of the Policy.
 - iii. The notice will provide three options of repayment, one of which may be selected by the Member:
 - (1) Option 1 — lump sum payment to PFRS for the full amount overpaid. Lump sum payment must be made within 30 days of the notice.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
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- (2) Option 2 — reduction from monthly benefit payments in the amount equal to ten percent (10%) of the total overpayment, until paid back in full.
- (3) Option 3 — repayment in equal installments over the same length of time that the overpayments occurred or three years, whichever is longer. Unless a financial hardship is approved by the PFRS Board, the installment period shall not exceed 3 years.
- iv. The notice and agreement to repay excess benefits will provide that Option 2 (10%) will go into effect by default if the Member fails to choose an alternative option within 30 days following the date of the notice.
- v. The notice shall state that dispute of overpayment must be submitted in writing to the Retirement office within 30 days following the date the notice was sent. This dispute should include supporting documentation, if applicable.

Underpayment of Retirement Allowance to Members and Beneficiaries

- 1. When PFRS has underpaid Retirement Allowances, the Member shall be entitled to a prospective adjustment to his or her Retirement Allowance necessary to correct the underpayment, as well as a lump sum payment for all past underpayments. The corrective payment shall be made as soon as is reasonably practicable following PFRS's discovery of the underpayment.
- 2. If a Member who was underpaid Retirement Allowances has died prior to payment of the lump sum amount due, the following procedures will be followed:
 - A. **Deceased Member with a Qualifying Widow/Widower for Survivor's Continuance**
 - i. If a deceased Member has a qualifying widow/ widower, the payment will be made directly to that person.
 - B. **Deceased Member without a Qualifying Widow/Widower for Survivor's Continuance**
 - i. If there is an open probate (i.e., no order for final distribution has been made), payment will be made to the estate through the personal representative or other legal process provided for in the Member's state of residence.
 - ii. If final distribution of the estate has been made, PFRS will review the order for final distribution to determine how assets that were unknown at

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
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the time of final distribution are to be distributed under the order. Payment will then be made in compliance with the order for final distribution, if possible.

- iii. If the Member's estate passed into an intervivos trust, the underpayment may be made to the Trustee after satisfactory inspection of trust documents.
 - iv. If probate was not established, distribution will be made in accordance with any applicable and valid Affidavit for Payment of Personal Property pursuant to California Probate Code Section 13101 or other legal process provided for in the Member's state of residence.
 - v. PFRS staff shall make reasonable efforts to locate the beneficiary entitled to payment by sending a letter by certified mail, return receipt requested, to the last known address of each such beneficiary, or by other means of similar intended effect.
 - vi. If, after taking the above steps, PFRS staff has not been able locate a beneficiary entitled to payment, PFRS shall hold the funds on behalf of that beneficiary for five years. If the funds are not claimed within five years, the funds may be transferred into the PFRS reserve fund. If a beneficiary later appears to claim the funds, the PFRS Board will consider such claims on a case-by-case basis.
3. Underpayments of \$20 or less will only be paid at the request of the Member.

IV. Periodic Review

- 1. Review of this Policy will be conducted by the Audit and Operations Committee not less than every three years.

The Policy governing the overpayment or underpayment of Member benefits of the Oakland Police and Fire Retirement System is hereby approved by vote of the Retirement Board, effective

<DATE>

WALTER L. JOHNSON, SR.
PRESIDENT
OAKLAND POLICE & FIRE RETIREMENT SYSTEM BOARD

~~KATANO KASAI~~ DAVID JONES
SECRETARY
OAKLAND POLICE & FIRE RETIREMENT SYSTEM BOARD

ATTACHMENT 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT OF MEMBER RETIREMENT ALLOWANCES

I. PURPOSE

The purpose of this Policy Governing the Overpayment or Underpayment of Member ~~Benefit Retirement Allowances~~ ("Policy") is to set forth procedures for handling the overpayment and ~~under payment~~ underpayment of Retirement Allowance payments to members and beneficiaries ("~~Members~~") of the Oakland Police and Fire Retirement System ("PFRS").

~~This Policy is designed for use when a benefit Retirement Allowance overpayment/underpayment affecting affects an individual or a small groups of Members. The PFRS Board may implement a different correction process that it determines is appropriate under special whenever large scale adjustments; such as court orders, charter interpretation, changes to a Memoranda of Understanding ("MOU") are necessitated by this Policy. For the purposes of this Policy, a large scale adjustment is an adjustment affecting twenty (20) or more Members.~~

In the event of any inconsistency between applicable law, ~~including any applicable statutes of limitations,~~ and this Policy, the law shall take precedence.

II. INTRODUCTION

The Oakland Police and Fire Retirement Board ("PFRS Board") has a fiduciary obligation to the retirement fund to conserve fund assets and protect the integrity of the fund for the benefit of all ~~PFRS members and beneficiaries ("Members") of the Oakland Police and Fire Retirement System. This duty includes maintaining the tax-qualified status of the Plan. Therefore, the PFRS Board, acting through its delegated administrative staff ("Staff"), has a duty to investigate any retirement allowance overpayments or underpayments promptly and diligently, and to recover overpayments and pay out underpayments of retirement plan benefits, unless circumstances exist that make it unreasonable to do so.~~

Members have a right to accurate and timely pension payments. Except as determined by a court of law or the PFRS Board pursuant to the Policy, no Member may receive or retain ~~benefit Retirement Allowance~~ payments over the amounts to which the Member is entitled, and no Member may be deprived of ~~benefit Retirement Allowance~~ payments to which the Member is entitled to receive. ~~Subject to all applicable laws, it shall be PFRS' policy to remit to a Member the amount of any underpayment of benefits, and to make every reasonable effort to recover from a Member the amount of any overpayment of benefits consistent with the Policy and the procedures established herein by the PFRS Board.~~

Commented [b1]: Changed to be consistent with the title of the Policy.

Commented [b2]: Simply making the abbreviated reference the first time the reference is made.

Commented [b3]: Hopefully changed thruout the doucument for consistency.

Commented [b4]: Thought it might be a good idea to define "large scale".

Commented [b5]: I believe in most cases that would be 3 years, which I believe is reasonably consistent with past practices.

Commented [b6]: Perhaps we should consider placing the Introduction before Purpose.

Commented [b7]: Reference to tax status seemed out of place and unnecessary.

Commented [b8]: Relocated and joined with other language to draft a revised stand-alone Policy statement.

Commented [b9]: Addressed in revised Policy Statement.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
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III. POLICY

~~Therefore, It is the policy of the PFRS Board, acting through its delegated administrative staff ("Staff"), has a duty to investigate any alleged retirement allowance overpayments or underpayments promptly and diligently, and, consistent with any applicable statutes of limitations, to make every reasonable effort to recover overpayments and pay out underpayments of Retirement-plan benefits Allowances, unless the PFRS Board determines, pursuant to the terms of this Policy, that circumstances exist that make it unreasonable to do so dictate otherwise.~~

IV. PROCEDURES

A. Notice

Upon discovery of an overpayment or underpayment, PFRS shall send a **Notice of Overpayment (or Underpayment) of Member Retirement Allowance** ("Notice" or "Notification") by certified mail, return receipt requested, or by express delivery service, to each affected Member. The Notice shall provide the information specified in either Section A1 or Section A2 below, as appropriate.

1. Notice of Underpayment of Member Retirement Allowance

The Notice of Underpayment of Member Retirement Allowance will advise the Member as follows:

- a. The facts and circumstances of the underpayment including details showing the total amount of the underpayment and how those amounts were determined.
- b. If applicable, a detailed description of any prospective corrections to be made and the effective date of such corrections.
- c. The amount, method of payment and timing of any back-payment due to the Member.
- d. The Member's right to appeal and the procedures for filing an appeal provided that the Member shall be given a minimum of thirty (30) days to file. The Notice will inform the Member that an appeal will not stay prospective corrections and that it may delay the payment of back-pay awards.

2. Notice of Overpayment of Member Retirement Allowance

The Notice of Overpayment of Member Retirement Allowance will advise the Member as follows:

Commented [b10]: The purpose here is to create a Policy statement that stands alone and is not mixed in with other drafting.

Commented [b11]: Most of what was in the Policy Section actually amounted to procedures.

Commented [b12]: My goal was to have the Policy flow from start to finish – Notice, Prospective Corrections, Retroactive Recoveries, Misc. stuff.

Commented [b13]: I thought it might be good to address the question of stays in the Policy.

Commented [LD14]: Part IV(A)(2) was moved AND edited by Member Muszar.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
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- a. The facts and circumstances of the overpayment including details showing the total amount of the overpayment and how those amounts were determined.
- b. If applicable, a detailed description any prospective corrections to be made and the effective date of such corrections.
- c. That the full amount of the overpayment must be repaid to PFRS through selection of one of the following options:
 - (1) Option 1 — lump sum payment to PFRS for the full amount overpaid. Lump sum payment must be made within 30 days of the Notice.
 - (2) Option 2 — reduction from monthly benefit payments in the amount equal to ten percent (10%) of the total overpayment, not to exceed ten percent (10%) of the Member's monthly Retirement Allowance, until paid back in full.
 - (3) Option 3 — repayment in equal installments over the same length of time that the overpayments occurred or three years, whichever is longer.
- d. That Option 2 (10%) will go into effect by default if the Member fails to choose an alternative option within 30 days following the date of the Notice.
- e. The procedures by which the Member may claim and apply for a financial hardship and/or negotiate an alternative repayment plan pursuant to the terms of the Policy.
- f. The Member's right to appeal and the procedures for filing an appeal provided that the Member shall be given a minimum of thirty (30) days to file. The Notice will inform the Member that an appeal will not stay prospective corrections and that collection of amounts owed will be stayed for a maximum of ninety (90) days pending the processing of the appeal.

B. Prospective Corrections

After the discovery and verification of an overpayment or underpayment of ~~benefits~~ Retirement Allowances, and after the required ~~written notification~~ Notification to the affected Member(s), PFRS will adjust future benefit payments to the Member to reflect the correct total amount to which the Member is entitled (as indicated below). Prospective corrections will be implemented at the earliest possible time but no earlier than fifteen (15) days following the date of Notice. ~~PFRS will also pay or assess the Member as appropriate~~

Commented [b15]: I was concerned that 10% of the total amount owed could exceed 10% of the Retirement Allowance. I think a 10% reduction is probably the most we should require people to absorb.

Commented [b16]: The Policy authorizes the Plan Administrator to negotiate. Members should be noticed that this is available to them.

Commented [b17]: This provides time to make whatever banking adjustments that might be required if the Retirement Allowance is reduced prospectively.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT OF MEMBER RETIREMENT ALLOWANCES

for the underpayment or overpayment in a lump sum, installments, adjustments to future monthly benefit payments, or a combination of these methods to which the Members are entitled in accordance with this policy and applicable law.

A.C. Collection of Overpayments of Retirement Allowance to PFRS' Members and Beneficiaries

PFRS Staff will correct the Member's recurring monthly overpayment to the correct amount going forward at the earliest practical time after discovering any overpayments.

1. Except as provided below, PFRS will take all reasonable steps to recover the full amount of all overpayments subject to the provisions of the Policy and applicable law.
2. Unless the PFRS Board, in its discretion and because of legal or practical considerations, determines otherwise PFRS will recover overpayments by one of the following methods: (a) a lump sum payment from the Member; (b) periodic installment payments from the Member deduction from the monthly Retirement Allowance in the amount equal to ten percent (10%) of the total overpayment, not to exceed ten percent (10%) of the Member's monthly Retirement Allowance, until paid back in full; or, (c) offsetting the amount to be recovered against monthly benefit payments over a period of time not to exceed three years; unless the PFRS Board, in its discretion and because of legal or practical considerations, determines that another process is warranted.
3. The PFRS Board believes has determined that considerations of cost effectiveness make it prudent and reasonable to pursue recovery of overpayments only where the cumulative total amount overpaid to the Member is ~~\$20 fifty dollars (\$50.00)~~ or more. Accordingly, the Retirement Plan Administrator (the "Plan Administrator") is authorized to ~~not seek recovery of any write-off~~ overpayments where the total amount overpaid to the Member is less than ~~\$20 fifty dollars (\$50)~~.
4. In addition to the options identified in Section IV A. 2. and IV B 2 of this Policy, ~~the Plan Administrator shall have authority to negotiate/re negotiate and approve the alternative terms of recovering for the recovery of overpayments through installments, lump sums, or as offsets against monthly benefit payments for amounts when the amount of the overpayment is below five thousand dollars (\$5,000.00). The Subject to PFRS Board approval, the Plan Administrator may negotiate alternative terms for the recovery of overpayments must approve installment overpayment recovery agreements~~ when the total amount of overpayment is five thousand dollars (\$5,000.00) or more. Among other things, the likelihood of collection, the cost of collection, the amount of possible recovery and documented financial hardship of the Member or Member's estate will be considered by the Plan Administrator and/or the PFRS Board when agreeing to ~~alternative installment recovery terms. The Plan Administrator shall have the authority to forgive up to one hundred dollars (\$100.00) of any amount owed. Any forgiveness of debt amounts~~

Commented [b18]: The original language was not very distinguishable from Option C. This spells it out.

Commented [b19]: I think \$20 was too low. I would be comfortable going to \$100.

Commented [b20]: This probably needs to be developed a little further but I am attempting to give the Plan Administrator the authority to renegotiate terms of payment when a justifiable change in circumstances occurs. For example, a financial hardship could occur after a payment plan is in place.

Also, maybe we should state somewhere that a Member can always pay off what is owed at any time.

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~~owed~~ above ~~One-one Hundred Dollars-dollars~~ (\$100.00) must be approved by the PFRS Board.

5. PFRS may pursue all legal remedies to collect overpayments, including making a claims against ~~an the Member's~~ estate or trust.
6. ~~Upon the death of the Member before full repayment of an overpayment has been made, PFRS shall pursue a claim or claims against the Member's estate, survivors, heirs and/or beneficiaries to recover the unpaid amounts.~~
7. If a Member dies while making repayments to PFRS, ~~and there is no surviving spouse who is eligible for a continuing Retirement Allowance,~~ the entire balance of the amount owed shall become due upon the Member's death and ~~will be~~ deducted from the final remittance check ~~if the check has not already been issued and deposited into the deceased Member's account.~~ Any remaining unpaid balance shall be pursued in accordance with this Policy ~~as a claim against the deceased Member's estate.~~ Overpayments due shall ~~not~~ be deducted from a Member's \$1,000 death benefit payment ~~unless there is no designated qualified beneficiary.~~
8. If the deceased Member has a surviving spouse who is entitled to a ~~reduced-full~~ continuation of the Member's monthly ~~benefit~~ Retirement Allowance, ~~the balance owed at the time of the Member's death will be collected from future Retirement Allowance payments at the same rate and on the same schedule as was in place at the time of the Member's death. When the surviving spouse is entitled to a reduced Retirement Allowance,~~ the Plan Administrator has the authority to collect a reduced monthly amount from the surviving spouse without changing the total amount owed by the deceased Member; ~~provided that the amount collected shall be reduced by at least the same percentage that the monthly Retirement Allowance was reduced.;~~
9. ~~Before collecting an overpayment from the monthly retirement allowance of a Member without consent, PFRS will give at least 30 day's notice.~~
10. The PFRS Board adopts the following procedures for accomplishing the recovery of overpaid benefits:

~~Notification of Overpayment.~~ Upon discovery of an overpayment, PFRS shall send a ~~Notice of Overpayment of Member Retirement Allowance~~ by certified mail, return receipt requested, or by express delivery service, to the Member advising the Member as follows:

- a. ~~The notice will identify the facts and circumstances of the overpayment and details showing the total amount of the overpayment.~~
- b. ~~The notice will request payment to PFRS of the amount overpaid, subject to the provisions of the Policy.~~

Commented [b21]: This seemed somewhat redundant with the following sections. I am not comfortable with inclusion of the word "survivors".

Commented [b22]: I am opposed to the practice of backing money out of accounts once it has been deposited.

Commented [b23]: Notice requirements moved into another section.

Commented [LD24]: This Section moved to Part IV(A)(2) and edited by Member Muszar.

Formatted

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
OF MEMBER RETIREMENT ALLOWANCES**

c. ~~The notice will provide three options of repayment, one of which may be selected by the Member.~~

(1) ~~Option 1 — lump sum payment to PFRS for the full amount overpaid. Lump sum payment must be made within 30 days of the notice.~~

(2) ~~Option 2 — reduction from monthly benefit payments in the amount equal to ten percent (10%) of the total overpayment, until paid back in full.~~

(3) ~~Option 3 — repayment in equal installments over the same length of time that the overpayments occurred or three years, whichever is longer. Unless a financial hardship is approved by the PFRS Board, the installment period shall not exceed 3 years.~~

d. ~~The notice and agreement to repay excess benefits will provide that Option 2 (10%) will go into effect by default if the Member fails to choose an alternative option within 30 days following the date of the notice.~~

e. ~~The notice shall state that dispute of overpayment must be submitted in writing to the Retirement office within 30 days following the date the notice was sent. This dispute should include supporting documentation, if applicable.~~

Commented [b25]: This is the only place in the Policy where an "agreement to repay" is mentioned. I agree, that having an agreement to repay is a good idea but it needs to be fleshed out a little. For example, Option 2 is the default option. How would we handle it when Option 2 went into play by default?

D. Payment of Underpayment of Retirement Allowance to Members and Beneficiaries

When PFRS has underpaid Retirement Allowances, the Member shall be entitled to a prospective adjustment to his or her Retirement Allowance necessary to correct the underpayment, as well as a lump sum payment for all past underpayments. The corrective payment shall be made as soon as is reasonably practicable following PFRS's discovery of the underpayment and Notice to the Member(s).

1. If a Member who was underpaid Retirement Allowances has died prior to payment of the lump sum amount due, the following procedures will be followed:

A. Deceased Member with a Qualifying ~~Widow/Widower~~Spouse for Survivor's Continuance

If a deceased Member has a qualifying ~~widow/widowerspouse~~, the Notice required by Section IV A of this Policy will be provided to the qualifying spouse. Future Retirement Allowance payments will be appropriately adjusted and the lump-sum payment of past underpayments will be made directly to that person/the qualified spouse.

B. A. Deceased Member without a Qualifying ~~Widow/Widower~~Spouse for Survivor's Continuance

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
OF MEMBER RETIREMENT ALLOWANCES**

- i. If the deceased Member does not have a qualifying spouse and there is an open probate (i.e., no order for final distribution has been made), payment will be made to the estate through the personal representative or other legal process provided for in the Member's state of residence. The Notice required by Section IV A of this Policy will be forwarded to the executor of the estate or probate referee, whichever is appropriate.
 - ii. If final distribution of the estate has been made, PFRS will review the order for final distribution to determine how assets that were unknown at the time of final distribution are to be distributed under the order. Notice and Payment will then be made in compliance with the order for final distribution, if possible.
 - iii. If the Member's estate passed into an intervivos- inter-vivos trust (living trust), Notice and the underpayment may be made to the Trustee after satisfactory inspection of trust documents.
 - iv. If probate was not established, Notice and distribution will be made in accordance with any applicable and valid Affidavit for Payment of Personal Property pursuant to California Probate Code Section 13101 or other legal process provided for in the Member's state of residence.
 - v. PFRS staff shall make reasonable efforts to locate the beneficiary entitled to payment by sending a letter by certified mail, return receipt requested, to the last known address of each such beneficiary, or by other means of similar intended effect.
 - vi. If, after taking the above steps, PFRS staff has not been able locate a beneficiary entitled to payment, PFRS shall hold the funds on behalf of that beneficiary for five years. If the funds are not claimed within five years, the funds may be transferred into the PFRS reserve fund. If a beneficiary later appears to claim the funds, the PFRS Board will consider such claims on a case-by-case basis.
2. Total Underpayments-underpayments of \$20 fifty dollars (\$50.00) or less will only be paid at the request of the Member.

V. Processing of Appeals

Appeals filed pursuant to this Policy which cannot be resolved informally, will be processed in accordance with Section 2603 of the City Charter and any procedures adopted by the PFRS Board for the conduct of such hearings.

~~V.~~ VI. Periodic Review

Commented [b26]: What if there is no estate, as can be the case for property held jointly with right of survivorship? Should we have a paragraph to address circumstances where there is no estate?.

Commented [b27]: Does this cover my question at b23?

Commented [b28]: This almost reads like an escrow account of some sort. Is that really necessary? Is there an easier way to account for the funds?

Commented [b29]: I would be comfortable going as high as \$100.

Commented [b30]: I think 2603 applies here as the action would amount to an individual "claim".

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
POLICY GOVERNING THE OVERPAYMENT OR UNDERPAYMENT
OF MEMBER RETIREMENT ALLOWANCES**

1. Review of this Policy will be conducted by the Audit and Operations Committee not less than every three years.
-

The Policy ~~governing~~Governing the ~~overpayment~~Overpayment or ~~Underpayment~~ of Member ~~benefits~~Retirement Allowances of the Oakland Police and Fire Retirement System is hereby approved by vote of the Retirement Board, effective <DATE>.

WALTER L. JOHNSON, SR.
PRESIDENT
OAKLAND POLICE & FIRE RETIREMENT SYSTEM BOARD

~~KATANO KASAI~~ DAVID JONES
SECRETARY
OAKLAND POLICE & FIRE RETIREMENT SYSTEM BOARD

Commented [b31]: General Comments: I would like to see us adopt a standardized formatting and numbering system for Board Policies. If not already there, I believe that Board Policies should be posted to the PFRS web page.

I would like to thank Staff for the work they put into this – it represents a very solid effort with a complicated and sensitive topic.

I also would like to thank Staff and the members of the Audit Committee for providing this opportunity for written comment.

bob muszar



MEMORANDUM

TO: Oakland Police & Fire
Retirement Board

FROM: David Jones

SUBJECT: Authorization and
Reimbursement of Board/Staff
Travel/Education Expenses

DATE: January 22, 2019

R. Steven Wilkinson, Board member of the Oakland Police and Fire Retirement System board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Board member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel / Education Event: 2018 Markets Group 6th Annual CA Institutional Forum

Event Location: The Lodge at Sonoma, Sonoma, CA

Event Date: December 5, 2018

Estimated Event Expense*: \$ 77.00 (estimated)

Notes: Approval prior to travel authorized by President Johnson.

- * If enrollment, registration or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the traveling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

For questions please contact David Low, Administrative Assistant, at 510-238-7295.

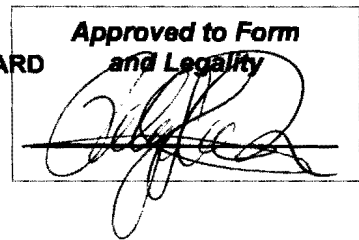
Attachments (if any):

Resolution #7037

2018 Markets Group 6th Annual CA Institutional Forum Agenda

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7037



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

TRAVEL AUTHORIZATION FOR PFRS BOARD MEMBER R. STEVEN WILKINSON FOR ATTENDANCE AT THE 2018 MARKETS GROUP CALIFORNIA INSTITUTIONAL FORUM CONFERENCE ("2018 MARKETS GROUP CONFERENCE") ON DECEMBER 5, 2018 IN SONOMA, CA WITH AN ESTIMATED BUDGET OF SEVENTY-SEVEN DOLLARS (\$77.00)

WHEREAS, PFRS Board Member R. Steven Wilkinson wished to attend the 2018 Markets Group Conference in Sonoma, CA on December 5, 2018; and

WHEREAS, in compliance with Section IV.(2)(c) the Education and Travel Policy, PFRS Board Member Wilkinson has received advanced approval from PFRS Board President Johnson to attend this conference prior to PFRS Board approval; and

WHEREAS, PFRS Board Member Wilkinson seeks reimbursement of expenses from the Board; and

WHEREAS, in compliance with the Education and Travel Policy, the Board/Staff Member has presented costs for travel, lodging and/or registration fees for the 2018 Markets Group Conference in the amount of approximately \$77.00; and

WHEREAS, PFRS Board Member Wilkinson seeks Board approval of the aforementioned estimated costs to attend the 2018 Markets Group Conference on December 5, 2018; now, therefore, be it

RESOLVED: PFRS Board Member R. Steven Wilkinson's travel request and estimated budget of \$77.00 to attend the 2018 Markets Group Conference is hereby approved.

IN BOARD MEETING, CITY HALL, OAKLAND, CA JANUARY 30, 2019

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, KASAIN, MELIA, MUSZAR, SPEAKMAN, AND PRESIDENT JOHNSON

NOES:

ABSTAIN: WILKINSON

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY



6th Annual California Institutional Forum

*An Annual Meeting of the Regional Institutional Investor Community – Wednesday December 5th, 2018
The Lodge at Sonoma Renaissance Resort & Spa, 1325 Broadway at Leveroni & Napa Roads, Sonoma, CA 95476*

DESIGNED FOR:

Pensions, Endowments, Foundations, Hospital Plans, Insurance Companies & Investment Consultants

2018 PROGRAM CONTRIBUTORS

Betty Yee, State Controller, **California**

Rob Feckner, Vice President, **CalPERS Board of Administration**

Travis Antoniono, Investment Officer, Corporate Governance, **California State Teachers' Retirement System**

John Ritter, Managing Director of Real Assets, **University of California**

Liza Crisafi, Chief Investment Officer, **San Diego City Employees' Retirement System**

David Franci, Managing Director, Absolute Return, **San Francisco Employees' Retirement System**

James McCallum, Chief Financial Officer, **Sacramento Region Community Foundation**

Gary Dokes, Chief Investment Officer, **Arizona Community Foundation**

David Hunter, Executive Director, Chief Investment Officer, **North Dakota Retirement & Investment Office**

Steve Algert, Managing Director and Assistant Treasurer, **The J. Paul Getty Trust**

Stephen Marshall, Director, Head of Asset Allocation, **Beacon Pointe Advisors**

Ryan Lobdell, Senior Vice President, **Pension Consulting Alliance**

Mary Lehmann, Vice President, Finance & Treasurer, **Amgen**

Don Stracke, Senior Consultant, **NEPC**

Stacy Lewis Daher, Associate Vice President of Finance & Treasury, **University of San Francisco**

Bob Maynard, Chief Investment Officer, **Public Employees' Retirement System of Idaho**

Paul Erlendson, Senior Vice President, **Callan LLC**

Eileen Neill, Managing Director, Senior Consultant, **Verus**

Carl Ludwigson, Director of Manager Research, **Bel Air Investment Advisors**

Stacy Jennings, Assistant Vice President of Investments, **Intermountain Healthcare**

Maggie Ralbovsky, Managing Director, **Wilshire Associates**

Mark White, Head of Real Assets, **Albourne Partners**

Shane Carson, State Investment Officer, **Alaska Retirement Management Board**

Mika Malone, Managing Principal, **Meketa Investment Group**

Suneel Kaji, Director and Co-Head of Emerging Markets, **UTIMCO**

Max Giolitti, Chief Risk Officer, **Verus**

2018 CONTRIBUTING PARTNERS

Allianz Global Investors | Nuveen Asset Management | ClearBridge Investments | ArrowMark Partners
RBC Global Asset Management and BlueBay | Vontobel Asset Management | Morgan Stanley Investment Management
Capital Fund Management | HSBC Global Asset Management | Putnam Investments
Nikko Asset Management | Credit Suisse Asset Management | Jane Street



7:30 Registration & Welcome Coffee

8:00 Breakfast Workshop: Can Institutional Investors Get Downside Protection in Volatile Markets While Receiving Stable Returns, Lower Management Fees and The Benefits of Higher Liquidity & Transparency?

Join us in exploring the rise of Alternative Risk Premia strategies, the benefits as well as the challenges of an allocation to the asset class. The discussion will touch on the evolution of the product universe, important differentiators among strategies and how to justify shifting an allocation from pure growth assets for the benefit of limiting and managing risk.

Presenter:

Jean-Charles Bertrand, Head of Multi-Asset, **HSBC Global Asset Management**

8:30 Welcome Remarks

Organizer: **Kari Walkley**, Program Manager, **Markets Group**

Honorary Chairman: **Rob Feckner**, Vice President, **CalPERS Board of Administration**

Welcome Keynote Address: **Betty Yee**, State Controller, **California**

Co-Chairperson: **Joel Damon**, Director, Senior Relationship Manager, **Allianz Global Investors**

Co-Chairperson: **Amanda Montgomery**, Director, Senior Relationship Manager, **Allianz Global Investors**

8:40 Panel: Macro Outlook and Global Asset Allocation

This year, the biggest investment-market uncertainties appear to revolve around political factors, such as the extent of policy shifts under new administrations in many countries, the effectiveness of fiscal stimuli, and more referendums and elections in the Eurozone. One hope among investors is that a global growth environment emerges, with a reasonably positive outlook for corporate profitability, a strong but relatively predictable U.S. dollar, and stabilized oil and other commodity prices. This panel will address these and other factors that could affect investors' global asset allocation decisions.

Moderator:

Stephen Marshall, Director, Head of Asset Allocation, **Beacon Pointe Advisors**

Panelists:

Bob Maynard, Chief Investment Officer, **Public Employees' Retirement System of Idaho**

Stacy Lewis Daher, Associate Vice President of Finance & Treasury, **University of San Francisco**

David Wilson, Managing Director, Head of Taxable Fixed Income Client Portfolio Management, **Nuveen Asset Management**

9:20 Panel: ESG Now and Then: Recent Trends in ESG Implementation

The ESG discussion is rapidly evolving as are the techniques for incorporating ESG analytics and factors into the portfolio construction process. This workshop will explore how investors are assessing ESG's longer-term material impacts and how they are positioning their portfolios to avoid these potential risks. The workshop will also examine specific strategies investors are using to address and integrate ESG issues in systematic value and multi-factor-based frameworks.

Moderator:

Maggie Ralbovsky, Managing Director, **Wilshire Associates**

Panelists:

Travis Antoniono, Investment Officer, Corporate Governance, **California State Teachers' Retirement System**

Grace Su, Managing Director, Portfolio Manager, **ClearBridge Investments**

10:00 Panel: An Evolving World for Alternative Credit

Following the global financial crisis, a low-rate environment has forced investors to rethink asset allocation in order to meet their portfolio objectives. This prolonged market condition has put particular stress on traditional credit and fixed income instruments that have historically played a critical role in portfolios. Further, hedge fund strategies employed to provide diversification and non-correlation have struggled to deliver. These dynamics are leading investors to increasingly embrace alternative credit strategies that look to take advantage of more complex, and often less liquid, opportunities. The panelists will seek to define the various segments within alternative credit, to highlight several key characteristics of these strategies, and to discuss real-time examples of opportunities in today's market.

Moderator:

Eileen Neill, Managing Director, Senior Consultant, **Verus**

Panelists:

Steve Alget, Managing Director and Assistant Treasurer, **The J. Paul Getty Trust**

Suneel Kaji, Director and Co-Head of Emerging Markets, **UTIMCO**

Tim Beresford, Client Portfolio Manager, **ArrowMark Partners**

10:40 Morning Coffee Break**10:55 Panel: Opportunistic Alternative Investments**

In an environment where investors are starved for returns, where can institutions turn to find alternatives that generate meaningful risk-adjusted returns? What's the role of private debt within a diversified portfolio and what are the best opportunities across infrastructure, real estate, commodities, hedge funds and private equity? These are real, important questions—not rhetorical ones—that this panel discussion will attack.

Moderator:

Carl Ludwigson, Director of Manager Research, **Bel Air Investment Advisors**

Panelists:

David Hunter, Executive Director, Chief Investment Officer, **North Dakota Retirement & Investment Office**

David Franci, Managing Director, Absolute Return, **San Francisco Employees' Retirement System**

Tim Leary, Portfolio Manager, **BlueBay Asset Management**

11:35 Interview: Tips for Resilient Decision Making in a VUCA World

Volatility, Uncertainty, Complexity and Ambiguity (VUCA) can cause lasting damage to high risk operations such as nuclear power stations or airlines if management systems fail. The resilient management of high reliability organizations has evolved to keep damage from inevitable problems to a minimum. In investment management avoidable losses permanently damage capital. Resilient portfolio management aims to minimize avoidable losses while delivering growth. This presentation will share some fundamental insights that have evolved over 25 years of quality growth investing.

Interviewer:

Mika Malone, Managing Principal, **Meketa Investment Group**

Interviewee:

Sudhir Roc-Sennett, Executive Director, Senior Portfolio Adviser, **Vontobel Asset Management**

12:05 Networking Luncheon Hosted by: Credit Suisse Asset Management

In the format of roundtables, small discussion groups are formed by topic. This is your opportunity to interact with some of our star speakers of the day, ask questions, and make connections.

Table 1 - Fixed Income Risks, What Asset Allocators Should Consider That Isn't Commonly Found in a Textbook Hosted by: Allianz Global Investors

Table 2 - Macro Outlook and Global Asset Allocation Hosted by: Nuveen Asset Management

Table 3 - Can Institutional Investors Get Downside Protection in Volatile Markets While Receiving Stable Returns, Lower Management Fees and The Benefits of Higher Liquidity & Transparency? Hosted by: HSBC Global Asset Management

Table 4 - ESG Now and Then: Recent Trends in ESG Implementation Hosted by: ClearBridge Investments

Table 5 - An Evolving World for Alternative Credit Hosted by: ArrowMark Partners

Table 6 - Opportunistic Alternative Investments Hosted by: RBC Global Asset Management / BlueBay Asset Management

Table 7 - Tips for Resilient Decision Making in a VUCA World Hosted by: Vontobel Asset Management

Table 8 - How to Create Value in a Competitive Infrastructure Environment Hosted by: Morgan Stanley Investment Management

Table 9 - Alternative Beta: Opportunities for Diversifying Returns in Portfolios Hosted by: Capital Fund Management

Table 10 - Emerging Markets: Relevancy and Value in Today's Markets Hosted by: Putnam Investments

Table 11 - China: The Great Disruptor of Our Time Hosted by: Nikko Asset Management

1:05 Presentation: Fixed Income Risks, What Asset Allocators Should Consider That Isn't Commonly Found in a Textbook

Evaluating the real risks in a fixed income portfolio has always been a challenging endeavor. Is it interest rate risk, credit risk or liquidity risk that is moving the value of portfolio up or down? Is it worth paying for active management or will simply trying to invest in a fixed income benchmark at a rock bottom fee accomplish the same portfolio objective? As central banking policy evolves from quantitative easing to quantitative tightening, seeking the right solutions may lead to significant performance dispersion depending on the true risk that either an active manager or a benchmark is taking.

Presenter:

Jim Dudnick, Director, Portfolio Manager, **Allianz Global Investors**

1:40 Panel: Alternative Beta: Opportunities for Diversifying Returns in Portfolios

Defining "Alternative Beta" and the potential diversification benefits it can bring to an investor's portfolio through persistent return streams that are uncorrelated to equity and fixed-income beta. The panel will discuss what distinguishes these strategies from "Beta" and "Alpha.", and will demystify some of these strategies, which include trend following, equity market neutral (quality, value, momentum), short volatility, carry and credit.

Moderator:

Ryan Lobdell, Senior Vice President, **Pension Consulting Alliance**

Panelists:

Gaurang Shah, Director of Investor Relations, **Capital Fund Management**

Max Giolitti, Chief Risk Officer, **Verus**

2:20 Panel: How to Create Value in a Competitive Infrastructure Environment

Depending on the structure of your portfolio, risk preference and subjective attitude towards infrastructure, 5-10% of total funds may be dedicated to the asset class. How should investors choose the appropriate infrastructure projects for their portfolios? Where can investors look outside the box for attractive infrastructure investment opportunities beyond core markets and sectors, while providing appropriate returns for the risk being taken?

Moderator:

James McCallum, Chief Financial Officer, **Sacramento Region Community Foundation**

Panelists:

John Ritter, Managing Director of Real Assets, **University of California**

Mark White, Head of Real Assets, **Albourne Partners**

Andrew Medvedev, Managing Director of Americas, **Morgan Stanley Investment Management**

3:00 Afternoon Coffee Break



3:15 Panel: Emerging Markets: Relevancy and Value in Today's Markets?

After several challenging years, emerging markets equities and debt have done well over the past year. Geopolitical issues, multiple Fed rate hikes and the increasingly likelihood of an unwinding of monetary accommodation by the ECB have led to increased uncertainty around whether the EM rally can continue. These and other factors have raised the question: Are EM equities and debt still relevant and deserving of a meaningful allocation in a long-term, well diversified portfolio? This, and other important questions about the class, will be answered.

Moderator:

Don Stracke, Senior Consultant, **NEPC**

Panelists:

Mary Lehmann, Vice President, Finance & Treasurer, **Amgen**

Stacy Jennings, Assistant Vice President of Investments, **Intermountain Healthcare**

Daniel Grana, Portfolio Manager, **Putnam Investments**

3:55 Interview: China: The Great Disruptor of Our Time

This session will delve into how China has effectively replaced the US as the primary source of demand growth - not just for investment but increasing consumption, and will soon become the second largest stock market in capitalization. Combined, China and Japan will become the next two most important decisions around risk and return in equity portfolios behind the US. Furthermore, Japan is mobilizing with renewed investment in Asia and industries accessing the China consumer, and changes in governance and transparency are reinvigorating investor enthusiasm and valuations. How can investors navigate these two markets in their portfolios as China comes online?

Interviewer:

Shane Carson, State Investment Officer, **Alaska Retirement Management Board**

Interviewee:

Eng Teck Tan, Senior Portfolio Manager, **Nikko Asset Management**

4:25 Chief Investment Officer Roundtable

Chief Investment Officers constantly face unique sets of challenges and investing environments. In this discussion, chief investment officers will focus on the key investment and management issues facing their funds, along with what they consider to be their plans' "best ideas" with regard to investment strategy. They will speak to what are the best performing asset allocations they have made this year, what a successful allocation looks like, and how they are identifying these investments.

Moderator:

Paul Erlendson, Senior Vice President, **Callan LLC**

Panelists:

Liza Crisafi, Chief Investment Officer, **San Diego City Employees' Retirement System**

Gary Dokes, Chief Investment Officer, **Arizona Community Foundation**

Bob Maynard, Chief Investment Officer, **Public Employees' Retirement System of Idaho**

5:05 Co-Chairperson's Closing Remarks

Joel Damon, Director, Senior Relationship Manager, **Allianz Global Investors**

Amanda Montgomery, Director, Senior Relationship Manager, **Allianz Global Investors**

5:10 Networking Cocktail Hosted by: Jane Street

6:00 Invitation-Only Dinner Hosted by: Allianz Global Investors



MEMORANDUM

TO: Oakland Police & Fire Retirement Board
FROM: David Jones
SUBJECT: Authorization and Reimbursement of Board/Staff Travel/Education Expenses
DATE: January 22, 2019

Martin Melia, Board member of the Oakland Police and Fire Retirement System board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Board member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel / Education Event: 2019 Pension Bridge Conference

Event Location: Westin St Francis Hotel, San Francisco, CA

Event Date: April 9, 2019 - April 10, 2019

Estimated Event Expense*: \$ 290.00 (estimated)

Notes: _____

* If enrollment, registration or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the traveling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

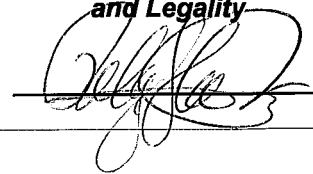
For questions please contact David Low, Administrative Assistant, at 510-238-7295.

Attachments (if any):
Resolution #7038
2019 Pension Bridge Agenda

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7038

Approved to Form
and Legality



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

TRAVEL AUTHORIZATION FOR PFRS BOARD MEMBER MARTIN MELIA TO TRAVEL AND ATTEND THE 2019 PENSION BRIDGE CONFERENCE ("PENSION BRIDGE CONFERENCE") FROM APRIL 9, 2019 TO APRIL 10, 2019 IN SAN FRANCISCO, CA WITH AN ESTIMATED BUDGET OF TWO HUNDRED NINETY DOLLARS (\$290.00)

WHEREAS, PFRS Board Member Martin Melia wishes to attend the Pension Bridge Conference in San Francisco, CA from April 9, 2019 to April 10, 2019; and

WHEREAS, PFRS Board Member Melia is expected to seek reimbursement of expenses from the Board; and

WHEREAS, in compliance with the Education and Board Travel Policy, which requires that PFRS Board/Staff Members seek PFRS Board approval prior to travel; and

WHEREAS, in compliance with the Board Education and Travel Policy, the Board/Staff Member has presented costs for travel, lodging and/or registration fees to the Pension Bridge Conference in the amount of approximately \$290.00; and

WHEREAS, PFRS Board Member Melia seeks Board approval of the aforementioned mentioned estimated costs to travel to San Francisco, CA to attend the Pension Bridge Conference from April 9, 2019 to April 10, 2019; now, therefore, be it

RESOLVED: PFRS Board Member Martin Melia's travel request and estimated budget of \$290.00 to attend the 2019 Pension Bridge Conference is hereby approved.

IN BOARD MEETING, CITY HALL, OAKLAND, CA JANUARY 30, 2019

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, KASAIN, MUSZAR, SPEAKMAN, WILKINSON, AND PRESIDENT JOHNSON

NOES:

ABSTAIN: MELIA

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

THE PENSION BRIDGE ANNUAL

April 9th & 10th, 2019 | Westin St. Francis Hotel, San Francisco



THE PENSION BRIDGE ANNUAL

April 9th & 10th, 2019 | Westin St. Francis Hotel, San Francisco

The Pension Bridge Annual Conference provides the highest level of education and networking to the institutional investment community. A mix of Public Funds, Corporate Funds, Foundations, Endowments, Union Funds, Taft-Hartley Funds, Family Offices, Sovereign Wealth Funds, Consultants and Investment Managers will come together for this exclusive event.

The Pension Bridge Annual provides the industry's only controlled attendance structured event. This helps The Pension Bridge to maintain the best conference ratio in the industry. **There will be over 200 Pension Fund Representatives and Non-Discretionary Consultants in attendance. We have allowed for only 100 Manager Firms.** This better than 2:1 ratio, combined with participation from the most influential industry figures, creates a more enjoyable environment for all.

LEARN FROM THE EXPERTS

ABOUT THE MOST IMPORTANT TRENDS, CHALLENGES, OPPORTUNITIES AND STRATEGIES TO ATTACK THE LONG-AWAITED CYCLE CONTRACTION THAT WILL SHAPE OUR INDUSTRY FOR THE IMMEDIATE AND LONG-TERM FUTURE:

- | | |
|--|--|
| ✓ Options to Ease the Pension Funding Crisis and Unsustainable Costs | ✓ The Benefits and Concerns of Multi-Asset Strategies |
| ✓ Best Strategies and Approaches to Mitigate Tail Risk | ✓ Expected Performance for Various Hedge Fund Strategies during the Next Downturn |
| ✓ Best Implementation and Allocation Strategies for a Public Fund LDI Program | ✓ Where is the Relative Value in Credit Strategies? |
| ✓ Does Risk Parity Make Sense Now? Expectations for Results during the Next Downturn | ✓ Which Sectors and Strategies will create the Best Opportunities in Distressed? |
| ✓ Where are the Greatest Risks and Triggers in the Debt Markets? | ✓ Biggest Concerns for Private Equity and Best Approaches to New Investments |
| ✓ Gender Diversity and Advancement of Women in the Industry | ✓ Lower Return Expectations for Real Estate? Where is the Most Risk? |
| ✓ How can your Future Investment Returns be Impacted by Climate Change? | ✓ Most Appealing Infrastructure Sectors, Geographies and Approaches |
| ✓ What are the Latest Trends and Most Promising Areas for Impact Investing? | ✓ The Portfolio Benefits of Farmland and Benefiting from the Global Food Demand |
| ✓ Why should Plan Sponsors Actively Manage Currency - Hedging vs. Alpha? | ✓ Identifying Water Risks in your Portfolio and Profiting from Water Stress and Scarcity |
| ✓ Challenges and Concerns in China and other EM Regions | ✓ Insights from Impactful CIOs on Risks, Allocations and More |

We remain in a low growth, low return environment with unfavorable demographics in the U.S. The Pension Bridge Annual will uncover various structural transformations and investment ideas that will be beneficial for long-term fiscal sustainability.

In addition to the listed themes above, we will be covering many more challenging issues that are crucial to the investment decision making process during these uncertain economic times. We will learn from the best about how to adapt in our industry which is always evolving and transforming.

THE PENSION BRIDGE ANNUAL HAS TWO GOALS IN MIND

First is to provide the **highest level of education** with the top speaker faculty. This highly regarded group will bring forth influential insights and concepts. The second goal is to help **build relationships** between the pension plans, consultants and investment managers. We have provided the best possible environment for this event which is designed to be conducive for networking. We will cap off the event with a fun and enjoyable networking outing necessary for maintaining relationships and connecting with your peers and prospective business contacts.

We look forward to a strong event and a very productive one from both an educational and relationship perspective. We have structured this conference in a manner that will be most productive and beneficial for you. We hope that you will join us to be amongst your industry peers to learn about the most up-to-date insights, investment strategies and trends.

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TUESDAY, APRIL 9TH
Westin St. Francis Hotel, San Francisco

7:00 AM – BREAKFAST

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8:00 AM – OPENING REMARKS

8:05 AM – KEYNOTE SPEAKER

Speaker:
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, **Massachusetts Pension Reserves Investment Management Board, (PRIM)**

8:35 AM – KEYNOTE SPEAKER – MACROECONOMIC VIEW

- Fed Balance Sheet Unwind – Effects for U.S., the Dollar and Globally
- The Everything Bubble
- Longer Term Implication of Tax Cuts Adding to the Deficit
- Debt to GDP Ratio
- Buffett Indicator at an Extreme
- Valuation Levels
- Margin Debt
- Corporate Debt Growth for Financial Engineering
- High Yield Defaults Outlook
- Algos and Passive Investment as a Market Risk
- Inflation/Deflation Debate
- Where are the Most Unfavorable Demographics Globally?
- What Countries Debt and Risks pose the Biggest Threat in Europe? Does that put the EU and Euro at Risk?
- China – Debt Levels, Leverage and Real Estate Bubble
- Japan's Demographics and Debt – what might be the Far-Reaching Effects?
- Which are the Shakier Emerging Market Countries that have High Debt that can be Hurt by a Strong Dollar?
- Derivatives Risk
- Expectations for Equities and Bonds
- Expectations for the Next Black Swan?
- What are the Most Appealing Investments for Low Return Environment?

PRESENTED BY:

BLACKROCK®

Speaker:
Rick Rieder, Managing Director, Global Chief Investment Officer of Fixed Income, **BlackRock**

9:05 AM – THE DEEPENING CRISIS OF UNFUNDED PENSION PLANS AND ITS FAR REACHING EFFECTS OF FISCAL DISTRESS

- Background on how we got here – what are the Contributing Factors?
- What are some Examples you've seen when Cities, Counties, School Districts and Other Local Entities are Forced to Contribute More to Keep the State System Afloat?
- Have you seen Cut-Backs on Repairing Streets and Bridges or Staffing Police and Teachers due to Pensions Crowding out Budget Spending? Any Other Cut-Backs you've seen in Education, Public Safety and Social Services?
- What sort of Higher Taxes have you seen for Scantier Services in Returns?
- What Recent Controversial Pension Reform Bills have been Passed Into Law? What were some Concessions Received and those they Didn't?
- What Trends have you seen in regards to Court Rulings on Reduced Benefits and Higher Contributions? Are the Courts Hindering Repair of this Funding Crisis?
- Do you Envision Further Credit Downgrades for Particular States due to High Unfunded Pension Liabilities? How much would this Further Complicate the Budget and Hamper Economic Growth?
- If we Face Another Strong Market Decline or Recession, what's the Time Frame for when Particular States or Plans would Face Insolvency?

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- What Actions should be taken by the Joint Select Committee on Solvency of Multiemployer Pension Plans?
- Aside from Raising Taxes, what are some Possible Options to Overcome Unsustainable Pension Costs? Thoughts on Initiating a Tax on Plan Members?
- Is Issuing Bonds to Pay Off Shortfalls a Solution or a Gamble?
- How Far Reaching would a Government Bailout be if Congress included Provision in the Budget Deal for Federal Funds towards Pension Plans?
- What are the Methods of Navigating the Challenges Posed by your Governance Structure?
- Are you Getting Pressured that your Investment Costs are Too High? How do you respond to such Allegations?
- Which Investment Strategies or De-Risking Strategies do you Favor for Decreasing a Pension Plan's Unfunded Liability While Helping to Preserve Cash?
- Will we see a Shift to Hunt for Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you believe Plans in Danger will Cut Illiquid Asset Classes in Favor of More Liquid Investments in order to Meet Benefit Payments?
- Do you see the Benefits of Adopting a Hybrid DB/DC Plan for New Hires? What are the Drawbacks?

Speakers:
David Eager, Executive Director, **Kentucky Retirement Systems**
Dominic Garcia, Chief Investment Officer, **Public Employees Retirement Association of New Mexico, (PERA)**
Glen R. Grell, Executive Director, **Public School Employees' Retirement System, (PSERS)**
Richard W. Ingram, Executive Director, **Teachers' Retirement System of Illinois**

9:55 AM – REFRESHMENT BREAK

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10:25 AM – RISK MANAGEMENT AND ADOPTING A RISK CULTURE

(A) KEY CONSIDERATIONS AND TOOLS FOR MANAGING RISKS

- Overview of the Transformation from an Asset Allocation-Centered Process to a More Comprehensive Risk Allocation-Based Process
- Are there Governance Challenges that have Prevented Wide-Spread Adoption of a Risk Allocation Framework?
- How has taking a Risk Allocation Approach changed the Structure of your Plan's Fixed Income Investments? Understanding Return Seeking Fixed Income and Traditional Risk Reducing Fixed Income
- What Irregularities have we seen in Portfolios as Asset Classes are Redrawn and Renamed via Risk Allocation? Are we still too Over-Reliant on Equities?
- Challenges of Performance Monitoring, Risk Data and Systems – getting good Risk Information Across All Asset Classes and Investment Vehicles
- How can considering Diversification and Risk Independently help Investors Build More Efficient Portfolios?

(B) TOP PENSION RISKS WE SHOULD BE MOST WARY OF

- Drawdown Risk
- Transparency and Liquidity Risk – Basing it on a Cost/Benefit Evaluation
- What's the Best Approach to Liquidity Risk as it applies to Meeting Future Cash Flow Obligations?
- Leverage Risk – what are the Best Approaches to keep these Risks within Acceptable Parameters?
- Equity, Credit, Duration, Inflation/Deflation, Currency, Geopolitical Risk Considerations
- Understanding Asset Class Correlation and Behavior Risk – Tendency of Interest Rate and Inflation Shocks Driving Both Equities and Bonds in the Same Direction, (Correlations Change)
- Other Risks such as Model Risk or Operational Risk
- How does Stress Testing or Scenario Analysis factor into your Process?
- What should Keep CIOs and Staff Up at Night?

(C) COMMUNICATION

- How do you Communicate your Risk Tolerances with your Board, Managers and Media?
- How has the Role of Fiduciary Responsibility Changed?
- What should Boards/Organizations Consider when Building a Risk Culture?
- How do you go about Educating a Board on Risk?
- What Metrics Aid in the Decision-Making Process?
- How does a Plan's Size affect the Approach to Pension Risk Management?

Speakers:
Timothy F. McCusker, FSA, CFA, CAIA, Chief Investment Officer, Partner, **NEPC**
James Nield, CFA, FRM, Chief Risk Officer, **Teacher Retirement System of Texas**

11:15 AM – RISK MITIGATING STRATEGIES

- Understanding Tail Risk Frequency, Severity and Impact
- Why should this be its Own Bucket or Asset Class? What Type of Allocation is Warranted?
- Understanding the Value of Risk Mitigating Strategies – why is it Important to Improve your Risk/Return Profile Now?
- What Risks can be Efficiently Hedged in the Financial Markets?
- What Types of Strategies and Approaches are used to Hedge? Advantages and Disadvantages of Each Approach?
- What are the Merits of an Option Overlay Strategy In Lieu of Owning a Tail Risk Hedge?
- What are the Trend or Momentum Following Strategies that you Prefer for Downside Protection?
- Why is Global Macro the Ideal Hedge Fund Allocation for Diversification and Decreasing the Depth of Drawdowns?
- How has Managed Futures Performed During Periods of Market Stress or Crisis Events?
- Long Duration U.S. Treasuries as a Diversifier in Extreme Market Conditions
- Building a Tactical Portfolio using Futures to Reduce Tail Losses and Enjoy Larger Gains
- Put Options as Insurance
- Using Information from the Derivatives Markets to assess Stress Points – where we are seeing Tail Risks Building?
- Systematic Risk Premia Allocations – does it Enhance Performance Outcomes? Are Short Track Records and Wide Variations in Products Concerning for Trend Risk Premia?
- Are there Alternative Ways to Deal with Equity Risk? How Defensive are these Strategies?
- What's the Most Challenging Aspect of Implementing a Risk Mitigating Strategies Program?
- How do you Measure Success?

11:50 AM – LIABILITY DRIVEN INVESTMENT (LDI), AND HOW IT CAN BE APPLIED TO PUBLIC DB PLANS

- What have Plans done to address the Hurdles of Low Pension Funded Status and Low Interest Rates over the past few years?
- Does LDI Make Sense Now Considering Current and Future Market Conditions? What is the Risk/Return?
- Are Plan Liabilities the only appropriate Benchmark?
- How does a Public Fund Implementation and Liability-Focused Allocation Differ from a Corporate Fund?
- Are some Approaches More Appropriate in a Less Liquid Fixed Income World?
- Do Plans need to Customize their Liability Hedging Allocation?
- For a Public Fund, what Cash Flow Generative Strategies would allow for the Portfolio to Reduce the Funding Ratio Volatility and Meet the Benefit Payment Needs?
- Understanding the Components of Performance Measurement and Evaluation – Risk Budgeting, Scenario Analysis, Liquidity Analysis and Performance Reporting
- What are some Industry Trends that Clients should be aware of in the LDI Market?
- Beyond the Ability to Earn Excess Returns, what should Investors look for in Selecting LDI Managers?
- Will we see a Strategy More Common in Europe with Plan Sponsors Combining an LDI Strategy with the Purchase of Longevity Insurance to Further Reduce Risk?
- What are some Common Myths that are Holding Back Plan Sponsors from Implementing a De-Risking or LDI Strategy?

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Speaker:
Abdallah Nauphal, Chief Executive Officer, Chief Investment Officer, **Insight Investment**

12:20 PM – RISK PARITY

- Risk Parity Explained
- Do you believe Risk Parity can Play a Role In and Contribute to Market Volatility?
- What are the Hidden Risks and Drawbacks of Risk Parity Portfolios?
- Does Risk Parity Make Sense Now if we Expect Low Market Returns in the Future?
- How did Risk Parity Perform during the last Financial Crisis Compared to other Asset Mix Models? Would you Expect Similar or Different Results for the Next Downturn?
- Is it possible that Bonds will Become Less Likely to Protect against a Large Drawdown in Equities?

- Is there an Over-Reliance on Bonds with Current Valuations? Should we be Worried about Leverage or Leveraging the Inappropriate Assets?
- Commodities Role in Risk Parity and Expectations
- Active Strategy? Passive? Extent to which a Risk Parity Portfolio is Managed?
- Leverage and Illiquidity Do Not Mix – any Approaches to Avoid this Combination?
- What Progress have we seen towards Adopting an Appropriate Benchmark?
- Thoughts on Measuring Expected Tail Loss Rather Than Volatility for Tail Risk Parity? Can it be More Effective?
- How do Investors Bucket the Risk Parity Strategy within the Asset Allocation Framework?
- How should Investors think about Differences in Forecasting Volatility when Selecting a Manager?

Speaker:
David Villa, CFA, Chief Investment Officer, Executive Director, **State of Wisconsin Investment Board, (SWIB)**

12:35 PM – LUNCH



1:45 PM – UNCONSTRAINED FIXED INCOME

- Assessing the Current Environment – Implications on Unconstrained for where we are in the Credit Cycle, Interest Rate Cycle and Fed Unwinding of QE
- How do you Approach Portfolio Construction with the Need for Increased Disaggregation of Alpha Sources?
- With the Proliferation of Products which are Diverse, what is the Return Objective?
- How do you Benchmark and Define Success for Unconstrained Fixed Income Strategies?
- With Non-Linearity of Risk Correlations and Volatility Not Being Stable through time, how are you Taking Advantage of Current Market Dislocations?
- How Important is Liquidity Management? Should Investors think about Transparency of Positioning in Unconstrained Fixed Income?
- What are the Implications of Reduced Liquidity? Have you Increased your Use of Bond ETFs to offer Enhanced Liquidity? If so, what were some Other Reasons for this Decision?
- Is the Recent Tilt Towards Higher Carry or Less Carry within specific Spreads such as Bank Loans, High Yield and Syndicated Loans, EM Debt, etc.?
- Where do you see the Greatest Risks in the Debt Markets and what might be the Trigger Points that Enhance that Potential?
- Are you Building Dry Powder at this point in the Credit Cycle?
- What Progress have we seen for a Factor or Risk Premium Approach for Assessing Risk?
- Do you see a Supply/Demand Imbalance in Long-Duration Fixed Income? What does that Imply for Investors?
- Using Structured Products, Swaps and Derivatives to Create Alpha and Hedge Volatility
- Emerging Markets Local Fixed Income – what are the Opportunities? Currency Risk Factors? Should Currency Exposures be Hedged or Unhedged?
- What are your Expectations and Outlook for Corporate Debt? Do you see a Disaster in the Making?
- Taxable Municipals vs. Corporate Bonds – Which Make More Sense Now?
- Do you view Bank Loans as a Hedge in Rising Rate Environment?
- If Trump Moves on GSE Reform, how would that impact the MBS Market?
- Understanding how to Select Alternative Managers – Multi-Sector, Multi-Region, Multi-Currency Skill Set or Duration Range Targets?

Moderator:
Keith M. Berlin, Director of Global Fixed Income and Credit, **Fund Evaluation Group**

2:30 PM – WOMEN AND THEIR INCREASING ROLE IN INVESTMENT MANAGEMENT

We'll revisit this topic as it created quite the buzz at last year's event and we'd like to keep the momentum moving for this initiative. Diversity, specifically for women, is a standard that can be achievable when viewed as a requirement, not a commercial imperative.

- What are some Ways we can Encourage Organizations to Embrace and then Require Gender Diversity?
- What is the Most Common Reason why Investors do not have Specific Women-Owned Investment Mandates? How Big an Issue is Lack of Supply?
- With just 6.5% of Global Private Equity Firms having Partners or Managing Partners that are Women (source: Prequin), how do you approach Beating those Odds?
- How does Diversity Impact your Organization? Any Gender Diversity Experiences you can Share?
- Have we seen any Statistical Performance for Women and Minority-Owned Investing? What about the Performance of Female Hedge Fund and Private Equity Managers?
- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?

- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?
- What Can Institutions do to Support Women's Advancement to the Top Levels of Leadership?
- How might Specialization be an Important Way for Women to offer a Diversified Strategy Approach?
- Controversial Topic – Is there a way the MeToo Movement can be Destructive with Quotas Resulting in Distortions of Decision-Making and Passing up Superior Candidates for a Job?
- Thoughts on the FTSE Russell Women on Boards Leadership Index Series and its Ability to Achieve Gender Diversity?
- What Career Advancement Advice would you give to Younger Women who are Passionate and Fairly New to Investment Management?

Moderator:
Meredith A. Jones, Partner & Head of Emerging Manager Research, **Aon Hewitt Investment Consulting**

Speakers:
Ronald D. Peyton, Executive Chairman, **Callan**
Dana S. Johns, MSF, Senior Portfolio Manager, **Maryland State Retirement and Pension System**
Susan E. Oh, CFA, Senior Portfolio Manager, **Pennsylvania Public School Employees' Retirement System**
Kristina P. Koutrakos, CAIA, Director of Portfolio Strategy, **Virginia Retirement System**

3:10 PM – REFRESHMENT BREAK

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3:40 PM – ENVIRONMENTAL, SOCIAL AND GOVERNANCE, (ESG)

- What's the Difference Between ESG, Socially Responsible Investing, (SRI) and Impact Investing?
- Do we have Proof that ESG Integration Adds Value?
- ESG Fund Performance vs. Traditional Funds
- What are Some Common Myths About ESG?
- Do Firms with Good Performance on SASB Topics Outperform Firms with Poor Performance on those Topics?
- How do you Approach ESG from a Fiduciary Standpoint and for the Development of your Plan's Investment Beliefs?
- Why are UN Sustainable Development Goals Important? What Ways are you using them to Help Investing in New Opportunities and Identify Future Areas of Risk?
- How should ESG be best Incorporated into the Investment and Due Diligence Process?
- What Tools, Data or Trends have we seen for ESG Implementation? What Initiatives are Focused on Driving Towards a Sustainable Global Economy?
- What are the Perceived Obstacles to applying an ESG Framework to the Stock Selection Process?
- How do ESG Factors Interact with Credit Quality, Affect the Pricing of Credit and how do they Affect Credit Returns?
- How can your Future Investment Returns be Impacted by Climate Change? Aside from Assessing Risks to Real Estate in Rising Sea Level Coastal Areas, what Risk Factors should we be Analyzing?
- What Approach should be taken to have a Climate Change Action Plan in place to address these Climate Risks?
- How should we approach Carbon Risk Management within an ESG Framework?
- Considerations for Investing in a Passive ESG Index – thoughts on Low Carbon Index? Combining ESG with Smart Beta?
- Will there come a time when Plan Sponsors Only Invest with UN PRI Investment Manager Signatory Firms?
- How are you Integrating ESG into your Real Estate, Private Equity and Infrastructure Investments?
- Understanding Relevant Benchmarks for ESG Risk Measurement

Moderator:
Herman Brill, Director, Office of Investment Management, **United Nations Joint Staff Pension Fund**

Speaker:
Michael McCauley, Senior Officer, Investment Programs & Governance, **Florida State Board of Administration, (SBA)**

4:15 PM – IMPACT INVESTING

Intent to generate a social and/or environmental impact in addition to a financial return. Tackling the toughest societal challenges: global health (treating and preventing disease), sustainable food systems through better agriculture, education, access to water (resource constraints), environment and climate change, diversity and inclusion, economic development, community building and more.

- The Role of UN's Sustainable Development Goals in Impact Investing Strategy
- What does the Future Hold for Impact Investing?
- What are the Top Challenges or Roadblocks for Investors?
- What are the Opportunities for Impact Investing in Emerging Markets versus Developed Markets?
- What are the Latest Trends in Impact Investment Globally? Most Promising Areas?

- Investing in Technology for Social Impact
- Measuring Social Impact – should you verify that the Funds you Invest in have their Portfolios Independently Measured and Verified by B Lab's GIIRS Impact Rating System?
- What are the Biggest Areas Risks of Impact Investing Projects?
- Do Larger Firms have an Advantage in this Space?
- Why is Private Equity Particularly Well-Suited for Impact Investing?
- What are some of the Socially Impact Bonds or Municipal Impact Bonds you've Invested in?
- Do you find it Difficult to Measure the Impact of Public Market Investments?
- What Evidence have we seen that Impact Investments will Reap Healthy Returns?
- How should Impact Investors think about Reporting?
- For the Next Inevitable Downturn or Recession, will Investors Abandon this Space? When and How Will it Become Mainstream?
- Cambridge Associates PE/VC Impact Investing Benchmark – any early Conclusions Despite the Limited Sample Size and Overall Youth of the Funds?

Moderator:
Laura B. Wirick, CFA, CAIA, Principal, Consultant, **Meketa Investment Group**
Speaker:
Falah Madadha, Senior Investment Officer, **Silicon Valley Community Foundation**

4:45 PM – EMERGING MARKETS

- Macro Environment and Recent Developments – how does that affect your Investments?
- With Central Banks Tapering, do you see a Correlation with Weaker EM Returns? What about a Stronger Dollar for a Prolonged Period? Weak Commodity Prices?
- What would be the Effects on Emerging Markets if we see Weak Growth in the U.S.? Instability in the Eurozone? Slowdown in China?
- How will the Trade War affect China and other Emerging Markets? Any Markets that are More Insulated?
- What is an Appropriate Long-Term Allocation to Emerging Markets? What should that Allocation look like, (Public Equity, Fixed Income, Private Equity, Frontier Markets, Alternatives, etc.)?
- What are Realistic Return Expectations? How might that Differ based on Region?
- How do Valuations look Relative to Risk in Different Regions?
- Outlook for China – are you Concerned about their Credit and Real Estate Bubbles? Thoughts on Trade Challenges?
- What are the Key LP Concerns and Challenges in Particular Regions?
- Identify what Country or Region you see Favorable Demographic Trends such as a Growing Middle Class, Urbanization, Promising Consumer Buying Behavior and Economic/Fiscal Reforms
- Which Markets in Frontier Countries can you Profit from Strong Growth and Access a Lower Correlation?
- What can be done to Mitigate Currency Risks?
- After seeing Argentina and Turkey with a Currency Crisis caused by High Debt and Surging Inflation that follows, are there Any EM Countries to Avoid?
- The Case for Emerging Markets Corporate Debt
- What Metrics are you using to Determine Relative Value in Sovereign Bonds?
- Public vs. Private Emerging Markets – Benefits and Drawbacks of each
- Active vs. Passive Debate
- Choosing an Emerging Markets Fund or Manager – should you be Investing by Region, Country or Sector?
- Given the Current Environment, will Emerging Markets Outperform Developed Markets?

Speaker:
Mike Rosborough, Senior Portfolio Manager, Investment Director, Global Fixed Income, **California Public Employees' Retirement System, (CalPERS)**

5:25 PM – COCKTAIL RECEPTION

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6:40 PM – COCKTAIL RECEPTION CONCLUDES

WEDNESDAY, APRIL 10TH

Westin St. Francis Hotel, San Francisco

7:00 AM – BREAKFAST

8:00 AM – KEYNOTE SPEAKER

The Science and Technology Revolution – Alpha by Investing in Innovation

- Historic Transformation
- Accelerating Pace of Innovation
- Investment Opportunity through Future Innovation
- Future Innovations and their Impact – Transportation as a Service, Artificial Intelligence/Deep Learning, Robotics, Blockchain, Internet of Things, Life Sciences, Improvements in Education
- Economic Modernization of China – Industries with Opportunity
- Economic Modernization of India Coming Into Focus

Speaker:
William J. Coaker Jr., CFA, MBA, Chief Investment Officer, **San Francisco Employees' Retirement System, (SFERS)**

8:30 AM – THE NEXT FRONTIER OF MULTI-ASSET INVESTING

- How has Multi-Asset Investing Evolved over the Years? How do you Navigate the Various Options and Approaches that are available today?
- Do these Strategies Reduce Correlation, Lower Volatility and Limit Downside Risk or Drawdown? If so, by How Much?
- What are the Common Sub-Asset Classes Included in Multi-Asset Strategies?
- Constructing the Portfolio – Risk Factor Approach
- How are Investors Incorporating Multi-Asset Strategies in their Portfolios?
- How do you see this Space Evolving in a more Treacherous/Volatile Market? Do you Worry that Dynamic and Tactical Asset Allocation Decisions that have been Little Tested in Recent Years can Harm Performance with Too Heavy a Reliance on Market Timing?
- Aside from Asset Allocation Skills, what other Skills are Required for the Ability to Generate Alpha and be Successful?
- Are Tactical Tilts More Transparent Today?
- How Worrisome is the Reliance on Stable Correlation Relationships with No Certainty those Relationships will Persist?
- How Much Value can one get Via Tactical Asset Allocation if you have the Right Expertise?
- Do you believe that Multi-Asset Funds have Sufficiently Incorporated Risk Controls into the Design of their Products?
- Understanding Dynamic Tail Risk Management Via Asset Allocation
- Is Excessive Leverage a Concern?
- How do you Measure Performance?
- Any Favorable Trends in Fees for Investors?
- How do Multi-Asset Managers Differentiate Themselves in this Crowded Field?

PRESENTED BY: **Janus Henderson**
INVESTORS

Speaker:
Ashwin Alankar, PhD, Senior Vice President, Global Head of Asset Allocation & Risk Management, **Janus Henderson Investors**

9:00 AM – HEDGE FUNDS

(A) CURRENT AND FUTURE STATE OF THE HEDGE FUND INDUSTRY

- Will Hedge Fund Underperformance Shift and Why?
- With Difficult Investment Conditions Pushing Many Seasoned Firms and Legendary Investors Out of the Business, does that mean some Strategies have Stopped Working or are Less Accurate? How do you approach this Struggle or go about Making your Strategy More Flexible?
- What is an Appropriate Fee Structure for Hedge Funds? Have you Seen More Fee Structures that Reward Alpha and Not Beta for Better Alignment of Interests and Avoid Overpaying for Underperformance?
- As an LP, do you find it Difficult to get Hedge Fund Managers to Provide Accurate Fee Information in a Timely, Efficient Manner? Do you believe we're In Need of a Standardized Reporting Template like ILPA for Private Equity?
- Why do Smaller Hedge Funds Outperform?
- With Crowding in FAANG and other stocks, do you see this as a Risk and a Contrarian Indicator for those Equity Holdings when the Cycle Turns?

What is Driving the Increase in Demand for Strategies Uncorrelated with the Capital Markets? Which Low Correlated Strategies are Most Attractive?

(B) IMPLEMENTATION OPTIONS

- If there was a Hedge Fund Strategy you would Invest in over the next Few Years, which one would it be and why?
- What sort of Downside Protection, Drawdown or Return Range do you expect we'll see from each of the Different Hedge Fund Strategies during the Next Market Downturn?
- Do you find Opportunities within the Global Macro Space Attractive and if so, why?
- Managed Futures – Diversification and Performance during Periods of Market Stress or Crisis Events. How much can it Decrease the Depth of Portfolio Drawdowns and Volatility?
- What is the Future of the Fund of Funds Space? How has it Changed in Recent Years? Where will Fees be? What will it take to Stay Competitive?
- Long-Short Equity Hedge Funds – what Differentiates Managers that have been able to Outperform?
- Liquid Hedge Fund Products such as UCITS, 40 Act and Hedge Fund Replication – are they a Viable Alternative and Under what Circumstances? How has their Performance and the Lower Fees Fared to Hedge Funds?
- The Role of Alternative Beta/Risk Premia Strategies in a Hedge Fund Portfolio – what are the Appropriate Expectations from a Sharpe Perspective?
- How do Emerging Managers Differentiate Themselves in the Quest for Institutional Capital?
- Implementation Considerations for Due Diligence, Portfolio Function and Manager Selection. What are the Key Traits you should be looking for? Key Characteristics for Quantitative Strategies?

(C) PORTFOLIO CONSTRUCTION AND RISK MANAGEMENT

- What is the Role of Separate Managed Accounts? What are the Benefits? Are they Better than Commingled Funds?
- Any Recent Trends you've seen for Pension Plans as far as Fees, Transparency, Customization, Increased Partnership, etc.?
- As an Investor, do you Negotiate the Frequency of Performance Fee Payments (Fee Crystallization), with your Managers so that it Doesn't Lead to Hidden and Higher Costs?
- Importance of Operations Due Diligence. Any recent Developments? How often should Operations be Reviewed?
- What Trends do you see Developing in Regards to the way we Evaluate Liquidity Provisions for Hedge Funds?

Moderator:
David E. Franci, Managing Director, Absolute Return, **San Francisco Employees' Retirement System, (SFERS)**

Speakers:
Dr. John Claisse, CEO, **Albourne America**
Elizabeth T. Burton, Chief Investment Officer, **Employees' Retirement System of the State of Hawaii**

9:45 AM – REFRESHMENT BREAK



10:15 AM – CREDIT STRATEGIES

- Current State of the Credit Market
- What will be the Catalyst that will cause Credit Spreads to Widen and Defaults to Rise?
- What is the Opportunity Set in Credit Strategies? Where is the Relative Value?
- What Subsectors of Credit are Most Attractive given the Stretched Valuations? Any Areas you are Avoiding?
- Do you see Investors being more willing to Trade Liquidity for Yield and should that be of Concern?
- High Yield Market – is it possible to see a High Yield Meltdown with a Lack of Liquidity? Understanding the Corporate Debt Risk Factors and the Strong Correlation to Equities

- Bank Loans Overview
- Outlook and Considerations for Structured – Are CLOs Safer than Pre-Crisis?
- Can Securitized Credit Weather Market Turbulence? How has it Performed During Previous Credit Events? Is there a Lower Correlation to Broader Fixed Income Sectors?
- Outlook for Emerging Market Debt
- Public vs. Private Credit
- Is Direct Lending in a Bubble and how would you Position for that?
- Opportunities and Risks for Europe and Asia
- How much should Plan Sponsors be Allocating to Credit? What is the Optimal Structure to a Credit Portfolio?
- Considerations for Selecting a Manager and Strategy
- Why should Multi-Asset Credit Strategies be a Tactical Asset Allocation with Dynamic Management for Pension Plans?
- How do we Develop Return and Risk Expectation for this Asset Class?
- How do we Benchmark Performance?

Speaker:
Peter E. Ehret, CFA, Director of Internal Credit, **Employees Retirement System of Texas**

10:55 AM – DISTRESSED INVESTING – OPPORTUNISTIC AND SPECIAL SITUATIONS

- How does the Interest Rate Environment and Fed Balance Sheet Unwind Affect your Plans?
- What are your Expectations for Default Rates going forward?
- What is Most Worrisome in Distressed Markets Today Versus a Few Years Ago?
- When will the Vast Sums of Undeployed Capital come in off the Sidelines? Do you Need an Economic Downturn?
- Is Direct Lending a Bubble and if so, how would you Invest When it Pops?
- Where do you see the Largest Demand from Clients? What are they Most Interested in?
- Which Sectors, Strategies and Geographies will create the Best Opportunities? Any Areas that should be Avoided?
- What Distressed Opportunities are we seeing the Energy Sector?
- What's the Potential Impact of the Debt Piled up by Corporations for their Share Buybacks?
- Will the Prevalent Covenant-Lite Deals create Problems during the Next Cycle?
- What are the Opportunities and Risks in Europe? Any Countries, Sectors or Types of Deals that Stand Out?
- Do you see Opportunities in Asia or Elsewhere Globally?
- What are the Recent Leverage Trends?
- Do you worry about a Liquidity Problem in ETFs and other Structured Credit Vehicles if there is Credit Event?
- Has the Regulatory Environment Changed the Opportunity Set? How has it Impacted your Firm?
- How do Investors go about Choosing the Right Distressed Strategy, Size, Investment Style and Approach?
- How will the Different Implementation Approaches affect Expected Returns? Control vs. Non-Control? Private vs. Public?
- Distressed Debt Vehicles in Hedge Fund Format vs. Private Equity Drawdown Structures – what are the Pros and Cons of Each?
- What Skill Sets/Characteristics should Pension Plans look for in a Distressed Manager?

11:30 AM – CURRENCY HEDGING AND CURRENCY ALPHA

(A) CURRENCY MARKET OVERVIEW

- What are the Factors Driving Currencies Today?
- Do you Worry about the Uncertainty Surrounding the Euro and EU?
- What is the Relationship Between Volatility and Currency Returns?
- Can Currencies be Forecasted via Fundamentals, Cycles and Trends?
- Benefits of Active and Dynamic Currency Management
- What are the most Common Reasons Asset Owners give for Not Actively Managing Currency? Are these Reasons Valid or Not?
- What is the Impact Forex can have on Overall Risk and Returns for International Equity and Bond Portfolios?
- Widely Confused Difference Between Currency Hedging and Currency as an Asset Class – how do they Differ in terms of Implementation Approaches?
- What are the Merits and Demerits of Adopting a Hedging Program vs. an Alpha Program?
- Different Skills Required for Currency Hedging vs. Currency Alpha – should a Different Manager be used for Each Approach or is it Possible to be Skilled in Both?

(B) CURRENCY OVERLAY HEDGING

- Given Plan Sponsors Non-U.S. Exposure, what Factors should be Considered in the Determination of Implementing a Currency Hedging Program?
- Is there an Optimum Currency Hedge Ratio for a Plan?
- How much of a Reduction in Portfolio Volatility and Risk should be Expected?
- Can it be More Beneficial to be Unhedged?
- Hedging Costs – how should this factor into your Decision?

(C) CURRENCY ALPHA

- How does Employing a Currency Alpha Strategy fit into an Asset Allocation Framework?
- Benefits of Non-Correlated Returns to Equities, Fixed Income and Alternative Investments
- How does Investing in Currency Diversify and Reduce Risk? Natural Diversifier for the Duration Risk in Bonds?
- How do you Manage Risk Factors?
- What are the Return Expectations?
- When considering Investing in an Active Currency Strategy, what should you look for in a Manager?

Moderator:
Andy T. Iseri, CFA, Senior Vice President, Global Manager Research, **Callan**

12:00 PM – LUNCH

SPONSORED BY:  **Crestline**

1:05 PM – PRIVATE EQUITY

- What's your Biggest Concern – Valuations, Excess Dry Powder, Downturn, etc?
- How are you Positioning Your Portfolio given the Current Market Conditions?
- Any Lessons Learned from the Financial Crisis? What are you doing Differently when Approaching New Investments?
- Protecting your Current Portfolio – how would you Guard Against your Existing Portfolio?
- Where are your Most Optimistic Returns Going Forward as far as Sector, Geography or Niche Strategy? What's your Biggest Worry?
- Which Lower or Non-Correlated PE Strategies have you Allocated to or Favor?
- Where do you see the LP/GP Relationship in the Future when it comes to Separately Managed Accounts, Strategic Partnerships, Co-Investments, LPs Concentrating Portfolios, etc.?
- Transparency and Fees – As an LP, has this Impacted your Ability to Commit Capital? SEC's Impact?
- Have you gotten More Involved in your GP's Valuation Process? How have you Achieved this Transparency Demand? Thoughts on the Fair Value Quality Initiative?
- Thoughts on GPs Selling Minority Stakes to Third Party Investors like Dyal or Petershill? Any Negative Implications that you can Foresee?
- Subscription Lines of Credit and Risk – how can you Better Understand How these Lines have Altered Returns? Thoughts on ILPA's Guidelines?
- Do you believe we're in a Venture Capital/Technology Bubble? How do you View the Venture Space today?
- For Co-Investment Deals that Underperform, what are the Reasons Why?
- Where can we find Good Returns in Private Credit Without Taking Inordinate Risk?
- Why should Secondaries be a Core Holding?
- Issues, Outlook and Opportunities for European PE

Moderator:
Faraz Shooshani, Managing Director, Senior Private Markets Consultant, **Verus**

1:50 PM – INFRASTRUCTURE

- State of the Infrastructure Markets
- Is there Too Much Capital Chasing Too Few Deals?
- With High Competition for Larger Investments, could there be More Return Potential in Smaller Projects?
- How has Performance been and what are the Recent Return Expectations?
- What have been the Effects of the Low Interest Rate Environment on Infrastructure and how might that Affect Returns and Leverage Going Forward?
- Which Sectors are Most Attractive?
- Which Geographies are Most Appealing? Developed or Emerging Economies?
- Approach – Greenfield vs. Brownfield?
- Why is Infrastructure Debt Attractive? Will it deliver for Investors Searching for Yield?

- What are the Biggest Challenges/Risks associated with Infrastructure Investing?
- Do you believe Credit Risk might be Under-Appreciated?
- Opportunities in Public-Private Partnerships?
- How have GPs Adopted ESG Principals?
- What are the Most Attractive Investments within Renewables?
- Listed vs. Unlisted – which do you Favor in a Volatile Market for Downside Protection? Do Rising Interest Rates Favor Either?
- Any Advantages or Limitations for Co-Investments? Separate Accounts?
- What are the Advantages of Open-Ended Funds over Closed-Ended Funds? Will we Continue to see a Surge in Open-Ended Funds in the Coming Years?
- What are the Major Technological Trends that will Shape Infrastructure Investing in the Coming Years?

Moderator:
Todd Lapenna, CFA, CAIA, Partner, Infrastructure & Real Assets, **StepStone Group**

2:25 PM – REAL ESTATE

- Are you Expecting a Drop in Pricing and Lower Returns? What are your Returns Expectations for the next 5-10 Years?
- Where do you See the Most Risk? How are you De-Risking?
- Are you Slowing Down, Maintaining or Increasing your Pace of Investment?
- Where are the Most Crowded Trades? Are there any Less Crowded Trades?
- What are your Return Expectations for Core?
- Within Non-Core, what Risks are Investors Willing to Take?
- What is the Biggest Threat to Commercial in the next few years for this Fully Priced Market?
- Are you Making Pivots or Tilts to Take Advantage of Macro or Socio/Demographic Trends?
- What are you seeing in the Market Today with Respect to Volume of Transactions and Pricing?
- Thoughts on the Bridge Financing Opportunity for Maturing Commercial Real Estate?
- What Real Estate Technology Trends are you Watching Most Closely?
- What's happening with Leverage? LP Preferences for Use of Leverage?
- Any Niche Property Types that you Like?
- Asia and European Real Estate Outlook – Opportunities and Investment Trends
- With the Privatization of Fannie Mae and Freddie Mac a Possibility, what would be the Effect on Real Estate Portfolios?
- Will Co-Investments become more Common?
- Current State of the Real Estate Secondary Market
- Thoughts on Programmatic Joint Ventures?
- Are we still seeing a Decline in Closed-Ended Funds? If so, Why and Will it Continue?
- Larger vs. Smaller Fund Size – which ones will Outperform going forward?
- What Strategies do you see as the Biggest Risks and the Biggest Rewards/Relative Value for the Future?

Moderator:
Christy Fields, Managing Director – Real Estate, **Pension Consulting Alliance, (PCA)**

Speaker:
Anthony Breault, Senior Investment Officer, Real Estate, **Oregon State Treasury**

3:10 PM – REFRESHMENT BREAK

3:35 PM – INVESTING IN FARMLAND

- Demographics, Global Food Demand and Land Scarcity as Macro Drivers
- Is Farmland a Good Investment if we have another Downturn or Financial Crisis?
- How has Historical Performance been?
- What are the Portfolio Benefits?
- Understanding the Evolution of U.S. Farmland Ownership and what the Transition will look like for Institutional Ownership. How might that Compare to Ownership of Timberland?
- What are the Physical-Casualty Risks? Is it a Concern or is it Proactively Managed through Operating Practices of the Farm?
- Would a Drop in Commodities Prices hurt Farmland Returns? Importance of Crop Diversification
- How might this Asset Class be Impacted by Future Regulatory Decisions?
- Thoughts on the Rise in Farmland Debt Strategies that have Attracted Investors?
- Is it Difficult to Access Farmland through Public Markets? Might the Public REIT Market Evolve for Farmland? What are the Pro's and Cons of these REITS?

3:50 PM – INVESTING IN WATER

The World Economic Forum has ranked water as a top global risk for the past several years. The growing focus on water scarcity has many eyeing opportunities. The United Nations estimates that almost half of the world's population will live in areas of high water stress by 2030, with a 40% shortfall between water supply and demand.

- What Factors are Contributing to Water Stress and Risks?
- How are Investors Identifying and Evaluating Water Risks in their Portfolios?
- Does the Ceres Investor Water Toolkit Serve its Purpose to Help Investors Evaluate and Understand Water Risks in their Holdings?
- ESG Social Benefit – Investing in Projects and Companies that will Help Clean, Distribute and Maintain our Water Supply
- Where are the Most Attractive Opportunities?
- Are you Seeing Situations where the Government is Underwriting some of the High Impact Risks of the Project?
- Should Pensions be Seeking Greenfield or Brownfield Investments and Why?
- What are the Biggest Investor Challenges?
- How do you Overcome the Investor Lack of Clarity on the Yield they will Receive once the Project is Built?
- What are your Predictions for Growth in this Space?

4:05 PM – CIO ROUNDTABLE

(A) RISKS, ALLOCATIONS AND MACRO-BASED DECISIONS

- In this Fully-Valued Environment, how are you Balancing the Risk of a Large Drawdown with your Return Goals? Has it Impacted your Asset Allocation?
- Which De-Risking Strategies or Investments with a Low/Non-Correlation have you Allocated to?
- Do you believe your Hedge Fund Strategies will provide a Cushion for the next Market Downturn? How do you use them to Reduce Risk?
- Have you Trended Towards a Passive Equity Allocation? When Volatility Rises, do you Believe Active Managers will Outperform?
- Have you made Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you Believe the Impact of Regulation along with the Shift Towards Passive Management has Created a Reduction in Market Liquidity? Will there be Sufficient Liquidity in the System to Cope with Conditions of Market Stress? Has it Impacted your Fund or Decisions?
- Is there Some Point at which Higher Rates would cause you to Rethink your Asset Allocation or Other Strategies?
- What Percentage of your Pension Fund's External Asset Management uses ESG Factors? Percentage Excluding Hedge Funds? Do you have Plans to Increase the Use of ESG Managers?
- How are you Viewing Emerging Markets Broadly and what do you feel is the proper EM Allocation? Any Regional or Frontier Strategies that interest you?

(B) ALIGNMENT OF INTERESTS

- What Changes or Trends have you noticed in Fee Structures/Terms and your Bargaining Power? Has the Size of your Fund been an Advantage or Disadvantage?
- How can you Overcome Governance Hurdles so that you can Effectively Partner with Outside Providers, Bring a Portion of the Investment Management In-House and Provide Incentive-Based Compensation?
- Have you Taken Steps to Address Diversity within your Investment Programs or your Organization's Staff?
- Do You and Your Investment Departments have the Authority to be a Dynamic, Tactical and Active Investor In Response to Extreme Economic Conditions?
- Have you Addressed Cybersecurity Protection for your Plan? How have you Educated of the Risks with Staff and Taken Steps for Protection with Investment Managers?
- Any Important Lessons Learned that you can Share from your Individual Plan Experiences?
- What Keeps You Up at Night?

Speakers:
Mansco Perry III, CFA, CAIA, Executive Director, Chief Investment Officer, **Minnesota State Board of Investment**
Tom Tull, CFA, Chief Investment Officer, **Employees Retirement System of Texas**
Bruce H. Cundick, CFA, CPA, Chief Investment Officer, **Utah Retirement Systems**

5:00 PM – CONFERENCE CONCLUDES

5:00 PM – TICKETS FOR NETWORKING EVENT HANDED OUT IN CONFERENCE ROOM

ATTENDEES OF THE NETWORKING EVENT MUST BE PRESENT IN THE CONFERENCE ROOM IN ORDER TO RECEIVE TICKETS

6:00 PM – NETWORKING EVENT, TBD

Networking Event – The Waterfront Restaurant Cocktail Reception & Dinner

Hosted by The Pension Bridge – Join our group for a cocktail reception and dinner at the Waterfront Restaurant located adjacent to the Financial District at Pier 7. Experience breathtaking views of San Francisco Bay and the iconic Bay Bridge. The Waterfront Restaurant, one of the city's finest seafood restaurants, has been a top culinary destination for more than 45 years and has been a known favorite for politicians, celebrities and business executives. The Pension Bridge Group will utilize will the waterfront space for meetings and conversation with quality contacts while taking in spectacular views.

9:00 PM – NETWORKING EVENT CONCLUDES

REGISTRATION:

To register or receive more information about The 2019 Pension Bridge Annual:

BOCA RATON OFFICE CONTACT:

Brett Semel

☎ (561) 455-2729

✉ bsemel@pensionbridge.com

NEW YORK OFFICE CONTACT:

Andrew Blake

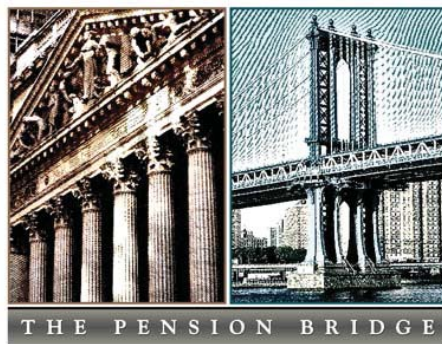
☎ (516) 818-7989

✉ ablake@pensionbridge.com

Please visit www.pensionbridge.com for additional details. **Registration is not available online.**

About The Pension Bridge: We are an innovative company offering educational conferences of the highest quality. Our objective is to provide an education to the institutional investment community while providing an impressive speaker faculty in a setting that is conducive to great networking. We help institutional money managers connect with Pension Funds and Consultants across the country in a fun, enjoyable atmosphere. Our events can act as a stepping stone to a successful financial relationship or simply help build the investment education.

Our management team's unique skills, operating experience, and industry relationships help to make our events the main attraction in the industry. We pride ourselves on being there to cater to our clients' wants and needs. Our ratio of plan sponsor to investment manager allows our events to be the most desirable and accommodating in the conference industry. The Pension Bridge is known for its strength, stability, relationships and operational excellence.



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MEMORANDUM

TO: Oakland Police & Fire
Retirement Board

FROM: David Jones

SUBJECT: Authorization and
Reimbursement of Board/Staff
Travel/Education Expenses

DATE: January 22, 2019

R. Steven Wilkinson, Board member of the **Oakland Police and Fire Retirement System** board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Board member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel / Education Event: 2019 Pension Bridge Conference

Event Location: Westin St Francis Hotel, San Francisco, CA

Event Date: April 9, 2019 - April 10, 2019

Estimated Event Expense*: \$ 290.00 (estimated)

Notes: _____

* If enrollment, registration or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the traveling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

For questions please contact David Low, Administrative Assistant, at 510-238-7295.

Attachments (if any):

Resolution #7039

2019 Pension Bridge Agenda

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7039

Approved to Form
and Legality

ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

TRAVEL AUTHORIZATION FOR PFRS BOARD MEMBER R. STEVEN WILKINSON TO TRAVEL AND ATTEND THE 2019 PENSION BRIDGE CONFERENCE ("PENSION BRIDGE CONFERENCE") FROM APRIL 9, 2019 TO APRIL 10, 2019 IN SAN FRANCISCO, CA WITH AN ESTIMATED BUDGET OF TWO HUNDRED NINETY DOLLARS (\$290.00)

WHEREAS, PFRS Board Member R. Steven Wilkinson wishes to attend the Pension Bridge Conference in San Francisco, CA from April 9, 2019 to April 10, 2019; and

WHEREAS, PFRS Board Member Wilkinson is expected to seek reimbursement of expenses from the Board; and

WHEREAS, in compliance with the Education and Board Travel Policy, which requires that PFRS Board/Staff Members seek PFRS Board approval prior to travel; and

WHEREAS, in compliance with the Board Education and Travel Policy, the Board/Staff Member has presented costs for travel, lodging and/or registration fees to the Pension Bridge Conference in the amount of approximately \$290.00; and

WHEREAS, PFRS Board Member Wilkinson seeks Board approval of the aforementioned mentioned estimated costs to travel to San Francisco, CA to attend the Pension Bridge Conference from April 9, 2019 to April 10, 2019; now, therefore, be it

RESOLVED: PFRS Board Member R. Steven Wilkinson's travel request and estimated budget of \$290.00 to attend the 2019 Pension Bridge Conference is hereby approved.

IN BOARD MEETING, CITY HALL, OAKLAND, CA JANUARY 30, 2019

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, KASAIN, MELIA, MUSZAR, SPEAKMAN, AND PRESIDENT JOHNSON

NOES:

ABSTAIN: WILKINSON

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

THE PENSION BRIDGE ANNUAL

April 9th & 10th, 2019 | Westin St. Francis Hotel, San Francisco



THE PENSION BRIDGE ANNUAL

April 9th & 10th, 2019 | Westin St. Francis Hotel, San Francisco

The Pension Bridge Annual Conference provides the highest level of education and networking to the institutional investment community. A mix of Public Funds, Corporate Funds, Foundations, Endowments, Union Funds, Taft-Hartley Funds, Family Offices, Sovereign Wealth Funds, Consultants and Investment Managers will come together for this exclusive event.

The Pension Bridge Annual provides the industry's only controlled attendance structured event. This helps The Pension Bridge to maintain the best conference ratio in the industry. **There will be over 200 Pension Fund Representatives and Non-Discretionary Consultants in attendance. We have allowed for only 100 Manager Firms.** This better than 2:1 ratio, combined with participation from the most influential industry figures, creates a more enjoyable environment for all.

LEARN FROM THE EXPERTS

ABOUT THE MOST IMPORTANT TRENDS, CHALLENGES, OPPORTUNITIES AND STRATEGIES TO ATTACK THE LONG-AWAITED CYCLE CONTRACTION THAT WILL SHAPE OUR INDUSTRY FOR THE IMMEDIATE AND LONG-TERM FUTURE:

- | | |
|--|--|
| ✓ Options to Ease the Pension Funding Crisis and Unsustainable Costs | ✓ The Benefits and Concerns of Multi-Asset Strategies |
| ✓ Best Strategies and Approaches to Mitigate Tail Risk | ✓ Expected Performance for Various Hedge Fund Strategies during the Next Downturn |
| ✓ Best Implementation and Allocation Strategies for a Public Fund LDI Program | ✓ Where is the Relative Value in Credit Strategies? |
| ✓ Does Risk Parity Make Sense Now? Expectations for Results during the Next Downturn | ✓ Which Sectors and Strategies will create the Best Opportunities in Distressed? |
| ✓ Where are the Greatest Risks and Triggers in the Debt Markets? | ✓ Biggest Concerns for Private Equity and Best Approaches to New Investments |
| ✓ Gender Diversity and Advancement of Women in the Industry | ✓ Lower Return Expectations for Real Estate? Where is the Most Risk? |
| ✓ How can your Future Investment Returns be Impacted by Climate Change? | ✓ Most Appealing Infrastructure Sectors, Geographies and Approaches |
| ✓ What are the Latest Trends and Most Promising Areas for Impact Investing? | ✓ The Portfolio Benefits of Farmland and Benefiting from the Global Food Demand |
| ✓ Why should Plan Sponsors Actively Manage Currency - Hedging vs. Alpha? | ✓ Identifying Water Risks in your Portfolio and Profiting from Water Stress and Scarcity |
| ✓ Challenges and Concerns in China and other EM Regions | ✓ Insights from Impactful CIOs on Risks, Allocations and More |

We remain in a low growth, low return environment with unfavorable demographics in the U.S. The Pension Bridge Annual will uncover various structural transformations and investment ideas that will be beneficial for long-term fiscal sustainability.

In addition to the listed themes above, we will be covering many more challenging issues that are crucial to the investment decision making process during these uncertain economic times. We will learn from the best about how to adapt in our industry which is always evolving and transforming.

THE PENSION BRIDGE ANNUAL HAS TWO GOALS IN MIND

First is to provide the **highest level of education** with the top speaker faculty. This highly regarded group will bring forth influential insights and concepts. The second goal is to help **build relationships** between the pension plans, consultants and investment managers. We have provided the best possible environment for this event which is designed to be conducive for networking. We will cap off the event with a fun and enjoyable networking outing necessary for maintaining relationships and connecting with your peers and prospective business contacts.

We look forward to a strong event and a very productive one from both an educational and relationship perspective. We have structured this conference in a manner that will be most productive and beneficial for you. We hope that you will join us to be amongst your industry peers to learn about the most up-to-date insights, investment strategies and trends.

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TUESDAY, APRIL 9TH
Westin St. Francis Hotel, San Francisco

7:00 AM – BREAKFAST

SPONSORED BY: **JENNISON ASSOCIATES**

8:00 AM – OPENING REMARKS

8:05 AM – KEYNOTE SPEAKER

Speaker:
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, **Massachusetts Pension Reserves Investment Management Board, (PRIM)**

8:35 AM – KEYNOTE SPEAKER – MACROECONOMIC VIEW

- Fed Balance Sheet Unwind – Effects for U.S., the Dollar and Globally
- The Everything Bubble
- Longer Term Implication of Tax Cuts Adding to the Deficit
- Debt to GDP Ratio
- Buffett Indicator at an Extreme
- Valuation Levels
- Margin Debt
- Corporate Debt Growth for Financial Engineering
- High Yield Defaults Outlook
- Algos and Passive Investment as a Market Risk
- Inflation/Deflation Debate
- Where are the Most Unfavorable Demographics Globally?
- What Countries Debt and Risks pose the Biggest Threat in Europe? Does that put the EU and Euro at Risk?
- China – Debt Levels, Leverage and Real Estate Bubble
- Japan's Demographics and Debt – what might be the Far-Reaching Effects?
- Which are the Shakier Emerging Market Countries that have High Debt that can be Hurt by a Strong Dollar?
- Derivatives Risk
- Expectations for Equities and Bonds
- Expectations for the Next Black Swan?
- What are the Most Appealing Investments for Low Return Environment?

PRESENTED BY: **BLACKROCK®**
Rick Rieder, Managing Director, Global Chief Investment Officer of Fixed Income, **BlackRock**

9:05 AM – THE DEEPENING CRISIS OF UNFUNDED PENSION PLANS AND ITS FAR REACHING EFFECTS OF FISCAL DISTRESS

- Background on how we got here – what are the Contributing Factors?
- What are some Examples you've seen when Cities, Counties, School Districts and Other Local Entities are Forced to Contribute More to Keep the State System Afloat?
- Have you seen Cut-Backs on Repairing Streets and Bridges or Staffing Police and Teachers due to Pensions Crowding out Budget Spending? Any Other Cut-Backs you've seen in Education, Public Safety and Social Services?
- What sort of Higher Taxes have you seen for Scantier Services in Returns?
- What Recent Controversial Pension Reform Bills have been Passed Into Law? What were some Concessions Received and those they Didn't?
- What Trends have you seen in regards to Court Rulings on Reduced Benefits and Higher Contributions? Are the Courts Hindering Repair of this Funding Crisis?
- Do you Envision Further Credit Downgrades for Particular States due to High Unfunded Pension Liabilities? How much would this Further Complicate the Budget and Hamper Economic Growth?
- If we Face Another Strong Market Decline or Recession, what's the Time Frame for when Particular States or Plans would Face Insolvency?

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- What Actions should be taken by the Joint Select Committee on Solvency of Multiemployer Pension Plans?
- Aside from Raising Taxes, what are some Possible Options to Overcome Unsustainable Pension Costs? Thoughts on Initiating a Tax on Plan Members?
- Is Issuing Bonds to Pay Off Shortfalls a Solution or a Gamble?
- How Far Reaching would a Government Bailout be if Congress included Provision in the Budget Deal for Federal Funds towards Pension Plans?
- What are the Methods of Navigating the Challenges Posed by your Governance Structure?
- Are you Getting Pressured that your Investment Costs are Too High? How do you respond to such Allegations?
- Which Investment Strategies or De-Risking Strategies do you Favor for Decreasing a Pension Plan's Unfunded Liability While Helping to Preserve Cash?
- Will we see a Shift to Hunt for Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you believe Plans in Danger will Cut Illiquid Asset Classes in Favor of More Liquid Investments in order to Meet Benefit Payments?
- Do you see the Benefits of Adopting a Hybrid DB/DC Plan for New Hires? What are the Drawbacks?

Speakers:
David Eager, Executive Director, **Kentucky Retirement Systems**
Dominic Garcia, Chief Investment Officer, **Public Employees Retirement Association of New Mexico, (PERA)**
Glen R. Grell, Executive Director, **Public School Employees' Retirement System, (PSERS)**
Richard W. Ingram, Executive Director, **Teachers' Retirement System of Illinois**

9:55 AM – REFRESHMENT BREAK

SPONSORED BY: **GCM GROSVENOR**

10:25 AM – RISK MANAGEMENT AND ADOPTING A RISK CULTURE

(A) KEY CONSIDERATIONS AND TOOLS FOR MANAGING RISKS

- Overview of the Transformation from an Asset Allocation-Centered Process to a More Comprehensive Risk Allocation-Based Process
- Are there Governance Challenges that have Prevented Wide-Spread Adoption of a Risk Allocation Framework?
- How has taking a Risk Allocation Approach changed the Structure of your Plan's Fixed Income Investments? Understanding Return Seeking Fixed Income and Traditional Risk Reducing Fixed Income
- What Irregularities have we seen in Portfolios as Asset Classes are Redrawn and Renamed via Risk Allocation? Are we still too Over-Reliant on Equities?
- Challenges of Performance Monitoring, Risk Data and Systems – getting good Risk Information Across All Asset Classes and Investment Vehicles
- How can considering Diversification and Risk Independently help Investors Build More Efficient Portfolios?

(B) TOP PENSION RISKS WE SHOULD BE MOST WARY OF

- Drawdown Risk
- Transparency and Liquidity Risk – Basing it on a Cost/Benefit Evaluation
- What's the Best Approach to Liquidity Risk as it applies to Meeting Future Cash Flow Obligations?
- Leverage Risk – what are the Best Approaches to keep these Risks within Acceptable Parameters?
- Equity, Credit, Duration, Inflation/Deflation, Currency, Geopolitical Risk Considerations
- Understanding Asset Class Correlation and Behavior Risk – Tendency of Interest Rate and Inflation Shocks Driving Both Equities and Bonds in the Same Direction, (Correlations Change)
- Other Risks such as Model Risk or Operational Risk
- How does Stress Testing or Scenario Analysis factor into your Process?
- What should Keep CIOs and Staff Up at Night?

(C) COMMUNICATION

- How do you Communicate your Risk Tolerances with your Board, Managers and Media?
- How has the Role of Fiduciary Responsibility Changed?
- What should Boards/Organizations Consider when Building a Risk Culture?
- How do you go about Educating a Board on Risk?
- What Metrics Aid in the Decision-Making Process?
- How does a Plan's Size affect the Approach to Pension Risk Management?

Speakers:
Timothy F. McCusker, FSA, CFA, CAIA, Chief Investment Officer, Partner, **NEPC**
James Nield, CFA, FRM, Chief Risk Officer, **Teacher Retirement System of Texas**

11:15 AM – RISK MITIGATING STRATEGIES

- Understanding Tail Risk Frequency, Severity and Impact
- Why should this be its Own Bucket or Asset Class? What Type of Allocation is Warranted?
- Understanding the Value of Risk Mitigating Strategies – why is it Important to Improve your Risk/Return Profile Now?
- What Risks can be Efficiently Hedged in the Financial Markets?
- What Types of Strategies and Approaches are used to Hedge? Advantages and Disadvantages of Each Approach?
- What are the Merits of an Option Overlay Strategy In Lieu of Owning a Tail Risk Hedge?
- What are the Trend or Momentum Following Strategies that you Prefer for Downside Protection?
- Why is Global Macro the Ideal Hedge Fund Allocation for Diversification and Decreasing the Depth of Drawdowns?
- How has Managed Futures Performed During Periods of Market Stress or Crisis Events?
- Long Duration U.S. Treasuries as a Diversifier in Extreme Market Conditions
- Building a Tactical Portfolio using Futures to Reduce Tail Losses and Enjoy Larger Gains
- Put Options as Insurance
- Using Information from the Derivatives Markets to assess Stress Points – where we are seeing Tail Risks Building?
- Systematic Risk Premia Allocations – does it Enhance Performance Outcomes? Are Short Track Records and Wide Variations in Products Concerning for Trend Risk Premia?
- Are there Alternative Ways to Deal with Equity Risk? How Defensive are these Strategies?
- What's the Most Challenging Aspect of Implementing a Risk Mitigating Strategies Program?
- How do you Measure Success?

11:50 AM – LIABILITY DRIVEN INVESTMENT (LDI), AND HOW IT CAN BE APPLIED TO PUBLIC DB PLANS

- What have Plans done to address the Hurdles of Low Pension Funded Status and Low Interest Rates over the past few years?
- Does LDI Make Sense Now Considering Current and Future Market Conditions? What is the Risk/Return?
- Are Plan Liabilities the only appropriate Benchmark?
- How does a Public Fund Implementation and Liability-Focused Allocation Differ from a Corporate Fund?
- Are some Approaches More Appropriate in a Less Liquid Fixed Income World?
- Do Plans need to Customize their Liability Hedging Allocation?
- For a Public Fund, what Cash Flow Generative Strategies would allow for the Portfolio to Reduce the Funding Ratio Volatility and Meet the Benefit Payment Needs?
- Understanding the Components of Performance Measurement and Evaluation – Risk Budgeting, Scenario Analysis, Liquidity Analysis and Performance Reporting
- What are some Industry Trends that Clients should be aware of in the LDI Market?
- Beyond the Ability to Earn Excess Returns, what should Investors look for in Selecting LDI Managers?
- Will we see a Strategy More Common in Europe with Plan Sponsors Combining an LDI Strategy with the Purchase of Longevity Insurance to Further Reduce Risk?
- What are some Common Myths that are Holding Back Plan Sponsors from Implementing a De-Risking or LDI Strategy?

PRESENTED BY:



Speaker:
Abdallah Nauphal, Chief Executive Officer, Chief Investment Officer, **Insight Investment**

12:20 PM – RISK PARITY

- Risk Parity Explained
- Do you believe Risk Parity can Play a Role In and Contribute to Market Volatility?
- What are the Hidden Risks and Drawbacks of Risk Parity Portfolios?
- Does Risk Parity Make Sense Now if we Expect Low Market Returns in the Future?
- How did Risk Parity Perform during the last Financial Crisis Compared to other Asset Mix Models? Would you Expect Similar or Different Results for the Next Downturn?
- Is it possible that Bonds will Become Less Likely to Protect against a Large Drawdown in Equities?

- Is there an Over-Reliance on Bonds with Current Valuations? Should we be Worried about Leverage or Leveraging the Inappropriate Assets?
- Commodities Role in Risk Parity and Expectations
- Active Strategy? Passive? Extent to which a Risk Parity Portfolio is Managed?
- Leverage and Illiquidity Do Not Mix – any Approaches to Avoid this Combination?
- What Progress have we seen towards Adopting an Appropriate Benchmark?
- Thoughts on Measuring Expected Tail Loss Rather Than Volatility for Tail Risk Parity? Can it be More Effective?
- How do Investors Bucket the Risk Parity Strategy within the Asset Allocation Framework?
- How should Investors think about Differences in Forecasting Volatility when Selecting a Manager?

Speaker:
David Villa, CFA, Chief Investment Officer, Executive Director, **State of Wisconsin Investment Board, (SWIB)**

12:35 PM – LUNCH



1:45 PM – UNCONSTRAINED FIXED INCOME

- Assessing the Current Environment – Implications on Unconstrained for where we are in the Credit Cycle, Interest Rate Cycle and Fed Unwinding of QE
- How do you Approach Portfolio Construction with the Need for Increased Disaggregation of Alpha Sources?
- With the Proliferation of Products which are Diverse, what is the Return Objective?
- How do you Benchmark and Define Success for Unconstrained Fixed Income Strategies?
- With Non-Linearity of Risk Correlations and Volatility Not Being Stable through time, how are you Taking Advantage of Current Market Dislocations?
- How Important is Liquidity Management? Should Investors think about Transparency of Positioning in Unconstrained Fixed Income?
- What are the Implications of Reduced Liquidity? Have you Increased your Use of Bond ETFs to offer Enhanced Liquidity? If so, what were some Other Reasons for this Decision?
- Is the Recent Tilt Towards Higher Carry or Less Carry within specific Spreads such as Bank Loans, High Yield and Syndicated Loans, EM Debt, etc.?
- Where do you see the Greatest Risks in the Debt Markets and what might be the Trigger Points that Enhance that Potential?
- Are you Building Dry Powder at this point in the Credit Cycle?
- What Progress have we seen for a Factor or Risk Premium Approach for Assessing Risk?
- Do you see a Supply/Demand Imbalance in Long-Duration Fixed Income? What does that Imply for Investors?
- Using Structured Products, Swaps and Derivatives to Create Alpha and Hedge Volatility
- Emerging Markets Local Fixed Income – what are the Opportunities? Currency Risk Factors? Should Currency Exposures be Hedged or Unhedged?
- What are your Expectations and Outlook for Corporate Debt? Do you see a Disaster in the Making?
- Taxable Municipals vs. Corporate Bonds – Which Make More Sense Now?
- Do you view Bank Loans as a Hedge in Rising Rate Environment?
- If Trump Moves on GSE Reform, how would that impact the MBS Market?
- Understanding how to Select Alternative Managers – Multi-Sector, Multi-Region, Multi-Currency Skill Set or Duration Range Targets?

Moderator:
Keith M. Berlin, Director of Global Fixed Income and Credit, **Fund Evaluation Group**

2:30 PM – WOMEN AND THEIR INCREASING ROLE IN INVESTMENT MANAGEMENT

We'll revisit this topic as it created quite the buzz at last year's event and we'd like to keep the momentum moving for this initiative. Diversity, specifically for women, is a standard that can be achievable when viewed as a requirement, not a commercial imperative.

- What are some Ways we can Encourage Organizations to Embrace and then Require Gender Diversity?
- What is the Most Common Reason why Investors do not have Specific Women-Owned Investment Mandates? How Big an Issue is Lack of Supply?
- With just 6.5% of Global Private Equity Firms having Partners or Managing Partners that are Women (source: Prequin), how do you approach Beating those Odds?
- How does Diversity Impact your Organization? Any Gender Diversity Experiences you can Share?
- Have we seen any Statistical Performance for Women and Minority-Owned Investing? What about the Performance of Female Hedge Fund and Private Equity Managers?
- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?

- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?
- What Can Institutions do to Support Women's Advancement to the Top Levels of Leadership?
- How might Specialization be an Important Way for Women to offer a Diversified Strategy Approach?
- Controversial Topic – Is there a way the MeToo Movement can be Destructive with Quotas Resulting in Distortions of Decision-Making and Passing up Superior Candidates for a Job?
- Thoughts on the FTSE Russell Women on Boards Leadership Index Series and its Ability to Achieve Gender Diversity?
- What Career Advancement Advice would you give to Younger Women who are Passionate and Fairly New to Investment Management?

Moderator:
Meredith A. Jones, Partner & Head of Emerging Manager Research, **Aon Hewitt Investment Consulting**

Speakers:
Ronald D. Peyton, Executive Chairman, **Callan**
Dana S. Johns, MSF, Senior Portfolio Manager, **Maryland State Retirement and Pension System**
Susan E. Oh, CFA, Senior Portfolio Manager, **Pennsylvania Public School Employees' Retirement System**
Kristina P. Koutrakos, CAIA, Director of Portfolio Strategy, **Virginia Retirement System**

3:10 PM – REFRESHMENT BREAK



3:40 PM – ENVIRONMENTAL, SOCIAL AND GOVERNANCE, (ESG)

- What's the Difference Between ESG, Socially Responsible Investing, (SRI) and Impact Investing?
- Do we have Proof that ESG Integration Adds Value?
- ESG Fund Performance vs. Traditional Funds
- What are Some Common Myths About ESG?
- Do Firms with Good Performance on SASB Topics Outperform Firms with Poor Performance on those Topics?
- How do you Approach ESG from a Fiduciary Standpoint and for the Development of your Plan's Investment Beliefs?
- Why are UN Sustainable Development Goals Important? What Ways are you using them to Help Investing in New Opportunities and Identify Future Areas of Risk?
- How should ESG be best Incorporated into the Investment and Due Diligence Process?
- What Tools, Data or Trends have we seen for ESG Implementation? What Initiatives are Focused on Driving Towards a Sustainable Global Economy?
- What are the Perceived Obstacles to applying an ESG Framework to the Stock Selection Process?
- How do ESG Factors Interact with Credit Quality, Affect the Pricing of Credit and how do they Affect Credit Returns?
- How can your Future Investment Returns be Impacted by Climate Change? Aside from Assessing Risks to Real Estate in Rising Sea Level Coastal Areas, what Risk Factors should we be Analyzing?
- What Approach should be taken to have a Climate Change Action Plan in place to address these Climate Risks?
- How should we approach Carbon Risk Management within an ESG Framework?
- Considerations for Investing in a Passive ESG Index – thoughts on Low Carbon Index? Combining ESG with Smart Beta?
- Will there come a time when Plan Sponsors Only Invest with UN PRI Investment Manager Signatory Firms?
- How are you Integrating ESG into your Real Estate, Private Equity and Infrastructure Investments?
- Understanding Relevant Benchmarks for ESG Risk Measurement

Moderator:
Herman Brill, Director, Office of Investment Management, **United Nations Joint Staff Pension Fund**

Speaker:
Michael McCauley, Senior Officer, Investment Programs & Governance, **Florida State Board of Administration, (SBA)**

4:15 PM – IMPACT INVESTING

Intent to generate a social and/or environmental impact in addition to a financial return. Tackling the toughest societal challenges: global health (treating and preventing disease), sustainable food systems through better agriculture, education, access to water (resource constraints), environment and climate change, diversity and inclusion, economic development, community building and more.

- The Role of UN's Sustainable Development Goals in Impact Investing Strategy
- What does the Future Hold for Impact Investing?
- What are the Top Challenges or Roadblocks for Investors?
- What are the Opportunities for Impact Investing in Emerging Markets versus Developed Markets?
- What are the Latest Trends in Impact Investment Globally? Most Promising Areas?

- Investing in Technology for Social Impact
- Measuring Social Impact – should you verify that the Funds you Invest in have their Portfolios Independently Measured and Verified by B Lab's GIIRS Impact Rating System?
- What are the Biggest Areas Risks of Impact Investing Projects?
- Do Larger Firms have an Advantage in this Space?
- Why is Private Equity Particularly Well-Suited for Impact Investing?
- What are some of the Socially Impact Bonds or Municipal Impact Bonds you've Invested in?
- Do you find it Difficult to Measure the Impact of Public Market Investments?
- What Evidence have we seen that Impact Investments will Reap Healthy Returns?
- How should Impact Investors think about Reporting?
- For the Next Inevitable Downturn or Recession, will Investors Abandon this Space? When and How Will it Become Mainstream?
- Cambridge Associates PE/VC Impact Investing Benchmark – any early Conclusions Despite the Limited Sample Size and Overall Youth of the Funds?

Moderator:
Laura B. Wirick, CFA, CAIA, Principal, Consultant, **Meketa Investment Group**

Speaker:
Falah Madadha, Senior Investment Officer, **Silicon Valley Community Foundation**

4:45 PM – EMERGING MARKETS

- Macro Environment and Recent Developments – how does that affect your Investments?
- With Central Banks Tapering, do you see a Correlation with Weaker EM Returns? What about a Stronger Dollar for a Prolonged Period? Weak Commodity Prices?
- What would be the Effects on Emerging Markets if we see Weak Growth in the U.S.? Instability in the Eurozone? Slowdown in China?
- How will the Trade War affect China and other Emerging Markets? Any Markets that are More Insulated?
- What is an Appropriate Long-Term Allocation to Emerging Markets? What should that Allocation look like, (Public Equity, Fixed Income, Private Equity, Frontier Markets, Alternatives, etc.)?
- What are Realistic Return Expectations? How might that Differ based on Region?
- How do Valuations look Relative to Risk in Different Regions?
- Outlook for China – are you Concerned about their Credit and Real Estate Bubbles? Thoughts on Trade Challenges?
- What are the Key LP Concerns and Challenges in Particular Regions?
- Identify what Country or Region you see Favorable Demographic Trends such as a Growing Middle Class, Urbanization, Promising Consumer Buying Behavior and Economic/Fiscal Reforms
- Which Markets in Frontier Countries can you Profit from Strong Growth and Access a Lower Correlation?
- What can be done to Mitigate Currency Risks?
- After seeing Argentina and Turkey with a Currency Crisis caused by High Debt and Surging Inflation that follows, are there Any EM Countries to Avoid?
- The Case for Emerging Markets Corporate Debt
- What Metrics are you using to Determine Relative Value in Sovereign Bonds?
- Public vs. Private Emerging Markets – Benefits and Drawbacks of each
- Active vs. Passive Debate
- Choosing an Emerging Markets Fund or Manager – should you be Investing by Region, Country or Sector?
- Given the Current Environment, will Emerging Markets Outperform Developed Markets?

Speaker:
Mike Rosborough, Senior Portfolio Manager, Investment Director, Global Fixed Income, **California Public Employees' Retirement System, (CalPERS)**

5:25 PM – COCKTAIL RECEPTION



6:40 PM – COCKTAIL RECEPTION CONCLUDES

WEDNESDAY, APRIL 10TH

Westin St. Francis Hotel, San Francisco

7:00 AM – BREAKFAST

8:00 AM – KEYNOTE SPEAKER

The Science and Technology Revolution – Alpha by Investing in Innovation

- Historic Transformation
- Accelerating Pace of Innovation
- Investment Opportunity through Future Innovation
- Future Innovations and their Impact – Transportation as a Service, Artificial Intelligence/Deep Learning, Robotics, Blockchain, Internet of Things, Life Sciences, Improvements in Education
- Economic Modernization of China – Industries with Opportunity
- Economic Modernization of India Coming Into Focus

Speaker:
William J. Coaker Jr., CFA, MBA, Chief Investment Officer, **San Francisco Employees' Retirement System, (SFERS)**

8:30 AM – THE NEXT FRONTIER OF MULTI-ASSET INVESTING

- How has Multi-Asset Investing Evolved over the Years? How do you Navigate the Various Options and Approaches that are available today?
- Do these Strategies Reduce Correlation, Lower Volatility and Limit Downside Risk or Drawdown? If so, by How Much?
- What are the Common Sub-Asset Classes Included in Multi-Asset Strategies?
- Constructing the Portfolio – Risk Factor Approach
- How are Investors Incorporating Multi-Asset Strategies in their Portfolios?
- How do you see this Space Evolving in a more Treacherous/Volatile Market? Do you Worry that Dynamic and Tactical Asset Allocation Decisions that have been Little Tested in Recent Years can Harm Performance with Too Heavy a Reliance on Market Timing?
- Aside from Asset Allocation Skills, what other Skills are Required for the Ability to Generate Alpha and be Successful?
- Are Tactical Tilts More Transparent Today?
- How Worrisome is the Reliance on Stable Correlation Relationships with No Certainty those Relationships will Persist?
- How Much Value can one get Via Tactical Asset Allocation if you have the Right Expertise?
- Do you believe that Multi-Asset Funds have Sufficiently Incorporated Risk Controls into the Design of their Products?
- Understanding Dynamic Tail Risk Management Via Asset Allocation
- Is Excessive Leverage a Concern?
- How do you Measure Performance?
- Any Favorable Trends in Fees for Investors?
- How do Multi-Asset Managers Differentiate Themselves in this Crowded Field?

PRESENTED BY: **Janus Henderson**
INVESTORS

Speaker:
Ashwin Alankar, PhD, Senior Vice President, Global Head of Asset Allocation & Risk Management, **Janus Henderson Investors**

9:00 AM – HEDGE FUNDS

(A) CURRENT AND FUTURE STATE OF THE HEDGE FUND INDUSTRY

- Will Hedge Fund Underperformance Shift and Why?
- With Difficult Investment Conditions Pushing Many Seasoned Firms and Legendary Investors Out of the Business, does that mean some Strategies have Stopped Working or are Less Accurate? How do you approach this Struggle or go about Making your Strategy More Flexible?
- What is an Appropriate Fee Structure for Hedge Funds? Have you Seen More Fee Structures that Reward Alpha and Not Beta for Better Alignment of Interests and Avoid Overpaying for Underperformance?
- As an LP, do you find it Difficult to get Hedge Fund Managers to Provide Accurate Fee Information in a Timely, Efficient Manner? Do you believe we're In Need of a Standardized Reporting Template like ILPA for Private Equity?
- Why do Smaller Hedge Funds Outperform?
- With Crowding in FAANG and other stocks, do you see this as a Risk and a Contrarian Indicator for those Equity Holdings when the Cycle Turns?
- What is Driving the Increase in Demand for Strategies Uncorrelated with the Capital Markets? Which Low Correlated Strategies are Most Attractive?

(B) IMPLEMENTATION OPTIONS

- If there was a Hedge Fund Strategy you would Invest in over the next Few Years, which one would it be and why?
- What sort of Downside Protection, Drawdown or Return Range do you expect we'll see from each of the Different Hedge Fund Strategies during the Next Market Downturn?
- Do you find Opportunities within the Global Macro Space Attractive and if so, why?
- Managed Futures – Diversification and Performance during Periods of Market Stress or Crisis Events. How much can it Decrease the Depth of Portfolio Drawdowns and Volatility?
- What is the Future of the Fund of Funds Space? How has it Changed in Recent Years? Where will Fees be? What will it take to Stay Competitive?
- Long-Short Equity Hedge Funds – what Differentiates Managers that have been able to Outperform?
- Liquid Hedge Fund Products such as UCITS, 40 Act and Hedge Fund Replication – are they a Viable Alternative and Under what Circumstances? How has their Performance and the Lower Fees Fared to Hedge Funds?
- The Role of Alternative Beta/Risk Premia Strategies in a Hedge Fund Portfolio – what are the Appropriate Expectations from a Sharpe Perspective?
- How do Emerging Managers Differentiate Themselves in the Quest for Institutional Capital?
- Implementation Considerations for Due Diligence, Portfolio Function and Manager Selection. What are the Key Traits you should be looking for? Key Characteristics for Quantitative Strategies?

(C) PORTFOLIO CONSTRUCTION AND RISK MANAGEMENT

- What is the Role of Separate Managed Accounts? What are the Benefits? Are they Better than Commingled Funds?
- Any Recent Trends you've seen for Pension Plans as far as Fees, Transparency, Customization, Increased Partnership, etc.?
- As an Investor, do you Negotiate the Frequency of Performance Fee Payments (Fee Crystallization), with your Managers so that it Doesn't Lead to Hidden and Higher Costs?
- Importance of Operations Due Diligence. Any recent Developments? How often should Operations be Reviewed?
- What Trends do you see Developing in Regards to the way we Evaluate Liquidity Provisions for Hedge Funds?

Moderator:
David E. Franci, Managing Director, Absolute Return, **San Francisco Employees' Retirement System, (SFERS)**

Speakers:
Dr. John Claisse, CEO, **Albourne America**
Elizabeth T. Burton, Chief Investment Officer, **Employees' Retirement System of the State of Hawaii**

9:45 AM – REFRESHMENT BREAK



10:15 AM – CREDIT STRATEGIES

- Current State of the Credit Market
- What will be the Catalyst that will cause Credit Spreads to Widen and Defaults to Rise?
- What is the Opportunity Set in Credit Strategies? Where is the Relative Value?
- What Subsectors of Credit are Most Attractive given the Stretched Valuations? Any Areas you are Avoiding?
- Do you see Investors being more willing to Trade Liquidity for Yield and should that be of Concern?
- High Yield Market – is it possible to see a High Yield Meltdown with a Lack of Liquidity? Understanding the Corporate Debt Risk Factors and the Strong Correlation to Equities

- Bank Loans Overview
- Outlook and Considerations for Structured – Are CLOs Safer than Pre-Crisis?
- Can Securitized Credit Weather Market Turbulence? How has it Performed During Previous Credit Events? Is there a Lower Correlation to Broader Fixed Income Sectors?
- Outlook for Emerging Market Debt
- Public vs. Private Credit
- Is Direct Lending in a Bubble and how would you Position for that?
- Opportunities and Risks for Europe and Asia
- How much should Plan Sponsors be Allocating to Credit? What is the Optimal Structure to a Credit Portfolio?
- Considerations for Selecting a Manager and Strategy
- Why should Multi-Asset Credit Strategies be a Tactical Asset Allocation with Dynamic Management for Pension Plans?
- How do we Develop Return and Risk Expectation for this Asset Class?
- How do we Benchmark Performance?

Speaker:
Peter E. Ehret, CFA, Director of Internal Credit, **Employees Retirement System of Texas**

10:55 AM – DISTRESSED INVESTING – OPPORTUNISTIC AND SPECIAL SITUATIONS

- How does the Interest Rate Environment and Fed Balance Sheet Unwind Affect your Plans?
- What are your Expectations for Default Rates going forward?
- What is Most Worrisome in Distressed Markets Today Versus a Few Years Ago?
- When will the Vast Sums of Undeployed Capital come in off the Sidelines? Do you Need an Economic Downturn?
- Is Direct Lending a Bubble and if so, how would you Invest When it Pops?
- Where do you see the Largest Demand from Clients? What are they Most Interested in?
- Which Sectors, Strategies and Geographies will create the Best Opportunities? Any Areas that should be Avoided?
- What Distressed Opportunities are we seeing the Energy Sector?
- What's the Potential Impact of the Debt Piled up by Corporations for their Share Buybacks?
- Will the Prevalent Covenant-Lite Deals create Problems during the Next Cycle?
- What are the Opportunities and Risks in Europe? Any Countries, Sectors or Types of Deals that Stand Out?
- Do you see Opportunities in Asia or Elsewhere Globally?
- What are the Recent Leverage Trends?
- Do you worry about a Liquidity Problem in ETFs and other Structured Credit Vehicles if there is Credit Event?
- Has the Regulatory Environment Changed the Opportunity Set? How has it Impacted your Firm?
- How do Investors go about Choosing the Right Distressed Strategy, Size, Investment Style and Approach?
- How will the Different Implementation Approaches affect Expected Returns? Control vs. Non-Control? Private vs. Public?
- Distressed Debt Vehicles in Hedge Fund Format vs. Private Equity Drawdown Structures – what are the Pros and Cons of Each?
- What Skill Sets/Characteristics should Pension Plans look for in a Distressed Manager?

11:30 AM – CURRENCY HEDGING AND CURRENCY ALPHA

(A) CURRENCY MARKET OVERVIEW

- What are the Factors Driving Currencies Today?
- Do you Worry about the Uncertainty Surrounding the Euro and EU?
- What is the Relationship Between Volatility and Currency Returns?
- Can Currencies be Forecasted via Fundamentals, Cycles and Trends?
- Benefits of Active and Dynamic Currency Management
- What are the most Common Reasons Asset Owners give for Not Actively Managing Currency? Are these Reasons Valid or Not?
- What is the Impact Forex can have on Overall Risk and Returns for International Equity and Bond Portfolios?
- Widely Confused Difference Between Currency Hedging and Currency as an Asset Class – how do they Differ in terms of Implementation Approaches?
- What are the Merits and Demerits of Adopting a Hedging Program vs. an Alpha Program?
- Different Skills Required for Currency Hedging vs. Currency Alpha – should a Different Manager be used for Each Approach or is it Possible to be Skilled in Both?

(B) CURRENCY OVERLAY HEDGING

- Given Plan Sponsors Non-U.S. Exposure, what Factors should be Considered in the Determination of Implementing a Currency Hedging Program?
- Is there an Optimum Currency Hedge Ratio for a Plan?
- How much of a Reduction in Portfolio Volatility and Risk should be Expected?
- Can it be More Beneficial to be Unhedged?
- Hedging Costs – how should this factor into your Decision?

(C) CURRENCY ALPHA

- How does Employing a Currency Alpha Strategy fit into an Asset Allocation Framework?
- Benefits of Non-Correlated Returns to Equities, Fixed Income and Alternative Investments
- How does Investing in Currency Diversify and Reduce Risk? Natural Diversifier for the Duration Risk in Bonds?
- How do you Manage Risk Factors?
- What are the Return Expectations?
- When considering Investing in an Active Currency Strategy, what should you look for in a Manager?

Moderator:
Andy T. Iseri, CFA, Senior Vice President, Global Manager Research, **Callan**

12:00 PM – LUNCH

SPONSORED BY:  **Crestline**

1:05 PM – PRIVATE EQUITY

- What's your Biggest Concern – Valuations, Excess Dry Powder, Downturn, etc?
- How are you Positioning Your Portfolio given the Current Market Conditions?
- Any Lessons Learned from the Financial Crisis? What are you doing Differently when Approaching New Investments?
- Protecting your Current Portfolio – how would you Guard Against your Existing Portfolio?
- Where are your Most Optimistic Returns Going Forward as far as Sector, Geography or Niche Strategy? What's your Biggest Worry?
- Which Lower or Non-Correlated PE Strategies have you Allocated to or Favor?
- Where do you see the LP/GP Relationship in the Future when it comes to Separately Managed Accounts, Strategic Partnerships, Co-Investments, LPs Concentrating Portfolios, etc.?
- Transparency and Fees – As an LP, has this Impacted your Ability to Commit Capital? SEC's Impact?
- Have you gotten More Involved in your GP's Valuation Process? How have you Achieved this Transparency Demand? Thoughts on the Fair Value Quality Initiative?
- Thoughts on GPs Selling Minority Stakes to Third Party Investors like Dyal or Petershill? Any Negative Implications that you can Foresee?
- Subscription Lines of Credit and Risk – how can you Better Understand How these Lines have Altered Returns? Thoughts on ILPA's Guidelines?
- Do you believe we're in a Venture Capital/Technology Bubble? How do you View the Venture Space today?
- For Co-Investment Deals that Underperform, what are the Reasons Why?
- Where can we find Good Returns in Private Credit Without Taking Inordinate Risk?
- Why should Secondaries be a Core Holding?
- Issues, Outlook and Opportunities for European PE

Moderator:
Faraz Shooshani, Managing Director, Senior Private Markets Consultant, **Verus**

1:50 PM – INFRASTRUCTURE

- State of the Infrastructure Markets
- Is there Too Much Capital Chasing Too Few Deals?
- With High Competition for Larger Investments, could there be More Return Potential in Smaller Projects?
- How has Performance been and what are the Recent Return Expectations?
- What have been the Effects of the Low Interest Rate Environment on Infrastructure and how might that Affect Returns and Leverage Going Forward?
- Which Sectors are Most Attractive?
- Which Geographies are Most Appealing? Developed or Emerging Economies?
- Approach – Greenfield vs. Brownfield?
- Why is Infrastructure Debt Attractive? Will it deliver for Investors Searching for Yield?

- What are the Biggest Challenges/Risks associated with Infrastructure Investing?
- Do you believe Credit Risk might be Under-Appreciated?
- Opportunities in Public-Private Partnerships?
- How have GPs Adopted ESG Principals?
- What are the Most Attractive Investments within Renewables?
- Listed vs. Unlisted – which do you Favor in a Volatile Market for Downside Protection? Do Rising Interest Rates Favor Either?
- Any Advantages or Limitations for Co-Investments? Separate Accounts?
- What are the Advantages of Open-Ended Funds over Closed-Ended Funds? Will we Continue to see a Surge in Open-Ended Funds in the Coming Years?
- What are the Major Technological Trends that will Shape Infrastructure Investing in the Coming Years?

Moderator:
Todd Lapenna, CFA, CAIA, Partner, Infrastructure & Real Assets, **StepStone Group**

2:25 PM – REAL ESTATE

- Are you Expecting a Drop in Pricing and Lower Returns? What are your Returns Expectations for the next 5-10 Years?
- Where do you See the Most Risk? How are you De-Risking?
- Are you Slowing Down, Maintaining or Increasing your Pace of Investment?
- Where are the Most Crowded Trades? Are there any Less Crowded Trades?
- What are your Return Expectations for Core?
- Within Non-Core, what Risks are Investors Willing to Take?
- What is the Biggest Threat to Commercial in the next few years for this Fully Priced Market?
- Are you Making Pivots or Tilts to Take Advantage of Macro or Socio/Demographic Trends?
- What are you seeing in the Market Today with Respect to Volume of Transactions and Pricing?
- Thoughts on the Bridge Financing Opportunity for Maturing Commercial Real Estate?
- What Real Estate Technology Trends are you Watching Most Closely?
- What's happening with Leverage? LP Preferences for Use of Leverage?
- Any Niche Property Types that you Like?
- Asia and European Real Estate Outlook – Opportunities and Investment Trends
- With the Privatization of Fannie Mae and Freddie Mac a Possibility, what would be the Effect on Real Estate Portfolios?
- Will Co-Investments become more Common?
- Current State of the Real Estate Secondary Market
- Thoughts on Programmatic Joint Ventures?
- Are we still seeing a Decline in Closed-Ended Funds? If so, Why and Will it Continue?
- Larger vs. Smaller Fund Size – which ones will Outperform going forward?
- What Strategies do you see as the Biggest Risks and the Biggest Rewards/Relative Value for the Future?

Moderator:
Christy Fields, Managing Director – Real Estate, **Pension Consulting Alliance, (PCA)**

Speaker:
Anthony Breault, Senior Investment Officer, Real Estate, **Oregon State Treasury**

3:10 PM – REFRESHMENT BREAK

3:35 PM – INVESTING IN FARMLAND

- Demographics, Global Food Demand and Land Scarcity as Macro Drivers
- Is Farmland a Good Investment if we have another Downturn or Financial Crisis?
- How has Historical Performance been?
- What are the Portfolio Benefits?
- Understanding the Evolution of U.S. Farmland Ownership and what the Transition will look like for Institutional Ownership. How might that Compare to Ownership of Timberland?
- What are the Physical-Casualty Risks? Is it a Concern or is it Proactively Managed through Operating Practices of the Farm?
- Would a Drop in Commodities Prices hurt Farmland Returns? Importance of Crop Diversification
- How might this Asset Class be Impacted by Future Regulatory Decisions?
- Thoughts on the Rise in Farmland Debt Strategies that have Attracted Investors?
- Is it Difficult to Access Farmland through Public Markets? Might the Public REIT Market Evolve for Farmland? What are the Pro's and Cons of these REITS?

3:50 PM – INVESTING IN WATER

The World Economic Forum has ranked water as a top global risk for the past several years. The growing focus on water scarcity has many eyeing opportunities. The United Nations estimates that almost half of the world's population will live in areas of high water stress by 2030, with a 40% shortfall between water supply and demand.

- What Factors are Contributing to Water Stress and Risks?
- How are Investors Identifying and Evaluating Water Risks in their Portfolios?
- Does the Ceres Investor Water Toolkit Serve its Purpose to Help Investors Evaluate and Understand Water Risks in their Holdings?
- ESG Social Benefit – Investing in Projects and Companies that will Help Clean, Distribute and Maintain our Water Supply
- Where are the Most Attractive Opportunities?
- Are you Seeing Situations where the Government is Underwriting some of the High Impact Risks of the Project?
- Should Pensions be Seeking Greenfield or Brownfield Investments and Why?
- What are the Biggest Investor Challenges?
- How do you Overcome the Investor Lack of Clarity on the Yield they will Receive once the Project is Built?
- What are your Predictions for Growth in this Space?

4:05 PM – CIO ROUNDTABLE

(A) RISKS, ALLOCATIONS AND MACRO-BASED DECISIONS

- In this Fully-Valued Environment, how are you Balancing the Risk of a Large Drawdown with your Return Goals? Has it Impacted your Asset Allocation?
- Which De-Risking Strategies or Investments with a Low/Non-Correlation have you Allocated to?
- Do you believe your Hedge Fund Strategies will provide a Cushion for the next Market Downturn? How do you use them to Reduce Risk?
- Have you Trended Towards a Passive Equity Allocation? When Volatility Rises, do you Believe Active Managers will Outperform?
- Have you made Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you Believe the Impact of Regulation along with the Shift Towards Passive Management has Created a Reduction in Market Liquidity? Will there be Sufficient Liquidity in the System to Cope with Conditions of Market Stress? Has it Impacted your Fund or Decisions?
- Is there Some Point at which Higher Rates would cause you to Rethink your Asset Allocation or Other Strategies?
- What Percentage of your Pension Fund's External Asset Management uses ESG Factors? Percentage Excluding Hedge Funds? Do you have Plans to Increase the Use of ESG Managers?
- How are you Viewing Emerging Markets Broadly and what do you feel is the proper EM Allocation? Any Regional or Frontier Strategies that interest you?

(B) ALIGNMENT OF INTERESTS

- What Changes or Trends have you noticed in Fee Structures/Terms and your Bargaining Power? Has the Size of your Fund been an Advantage or Disadvantage?
- How can you Overcome Governance Hurdles so that you can Effectively Partner with Outside Providers, Bring a Portion of the Investment Management In-House and Provide Incentive-Based Compensation?
- Have you Taken Steps to Address Diversity within your Investment Programs or your Organization's Staff?
- Do You and Your Investment Departments have the Authority to be a Dynamic, Tactical and Active Investor In Response to Extreme Economic Conditions?
- Have you Addressed Cybersecurity Protection for your Plan? How have you Educated of the Risks with Staff and Taken Steps for Protection with Investment Managers?
- Any Important Lessons Learned that you can Share from your Individual Plan Experiences?
- What Keeps You Up at Night?

Speakers:
Mansco Perry III, CFA, CAIA, Executive Director, Chief Investment Officer, **Minnesota State Board of Investment**
Tom Tull, CFA, Chief Investment Officer, **Employees Retirement System of Texas**
Bruce H. Cundick, CFA, CPA, Chief Investment Officer, **Utah Retirement Systems**

5:00 PM – CONFERENCE CONCLUDES

5:00 PM – TICKETS FOR NETWORKING EVENT HANDED OUT IN CONFERENCE ROOM

ATTENDEES OF THE NETWORKING EVENT MUST BE PRESENT IN THE CONFERENCE ROOM IN ORDER TO RECEIVE TICKETS

6:00 PM – NETWORKING EVENT, TBD

Networking Event – The Waterfront Restaurant Cocktail Reception & Dinner

Hosted by The Pension Bridge – Join our group for a cocktail reception and dinner at the Waterfront Restaurant located adjacent to the Financial District at Pier 7. Experience breathtaking views of San Francisco Bay and the iconic Bay Bridge. The Waterfront Restaurant, one of the city's finest seafood restaurants, has been a top culinary destination for more than 45 years and has been a known favorite for politicians, celebrities and business executives. The Pension Bridge Group will utilize will the waterfront space for meetings and conversation with quality contacts while taking in spectacular views.

9:00 PM – NETWORKING EVENT CONCLUDES

REGISTRATION:

To register or receive more information about The 2019 Pension Bridge Annual:

BOCA RATON OFFICE CONTACT:

Brett Semel

☎ (561) 455-2729

✉ bsemel@pensionbridge.com

NEW YORK OFFICE CONTACT:

Andrew Blake

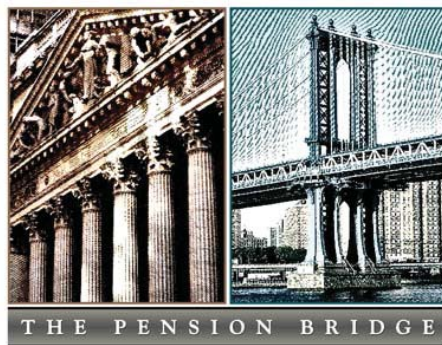
☎ (516) 818-7989

✉ ablake@pensionbridge.com

Please visit www.pensionbridge.com for additional details. **Registration is not available online.**

About The Pension Bridge: We are an innovative company offering educational conferences of the highest quality. Our objective is to provide an education to the institutional investment community while providing an impressive speaker faculty in a setting that is conducive to great networking. We help institutional money managers connect with Pension Funds and Consultants across the country in a fun, enjoyable atmosphere. Our events can act as a stepping stone to a successful financial relationship or simply help build the investment education.

Our management team's unique skills, operating experience, and industry relationships help to make our events the main attraction in the industry. We pride ourselves on being there to cater to our clients' wants and needs. Our ratio of plan sponsor to investment manager allows our events to be the most desirable and accommodating in the conference industry. The Pension Bridge is known for its strength, stability, relationships and operational excellence.



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MEMORANDUM

TO: Oakland Police & Fire Retirement Board

FROM: David Jones

SUBJECT: Authorization and Reimbursement of Board/Staff Travel/Education Expenses

DATE: January 22, 2019

Jaime Godfrey, Board member of the **Oakland Police and Fire Retirement System** board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Board member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel / Education Event: 2019 Pension Bridge Conference

Event Location: Westin St Francis Hotel, San Francisco, CA

Event Date: April 9, 2019 - April 10, 2019

Estimated Event Expense*: \$ 1,400.00 (estimated)

Notes: _____

* If enrollment, registration or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the traveling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

For questions please contact David Low, Administrative Assistant, at 510-238-7295.

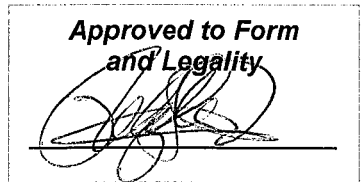
Attachments (if any):

Resolution #7040

2019 Pension Bridge Agenda

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7040



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

TRAVEL AUTHORIZATION FOR PFRS BOARD MEMBER JAIME GODFREY TO TRAVEL AND ATTEND THE 2019 PENSION BRIDGE CONFERENCE ("PENSION BRIDGE CONFERENCE") FROM APRIL 9, 2019 TO APRIL 10, 2019 IN SAN FRANCISCO, CA WITH AN ESTIMATED BUDGET OF ONE THOUSAND FOUR HUNDRED DOLLARS (\$1,400.00)

WHEREAS, PFRS Board Member Jaime Godfrey wishes to attend the Pension Bridge Conference in San Francisco, CA from April 9, 2019 to April 10, 2019; and

WHEREAS, PFRS Board Member Godfrey is expected to seek reimbursement of expenses from the Board; and

WHEREAS, in compliance with the Education and Board Travel Policy, which requires that PFRS Board/Staff Members seek PFRS Board approval prior to travel; and

WHEREAS, in compliance with the Board Education and Travel Policy, the Board/Staff Member has presented costs for travel-related parking expenses (est. \$292.00), lodging and meals expenses (est. \$919.00), and registration fees to the Pension Bridge Conference (\$189.00), for an estimated total amount of \$1,400.00; and

WHEREAS, PFRS Board Member Godfrey seeks Board approval of the aforementioned mentioned estimated costs to travel to San Francisco, CA to attend the Pension Bridge Conference from April 9, 2019 to April 10, 2019; now, therefore, be it

RESOLVED: PFRS Board Member Jaime Godfrey's travel request and estimated budget of \$1,400.00 to attend the 2019 Pension Bridge Conference is hereby approved.

IN BOARD MEETING, CITY HALL, OAKLAND, CA JANUARY 30, 2019

PASSED BY THE FOLLOWING VOTE:

AYES: KASAIN, MELIA, MUSZAR, SPEAKMAN, WILKINSON, AND PRESIDENT JOHNSON

NOES:

ABSTAIN: GODFREY

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

THE PENSION BRIDGE ANNUAL

April 9th & 10th, 2019 | Westin St. Francis Hotel, San Francisco



THE PENSION BRIDGE ANNUAL

April 9th & 10th, 2019 | Westin St. Francis Hotel, San Francisco

The Pension Bridge Annual Conference provides the highest level of education and networking to the institutional investment community. A mix of Public Funds, Corporate Funds, Foundations, Endowments, Union Funds, Taft-Hartley Funds, Family Offices, Sovereign Wealth Funds, Consultants and Investment Managers will come together for this exclusive event.

The Pension Bridge Annual provides the industry's only controlled attendance structured event. This helps The Pension Bridge to maintain the best conference ratio in the industry. **There will be over 200 Pension Fund Representatives and Non-Discretionary Consultants in attendance. We have allowed for only 100 Manager Firms.** This better than 2:1 ratio, combined with participation from the most influential industry figures, creates a more enjoyable environment for all.

LEARN FROM THE EXPERTS

ABOUT THE MOST IMPORTANT TRENDS, CHALLENGES, OPPORTUNITIES AND STRATEGIES TO ATTACK THE LONG-AWAITED CYCLE CONTRACTION THAT WILL SHAPE OUR INDUSTRY FOR THE IMMEDIATE AND LONG-TERM FUTURE:

- | | |
|--|--|
| ✓ Options to Ease the Pension Funding Crisis and Unsustainable Costs | ✓ The Benefits and Concerns of Multi-Asset Strategies |
| ✓ Best Strategies and Approaches to Mitigate Tail Risk | ✓ Expected Performance for Various Hedge Fund Strategies during the Next Downturn |
| ✓ Best Implementation and Allocation Strategies for a Public Fund LDI Program | ✓ Where is the Relative Value in Credit Strategies? |
| ✓ Does Risk Parity Make Sense Now? Expectations for Results during the Next Downturn | ✓ Which Sectors and Strategies will create the Best Opportunities in Distressed? |
| ✓ Where are the Greatest Risks and Triggers in the Debt Markets? | ✓ Biggest Concerns for Private Equity and Best Approaches to New Investments |
| ✓ Gender Diversity and Advancement of Women in the Industry | ✓ Lower Return Expectations for Real Estate? Where is the Most Risk? |
| ✓ How can your Future Investment Returns be Impacted by Climate Change? | ✓ Most Appealing Infrastructure Sectors, Geographies and Approaches |
| ✓ What are the Latest Trends and Most Promising Areas for Impact Investing? | ✓ The Portfolio Benefits of Farmland and Benefiting from the Global Food Demand |
| ✓ Why should Plan Sponsors Actively Manage Currency - Hedging vs. Alpha? | ✓ Identifying Water Risks in your Portfolio and Profiting from Water Stress and Scarcity |
| ✓ Challenges and Concerns in China and other EM Regions | ✓ Insights from Impactful CIOs on Risks, Allocations and More |

We remain in a low growth, low return environment with unfavorable demographics in the U.S. The Pension Bridge Annual will uncover various structural transformations and investment ideas that will be beneficial for long-term fiscal sustainability.

In addition to the listed themes above, we will be covering many more challenging issues that are crucial to the investment decision making process during these uncertain economic times. We will learn from the best about how to adapt in our industry which is always evolving and transforming.

THE PENSION BRIDGE ANNUAL HAS TWO GOALS IN MIND

First is to provide the **highest level of education** with the top speaker faculty. This highly regarded group will bring forth influential insights and concepts. The second goal is to help **build relationships** between the pension plans, consultants and investment managers. We have provided the best possible environment for this event which is designed to be conducive for networking. We will cap off the event with a fun and enjoyable networking outing necessary for maintaining relationships and connecting with your peers and prospective business contacts.

We look forward to a strong event and a very productive one from both an educational and relationship perspective. We have structured this conference in a manner that will be most productive and beneficial for you. We hope that you will join us to be amongst your industry peers to learn about the most up-to-date insights, investment strategies and trends.

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TUESDAY, APRIL 9TH
Westin St. Francis Hotel, San Francisco

7:00 AM – BREAKFAST

SPONSORED BY:

JENNISON ASSOCIATES

8:00 AM – OPENING REMARKS

8:05 AM – KEYNOTE SPEAKER

Speaker:
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, **Massachusetts Pension Reserves Investment Management Board, (PRIM)**

8:35 AM – KEYNOTE SPEAKER – MACROECONOMIC VIEW

- Fed Balance Sheet Unwind – Effects for U.S., the Dollar and Globally
- The Everything Bubble
- Longer Term Implication of Tax Cuts Adding to the Deficit
- Debt to GDP Ratio
- Buffett Indicator at an Extreme
- Valuation Levels
- Margin Debt
- Corporate Debt Growth for Financial Engineering
- High Yield Defaults Outlook
- Algos and Passive Investment as a Market Risk
- Inflation/Deflation Debate
- Where are the Most Unfavorable Demographics Globally?
- What Countries Debt and Risks pose the Biggest Threat in Europe? Does that put the EU and Euro at Risk?
- China – Debt Levels, Leverage and Real Estate Bubble
- Japan's Demographics and Debt – what might be the Far-Reaching Effects?
- Which are the Shakier Emerging Market Countries that have High Debt that can be Hurt by a Strong Dollar?
- Derivatives Risk
- Expectations for Equities and Bonds
- Expectations for the Next Black Swan?
- What are the Most Appealing Investments for Low Return Environment?

PRESENTED BY:

BLACKROCK®

Speaker:
Rick Rieder, Managing Director, Global Chief Investment Officer of Fixed Income, **BlackRock**

9:05 AM – THE DEEPENING CRISIS OF UNFUNDED PENSION PLANS AND ITS FAR REACHING EFFECTS OF FISCAL DISTRESS

- Background on how we got here – what are the Contributing Factors?
- What are some Examples you've seen when Cities, Counties, School Districts and Other Local Entities are Forced to Contribute More to Keep the State System Afloat?
- Have you seen Cut-Backs on Repairing Streets and Bridges or Staffing Police and Teachers due to Pensions Crowding out Budget Spending? Any Other Cut-Backs you've seen in Education, Public Safety and Social Services?
- What sort of Higher Taxes have you seen for Scantier Services in Returns?
- What Recent Controversial Pension Reform Bills have been Passed Into Law? What were some Concessions Received and those they Didn't?
- What Trends have you seen in regards to Court Rulings on Reduced Benefits and Higher Contributions? Are the Courts Hindering Repair of this Funding Crisis?
- Do you Envision Further Credit Downgrades for Particular States due to High Unfunded Pension Liabilities? How much would this Further Complicate the Budget and Hamper Economic Growth?
- If we Face Another Strong Market Decline or Recession, what's the Time Frame for when Particular States or Plans would Face Insolvency?

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- What Actions should be taken by the Joint Select Committee on Solvency of Multiemployer Pension Plans?
- Aside from Raising Taxes, what are some Possible Options to Overcome Unsustainable Pension Costs? Thoughts on Initiating a Tax on Plan Members?
- Is Issuing Bonds to Pay Off Shortfalls a Solution or a Gamble?
- How Far Reaching would a Government Bailout be if Congress included Provision in the Budget Deal for Federal Funds towards Pension Plans?
- What are the Methods of Navigating the Challenges Posed by your Governance Structure?
- Are you Getting Pressured that your Investment Costs are Too High? How do you respond to such Allegations?
- Which Investment Strategies or De-Risking Strategies do you Favor for Decreasing a Pension Plan's Unfunded Liability While Helping to Preserve Cash?
- Will we see a Shift to Hunt for Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you believe Plans in Danger will Cut Illiquid Asset Classes in Favor of More Liquid Investments in order to Meet Benefit Payments?
- Do you see the Benefits of Adopting a Hybrid DB/DC Plan for New Hires? What are the Drawbacks?

Speakers:
David Eager, Executive Director, **Kentucky Retirement Systems**
Dominic Garcia, Chief Investment Officer, **Public Employees Retirement Association of New Mexico, (PERA)**
Glen R. Grell, Executive Director, **Public School Employees' Retirement System, (PSERS)**
Richard W. Ingram, Executive Director, **Teachers' Retirement System of Illinois**

9:55 AM – REFRESHMENT BREAK

SPONSORED BY:

GCM GROSVENOR

10:25 AM – RISK MANAGEMENT AND ADOPTING A RISK CULTURE

(A) KEY CONSIDERATIONS AND TOOLS FOR MANAGING RISKS

- Overview of the Transformation from an Asset Allocation-Centered Process to a More Comprehensive Risk Allocation-Based Process
- Are there Governance Challenges that have Prevented Wide-Spread Adoption of a Risk Allocation Framework?
- How has taking a Risk Allocation Approach changed the Structure of your Plan's Fixed Income Investments? Understanding Return Seeking Fixed Income and Traditional Risk Reducing Fixed Income
- What Irregularities have we seen in Portfolios as Asset Classes are Redrawn and Renamed via Risk Allocation? Are we still too Over-Reliant on Equities?
- Challenges of Performance Monitoring, Risk Data and Systems – getting good Risk Information Across All Asset Classes and Investment Vehicles
- How can considering Diversification and Risk Independently help Investors Build More Efficient Portfolios?

(B) TOP PENSION RISKS WE SHOULD BE MOST WARY OF

- Drawdown Risk
- Transparency and Liquidity Risk – Basing it on a Cost/Benefit Evaluation
- What's the Best Approach to Liquidity Risk as it applies to Meeting Future Cash Flow Obligations?
- Leverage Risk – what are the Best Approaches to keep these Risks within Acceptable Parameters?
- Equity, Credit, Duration, Inflation/Deflation, Currency, Geopolitical Risk Considerations
- Understanding Asset Class Correlation and Behavior Risk – Tendency of Interest Rate and Inflation Shocks Driving Both Equities and Bonds in the Same Direction, (Correlations Change)
- Other Risks such as Model Risk or Operational Risk
- How does Stress Testing or Scenario Analysis factor into your Process?
- What should Keep CIOs and Staff Up at Night?

(C) COMMUNICATION

- How do you Communicate your Risk Tolerances with your Board, Managers and Media?
- How has the Role of Fiduciary Responsibility Changed?
- What should Boards/Organizations Consider when Building a Risk Culture?
- How do you go about Educating a Board on Risk?
- What Metrics Aid in the Decision-Making Process?
- How does a Plan's Size affect the Approach to Pension Risk Management?

Speakers:
Timothy F. McCusker, FSA, CFA, CAIA, Chief Investment Officer, Partner, **NEPC**
James Nield, CFA, FRM, Chief Risk Officer, **Teacher Retirement System of Texas**

11:15 AM – RISK MITIGATING STRATEGIES

- Understanding Tail Risk Frequency, Severity and Impact
- Why should this be its Own Bucket or Asset Class? What Type of Allocation is Warranted?
- Understanding the Value of Risk Mitigating Strategies – why is it Important to Improve your Risk/Return Profile Now?
- What Risks can be Efficiently Hedged in the Financial Markets?
- What Types of Strategies and Approaches are used to Hedge? Advantages and Disadvantages of Each Approach?
- What are the Merits of an Option Overlay Strategy In Lieu of Owning a Tail Risk Hedge?
- What are the Trend or Momentum Following Strategies that you Prefer for Downside Protection?
- Why is Global Macro the Ideal Hedge Fund Allocation for Diversification and Decreasing the Depth of Drawdowns?
- How has Managed Futures Performed During Periods of Market Stress or Crisis Events?
- Long Duration U.S. Treasuries as a Diversifier in Extreme Market Conditions
- Building a Tactical Portfolio using Futures to Reduce Tail Losses and Enjoy Larger Gains
- Put Options as Insurance
- Using Information from the Derivatives Markets to assess Stress Points – where we are seeing Tail Risks Building?
- Systematic Risk Premia Allocations – does it Enhance Performance Outcomes? Are Short Track Records and Wide Variations in Products Concerning for Trend Risk Premia?
- Are there Alternative Ways to Deal with Equity Risk? How Defensive are these Strategies?
- What's the Most Challenging Aspect of Implementing a Risk Mitigating Strategies Program?
- How do you Measure Success?

11:50 AM – LIABILITY DRIVEN INVESTMENT (LDI), AND HOW IT CAN BE APPLIED TO PUBLIC DB PLANS

- What have Plans done to address the Hurdles of Low Pension Funded Status and Low Interest Rates over the past few years?
- Does LDI Make Sense Now Considering Current and Future Market Conditions? What is the Risk/Return?
- Are Plan Liabilities the only appropriate Benchmark?
- How does a Public Fund Implementation and Liability-Focused Allocation Differ from a Corporate Fund?
- Are some Approaches More Appropriate in a Less Liquid Fixed Income World?
- Do Plans need to Customize their Liability Hedging Allocation?
- For a Public Fund, what Cash Flow Generative Strategies would allow for the Portfolio to Reduce the Funding Ratio Volatility and Meet the Benefit Payment Needs?
- Understanding the Components of Performance Measurement and Evaluation – Risk Budgeting, Scenario Analysis, Liquidity Analysis and Performance Reporting
- What are some Industry Trends that Clients should be aware of in the LDI Market?
- Beyond the Ability to Earn Excess Returns, what should Investors look for in Selecting LDI Managers?
- Will we see a Strategy More Common in Europe with Plan Sponsors Combining an LDI Strategy with the Purchase of Longevity Insurance to Further Reduce Risk?
- What are some Common Myths that are Holding Back Plan Sponsors from Implementing a De-Risking or LDI Strategy?

PRESENTED BY:



Speaker:
Abdallah Nauphal, Chief Executive Officer, Chief Investment Officer, **Insight Investment**

12:20 PM – RISK PARITY

- Risk Parity Explained
- Do you believe Risk Parity can Play a Role In and Contribute to Market Volatility?
- What are the Hidden Risks and Drawbacks of Risk Parity Portfolios?
- Does Risk Parity Make Sense Now if we Expect Low Market Returns in the Future?
- How did Risk Parity Perform during the last Financial Crisis Compared to other Asset Mix Models? Would you Expect Similar or Different Results for the Next Downturn?
- Is it possible that Bonds will Become Less Likely to Protect against a Large Drawdown in Equities?

- Is there an Over-Reliance on Bonds with Current Valuations? Should we be Worried about Leverage or Leveraging the Inappropriate Assets?
- Commodities Role in Risk Parity and Expectations
- Active Strategy? Passive? Extent to which a Risk Parity Portfolio is Managed?
- Leverage and Illiquidity Do Not Mix – any Approaches to Avoid this Combination?
- What Progress have we seen towards Adopting an Appropriate Benchmark?
- Thoughts on Measuring Expected Tail Loss Rather Than Volatility for Tail Risk Parity? Can it be More Effective?
- How do Investors Bucket the Risk Parity Strategy within the Asset Allocation Framework?
- How should Investors think about Differences in Forecasting Volatility when Selecting a Manager?

Speaker:
David Villa, CFA, Chief Investment Officer, Executive Director, **State of Wisconsin Investment Board, (SWIB)**

12:35 PM – LUNCH



1:45 PM – UNCONSTRAINED FIXED INCOME

- Assessing the Current Environment – Implications on Unconstrained for where we are in the Credit Cycle, Interest Rate Cycle and Fed Unwinding of QE
- How do you Approach Portfolio Construction with the Need for Increased Disaggregation of Alpha Sources?
- With the Proliferation of Products which are Diverse, what is the Return Objective?
- How do you Benchmark and Define Success for Unconstrained Fixed Income Strategies?
- With Non-Linearity of Risk Correlations and Volatility Not Being Stable through time, how are you Taking Advantage of Current Market Dislocations?
- How Important is Liquidity Management? Should Investors think about Transparency of Positioning in Unconstrained Fixed Income?
- What are the Implications of Reduced Liquidity? Have you Increased your Use of Bond ETFs to offer Enhanced Liquidity? If so, what were some Other Reasons for this Decision?
- Is the Recent Tilt Towards Higher Carry or Less Carry within specific Spreads such as Bank Loans, High Yield and Syndicated Loans, EM Debt, etc.?
- Where do you see the Greatest Risks in the Debt Markets and what might be the Trigger Points that Enhance that Potential?
- Are you Building Dry Powder at this point in the Credit Cycle?
- What Progress have we seen for a Factor or Risk Premium Approach for Assessing Risk?
- Do you see a Supply/Demand Imbalance in Long-Duration Fixed Income? What does that Imply for Investors?
- Using Structured Products, Swaps and Derivatives to Create Alpha and Hedge Volatility
- Emerging Markets Local Fixed Income – what are the Opportunities? Currency Risk Factors? Should Currency Exposures be Hedged or Unhedged?
- What are your Expectations and Outlook for Corporate Debt? Do you see a Disaster in the Making?
- Taxable Municipals vs. Corporate Bonds – Which Make More Sense Now?
- Do you view Bank Loans as a Hedge in Rising Rate Environment?
- If Trump Moves on GSE Reform, how would that impact the MBS Market?
- Understanding how to Select Alternative Managers – Multi-Sector, Multi-Region, Multi-Currency Skill Set or Duration Range Targets?

Moderator:
Keith M. Berlin, Director of Global Fixed Income and Credit, **Fund Evaluation Group**

2:30 PM – WOMEN AND THEIR INCREASING ROLE IN INVESTMENT MANAGEMENT

We'll revisit this topic as it created quite the buzz at last year's event and we'd like to keep the momentum moving for this initiative. Diversity, specifically for women, is a standard that can be achievable when viewed as a requirement, not a commercial imperative.

- What are some Ways we can Encourage Organizations to Embrace and then Require Gender Diversity?
- What is the Most Common Reason why Investors do not have Specific Women-Owned Investment Mandates? How Big an Issue is Lack of Supply?
- With just 6.5% of Global Private Equity Firms having Partners or Managing Partners that are Women (source: Prequin), how do you approach Beating those Odds?
- How does Diversity Impact your Organization? Any Gender Diversity Experiences you can Share?
- Have we seen any Statistical Performance for Women and Minority-Owned Investing? What about the Performance of Female Hedge Fund and Private Equity Managers?
- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?

- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?
- What Can Institutions do to Support Women's Advancement to the Top Levels of Leadership?
- How might Specialization be an Important Way for Women to offer a Diversified Strategy Approach?
- Controversial Topic – Is there a way the MeToo Movement can be Destructive with Quotas Resulting in Distortions of Decision-Making and Passing up Superior Candidates for a Job?
- Thoughts on the FTSE Russell Women on Boards Leadership Index Series and its Ability to Achieve Gender Diversity?
- What Career Advancement Advice would you give to Younger Women who are Passionate and Fairly New to Investment Management?

Moderator:
Meredith A. Jones, Partner & Head of Emerging Manager Research, **Aon Hewitt Investment Consulting**

Speakers:
Ronald D. Peyton, Executive Chairman, **Callan**
Dana S. Johns, MSF, Senior Portfolio Manager, **Maryland State Retirement and Pension System**
Susan E. Oh, CFA, Senior Portfolio Manager, **Pennsylvania Public School Employees' Retirement System**
Kristina P. Koutrakos, CAIA, Director of Portfolio Strategy, **Virginia Retirement System**

3:10 PM – REFRESHMENT BREAK

SPONSORED BY:



3:40 PM – ENVIRONMENTAL, SOCIAL AND GOVERNANCE, (ESG)

- What's the Difference Between ESG, Socially Responsible Investing, (SRI) and Impact Investing?
- Do we have Proof that ESG Integration Adds Value?
- ESG Fund Performance vs. Traditional Funds
- What are Some Common Myths About ESG?
- Do Firms with Good Performance on SASB Topics Outperform Firms with Poor Performance on those Topics?
- How do you Approach ESG from a Fiduciary Standpoint and for the Development of your Plan's Investment Beliefs?
- Why are UN Sustainable Development Goals Important? What Ways are you using them to Help Investing in New Opportunities and Identify Future Areas of Risk?
- How should ESG be best Incorporated into the Investment and Due Diligence Process?
- What Tools, Data or Trends have we seen for ESG Implementation? What Initiatives are Focused on Driving Towards a Sustainable Global Economy?
- What are the Perceived Obstacles to applying an ESG Framework to the Stock Selection Process?
- How do ESG Factors Interact with Credit Quality, Affect the Pricing of Credit and how do they Affect Credit Returns?
- How can your Future Investment Returns be Impacted by Climate Change? Aside from Assessing Risks to Real Estate in Rising Sea Level Coastal Areas, what Risk Factors should we be Analyzing?
- What Approach should be taken to have a Climate Change Action Plan in place to address these Climate Risks?
- How should we approach Carbon Risk Management within an ESG Framework?
- Considerations for Investing in a Passive ESG Index – thoughts on Low Carbon Index? Combining ESG with Smart Beta?
- Will there come a time when Plan Sponsors Only Invest with UN PRI Investment Manager Signatory Firms?
- How are you Integrating ESG into your Real Estate, Private Equity and Infrastructure Investments?
- Understanding Relevant Benchmarks for ESG Risk Measurement

Moderator:
Herman Brill, Director, Office of Investment Management, **United Nations Joint Staff Pension Fund**

Speaker:
Michael McCauley, Senior Officer, Investment Programs & Governance, **Florida State Board of Administration, (SBA)**

4:15 PM – IMPACT INVESTING

Intent to generate a social and/or environmental impact in addition to a financial return. Tackling the toughest societal challenges: global health (treating and preventing disease), sustainable food systems through better agriculture, education, access to water (resource constraints), environment and climate change, diversity and inclusion, economic development, community building and more.

- The Role of UN's Sustainable Development Goals in Impact Investing Strategy
- What does the Future Hold for Impact Investing?
- What are the Top Challenges or Roadblocks for Investors?
- What are the Opportunities for Impact Investing in Emerging Markets versus Developed Markets?
- What are the Latest Trends in Impact Investment Globally? Most Promising Areas?

- Investing in Technology for Social Impact
- Measuring Social Impact – should you verify that the Funds you Invest in have their Portfolios Independently Measured and Verified by B Lab's GIIRS Impact Rating System?
- What are the Biggest Areas Risks of Impact Investing Projects?
- Do Larger Firms have an Advantage in this Space?
- Why is Private Equity Particularly Well-Suited for Impact Investing?
- What are some of the Socially Impact Bonds or Municipal Impact Bonds you've Invested in?
- Do you find it Difficult to Measure the Impact of Public Market Investments?
- What Evidence have we seen that Impact Investments will Reap Healthy Returns?
- How should Impact Investors think about Reporting?
- For the Next Inevitable Downturn or Recession, will Investors Abandon this Space? When and How Will it Become Mainstream?
- Cambridge Associates PE/VC Impact Investing Benchmark – any early Conclusions Despite the Limited Sample Size and Overall Youth of the Funds?

Moderator:
Laura B. Wirick, CFA, CAIA, Principal, Consultant, **Meketa Investment Group**
Speaker:
Falah Madadha, Senior Investment Officer, **Silicon Valley Community Foundation**

4:45 PM – EMERGING MARKETS

- Macro Environment and Recent Developments – how does that affect your Investments?
- With Central Banks Tapering, do you see a Correlation with Weaker EM Returns? What about a Stronger Dollar for a Prolonged Period? Weak Commodity Prices?
- What would be the Effects on Emerging Markets if we see Weak Growth in the U.S.? Instability in the Eurozone? Slowdown in China?
- How will the Trade War affect China and other Emerging Markets? Any Markets that are More Insulated?
- What is an Appropriate Long-Term Allocation to Emerging Markets? What should that Allocation look like, (Public Equity, Fixed Income, Private Equity, Frontier Markets, Alternatives, etc.)?
- What are Realistic Return Expectations? How might that Differ based on Region?
- How do Valuations look Relative to Risk in Different Regions?
- Outlook for China – are you Concerned about their Credit and Real Estate Bubbles? Thoughts on Trade Challenges?
- What are the Key LP Concerns and Challenges in Particular Regions?
- Identify what Country or Region you see Favorable Demographic Trends such as a Growing Middle Class, Urbanization, Promising Consumer Buying Behavior and Economic/Fiscal Reforms
- Which Markets in Frontier Countries can you Profit from Strong Growth and Access a Lower Correlation?
- What can be done to Mitigate Currency Risks?
- After seeing Argentina and Turkey with a Currency Crisis caused by High Debt and Surging Inflation that follows, are there Any EM Countries to Avoid?
- The Case for Emerging Markets Corporate Debt
- What Metrics are you using to Determine Relative Value in Sovereign Bonds?
- Public vs. Private Emerging Markets – Benefits and Drawbacks of each
- Active vs. Passive Debate
- Choosing an Emerging Markets Fund or Manager – should you be Investing by Region, Country or Sector?
- Given the Current Environment, will Emerging Markets Outperform Developed Markets?

Speaker:
Mike Rosborough, Senior Portfolio Manager, Investment Director, Global Fixed Income, **California Public Employees' Retirement System, (CalPERS)**

5:25 PM – COCKTAIL RECEPTION

SPONSORED BY:



PGIM FIXED INCOME

6:40 PM – COCKTAIL RECEPTION CONCLUDES

WEDNESDAY, APRIL 10TH

Westin St. Francis Hotel, San Francisco

7:00 AM – BREAKFAST

8:00 AM – KEYNOTE SPEAKER

The Science and Technology Revolution – Alpha by Investing in Innovation

- Historic Transformation
- Accelerating Pace of Innovation
- Investment Opportunity through Future Innovation
- Future Innovations and their Impact – Transportation as a Service, Artificial Intelligence/Deep Learning, Robotics, Blockchain, Internet of Things, Life Sciences, Improvements in Education
- Economic Modernization of China – Industries with Opportunity
- Economic Modernization of India Coming Into Focus

Speaker:
William J. Coaker Jr., CFA, MBA, Chief Investment Officer, **San Francisco Employees' Retirement System, (SFERS)**

8:30 AM – THE NEXT FRONTIER OF MULTI-ASSET INVESTING

- How has Multi-Asset Investing Evolved over the Years? How do you Navigate the Various Options and Approaches that are available today?
- Do these Strategies Reduce Correlation, Lower Volatility and Limit Downside Risk or Drawdown? If so, by How Much?
- What are the Common Sub-Asset Classes Included in Multi-Asset Strategies?
- Constructing the Portfolio – Risk Factor Approach
- How are Investors Incorporating Multi-Asset Strategies in their Portfolios?
- How do you see this Space Evolving in a more Treacherous/Volatile Market? Do you Worry that Dynamic and Tactical Asset Allocation Decisions that have been Little Tested in Recent Years can Harm Performance with Too Heavy a Reliance on Market Timing?
- Aside from Asset Allocation Skills, what other Skills are Required for the Ability to Generate Alpha and be Successful?
- Are Tactical Tilts More Transparent Today?
- How Worrisome is the Reliance on Stable Correlation Relationships with No Certainty those Relationships will Persist?
- How Much Value can one get Via Tactical Asset Allocation if you have the Right Expertise?
- Do you believe that Multi-Asset Funds have Sufficiently Incorporated Risk Controls into the Design of their Products?
- Understanding Dynamic Tail Risk Management Via Asset Allocation
- Is Excessive Leverage a Concern?
- How do you Measure Performance?
- Any Favorable Trends in Fees for Investors?
- How do Multi-Asset Managers Differentiate Themselves in this Crowded Field?

PRESENTED BY: **Janus Henderson**
INVESTORS

Speaker:
Ashwin Alankar, PhD, Senior Vice President, Global Head of Asset Allocation & Risk Management, **Janus Henderson Investors**

9:00 AM – HEDGE FUNDS

(A) CURRENT AND FUTURE STATE OF THE HEDGE FUND INDUSTRY

- Will Hedge Fund Underperformance Shift and Why?
- With Difficult Investment Conditions Pushing Many Seasoned Firms and Legendary Investors Out of the Business, does that mean some Strategies have Stopped Working or are Less Accurate? How do you approach this Struggle or go about Making your Strategy More Flexible?
- What is an Appropriate Fee Structure for Hedge Funds? Have you Seen More Fee Structures that Reward Alpha and Not Beta for Better Alignment of Interests and Avoid Overpaying for Underperformance?
- As an LP, do you find it Difficult to get Hedge Fund Managers to Provide Accurate Fee Information in a Timely, Efficient Manner? Do you believe we're In Need of a Standardized Reporting Template like ILPA for Private Equity?
- Why do Smaller Hedge Funds Outperform?
- With Crowding in FAANG and other stocks, do you see this as a Risk and a Contrarian Indicator for those Equity Holdings when the Cycle Turns?

What is Driving the Increase in Demand for Strategies Uncorrelated with the Capital Markets? Which Low Correlated Strategies are Most Attractive?

(B) IMPLEMENTATION OPTIONS

- If there was a Hedge Fund Strategy you would Invest in over the next Few Years, which one would it be and why?
- What sort of Downside Protection, Drawdown or Return Range do you expect we'll see from each of the Different Hedge Fund Strategies during the Next Market Downturn?
- Do you find Opportunities within the Global Macro Space Attractive and if so, why?
- Managed Futures – Diversification and Performance during Periods of Market Stress or Crisis Events. How much can it Decrease the Depth of Portfolio Drawdowns and Volatility?
- What is the Future of the Fund of Funds Space? How has it Changed in Recent Years? Where will Fees be? What will it take to Stay Competitive?
- Long-Short Equity Hedge Funds – what Differentiates Managers that have been able to Outperform?
- Liquid Hedge Fund Products such as UCITS, 40 Act and Hedge Fund Replication – are they a Viable Alternative and Under what Circumstances? How has their Performance and the Lower Fees Fared to Hedge Funds?
- The Role of Alternative Beta/Risk Premia Strategies in a Hedge Fund Portfolio – what are the Appropriate Expectations from a Sharpe Perspective?
- How do Emerging Managers Differentiate Themselves in the Quest for Institutional Capital?
- Implementation Considerations for Due Diligence, Portfolio Function and Manager Selection. What are the Key Traits you should be looking for? Key Characteristics for Quantitative Strategies?

(C) PORTFOLIO CONSTRUCTION AND RISK MANAGEMENT

- What is the Role of Separate Managed Accounts? What are the Benefits? Are they Better than Commingled Funds?
- Any Recent Trends you've seen for Pension Plans as far as Fees, Transparency, Customization, Increased Partnership, etc.?
- As an Investor, do you Negotiate the Frequency of Performance Fee Payments (Fee Crystallization), with your Managers so that it Doesn't Lead to Hidden and Higher Costs?
- Importance of Operations Due Diligence. Any recent Developments? How often should Operations be Reviewed?
- What Trends do you see Developing in Regards to the way we Evaluate Liquidity Provisions for Hedge Funds?

Moderator:
David E. Franci, Managing Director, Absolute Return, **San Francisco Employees' Retirement System, (SFERS)**

Speakers:
Dr. John Claisse, CEO, **Albourne America**
Elizabeth T. Burton, Chief Investment Officer, **Employees' Retirement System of the State of Hawaii**

9:45 AM – REFRESHMENT BREAK



10:15 AM – CREDIT STRATEGIES

- Current State of the Credit Market
- What will be the Catalyst that will cause Credit Spreads to Widen and Defaults to Rise?
- What is the Opportunity Set in Credit Strategies? Where is the Relative Value?
- What Subsectors of Credit are Most Attractive given the Stretched Valuations? Any Areas you are Avoiding?
- Do you see Investors being more willing to Trade Liquidity for Yield and should that be of Concern?
- High Yield Market – is it possible to see a High Yield Meltdown with a Lack of Liquidity? Understanding the Corporate Debt Risk Factors and the Strong Correlation to Equities

- Bank Loans Overview
- Outlook and Considerations for Structured – Are CLOs Safer than Pre-Crisis?
- Can Securitized Credit Weather Market Turbulence? How has it Performed During Previous Credit Events? Is there a Lower Correlation to Broader Fixed Income Sectors?
- Outlook for Emerging Market Debt
- Public vs. Private Credit
- Is Direct Lending in a Bubble and how would you Position for that?
- Opportunities and Risks for Europe and Asia
- How much should Plan Sponsors be Allocating to Credit? What is the Optimal Structure to a Credit Portfolio?
- Considerations for Selecting a Manager and Strategy
- Why should Multi-Asset Credit Strategies be a Tactical Asset Allocation with Dynamic Management for Pension Plans?
- How do we Develop Return and Risk Expectation for this Asset Class?
- How do we Benchmark Performance?

Speaker:
Peter E. Ehret, CFA, Director of Internal Credit, **Employees Retirement System of Texas**

10:55 AM – DISTRESSED INVESTING – OPPORTUNISTIC AND SPECIAL SITUATIONS

- How does the Interest Rate Environment and Fed Balance Sheet Unwind Affect your Plans?
- What are your Expectations for Default Rates going forward?
- What is Most Worrisome in Distressed Markets Today Versus a Few Years Ago?
- When will the Vast Sums of Undeployed Capital come in off the Sidelines? Do you Need an Economic Downturn?
- Is Direct Lending a Bubble and if so, how would you Invest When it Pops?
- Where do you see the Largest Demand from Clients? What are they Most Interested in?
- Which Sectors, Strategies and Geographies will create the Best Opportunities? Any Areas that should be Avoided?
- What Distressed Opportunities are we seeing the Energy Sector?
- What's the Potential Impact of the Debt Piled up by Corporations for their Share Buybacks?
- Will the Prevalent Covenant-Lite Deals create Problems during the Next Cycle?
- What are the Opportunities and Risks in Europe? Any Countries, Sectors or Types of Deals that Stand Out?
- Do you see Opportunities in Asia or Elsewhere Globally?
- What are the Recent Leverage Trends?
- Do you worry about a Liquidity Problem in ETFs and other Structured Credit Vehicles if there is Credit Event?
- Has the Regulatory Environment Changed the Opportunity Set? How has it Impacted your Firm?
- How do Investors go about Choosing the Right Distressed Strategy, Size, Investment Style and Approach?
- How will the Different Implementation Approaches affect Expected Returns? Control vs. Non-Control? Private vs. Public?
- Distressed Debt Vehicles in Hedge Fund Format vs. Private Equity Drawdown Structures – what are the Pros and Cons of Each?
- What Skill Sets/Characteristics should Pension Plans look for in a Distressed Manager?

11:30 AM – CURRENCY HEDGING AND CURRENCY ALPHA

(A) CURRENCY MARKET OVERVIEW

- What are the Factors Driving Currencies Today?
- Do you Worry about the Uncertainty Surrounding the Euro and EU?
- What is the Relationship Between Volatility and Currency Returns?
- Can Currencies be Forecasted via Fundamentals, Cycles and Trends?
- Benefits of Active and Dynamic Currency Management
- What are the most Common Reasons Asset Owners give for Not Actively Managing Currency? Are these Reasons Valid or Not?
- What is the Impact Forex can have on Overall Risk and Returns for International Equity and Bond Portfolios?
- Widely Confused Difference Between Currency Hedging and Currency as an Asset Class – how do they Differ in terms of Implementation Approaches?
- What are the Merits and Demerits of Adopting a Hedging Program vs. an Alpha Program?
- Different Skills Required for Currency Hedging vs. Currency Alpha – should a Different Manager be used for Each Approach or is it Possible to be Skilled in Both?

(B) CURRENCY OVERLAY HEDGING

- Given Plan Sponsors Non-U.S. Exposure, what Factors should be Considered in the Determination of Implementing a Currency Hedging Program?
- Is there an Optimum Currency Hedge Ratio for a Plan?
- How much of a Reduction in Portfolio Volatility and Risk should be Expected?
- Can it be More Beneficial to be Unhedged?
- Hedging Costs – how should this factor into your Decision?

(C) CURRENCY ALPHA

- How does Employing a Currency Alpha Strategy fit into an Asset Allocation Framework?
- Benefits of Non-Correlated Returns to Equities, Fixed Income and Alternative Investments
- How does Investing in Currency Diversify and Reduce Risk? Natural Diversifier for the Duration Risk in Bonds?
- How do you Manage Risk Factors?
- What are the Return Expectations?
- When considering Investing in an Active Currency Strategy, what should you look for in a Manager?

Moderator:
Andy T. Iseri, CFA, Senior Vice President, Global Manager Research, **Callan**

12:00 PM – LUNCH

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1:05 PM – PRIVATE EQUITY

- What's your Biggest Concern – Valuations, Excess Dry Powder, Downturn, etc?
- How are you Positioning Your Portfolio given the Current Market Conditions?
- Any Lessons Learned from the Financial Crisis? What are you doing Differently when Approaching New Investments?
- Protecting your Current Portfolio – how would you Guard Against your Existing Portfolio?
- Where are your Most Optimistic Returns Going Forward as far as Sector, Geography or Niche Strategy? What's your Biggest Worry?
- Which Lower or Non-Correlated PE Strategies have you Allocated to or Favor?
- Where do you see the LP/GP Relationship in the Future when it comes to Separately Managed Accounts, Strategic Partnerships, Co-Investments, LPs Concentrating Portfolios, etc.?
- Transparency and Fees – As an LP, has this Impacted your Ability to Commit Capital? SEC's Impact?
- Have you gotten More Involved in your GP's Valuation Process? How have you Achieved this Transparency Demand? Thoughts on the Fair Value Quality Initiative?
- Thoughts on GPs Selling Minority Stakes to Third Party Investors like Dyal or Petershill? Any Negative Implications that you can Foresee?
- Subscription Lines of Credit and Risk – how can you Better Understand How these Lines have Altered Returns? Thoughts on ILPA's Guidelines?
- Do you believe we're in a Venture Capital/Technology Bubble? How do you View the Venture Space today?
- For Co-Investment Deals that Underperform, what are the Reasons Why?
- Where can we find Good Returns in Private Credit Without Taking Inordinate Risk?
- Why should Secondaries be a Core Holding?
- Issues, Outlook and Opportunities for European PE

Moderator:
Faraz Shooshani, Managing Director, Senior Private Markets Consultant, **Verus**

1:50 PM – INFRASTRUCTURE

- State of the Infrastructure Markets
- Is there Too Much Capital Chasing Too Few Deals?
- With High Competition for Larger Investments, could there be More Return Potential in Smaller Projects?
- How has Performance been and what are the Recent Return Expectations?
- What have been the Effects of the Low Interest Rate Environment on Infrastructure and how might that Affect Returns and Leverage Going Forward?
- Which Sectors are Most Attractive?
- Which Geographies are Most Appealing? Developed or Emerging Economies?
- Approach – Greenfield vs. Brownfield?
- Why is Infrastructure Debt Attractive? Will it deliver for Investors Searching for Yield?

- What are the Biggest Challenges/Risks associated with Infrastructure Investing?
- Do you believe Credit Risk might be Under-Appreciated?
- Opportunities in Public-Private Partnerships?
- How have GPs Adopted ESG Principals?
- What are the Most Attractive Investments within Renewables?
- Listed vs. Unlisted – which do you Favor in a Volatile Market for Downside Protection? Do Rising Interest Rates Favor Either?
- Any Advantages or Limitations for Co-Investments? Separate Accounts?
- What are the Advantages of Open-Ended Funds over Closed-Ended Funds? Will we Continue to see a Surge in Open-Ended Funds in the Coming Years?
- What are the Major Technological Trends that will Shape Infrastructure Investing in the Coming Years?

Moderator:
Todd Lapenna, CFA, CAIA, Partner, Infrastructure & Real Assets, **StepStone Group**

2:25 PM – REAL ESTATE

- Are you Expecting a Drop in Pricing and Lower Returns? What are your Returns Expectations for the next 5-10 Years?
- Where do you See the Most Risk? How are you De-Risking?
- Are you Slowing Down, Maintaining or Increasing your Pace of Investment?
- Where are the Most Crowded Trades? Are there any Less Crowded Trades?
- What are your Return Expectations for Core?
- Within Non-Core, what Risks are Investors Willing to Take?
- What is the Biggest Threat to Commercial in the next few years for this Fully Priced Market?
- Are you Making Pivots or Tilts to Take Advantage of Macro or Socio/Demographic Trends?
- What are you seeing in the Market Today with Respect to Volume of Transactions and Pricing?
- Thoughts on the Bridge Financing Opportunity for Maturing Commercial Real Estate?
- What Real Estate Technology Trends are you Watching Most Closely?
- What's happening with Leverage? LP Preferences for Use of Leverage?
- Any Niche Property Types that you Like?
- Asia and European Real Estate Outlook – Opportunities and Investment Trends
- With the Privatization of Fannie Mae and Freddie Mac a Possibility, what would be the Effect on Real Estate Portfolios?
- Will Co-Investments become more Common?
- Current State of the Real Estate Secondary Market
- Thoughts on Programmatic Joint Ventures?
- Are we still seeing a Decline in Closed-Ended Funds? If so, Why and Will it Continue?
- Larger vs. Smaller Fund Size – which ones will Outperform going forward?
- What Strategies do you see as the Biggest Risks and the Biggest Rewards/Relative Value for the Future?

Moderator:
Christy Fields, Managing Director – Real Estate, **Pension Consulting Alliance, (PCA)**

Speaker:
Anthony Breault, Senior Investment Officer, Real Estate, **Oregon State Treasury**

3:10 PM – REFRESHMENT BREAK

3:35 PM – INVESTING IN FARMLAND

- Demographics, Global Food Demand and Land Scarcity as Macro Drivers
- Is Farmland a Good Investment if we have another Downturn or Financial Crisis?
- How has Historical Performance been?
- What are the Portfolio Benefits?
- Understanding the Evolution of U.S. Farmland Ownership and what the Transition will look like for Institutional Ownership. How might that Compare to Ownership of Timberland?
- What are the Physical-Casualty Risks? Is it a Concern or is it Proactively Managed through Operating Practices of the Farm?
- Would a Drop in Commodities Prices hurt Farmland Returns? Importance of Crop Diversification
- How might this Asset Class be Impacted by Future Regulatory Decisions?
- Thoughts on the Rise in Farmland Debt Strategies that have Attracted Investors?
- Is it Difficult to Access Farmland through Public Markets? Might the Public REIT Market Evolve for Farmland? What are the Pro's and Cons of these REITS?

3:50 PM – INVESTING IN WATER

The World Economic Forum has ranked water as a top global risk for the past several years. The growing focus on water scarcity has many eyeing opportunities. The United Nations estimates that almost half of the world's population will live in areas of high water stress by 2030, with a 40% shortfall between water supply and demand.

- What Factors are Contributing to Water Stress and Risks?
- How are Investors Identifying and Evaluating Water Risks in their Portfolios?
- Does the Ceres Investor Water Toolkit Serve its Purpose to Help Investors Evaluate and Understand Water Risks in their Holdings?
- ESG Social Benefit – Investing in Projects and Companies that will Help Clean, Distribute and Maintain our Water Supply
- Where are the Most Attractive Opportunities?
- Are you Seeing Situations where the Government is Underwriting some of the High Impact Risks of the Project?
- Should Pensions be Seeking Greenfield or Brownfield Investments and Why?
- What are the Biggest Investor Challenges?
- How do you Overcome the Investor Lack of Clarity on the Yield they will Receive once the Project is Built?
- What are your Predictions for Growth in this Space?

4:05 PM – CIO ROUNDTABLE

(A) RISKS, ALLOCATIONS AND MACRO-BASED DECISIONS

- In this Fully-Valued Environment, how are you Balancing the Risk of a Large Drawdown with your Return Goals? Has it Impacted your Asset Allocation?
- Which De-Risking Strategies or Investments with a Low/Non-Correlation have you Allocated to?
- Do you believe your Hedge Fund Strategies will provide a Cushion for the next Market Downturn? How do you use them to Reduce Risk?
- Have you Trended Towards a Passive Equity Allocation? When Volatility Rises, do you Believe Active Managers will Outperform?
- Have you made Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you Believe the Impact of Regulation along with the Shift Towards Passive Management has Created a Reduction in Market Liquidity? Will there be Sufficient Liquidity in the System to Cope with Conditions of Market Stress? Has it Impacted your Fund or Decisions?
- Is there Some Point at which Higher Rates would cause you to Rethink your Asset Allocation or Other Strategies?
- What Percentage of your Pension Fund's External Asset Management uses ESG Factors? Percentage Excluding Hedge Funds? Do you have Plans to Increase the Use of ESG Managers?
- How are you Viewing Emerging Markets Broadly and what do you feel is the proper EM Allocation? Any Regional or Frontier Strategies that interest you?

(B) ALIGNMENT OF INTERESTS

- What Changes or Trends have you noticed in Fee Structures/Terms and your Bargaining Power? Has the Size of your Fund been an Advantage or Disadvantage?
- How can you Overcome Governance Hurdles so that you can Effectively Partner with Outside Providers, Bring a Portion of the Investment Management In-House and Provide Incentive-Based Compensation?
- Have you Taken Steps to Address Diversity within your Investment Programs or your Organization's Staff?
- Do You and Your Investment Departments have the Authority to be a Dynamic, Tactical and Active Investor In Response to Extreme Economic Conditions?
- Have you Addressed Cybersecurity Protection for your Plan? How have you Educated of the Risks with Staff and Taken Steps for Protection with Investment Managers?
- Any Important Lessons Learned that you can Share from your Individual Plan Experiences?
- What Keeps You Up at Night?

Speakers:
Mansco Perry III, CFA, CAIA, Executive Director, Chief Investment Officer, **Minnesota State Board of Investment**
Tom Tull, CFA, Chief Investment Officer, **Employees Retirement System of Texas**
Bruce H. Cundick, CFA, CPA, Chief Investment Officer, **Utah Retirement Systems**

5:00 PM – CONFERENCE CONCLUDES

5:00 PM – TICKETS FOR NETWORKING EVENT HANDED OUT IN CONFERENCE ROOM

ATTENDEES OF THE NETWORKING EVENT MUST BE PRESENT IN THE CONFERENCE ROOM IN ORDER TO RECEIVE TICKETS

6:00 PM – NETWORKING EVENT, TBD

Networking Event – The Waterfront Restaurant Cocktail Reception & Dinner

Hosted by The Pension Bridge – Join our group for a cocktail reception and dinner at the Waterfront Restaurant located adjacent to the Financial District at Pier 7. Experience breathtaking views of San Francisco Bay and the iconic Bay Bridge. The Waterfront Restaurant, one of the city's finest seafood restaurants, has been a top culinary destination for more than 45 years and has been a known favorite for politicians, celebrities and business executives. The Pension Bridge Group will utilize will the waterfront space for meetings and conversation with quality contacts while taking in spectacular views.

9:00 PM – NETWORKING EVENT CONCLUDES

REGISTRATION:

To register or receive more information about The 2019 Pension Bridge Annual:

BOCA RATON OFFICE CONTACT:

Brett Semel

☎ (561) 455-2729

✉ bsemel@pensionbridge.com

NEW YORK OFFICE CONTACT:

Andrew Blake

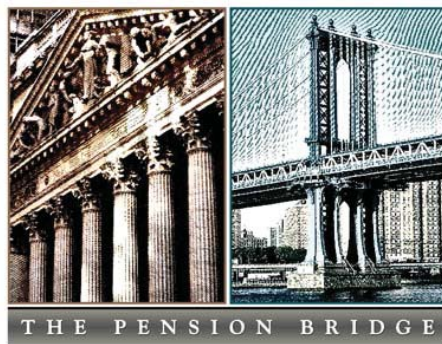
☎ (516) 818-7989

✉ ablake@pensionbridge.com

Please visit www.pensionbridge.com for additional details. **Registration is not available online.**

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Our management team's unique skills, operating experience, and industry relationships help to make our events the main attraction in the industry. We pride ourselves on being there to cater to our clients' wants and needs. Our ratio of plan sponsor to investment manager allows our events to be the most desirable and accommodating in the conference industry. The Pension Bridge is known for its strength, stability, relationships and operational excellence.



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CITY OF OAKLAND

MEMORANDUM

TO: Oakland Police & Fire
Retirement Board

FROM: David Jones

SUBJECT: Authorization and
Reimbursement of Board/Staff
Travel/Education Expenses

DATE: January 22, 2019

R. Steven Wilkinson, Board member of the Oakland Police and Fire Retirement System board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Board member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel / Education Event: 2019 CALAPRS General Assembly

Event Location: Monterey Marriott Hotel, Monterey, CA

Event Date: March 2-5, 2019

Estimated Event Expense*: \$ 1,250.00 (estimated)

Notes: _____

* If enrollment, registration or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the traveling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

For questions please contact David Low, Administrative Assistant, at 510-238-7295.

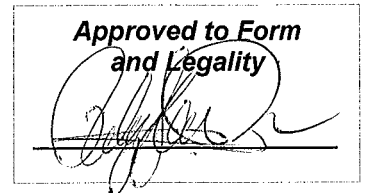
Attachments (if any):

Resolution #7041

2019 CALAPRS General Assembly - Agenda

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 7041



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

TRAVEL AUTHORIZATION FOR PFRS BOARD MEMBER R. STEVEN WILKINSON TO TRAVEL AND ATTEND THE 2019 CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS GENERAL ASSEMBLY CONFERENCE ("2019 CALAPRS CONFERENCE") FROM MARCH 2, 2019 TO MARCH 5, 2019 IN MONTEREY, CA WITH AN ESTIMATED BUDGET OF ONE THOUSAND TWO HUNDRED FIFTY DOLLARS (\$1,250.00)

WHEREAS, PFRS Board Member R. Steven Wilkinson wishes to attend the 2019 CALAPRS Conference in Monterey, CA from March 2, 2019 to March 5, 2019; and

WHEREAS, PFRS Board Member Wilkinson is expected to seek reimbursement of expenses from the Board; and

WHEREAS, in compliance with the Education and Board Travel Policy, which requires that PFRS Board/Staff Members seek PFRS Board approval prior to travel; and

WHEREAS, in compliance with the Board Education and Travel Policy, the Board/Staff Member has presented costs for travel, lodging and/or registration fees to the 2019 CALAPRS Conference in the amount of approximately \$1,250.00; and

WHEREAS, PFRS Board Member Wilkinson seeks Board approval of the aforementioned mentioned estimated costs to travel to Monterey, CA to attend the 2019 CALAPRS Conference from March 2, 2019 to March 5, 2019; now, therefore, be it

RESOLVED: PFRS Board Member R. Steven Wilkinson's travel request and estimated budget of \$1,250.00 to attend the 2019 CALAPRS Conference is hereby approved.

IN BOARD MEETING, CITY HALL, OAKLAND, CA _____ **JANUARY 30, 2019**

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, KASAIN, MELIA, MUSZAR, SPEAKMAN, AND PRESIDENT JOHNSON

NOES:

ABSTAIN: WILKINSON

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY



CALAPRS


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California Association of Public Retirement Systems

General Assembly

MARCH 2-5, 2019
MONTEREY MARRIOTT
MONTEREY, CA

California's Public Retirement Systems: Mission-Driven



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P: 415-764-4860 | info@calaprs.org | www.calaprs.org

CALAPRS GENERAL ASSEMBLY 2019 — PROGRAM

The California Association of Public Retirement Systems, CALAPRS, invites you to attend the General Assembly on March 2-5, 2019 at the Monterey Marriott in Monterey, CA. The General Assembly is an educational conference for retirement system trustees, senior staff, and annual sponsors of CALAPRS.

SATURDAY, MARCH 2

4:00 – 6:00 PM | Early-Bird Registration

SUNDAY, MARCH 3

10:00 AM – 5:00 PM | Registration

2:00 PM | Opening Remarks

Speakers: Donna Lum, CalPERS, CALAPRS President and Steve Delaney, OCERS, Conference Chair

2:15 PM | Communicating the Value of Public Service

Speaker: Bob Wilson, Missouri Local Government Employees Retirement System (LAGERS)

3:15 PM | Networking Break

3:45 PM | Pension Administration System Implementations in California: A Panel Discussion

Moderator: Andrew Roth, CalSTRS
Panelists: Marcelle Rossman, SDCERS; Amy Burke, San Luis Obispo County Pension Trust; and Eric Stern, SCERS

7:00 PM – 9:30 PM | Dinner at the Monterey Bay Aquarium

Guests welcome. Transportation provided.

MONDAY, MARCH 4

7:00 AM – 4:00 PM | Registration

7:15 AM – 8:15 AM | Breakfast

8:15 AM | Opening Remarks & Toigo Award Presentation

Speakers: Donna Lum, CalPERS, CALAPRS President and Steve Delaney, OCERS, Conference Chair

8:30 AM | Reimagining the Future

Speaker: Frank Diana, Futurist

9:30 AM | Networking Break

10:00 AM | What's New in Mortality?

Speaker: David Lamoureux, CalSTRS

11:00 AM | Cyber Security

Speakers: Brian Abellera, Federal Bureau of Investigation, and Matt Eakin, OCERS

12:00 PM | Lunch

1:30 PM | Blockchain

Speaker: To be Announced

2:30 PM | Networking Break

3:00 PM | Private Credit:

Threats and Opportunities – A Panel Discussion

Moderator: James Walsh, Albourne America, LLC

5:00 PM – 6:00 PM | Hosted Reception

TUESDAY, MARCH 5

7:15 AM – 8:15 AM | Breakfast

8:15 AM | Lean Six Sigma Training

Speaker: Suzanne Jenike, OCERS; and Ric Van Der Linden, ProgressivEdge, Inc.

9:00 AM | CEM Benchmarking: Research Highlights in Pension Administration and Investments

Speaker: Tom Scheibelhut, CEM Benchmarking, Inc.

9:45 AM | Networking Break

10:15 AM | Generation CX: The Evolution of Member Communications

Speaker: Jonathan Clark, MBA, RPMI, United Kingdom

11:00 AM – 11:15 AM | Closing Remarks & Adjourn

Speakers: Donna Lum, CalPERS, CALAPRS President and Steve Delaney, OCERS, Conference Chair

WHAT TO KNOW...

Register online at:

<http://www.calaprs.org/generalassembly>

Registration fee:

- Retirement Systems: \$150/person
- Sponsors: \$1500/company (2 representatives)

Book your room at: Monterey Marriott, 350 Calle Principal, Monterey, CA 93940

- Online: <https://book.passkey.com/go/calaprs2019>
- By phone: 831-649-4234

Room Rate: \$221/night

Government rate rooms, \$140/night, may be available on a first come, first serve basis.

Cut-Off: February 8, 2019 – Book early, rooms may sell out!



MEMORANDUM

TO: Oakland Police & Fire
Retirement Board

FROM: David Jones

SUBJECT: Authorization and
Reimbursement of Board/Staff
Travel/Education Expenses

DATE: January 22, 2019

Katano Kasaine, Board member of the **Oakland Police and Fire Retirement System** board, requests authorization for reimbursement of travel and/or board education related funds for the event detailed below. Staff has verified that budgeted funds are available for this Board member to be reimbursed.

Staff recommends the reimbursement of travel/education funds for the event below be approved by board motion.

Travel / Education Event: 2019 CALAPRS General Assembly

Event Location: Monterey Marriott Hotel, Monterey, CA

Event Date: March 2-5, 2019

Estimated Event Expense*: \$ 1,250.00 (estimated)

Notes: _____

* If enrollment, registration or admission expenses are required, the fund will process a check in advance and pay vendor directly; all other board-approved reimbursements will be made upon delivery of receipts to staff by the traveling party. Cancellation of event attendance requires return of all reimbursed funds paid to attendee to the fund.

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

For questions please contact David Low, Administrative Assistant, at 510-238-7295.

Attachments (if any):

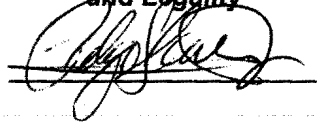
Resolution #7042

2019 CALAPRS General Assembly - Agenda

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7042

Approved to Form
and Legality



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

TRAVEL AUTHORIZATION FOR PFRS BOARD MEMBER KATANO KASAINÉ TO TRAVEL AND ATTEND THE 2019 CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS GENERAL ASSEMBLY CONFERENCE ("2019 CALAPRS CONFERENCE") FROM MARCH 2, 2019 TO MARCH 5, 2019 IN MONTEREY, CA WITH AN ESTIMATED BUDGET OF ONE THOUSAND TWO HUNDRED FIFTY DOLLARS (\$1,250.00)

WHEREAS, PFRS Board Member Katano Kasaine wishes to attend the 2019 CALAPRS Conference in Monterey, CA from March 2, 2019 to March 5, 2019; and

WHEREAS, PFRS Board Member Kasaine is expected to seek reimbursement of expenses from the Board; and

WHEREAS, in compliance with the Education and Board Travel Policy, which requires that PFRS Board/Staff Members seek PFRS Board approval prior to travel; and

WHEREAS, in compliance with the Board Education and Travel Policy, the Board/Staff Member has presented costs for travel, lodging and/or registration fees to the 2019 CALAPRS Conference in the amount of approximately \$1,250.00; and

WHEREAS, PFRS Board Member Kasaine seeks Board approval of the aforementioned mentioned estimated costs to travel to Monterey, CA to attend the 2019 CALAPRS Conference from March 2, 2019 to March 5, 2019; now, therefore, be it

RESOLVED: PFRS Board Member Kasaine's travel request and estimated budget of \$1,250.00 to attend the 2019 CALAPRS Conference is hereby approved.

IN BOARD MEETING, CITY HALL, OAKLAND, CA JANUARY 30, 2019

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, MELIA, MUSZAR, SPEAKMAN, WILKINSON, AND PRESIDENT JOHNSON

NOES:

ABSTAIN: KASAINÉ

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY



CALAPRS


EDUCATION • COMMUNICATION • NETWORKING

California Association of Public Retirement Systems

General Assembly

MARCH 2-5, 2019
MONTEREY MARRIOTT
MONTEREY, CA

California's Public Retirement Systems: Mission-Driven



California Association of Public Employees' Retirement Systems (CALAPRS)
575 Market Street, Suite 2125, San Francisco, CA 94105
P: 415-764-4860 | info@calaprs.org | www.calaprs.org

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Cut-Off: February 8, 2019 – Book early, rooms may sell out!



A G E N D A R E P O R T

TO: Oakland Police and Fire
Retirement Board

FROM: David Jones
Plan Administrator

SUBJECT: Audit Committee Agenda Pending List

DATE: January 22, 2019

	SUBJECT	PROPOSED SCHEDULED MEETINGS	STATUS
1	Plan Administrator Status Report regarding status of request to City Administrator to set up Working Group to Address Actuarial Funding date of July 1, 2026	VERBAL	Meetings are Ongoing
2	Procedures Addressing (1) Board Hearings and (2) Sensitive Personal Information at public meetings	02/27/2019	
3	PFRS Actuary Valuation as of July 1, 2018	02/27/2019	
4	Discussion of the 2006 Management Audit of the PFRS System	03/27/2019	

Respectfully submitted,

David Jones, Plan Administrator
Oakland Police and Fire Retirement System

PFRS Audit Committee Meeting
January 30, 2019

All persons wishing to address the Board must complete a speaker's card, stating their name and the agenda item (including "Open Forum") they wish to address. The Board may take action on items not on the agenda only if findings pursuant to the Sunshine Ordinance and Brown Act are made that the matter is urgent or an emergency.

Oakland Police and Fire Retirement Board meetings are held in wheelchair accessible facilities. Contact the Retirement Unit, 150 Frank Ogawa Plaza, Suite 3349 or call (510) 238-7295 for additional information.



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

INVESTMENT COMMITTEE MEMBERS

Jaime T. Godfrey
Chairman

R. Steve Wilkinson
Member

Martin J. Melia
Member

**In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Investment Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Investment Committee.*

REGULAR MEETING of the INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Wednesday, January 30, 2019 – 10:00 am
One Frank H. Ogawa Plaza, Hearing Room 1
Oakland, California 94612

- - - ORDER OF BUSINESS - - -

- | | |
|-------|---|
| 1. | Subject: PFRS Investment Committee Meeting Minutes |
| | From: Staff of the PFRS Board |
| <hr/> | |
| | Recommendation: APPROVE November 28, 2018 Investment Committee meeting minutes. |
- | | |
|-------|---|
| 2. | Subject: Investment Market Overview |
| | From: Pension Consulting Alliance |
| <hr/> | |
| | Recommendation: ACCEPT an informational report on the global investment markets through January 2019. |
- | | |
|-------|---|
| 3. | Subject: Preliminary Investment Fund Performance Report for the Quarter Ending December 31, 2018 |
| | From: Pension Consulting Alliance |
| <hr/> | |
| | Recommendation: ACCEPT a Preliminary Investment Fund Performance Report for the Quarter Ending December 31, 2018. |
- | | |
|-------|---|
| 4. | Subject: Investment Asset Class Review - Crisis Risk Offset (CRO)-Long Duration |
| | From: Pension Consulting Alliance |
| <hr/> | |
| | Recommendation: ACCEPT an informational report of the Investment Asset Class Review - Crisis Risk Offset (CRO)-Long Duration. |

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR INVESTMENT COMMITTEE MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

5. **Subject:** Investment Policy Amendment – Addition of the Description of the Defensive Equity Investment Management Style
From: Pension Consulting Alliance
-
- Recommendation:** **RECOMMEND BOARD APPROVAL** of an amendment to the Investment Policy of the Oakland Police and Fire Retirement System with the addition of a description of the Defensive Equity investment management style.
6. **Subject:** Management change Update Report - Parametric Portfolio Advisors
From: Pension Consulting Alliance
-
- Recommendation:** **ACCEPT** an informational report regarding a planned management change at Parametric Portfolio Advisors in 2019.
7. **Subject:** Report About A Change of Management and Ownership of PFRS Investment Advisor Pension Consulting Alliance
From: Pension Consulting Alliance
-
- Recommendation:** **ACCEPT** an informational report about the joining of management and ownership of PFRS's investment advisor Pension Consulting Alliance with Meketa Investment Group, and provide direction to staff on continuing services.
8. **Subject:** Resolution No. 7035 - Resolution authorizing exercise of a one-year option to extend the agreement with Fisher Investment to provide International Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing February 16, 2019 through February 16, 2020
From: Staff of the PFRS Board
-
- Recommendation:** **RECOMMEND BOARD APPROVAL** of Resolution No. 7035 - Resolution authorizing exercise of a one-year option to extend the agreement with Fisher Investment to provide International Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing February 16, 2019 through February 16, 2020.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR INVESTMENT COMMITTEE MEETING
JANUARY 30, 2019**

ORDER OF BUSINESS, continued

9. **Subject:** Resolution No. 7036 - Resolution authorizing exercise of a one-year option to extend the agreement with Earnest Partners to provide Mid Cap Core Domestic Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing March 24, 2019 through March 24, 2020

From: Staff of the PFRS Board

Recommendation: **RECOMMEND BOARD APPROVAL** of Resolution No. 7036 - Resolution authorizing exercise of a one-year option to extend the agreement with Earnest Partners to provide Mid Cap Core Domestic Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing March 24, 2019 through March 24, 2020.

10. **Schedule of Pending Investment Committee Meeting Agenda Items**
11. **Future Scheduling**
12. **Open Forum**
13. **Adjournment of Meeting**

AN INVESTMENT AND FINANCIAL MATTERS COMMITTEE MEETING of the Oakland Police and Fire Retirement System ("PFRS") was held November 28, 2018 in Hearing Room 1, One Frank Ogawa Plaza, Oakland, California.

Committee Members Present:

- Jaime T. Godfrey, Chairman
- R. Steven Wilkinson, Member
- Martin J. Melia, Member

Additional Attendees:

- David Jones, Plan Administrator
- Pelayo Llamas, PFRS Legal Counsel
- David Low & Teir Jenkins, Staff Members
- David Sancewich & Sean Copus, Pension Consulting Alliance

The meeting was called to order at 10:06 am.

1. **Approval of Investment Committee meeting minutes** – Member Melia made a motion to approve the October 31, 2018 Investment Committee meeting minutes, second by Member Wilkinson. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

2. **Investment Manager Performance Review – Fisher Investments** – Kate Rorer and Christo Barker from Fisher Investments presented a performance, strategy and management review of the PFRS Investment Portfolio managed by Fisher Investments. Following discussion between the Fisher Investments representatives and the Investment Committee, Member Melia made a motion accept the Informational Report from Fisher Investments, second by Member Wilkinson. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

3. **Investment Manager Overview – Fisher Investments** – Sean Copus from PCA presented his review of Fisher Investments performance as investment manager of PFRS International Equity Investments. Following Committee discussion, Member Wilkinson made a motion to accept the informational report from PCA, second by member Melia. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

4. **Investment Market Overview** – David Sancewich from Pension Consulting Alliance (PCA) reported on the global economic factors affecting the PFRS Fund. Member Melia made a motion accept the Informational Report from PCA, second by Member Wilkinson. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

5. **\$14.2 million 1st Quarter 2019 Member Benefits Drawdown** – Sean Copus presented PCA's recommendation on drawdowns to be made to pay for January 2019 through March 2019 member retirement benefits. Mr. Copus reported that PCA recommended withdrawing \$3.0 million from the funds managed by Parametric Portfolio Advisors (Covered Calls) and \$11.2 million from Cash from the City of

Oakland. Following Committee discussion, Member Melia made a motion to recommend Board Approval of a \$14.2 million drawdown, which includes an \$11.2 million contribution from the City of Oakland and a \$3.0 million contribution from the PFRS Investment Fund, to be used to pay for January 2019 through March 2019 member retirement benefits, second by member Wilkinson. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

6. **Investment Fund Performance Report for the Quarter Ending September 30, 2018** – Mr. Copus presented the comprehensive review of the PFRS investment fund performance for the quarter ending September 30, 2018. Mr. Sancewich concluded his report by indicating that the PCA and Staff would be presenting the performance report for the City of Oakland Finance and Management Committee on December 4. Following some Committee discussion, Member Melia made a motion to recommend Board approval of the PFRS Investment Fund Performance Report for the Quarter ending September 30, 2018, second by member Wilkinson. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

7. **Resolution No. 7033 - Resolution modifying the agreement with Parametric Portfolio Associates, LLC** – PFRS Investment Officer Teir Jenkins reported that the service agreement with Parametric Portfolio Associates, LLC was concluding and recommended that a one year extension to this service agreement be implemented. Additionally, Mr. Jenkins reported that the original contract only allowed for three (3) one-year extension following the completion of the original five-year service agreement and recommended an amendment to the service agreement to update the language in the service agreement that would alter the three one-year extension into unlimited one-year extensions.

Following some committee discussion, Member Melia made a motion to recommend Board approval of resolution no. 7033 - Resolution modifying the agreement with Parametric Portfolio Associates, LLC to provide Covered Calls asset class investment manager services for the City of Oakland Police and Fire Retirement System Board in order to (1) provide for unlimited one-year extension options under in section IV, subsection B; and (2) to exercise a one-year option to extend the agreement commencing December 23, 2018 through December 23, 2019, second by member Wilkinson. Motion passed.

[GODFREY – Y / MELIA – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

8. **Investment Committee Pending Agenda Items** – The investment committee and PCA discussed the upcoming agenda items scheduled on PCA's future meeting's agenda.
9. **Future Scheduling** – The next Investment Committee meeting was scheduled for December 19, 2018.

10. Open Forum – No Report.

11. Adjournment of Meeting – The meeting adjourned at 11:06 am.

JAIME T. GODFREY, COMMITTEE CHAIRMAN

DATE

DRAFT

PCA INVESTMENT MARKET RISK METRICS

Monthly Report



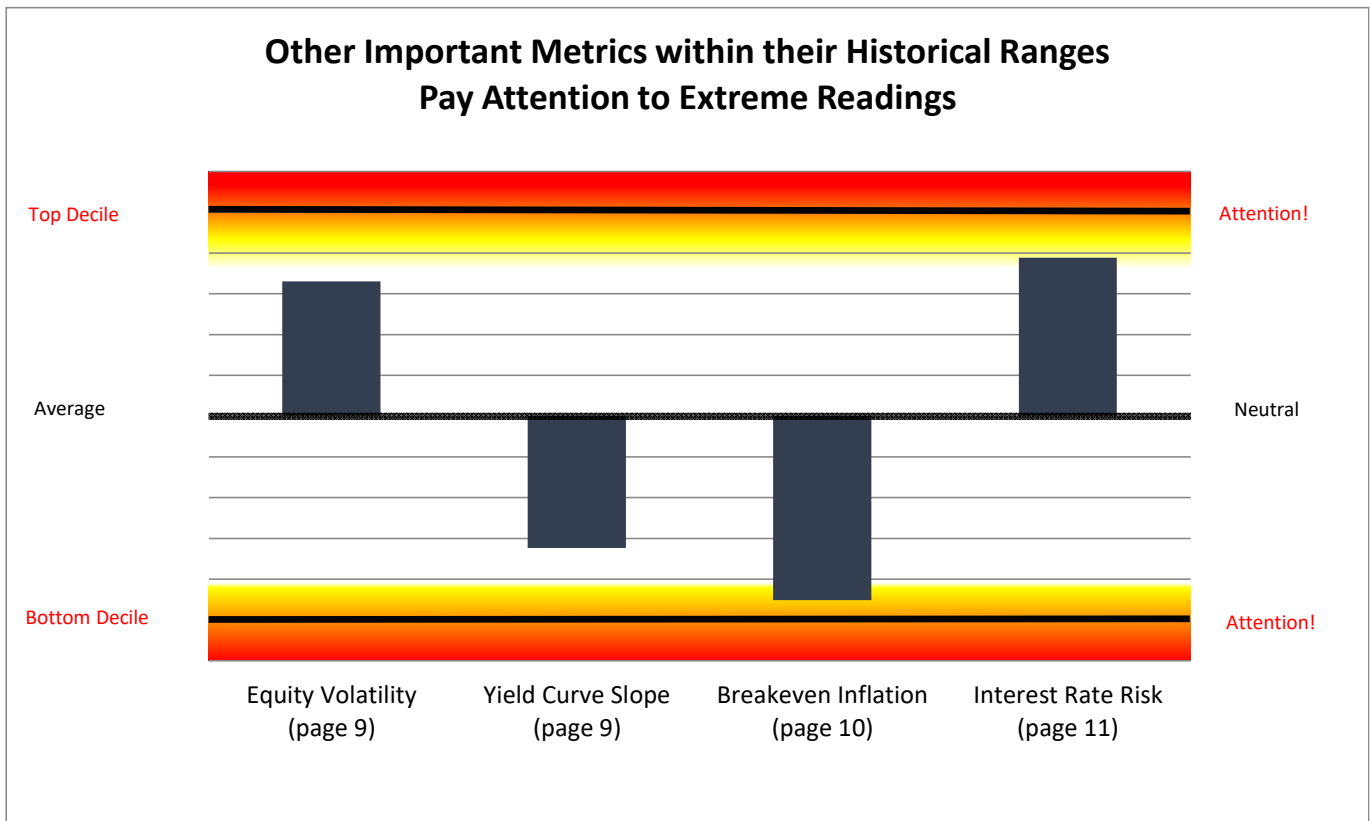
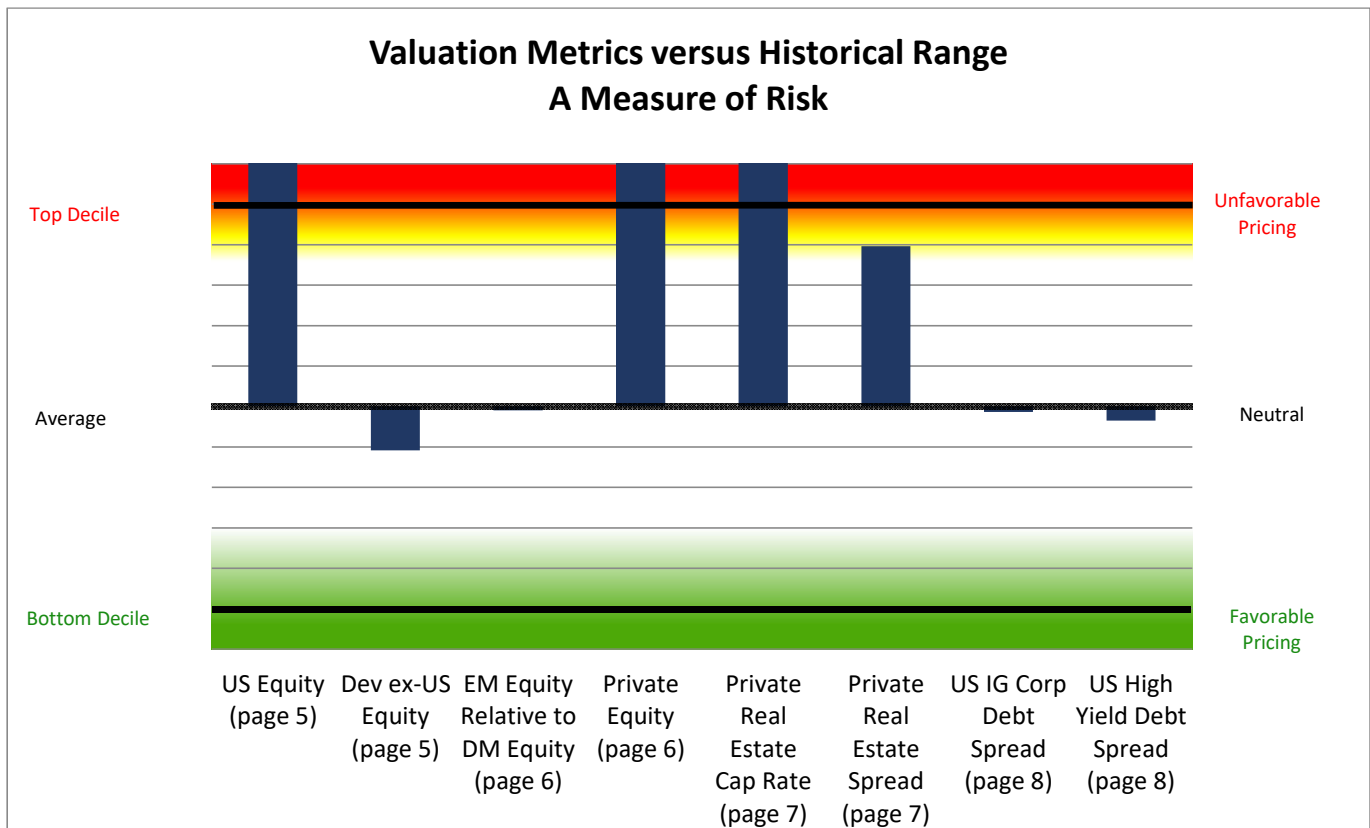
January 2019
(as of 12/31/18)

Takeaways

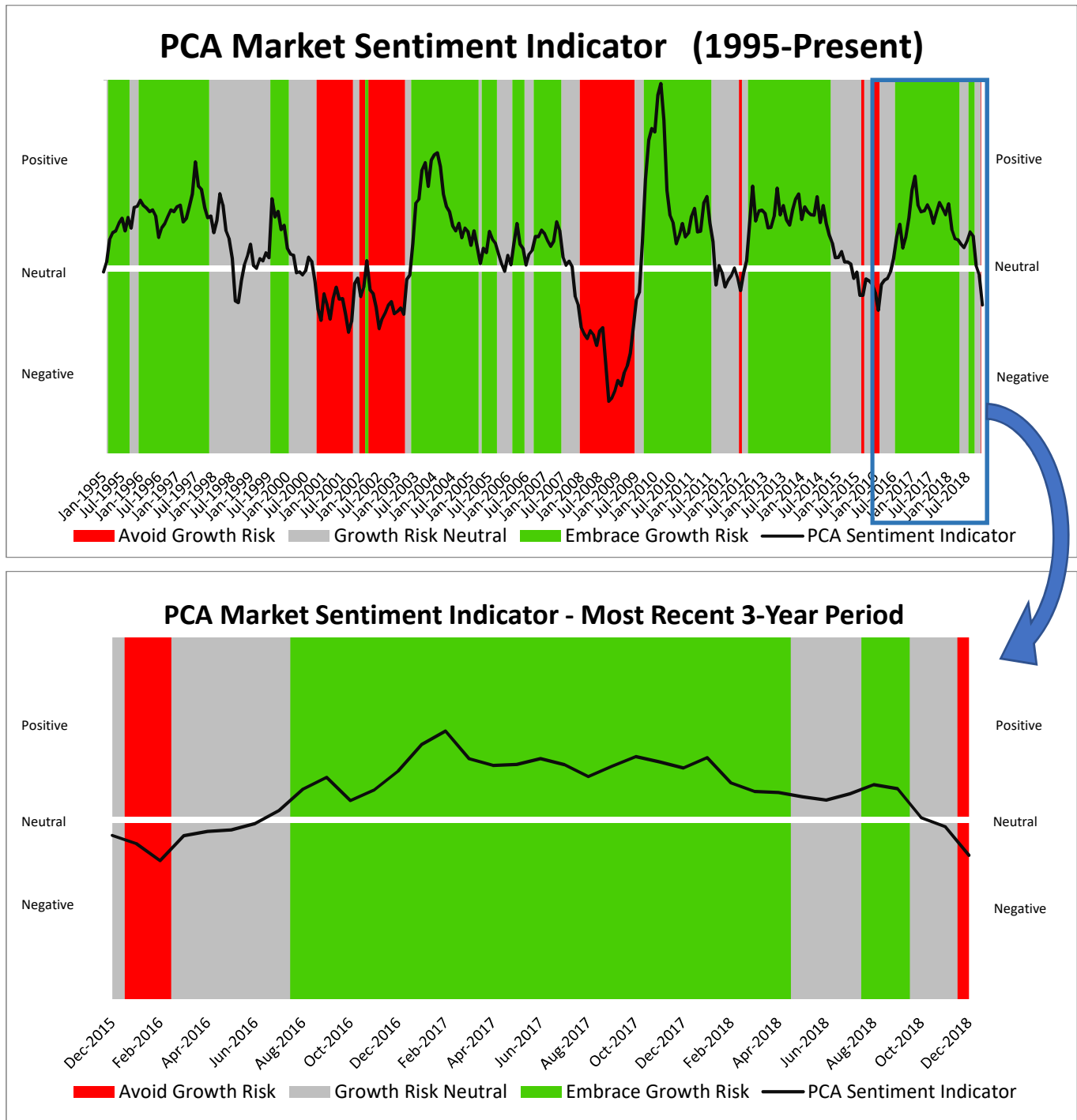
- December completed what proved to be a challenging year for nearly all risk-based assets. While calendar year returns for most markets were well within expectations (albeit negative), the rampant volatility of October and December culminated in a historically poor quarter for global equity markets.
- Despite recent market declines, U.S. Equity markets remain expensive whereas non-U.S. markets remain reasonably valued.
- U.S. Credit spreads have widened to historical average levels.
- Coinciding with severe equity market declines in December was the strong performance of U.S. Treasury bonds. As a result of this activity, duration risk has increased and the yield curve has continued to flatten.
- Risk assets have entered a higher risk regime that appears to be gaining traction. Implied equity market volatility (i.e., VIX) spent the majority of December above its long-term average level of 19.3, including spending several days above 30 near month-end.
- PCA's Market Sentiment Indicator (page 4) flipped to negative (**red**) as a result of negative one-year returns in equity markets and corporate bond spreads.
- **Economies and markets appear to be in transition.** Diverging global economic growth, diverging global monetary policy, and ongoing geopolitical turmoil has resulted in a high degree of uncertainty in the global capital markets.

¹See Appendix for the rationale for selection and calculation methodology used for the risk metrics.

Risk Overview



Market Sentiment



Information Behind Current Sentiment Reading

Bond Spread Momentum Trailing-Twelve Months

Equity Return Momentum Trailing-Twelve Months

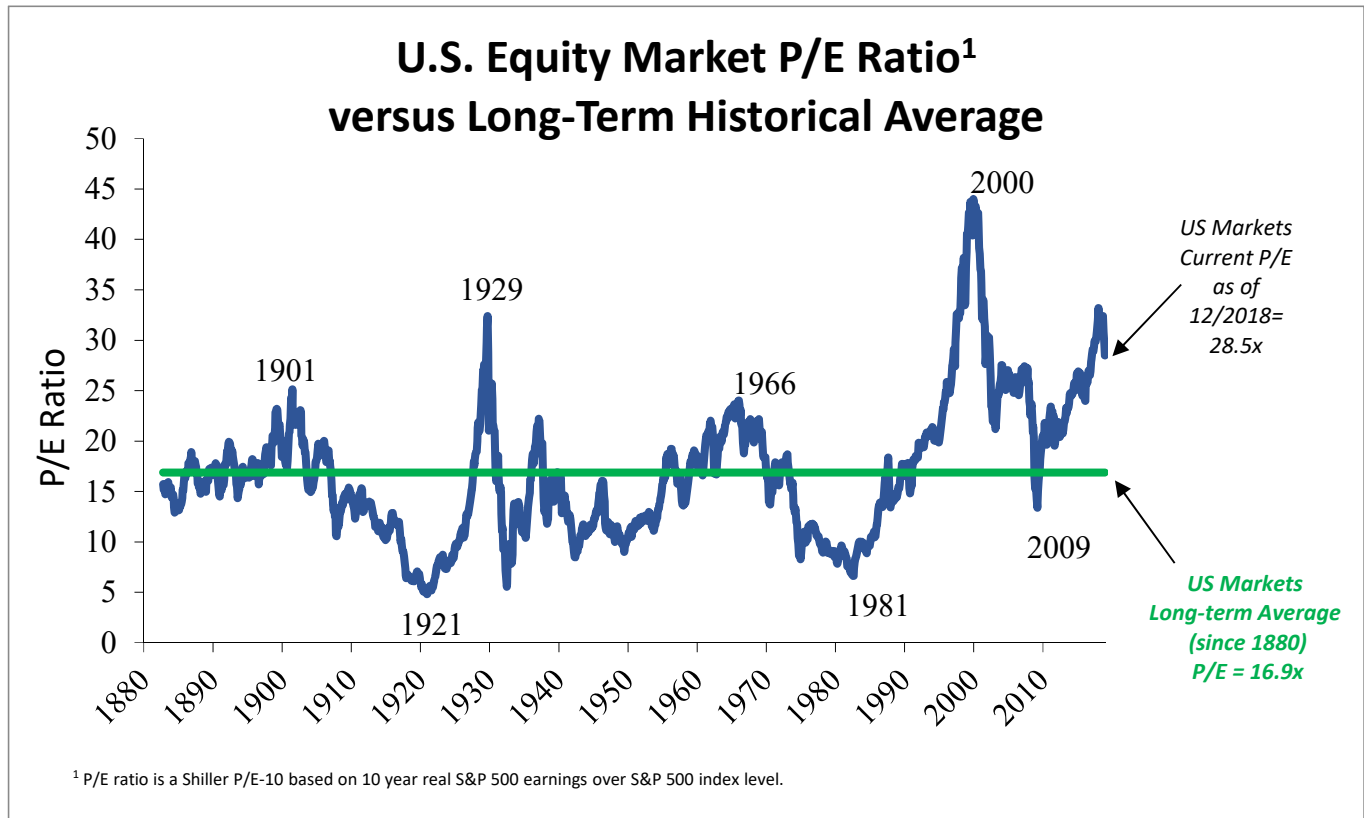
Agreement Between Bond Spread and Equity Spread Momentum Measures?

Negative	■
Negative	■
Agree	■

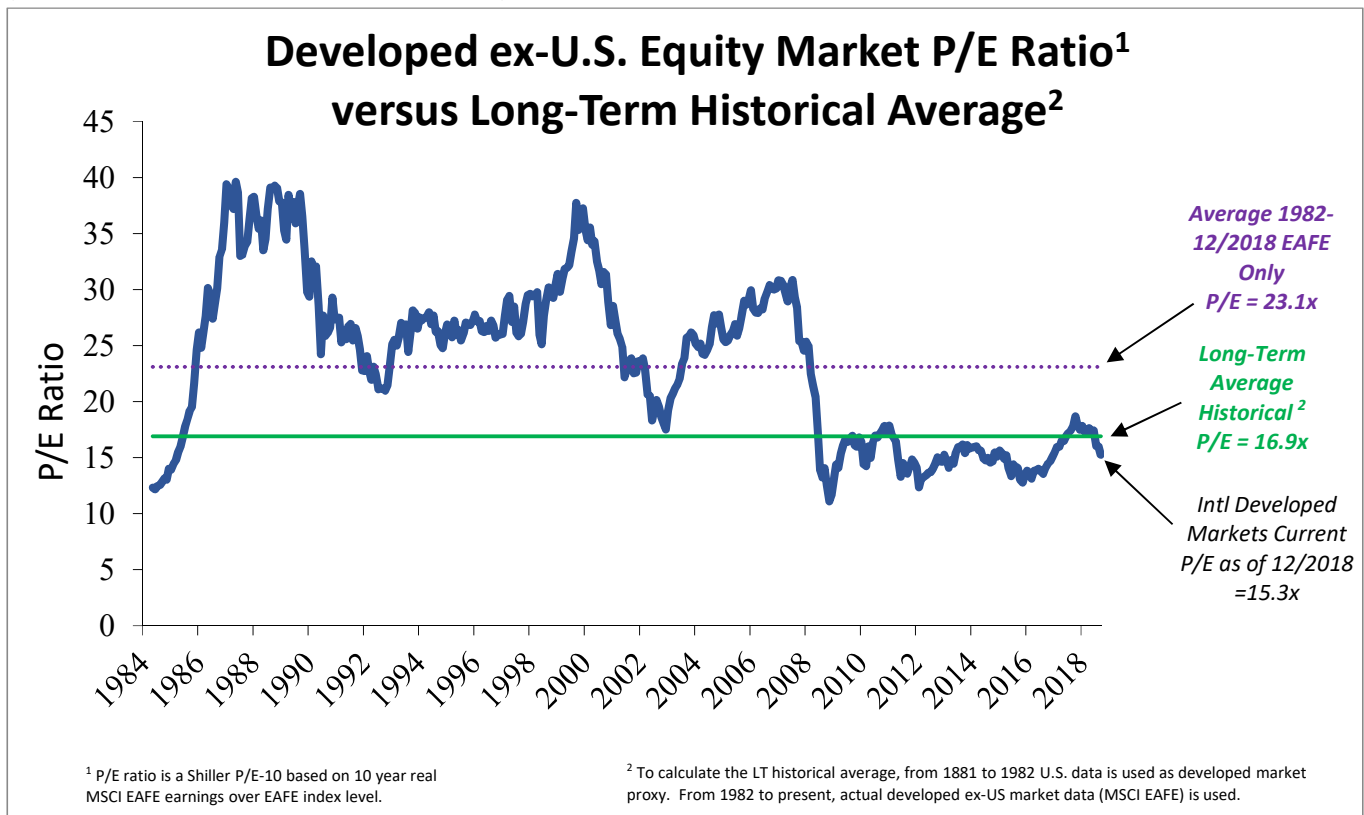
Growth Risk Visibility (Current Overall Sentiment)

Negative	■
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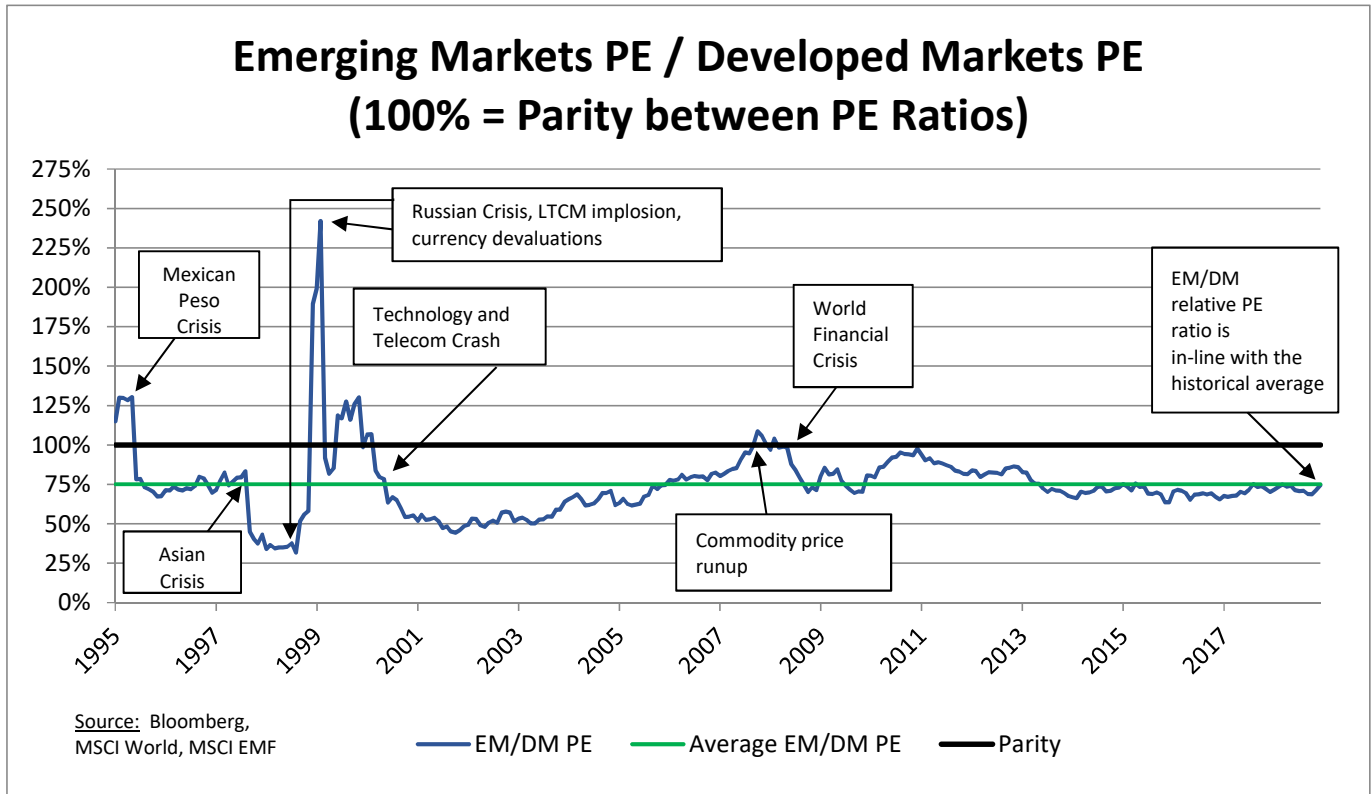
Developed Public Equity Markets



(Please note the difference in time scales)

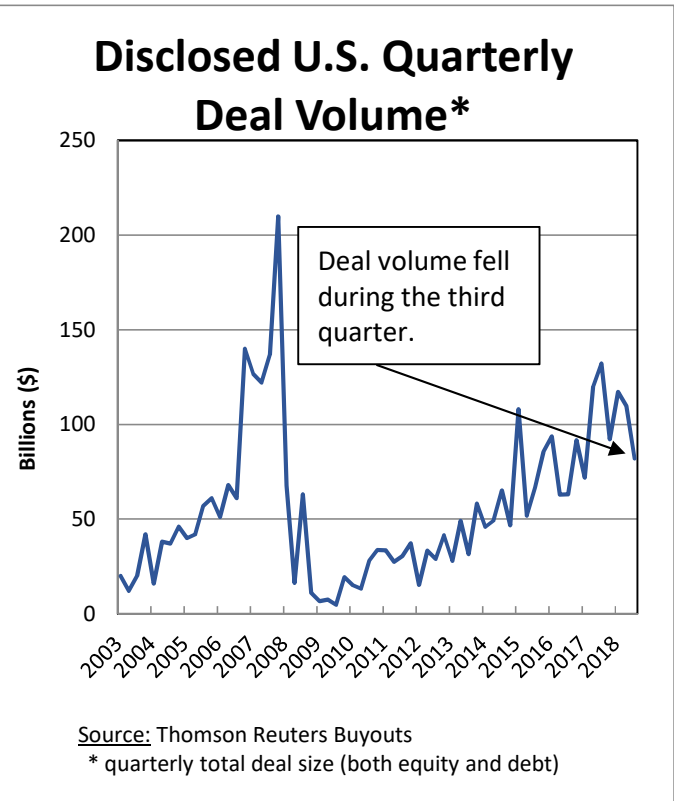
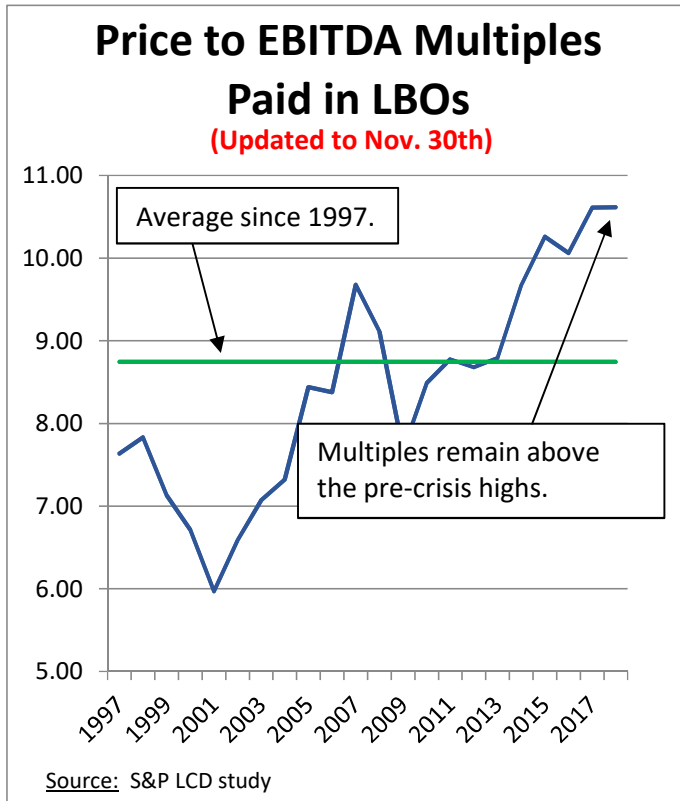


Emerging Market Public Equity Markets



US Private Equity

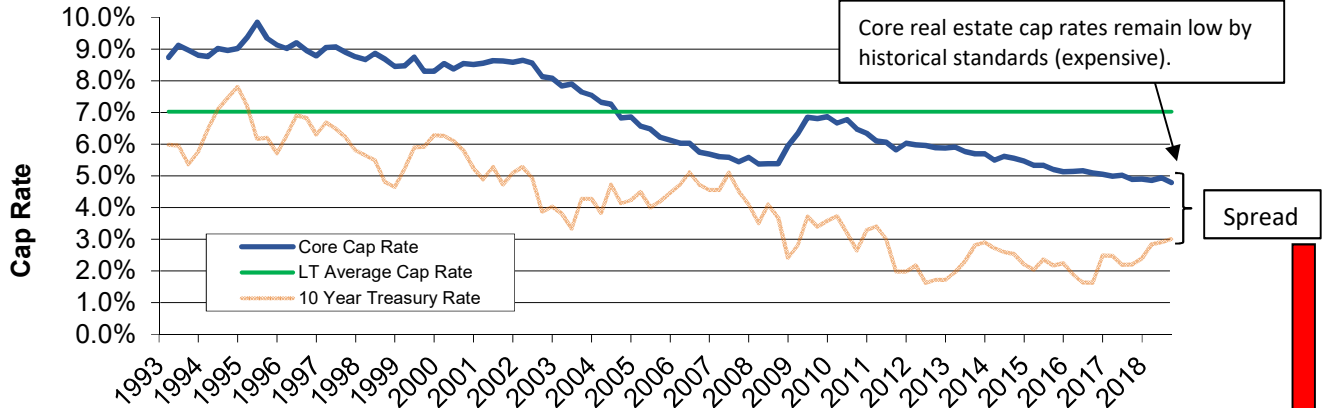
Quarterly Data, Updated to September 30th



Private Real Estate

Quarterly Data, Updated to September 30th.

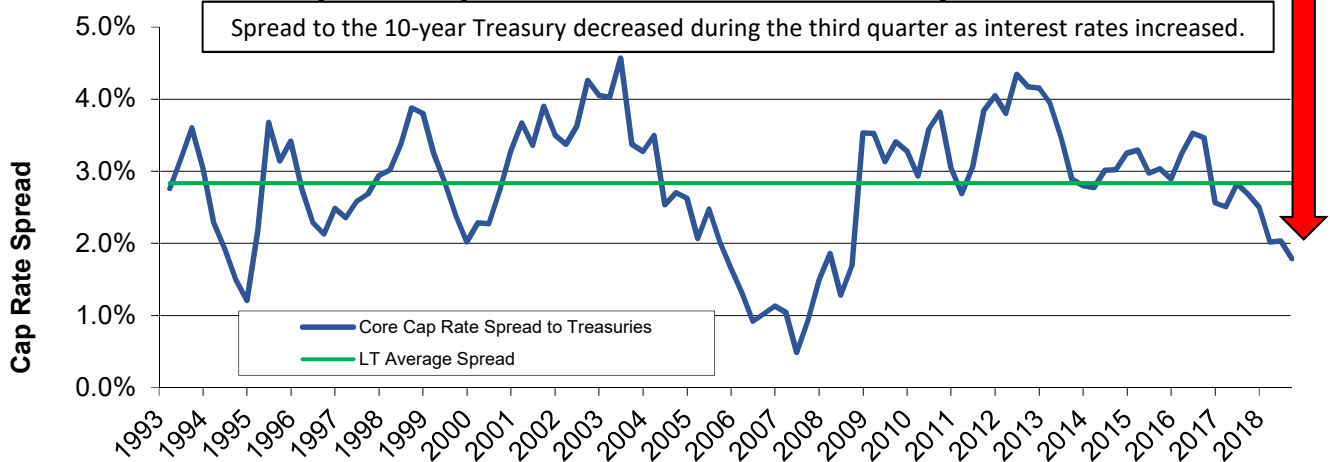
Core Real Estate Current Value Cap Rates¹



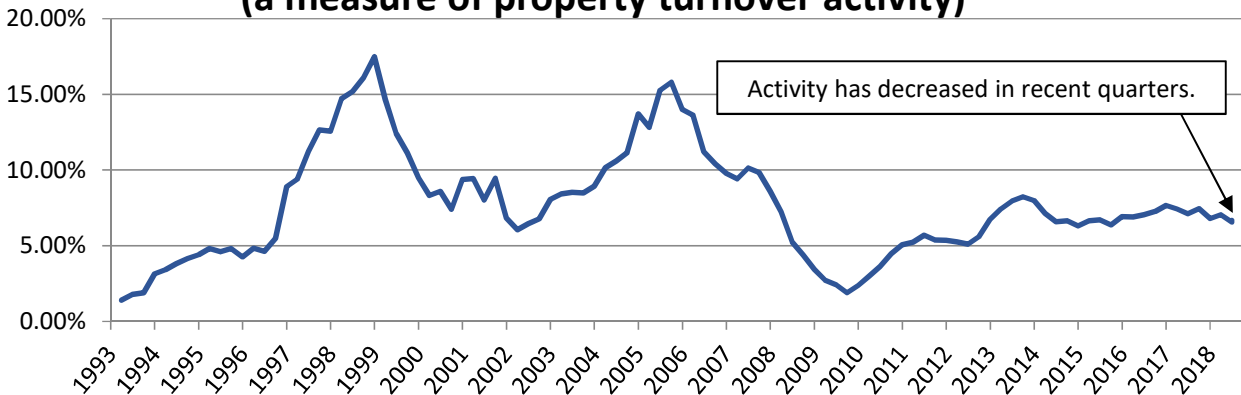
Sources: NCREIF, www.ustreas.gov

¹A cap rate is the current annual income of the property divided by an estimate of the current value of the property. It is the current yield of the property. Low cap rates indicate high valuations.

Core Cap Rate Spread over 10-Year Treasury Interest Rate



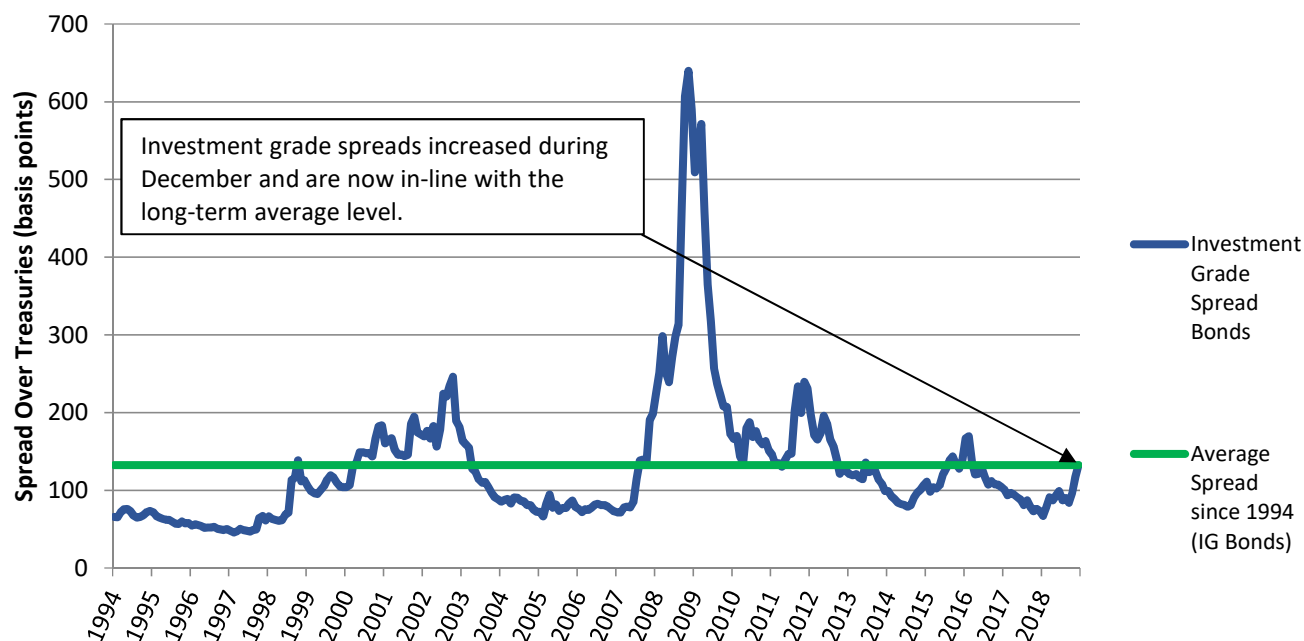
Transactions as a % of Market Value Trailing-Four Quarters (a measure of property turnover activity)



Source: NCREIF, PCA calculation

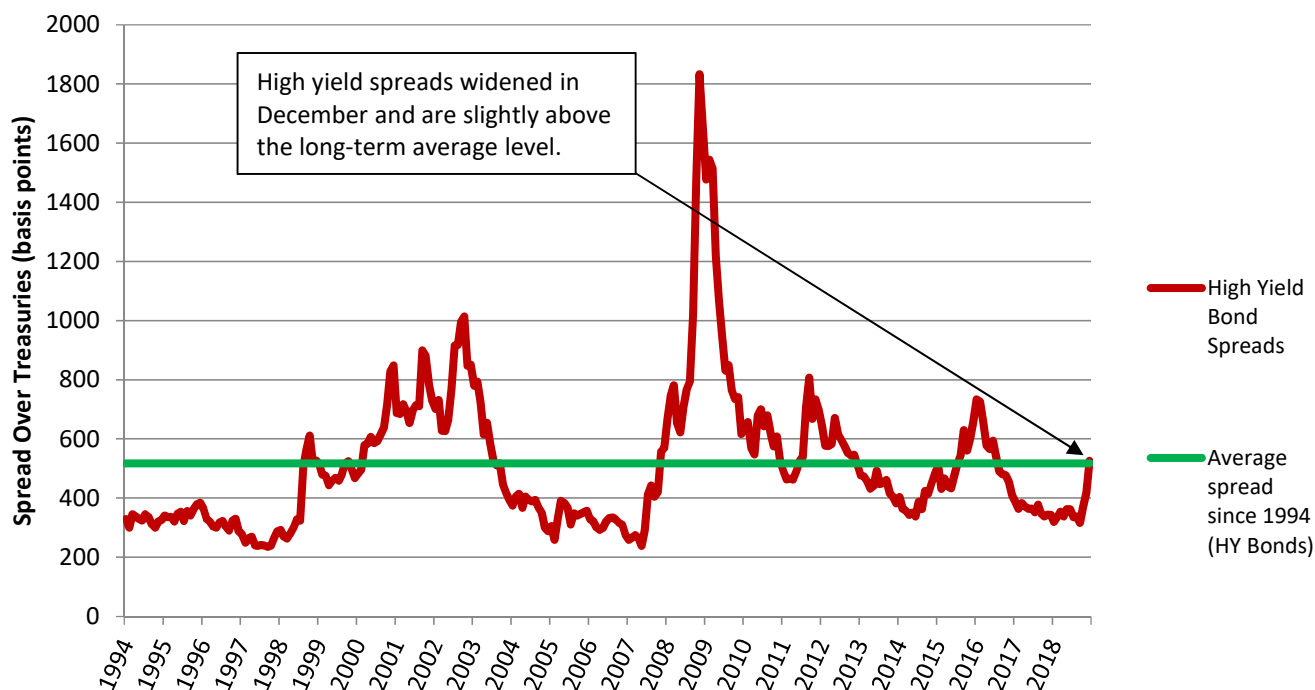
Credit Market US Fixed Income

Investment Grade Corporate Bond Spreads



Source: LehmanLive: Barclays Capital US Corporate Investment Grade Index Intermediate Component.

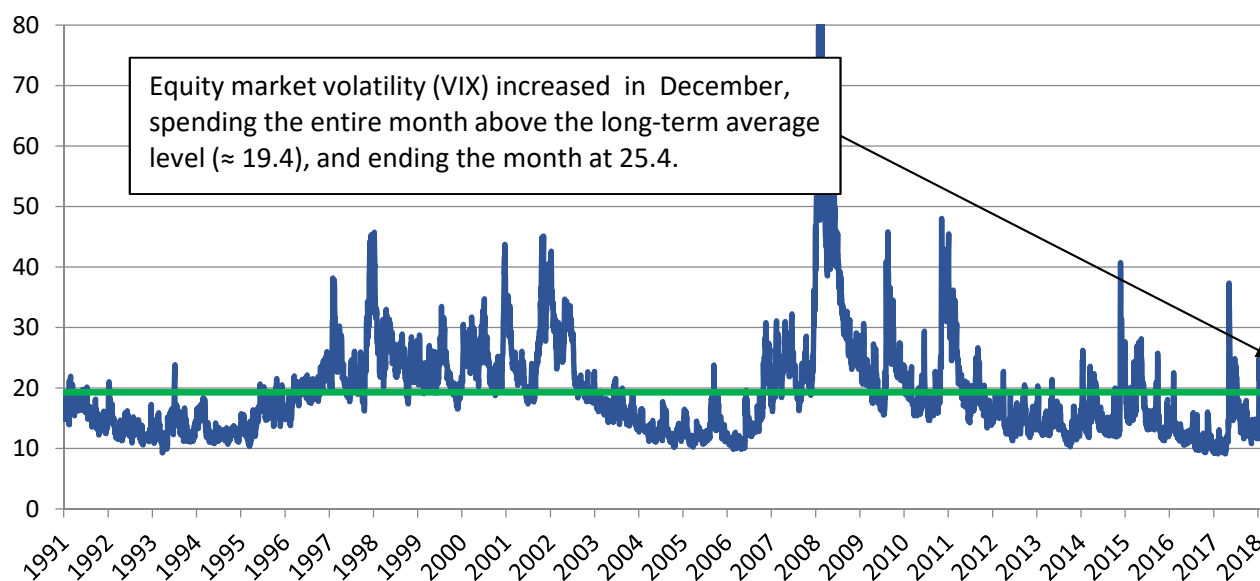
High Yield Corporate Bond Spreads



Source: LehmanLive: Barclays Capital U.S. Corporate High Yield Index.

Other Market Metrics

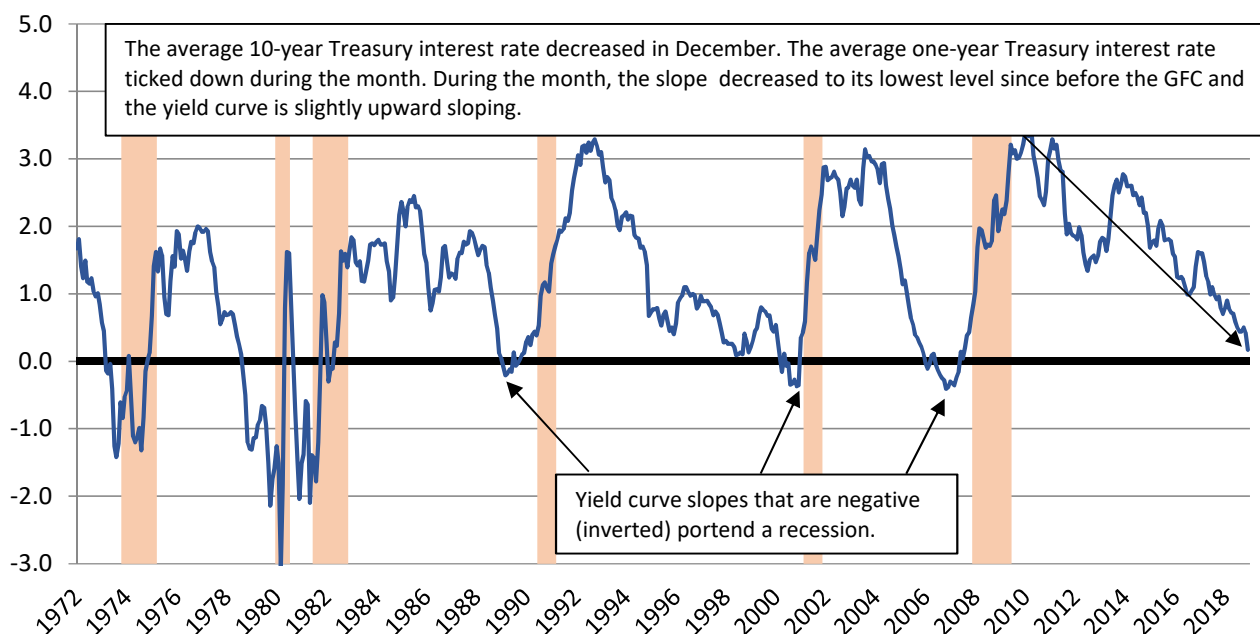
VIX - a measure of equity market fear / uncertainty



Source: <http://www.cboe.com/micro/vix/historical.aspx>

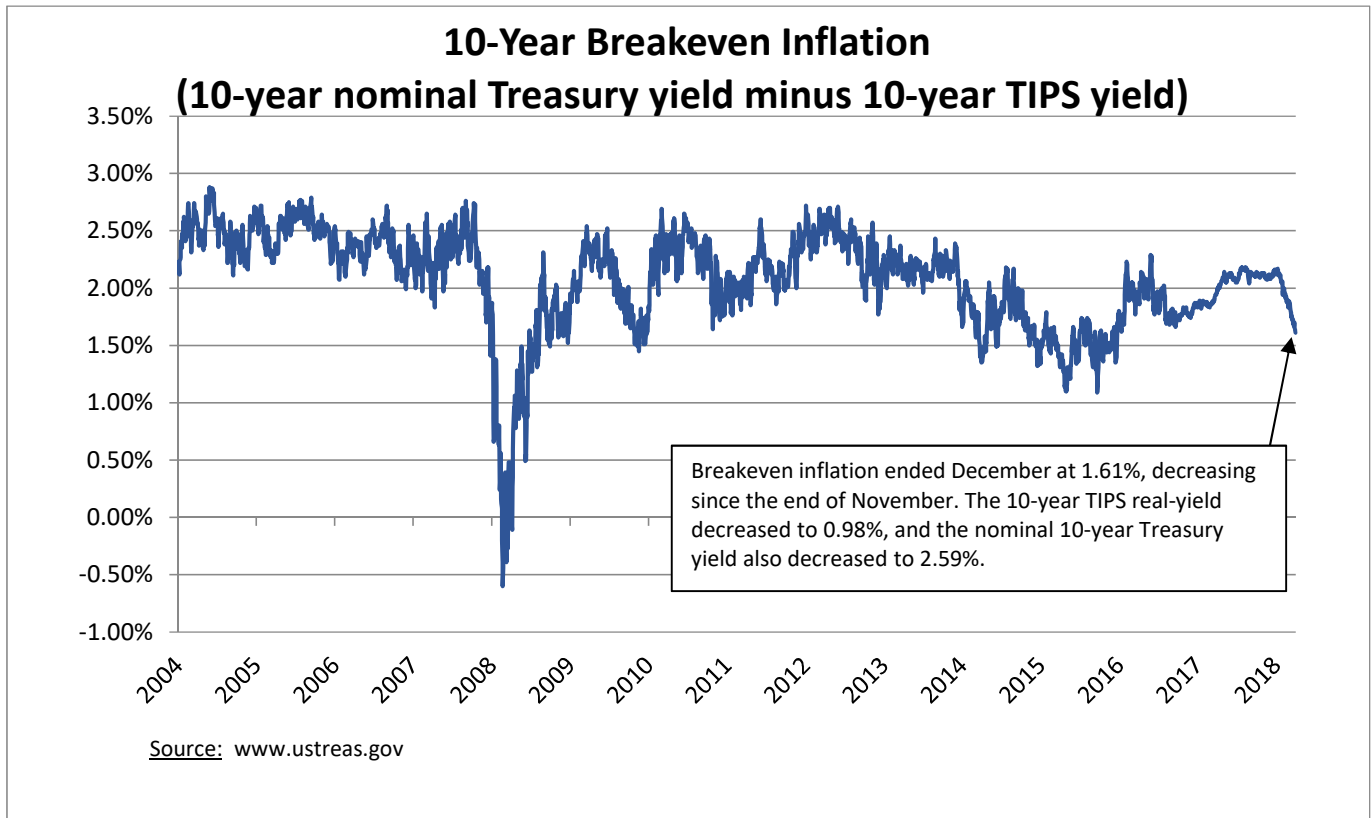
(Please note the difference in time scales)

Yield Curve Slope

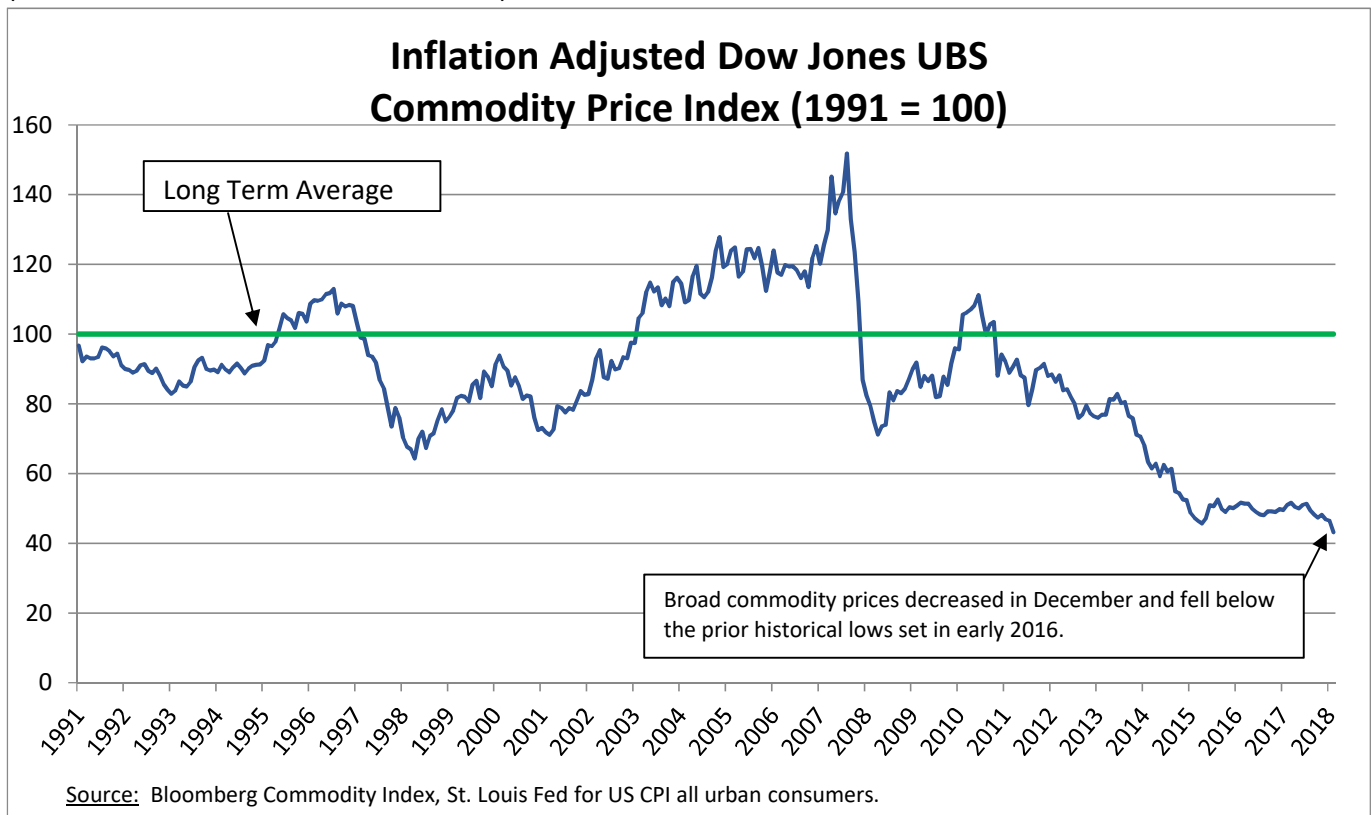


Source: www.ustreas.gov (10 yr treasury yield minus 1 year treasury yield)

Measures of Inflation Expectations

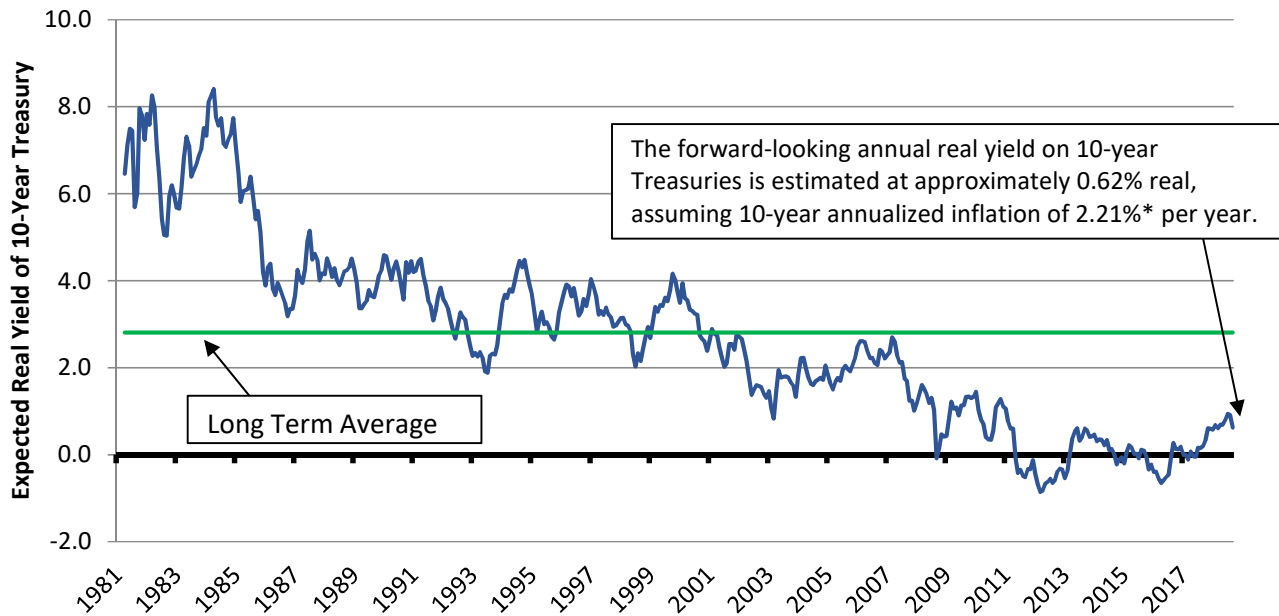


(Please note the difference in time scales)



Measures of U.S. Treasury Interest Rate Risk

Estimate of 10-Year Treasury Forward-Looking Real Yield

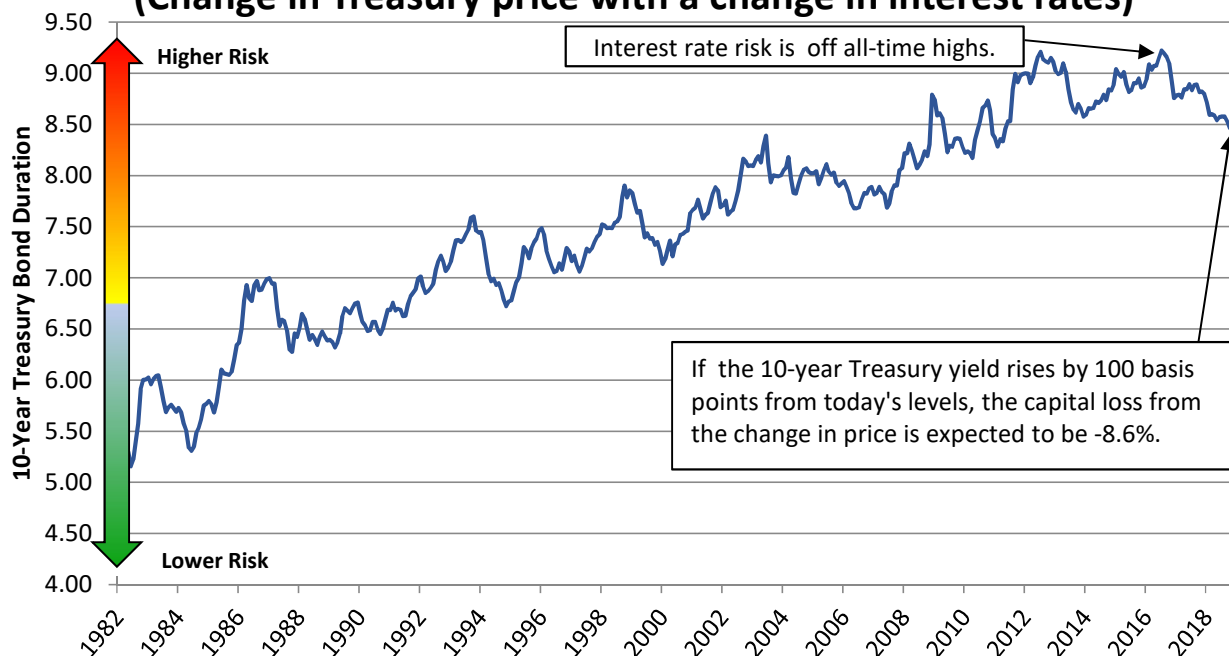


Sources: www.ustreas.gov for 10-year constant maturity rates

*Federal Reserve Bank of Philadelphia survey of professional forecasts for inflation estimates

10-Year Treasury Duration

(Change in Treasury price with a change in interest rates)



Source: www.ustreas.gov for 10-year constant maturity rates, calculation of duration

Appendix

Appendix

METRIC DESCRIPTION, RATIONALE FOR SELECTION AND CALCULATION METHODOLOGY

US Equity Markets:

Metric: P/E ratio = Price / "Normalized" earnings for the S&P 500 Index

To represent the price of US equity markets, we have chosen the S&P 500 index. This index has the longest published history of price, is well known, and also has reliable, long-term, published quarterly earnings. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the S&P 500 index). Equity markets are very volatile. Prices fluctuate significantly during normal times and extremely during periods of market stress or euphoria. Therefore, developing a measure of earnings power (E) which is stable is vitally important, if the measure is to provide insight. While equity prices can and do double, or get cut in half, real earnings power does not change nearly as much. Therefore, we have selected a well known measure of real, stable earnings power developed by Yale Professor Robert Shiller known as the Shiller E-10. The calculation of E-10 is simply the average real annual earnings over the past 10 years. Over 10 years, the earnings shenanigans and boom and bust levels of earnings tend to even out (and often times get restated). Therefore, this earnings statistic gives a reasonably stable, slow-to-change estimate of average real earnings power for the index. Professor Shiller's data and calculation of the E-10 are available on his website at <http://www.econ.yale.edu/~shiller/data.htm>. We have used his data as the base for our calculations. Details of the theoretical justification behind the measure can be found in his book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005].

Developed Equity Markets Excluding the US:

Metric: P/E ratio = Price / "Normalized" earnings for the MSCI EAFE Index

To represent the price of non-US developed equity markets, we have chosen the MSCI EAFE index. This index has the longest published history of price for non-US developed equities. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the MSCI EAFE index). The price level of this index is available starting in December 1969. Again, for the reasons described above, we elected to use the Shiller E-10 as our measure of earnings (E). Since 12/1972, a monthly price earnings ratio is available from MSCI. Using this quoted ratio, we have backed out the implied trailing-twelve month earnings of the EAFE index for each month from 12/1972 to the present. These annualized earnings are then inflation adjusted using CPI-U to represent real earnings in US dollar terms for each time period. The Shiller E-10 for the EAFE index (10 year average real earnings) is calculated in the same manner as detailed above.

However, we do not believe that the pricing and earnings history of the EAFE markets are long enough to be a reliable representation of pricing history for developed market equities outside of the US. Therefore, in constructing the Long-Term Average Historical P/E for developed ex-US equities for comparison purposes, we have elected to use the US equity market as a developed market proxy, from 1881 to 1982. This lowers the Long-Term Average Historical P/E considerably. We believe this methodology provides a more realistic historical comparison for a market with a relatively short history.

Appendix

METRIC DESCRIPTION, RATIONALE FOR SELECTION AND CALCULATION METHODOLOGY

Emerging Market Equity Markets:

Metric: Ratio of Emerging Market P/E Ratio to Developed Market P/E Ratio

To represent the Emerging Markets P/E Ratio, we have chosen the MSCI Emerging Market Free Index, which has P/E data back to January 1995 on Bloomberg. To represent the Developed Markets PE Ratio, we have chosen the MSCI World Index, which also has data back to January 1995 on Bloomberg. Although there are issues with published, single time period P/E ratios, in which the denominator effect can cause large movements, we feel that the information contained in such movements will alert investors to market activity that they will want to interpret.

US Private Equity Markets:

Metrics: S&P LCD Average EBITDA Multiples Paid in LBOs and US Quarterly Deal Volume

The Average Purchase Price to EBITDA multiples paid in LBOs is published quarterly by S&P in their LCD study. This is the total price paid (both equity and debt) over the trailing-twelve month EBITDA (earnings before interest, taxes, depreciation and amortization) as calculated by S&P LCD. This is the relevant, high-level pricing metric that private equity managers use in assessing deals. Data is published monthly.

US quarterly deal volume for private equity is the total deal volume in \$ billions (both equity and debt) reported in the quarter by Thomson Reuters Buyouts. This metric gives a measure of the level of activity in the market. Data is published quarterly.

U.S Private Real Estate Markets:

Metrics: US Cap Rates, Cap Rate Spreads, and Transactions as a % of Market Value

Real estate cap rates are a measure of the price paid in the market to acquire properties versus their annualized income generation before financing costs (NOI=net operating income). The data, published by NCREIF, describes completed and leased properties (core) on an unleveraged basis. We chose to use current value cap rates. These are capitalization rates from properties that were revalued during the quarter. This data relies on estimates of value and therefore tends to be lagging (estimated prices are slower to rise and slower to fall than transaction prices). The data is published quarterly.

Spreads between the cap rate (described above) and the 10-year nominal Treasury yield, indicate a measure of the cost of properties versus a current measure of the cost of financing.

Transactions as a % of Market Value Trailing-Four Quarters is a measure of property turnover activity in the NCREIF Universe. This quarterly metric is a measure of activity in the market.

Credit Markets US Fixed Income:

Metric: Spreads

The absolute level of spreads over treasuries and spread trends (widening / narrowing) are good indicators of credit risk in the fixed income markets. Spreads incorporate estimates of future default, but can also be driven by technical dislocations in the fixed income markets. Abnormally narrow spreads (relative to historical levels) indicate higher levels of valuation risk, wide spreads indicate lower levels of valuation risk and / or elevated default fears. Investment grade bond spreads are represented by the Barclays Capital US Corporate Investment Grade Index Intermediate Component. The high yield corporate bond spreads are represented by the Barclays Capital US Corporate High Yield Index.

Appendix

METRIC DESCRIPTION, RATIONALE FOR SELECTION AND CALCULATION METHODOLOGY

Measure of Equity Market Fear / Uncertainty

Metric: VIX – Measure of implied option volatility for U.S. equity markets

The VIX is a key measure of near-term volatility conveyed by implied volatility of S&P 500 index option prices. VIX increases with uncertainty and fear. Stocks and the VIX are negatively correlated. Volatility tends to spike when equity markets fall.

Measure of Monetary Policy

Metric: Yield Curve Slope

We calculate the yield curve slope as the 10 year treasury yield minus the 1 year treasury yield. When the yield curve slope is zero or negative, this is a signal to pay attention. A negative yield curve slope signals lower rates in the future, caused by a contraction in economic activity. Recessions are typically preceded by an inverted (negatively sloped) yield curve. A very steep yield curve (2 or greater) indicates a large difference between shorter-term interest rates (the 1 year rate) and longer-term rates (the 10 year rate). This can signal expansion in economic activity in the future, or merely higher future interest rates.

Measures of US Inflation Expectations

Metrics: Breakeven Inflation and Inflation Adjusted Commodity Prices

Inflation is a very important indicator impacting all assets and financial instruments. Breakeven inflation is calculated as the 10 year nominal treasury yield minus the 10 year real yield on US TIPS (treasury inflation protected securities). Abnormally low long-term inflation expectations are indicative of deflationary fears. A rapid rise in breakeven inflation indicates an acceleration in inflationary expectations as market participants sell nominal treasuries and buy TIPS. If breakeven inflation continues to rise quarter over quarter, this is a signal of inflationary worries rising, which may cause Fed action and / or dollar decline.

Commodity price movement (above the rate of inflation) is an indication of anticipated inflation caused by real global economic activity putting pressure on resource prices. We calculate this metric by adjusted in the Dow Jones UBS Commodity Index (formerly Dow Jones AIG Commodity Index) by US CPI-U. While rising commodity prices will not necessarily translate to higher US inflation, higher US inflation will likely show up in higher commodity prices, particularly if world economic activity is robust.

These two measures of anticipated inflation can, and often are, conflicting.

Measures of US Treasury Bond Interest Rate Risk

Metrics: 10-Year Treasury Forward-Looking Real Yield and 10-Year Treasury Duration

The expected annualized real yield of the 10 year U.S. Treasury Bond is a measure of valuation risk for U.S. Treasuries. A low real yield means investors will accept a low rate of expected return for the certainty of receiving their nominal cash flows. PCA estimates the expected annualized real yield by subtracting an estimate of expected 10 year inflation (produced by the Survey of Professional Forecasters as collected by the Federal Reserve Bank of Philadelphia), from the 10 year Treasury constant maturity interest rate.

Duration for the 10-Year Treasury Bond is calculated based on the current yield and a price of 100. This is a measure of expected percentage movements in the price of the bond based on small movements in percentage yield. We make no attempt to account for convexity.

Definition of “extreme” metric readings

A metric reading is defined as “extreme” if the metric reading is in the top or bottom decile of its historical readings. These “extreme” reading should cause the reader to pay attention. These metrics have reverted toward their mean values in the past.

PCA Market Sentiment Indicator

Explanation, Construction and Q&A

By:

Pension Consulting Alliance, LLC.

PCA has created the PCA Market Sentiment Indicator (PMSI) to complement our valuation-focused PCA Investment Market Risk Metrics. This measure of sentiment is meant to capture significant and persistent shifts in long-lived market trends of economic growth risk, either towards a risk-seeking trend or a risk-aversion trend.

This paper explores:

- What is the PCA Market Sentiment Indicator (PMSI)?
- How do I read the indicator graph?
- How is the PCA Market Sentiment Indicator (PMSI) constructed?
- What do changes in the indicator mean?



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PCA Market Sentiment Indicator

PCA has created a market sentiment indicator for monthly publication (the PMSI – see below) to complement PCA's Investment Market Risk Metrics.

PCA's Investment Market Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk concerns long before a market corrections take place. The PMSI helps to address this early-warning bias by measuring whether the markets are beginning to acknowledge key Risk Metrics trends, and / or indicating non-valuation based concerns. Once the PMSI indicates that the market sentiment has shifted, it is our belief that investors should consider significant action, particularly if confirmed by the Risk Metrics. Importantly, PCA believes the Risk Metrics and PMSI should always be used in conjunction with one another and never in isolation. The questions and answers below highlight and discuss the basic underpinnings of the PCA PMSI:

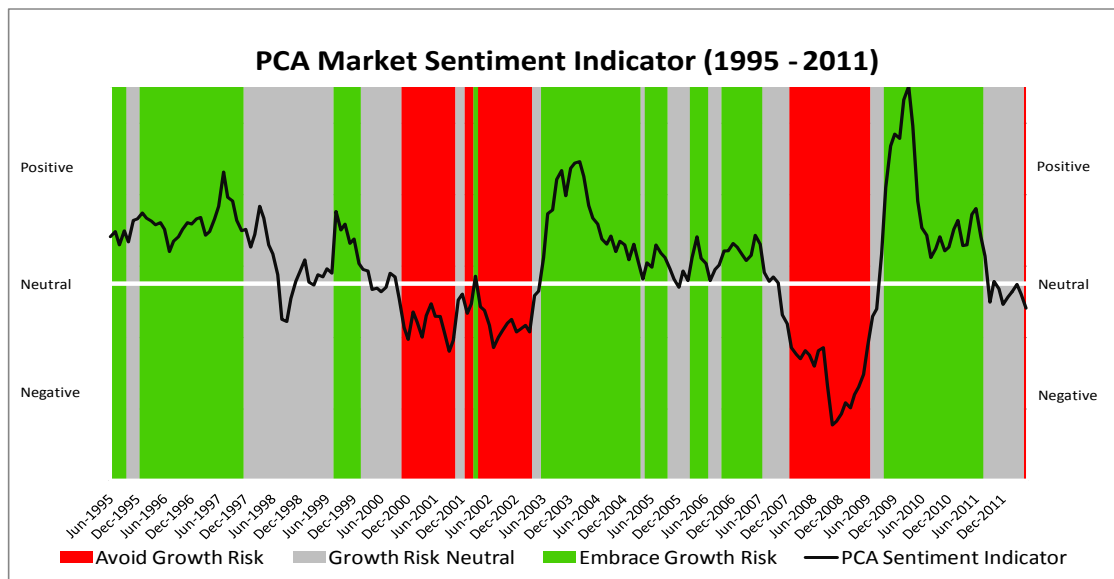
What is the PCA Market Sentiment Indicator (PMSI)?

The PMSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets, and is the largest risk exposure that most portfolios bear. The PMSI takes into account the momentum (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

How do I read the PCA Market Sentiment Indicator (PMSI) graph?

Simply put, the PMSI is a color coded indicator that signals the market's sentiment regarding economic growth risk. It is read left to right chronologically. A green indicator on the PMSI indicates that the market's sentiment towards growth risk is positive. A gray indicator indicates that the market's sentiment towards growth risk is neutral or inconclusive. A red indicator indicates that the market's sentiment towards growth risk is negative. The black line on the graph is the level of the PMSI. The degree of the signal above or below the neutral reading is an indication the signal's current strength.

Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior.



PCA Market Sentiment Indicator

How is the PCA Market Sentiment Indicator (PMSI) Constructed?

The PMSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:

1. Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months)
2. Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration U.S. Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight). The scale of this measure is adjusted to match that of the stock return momentum measure.

The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure. The color reading on the graph is determined as follows:

1. If both stock return momentum and bond spread momentum are positive = GREEN (positive)
2. If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive)
3. If both stock return momentum and bond spread momentum are negative = RED (negative)

What does the PCA Market Sentiment Indicator (PMSI) mean? Why might it be useful?

There is strong evidence that time series momentum is significant and persistent. In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12 month period. The PMSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

ⁱ Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior.

ⁱⁱ "Time Series Momentum" Moskowitz, Ooi, Pedersen, August 2010
<http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

City of Oakland Police and Fire Retirement System

Preliminary 4Q 2018 Performance

As of 12/31/2018, gross of fees

Segment Manager	Benchmark	Style	4Q 2018	1-year	3-year	5-year	Since Inception ⁸	Inception Date ⁹
Total Plan (Gross of Fees)			-9.8	-4.8	7.0	5.5	---	---
Total Plan (Net of Fees)¹⁰			-9.9	-5.2	6.6	5.2	---	---
Policy Benchmark¹			-10.2	-5.0	6.6	5.6	---	---
Public Equity			-15.0	-8.6	7.8	6.4	---	---
Public Equity Benchmark⁴			-13.7	-6.9	8.2	6.6	---	---
Domestic Equity			-15.6	-6.4	8.9	7.7	---	---
Russell 3000 (blend)⁵			-14.3	-5.2	9.0	7.9	---	---
Large Cap			-13.8	-4.2	9.3	8.4	---	---
Northern Trust	Large Cap Core		-13.8	-4.8	9.0	8.2	12.4	5/2010
Russell 1000	Large Cap Core		-13.8	-4.8	9.1	8.2	12.4	---
SSgA Russell 1000 Value	Large Cap Value		-11.7	-8.2	7.0	---	4.7	10/2014
Russell 1000 Value	Large Cap Value		-11.7	-8.3	7.0	---	4.6	---
SSgA Russell 1000 Growth	Large Cap Growth		-15.9	-1.5	11.2	---	9.9	10/2014
Russell 1000 Growth	Large Cap Growth		-15.9	-1.5	11.2	---	9.9	---
Midcap			-16.7	-9.7	9.9	8.2	---	---
Earnest Partners	Mid Cap Core		-16.7	-9.7	9.9	8.2	8.2	3/2006
Russell Mid Cap	Mid Cap Core		-15.4	-9.1	7.0	6.3	7.3	---
Small Cap			-21.7	-11.6	6.2	3.4	---	---
NWQ	Small Cap Value		-21.3	-17.8	4.5	3.9	6.1	1/2006
Russell 2000 Value	Small Cap Value		-18.7	-12.9	7.4	3.6	5.4	---
Rice Hall James	Small Cap Growth		-22.0	-6.2	---	---	4.6	7/2017
Russell 2000 Growth	Small Cap Growth		-21.7	-9.3	---	---	-0.1	---
International Equity			-13.1	-15.2	4.4	1.6	---	---
MSCI ACWI Ex US (blend)⁶			-11.4	-13.8	5.0	1.1	---	---
Hansberger	International		-13.5	-16.5	5.8	2.3	3.6	1/2006
MSCI ACWI Ex US	ACWI ex US		-11.4	-13.8	5.0	1.1	3.3	---
Fisher	International		-13.4	-15.5	3.9	1.6	2.9	3/2011
MSCI ACWI Ex US	ACWI ex US		-11.4	-13.8	5.0	1.1	2.4	---
State Street Global	International		-12.5	-13.5	3.2	0.9	6.5	7/2002
MSCI EAFE	Developed Markets		-12.5	-13.4	3.4	1.0	6.6	---
Fixed Income			1.0	0.4	3.4	3.2	---	---
BC Universal (blend)⁷			1.2	-0.3	2.6	2.7	---	---
Reams	Core Plus		2.5	1.5	2.9	2.8	5.5	1/1998
Bbg BC Universal (blend) ⁷	Core Plus		1.2	-0.3	2.6	2.7	4.8	---
Ramirez	Core		1.1	-0.1	---	---	2.5	1/2017
Bbg BC Aggregate	Core		1.6	0.0	---	---	1.8	---
DDJ	High Yield/Bank Loans		-3.4	0.6	9.3	---	5.8	1/2015
ICE BofAML US High Yield	High Yield/Bank Loans		-4.7	-2.3	7.3	---	4.1	---
Crisis Risk Offset			-10.0	---	---	---	---	---
Parametric	Risk Premia/Trend Following		-10.0	---	---	---	-10.0	9/2018
SG Multi Alt Risk Premia	Risk Premia/Trend Following		-0.6	---	---	---	-0.6	---
Covered Calls			-11.0	-4.9	6.6	---	6.2	3/2014
CBOE BXM			-10.8	-4.8	4.8	---	4.8	---
Parametric BXM	Passive Covered Calls		-9.0	-4.0	5.8	5.8	5.6	3/2014
Parametric DeltaShift	Active Covered Calls		-12.9	-5.8	7.4	---	7.5	---

Source of Blended Benchmarks: PCA Performance Group

1. Starting on 5/1/2016, Policy Benchmark consists of 48% Russell 3000, 12% MSCI ACWI ex U.S., 20% BbgBC Universal, 20% CBOE BXM

4. Public Equity Benchmark consists of 76% Russell 3000 and 24% MSCI ACWI ex U.S.

5. Domestic Equity Benchmark consists of S&P 500 thru 3/31/98, 10% R1000, 20% R1000V, 5% RMC from 4/1/98 - 12/31/04, and Russell 3000 from 1/1/05 to the present.

6. International Equity Benchmark consists of MSCI EAFE thru 12/31/04, and MSCI ACWI ex US thereafter.

7. Fixed Income Benchmark consists of BbgBC Aggregate prior to 4/1/06, and BbgBC Universal thereafter.

8. Performance is calculated based on the first full month of performance since funding.

9. Inception date reflects the month when portfolio received initial funding.

10. Annual 3- & 5-year investment manager fees estimated at 34 basis points

City of Oakland Police and Fire Retirement System
Preliminary Market Value Summary
As of 12/31/2018

Manager	Style	Market Value \$(000)	Target	Actual ¹	Difference
Total Plan		\$350,053	100.0%	100.0%	0.0%
Public Equity		\$174,946	52.0%	50.0%	-2.0%
Domestic Equity		\$133,535	40.0%	38.1%	-1.9%
Large Cap Equity					
Northern Trust	Large Cap Core	72,965	23.2%	20.8%	-2.4%
SSgA Russell 1000 Value	Large Cap Value	7,287	0.0%	2.1%	2.1%
SSgA Russell 1000 Growth	Large Cap Growth	8,338	0.0%	2.4%	2.4%
Mid Cap Equity					
Earnest Partners	Mid Cap Core	25,676	6.8%	7.3%	0.5%
Small Cap Equity					
NWQ	Small Cap Value	8,203	2.5%	2.3%	-0.2%
Rice Hall James	Small Cap Growth	11,066	2.5%	3.2%	0.7%
International Equity		\$41,411	12.0%	11.8%	-0.2%
SSgA	International	12,955	3.6%	3.7%	0.1%
Hansberger	International	14,150	4.2%	4.0%	-0.2%
Fisher	International	14,306	4.2%	4.1%	-0.1%
Fixed Income		\$91,493	31.0%	26.1%	-4.9%
Reams	Core Plus	23,000	12.0%	6.6%	-5.4%
Ramirez	Core	68,493	19.0%	19.6%	0.6%
Credit		\$7,616	2.0%	2.2%	0.2%
DDJ	High Yield/Bank Loans	7,616	---	2.2%	---
Covered Calls		\$45,110	5.0%	12.9%	7.9%
Parametric (Eaton Vance)	Active/Replication	45,110	---	12.9%	---
Crisis Risk Offset		\$23,187	10.0%	6.6%	-3.4%
New/Current Manager	Long Duration	0	3.3%	0.0%	-3.3%
Parametric	Trend/Risk Premia	23,187	6.7%	6.6%	0.0%
Total Cash²		\$7,701	0.0%	2.2%	2.2%

1. In aggregate, asset class allocations equal to 100% of total investment portfolio.

2. Preliminary estimated balance Includes cash balance with City Treasury and Custodian Cash account as of 12/31/2018.

Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC (PCA)

CC: David Sancewich – PCA
Sean Copus – PCA
Teir Jenkins – OPFRS
David Jones – OPFRS

RE: **Crisis Risk Offset Implementation – Long Duration**

As part of a recent OPFRS asset-liability study, the Board approved a new long-term strategic allocation policy. A key feature of the new strategic allocation policy is its allocation to a Crisis Risk Offset (CRO) strategic class. When fully structured and funded, the CRO class will be comprised of three equally weighted components: Long Duration, Systematic Trend Following, and Alternative Risk Premia. The CRO class is expected to (i) have a high probability of producing material appreciation during equity-crisis periods, and (ii) maintain its long-term purchasing power in the intervening market cycles.

As PCA has discussed at prior meetings, one segment of this new class is Long Duration. Long Duration portfolios are those that generally consist of long-dated (maturities in excess of 10 years) high-quality bonds (such as Treasuries and Government-backed high-quality agencies).

Long term Asset Allocation, Period ending 12/31/2018

Asset Class	12/31/2018 Actual	Long-Term Targets
Cash	2	0
Fixed Income	26	21
Credit	2	2
Covered Calls	13	5
Domestic Equity	38	40
International Equity	12	12
CRO	7	20

Unlike the two other components of CRO (Trend Following and Alternative Risk Premia), the Long Duration segment of the asset class can be managed by most reputable fixed income investment firms and is relatively inexpensive to manage. Rather than conduct a full Long Duration manager search, PCA recommends OPFRS utilize one of its current investment managers to run this portion of the asset class.

Both of OPFRS's current fixed income managers are high quality firms and have the investment expertise to manage this segment of the CRO asset class.

PCA recommends that OPFRS engage one of its fixed income providers to manage these assets rather than conduct a full RFI/RFP review. PCA will update the OPFRS Board at its February 2019 meeting with a specific recommendation.

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Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC (PCA)

CC: David Sancewich – PCA
Sean Copus – PCA
Teir Jenkins – OPFRS
David Jones - OPFRS

RE: Investment Guideline Revision – Defensive Equity Addition

Summary and Recommendation

In September 2018, SPI Strategies, LLC (SPI) was selected by OPFRS to manage its new Defensive Equity mandate. As part of its defensive investment strategy, SPI's ELROI Long Alpha Plus product utilizes the short selling¹ of equities as part of its investment process. However, OPFRS's Investment Policy does not currently allow the use of shorting in its equity portfolios. This memo recommends changes to the guidelines within the OPFRS Statement of Investment Policy, regarding clarification of the new defensive equity strategy and the use of shorting within the portfolio.

Current Investment Policy Language:

None

Proposed Investment Policy Language:

A defensive equity portfolio that is designed to limit downside losses in the stock market during bear markets. The portfolio should maintain significant exposure to the U.S. stocks that make up the S&P 500 index. Stocks in the Defensive Equity strategy are held so that the risk characteristics of the portfolio are very similar to those of the benchmark but may vary over different periods. This style of investment is the only equity strategy that may utilize short selling as a tool for investments.

¹ Short selling (shorting) involves the sale of a borrowed security with the objective of profiting off the borrowed securities decline in value.

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CITY OF OAKLAND

**POLICE AND FIRE RETIREMENT
SYSTEM**

**INVESTMENT POLICY STATEMENT
AND
MANAGER GUIDELINES**

Approved January 1, 2015

Revised December 19, 2018

INVESTMENT POLICY CONTENTS

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APPENDIX

I. Restricted Holdings

A. PROLOGUE

1) The "Plan" Defined

This document addresses the Oakland Police and Fire Retirement System ("OPFRS") pension plan that the Oakland electorate established in the early 1950's by amendment to the Charter of the City of Oakland. It was readopted as Article XXVI of the Charter in 1968 to provide retirement benefits for sworn members of the City of Oakland Police and Fire Departments. The plan is a fluctuating defined benefit plan. Article XXVI requires that the City of Oakland make periodic contributions each year necessary to actuarially fund all liabilities for all Plan members by July 1, 2026 (based on actuarial valuations). In 1976 the OPFRS was closed to new members, and the City placed new police and fire employees in the Public Employees' Retirement System ("PERS"). The OPFRS pension plan is administered and managed by the Police and Fire Retirement Board in accordance with the provisions of Article XXVI of the City of Oakland's Charter, as it may be amended from time to time by the Oakland voters.

2) The "Fund" Defined

The fund means the Police and Retirement Fund consisting of all funds contributed by the City of Oakland, member contributions and interest, and returns on investments and funds. The Charter of the City of Oakland mandates that the Police and Fire Retirement Board shall have exclusive control over the administration and investment of the Police and Fire Retirement Fund and that the Board shall invest all funds except those required for current disbursements (e.g. payments to cover operating costs and pension payments). The Board will authorize each investment counsel to invest a portion of the Police and Fire Retirement Fund ("investment funds" or "Plan assets").

3) The "Board" Defined

The Plan, the Police and Fire Retirement Fund, and OPFRS are managed and administered by the Police and Fire Retirement Board in accordance with the provisions of Article XXVI of the Charter of the City of Oakland. The Board consists of the following seven members: (1) the Mayor of Oakland (or designee), (2) an elected retired member of the Police Department, (3) an elected retired member of the Fire Department, (4) an elected retired member alternating between Police and Fire, (5) a life insurance executive of a local office, (6) a senior officer of a local bank, and (7) a community representative.

Pursuant to Article XVI, section 17 of the California Constitution, Article XXVI of the City Charter, and other applicable laws, the Board and its advisors, including but not limited to investment managers /investment counsel and investment consultants, are fiduciaries of the OPFRS and are required to manage and administer the Plan assets solely in the interest of, and for the exclusive purposes of providing benefits to, Plan members and their beneficiaries, minimizing employer contributions to the Plan, and defraying reasonable expenses of administering the OPFRS.

B. RESPONSIBILITIES AND AUTHORITY

1) The Board

The Board has exclusive control of the administration and investment of the Police and Fire Retirement Fund, subject to the terms and limitations set forth in City Charter Article XXVI and will be responsible for the following:

- a) Discharging duties 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 and with like aims;
- b) Establishing and approving the OPFRS investment policy;
- c) Diversifying the investments of the system among investment managers so as to minimize the risk of loss and maximize the rate of return, unless under the circumstances it is clearly not prudent to do so;
- d) Overseeing and monitoring investment performance and compliance with this policy by advisors and consultants retained by the Board;
- e) Retaining custodians, investment advisors/investment counsel and managers whose expertise is deemed to be appropriate and necessary; reviewing and approving their invoices for services rendered; and
- f) Revising investment policy from time to time in accordance with prudence to update the policy and as deemed appropriate by the Board.

2) The Investment Consultant

The Investment Consultant is retained by the Board to assist same in the development of overall investment policy and guidelines. The investment consultant is responsible for advising the Board on all aspects of the investment process. The investment consultant will provide advice as to the asset allocation policies, investment manager selection, performance measurement and monitoring and other due diligence activities as the Board determines to be necessary in the overall fiduciary stewardship of the OPFRS.

3) The Investment Manager/Investment Counsel

The Investment Manager/Investment Counsel will construct and manage investment portfolios consistent with the investment philosophy and disciplines the manager was hired to implement. Investment managers will have discretion to invest the investment funds, provided that investment manager's investments and investment-related decisions shall be in accordance with this investment policy, as it may be amended by the OPFRS administration with the approval of the City Attorney to reflect the specific guidelines and parameters for each manager, the Charter of the City of

Oakland, the manager's fiduciary obligations and applicable laws and regulations. Managers are expected to adhere to the policy and guideline promulgations contained within this document.

C. PURPOSE OF POLICY

1) To Record Long Range Policy

This document sets out the Board's investment policy and guidelines based on actuarial valuations and the City Charter and represents the conclusions and decisions made after a deliberate and focused review of the Plan's expected obligations and funding resources over a long-range future period. The Plan's investments represent an opportunity:

- to reduce the cost of the Plan's benefits to the City of Oakland, and
- to insulate the Plan's assets against the deterioration of purchasing power caused by inflation.

The Board recognizes that investment markets have repeatedly demonstrated broad performance cycles having two fundamental characteristics, which bear heavily on the Plan's expectations toward its future:

- The cycles cannot be accurately predicted as to either their beginning points, ending points, or their magnitude, and
- There is little or no relationship between market cycles and the convenient calendar periods commonly used in business for measurement and evaluation.

Although the Board will review investment performance and investing activities on a regular, periodic basis, the formation of judgments and the actions to be taken on those judgments will be aimed at matching the emerging long-term needs of the Plan with the proven, long-term performance patterns of the various investment markets.

2) To Provide the Guidelines and Policies with which Investment Consultants and Investment Counsel/Investment Managers must Comply

This policy document conveys not only the specific guidelines for action, but also the philosophical foundations for those guidelines.

This document records the conclusions reached by the Board, after a professionally-assisted, diligent process of study and evaluation, to arrive at the most suitable combination of investment risk level and rate of return which will satisfy the Plan's obligations and the City of Oakland's likely future priorities for funding them. During the first quarter of 1997, the City of Oakland issued pension obligation bonds equivalent to the actuarial present value of the City's expected contributions to the retirement system from March 1997 through June 2011. The retirement system received a deposit of \$417.1 million in lieu of contributions from March 1997 through June 2011, the City's contribution "holiday period". The Retirement system subsequently received a deposit of \$210 million in lieu of contribution on July 2012. The Charter requires that the system be fully funded by July 1, 2026.

D. CONTEXT OF POLICY

1) Nature of the OPFRS Retirement Plan

As stated earlier in this document, the plan is a closed plan and there are no members still in active service. The plan exists to pay the retirement liabilities of the retired members that are eligible to receive plan benefits, i.e., a retirement allowance.

The OPFRS retirement plan has other provisions and classifications of retirement and this document is intended to illustrate some basic provisions and is not intended to be, nor should it be interpreted as, a complete description of all plan provisions. The plan has an early service retirement, disability provisions, a surviving spouse and post retirement death benefit. Investment Counsel/Investment Managers and Investment Advisors are responsible for familiarizing themselves with the provisions of the OPFRS retirement plan which are set forth in Article XXVI of the City Charter; this investment policy is not intended to be the source for the terms and provisions of the plan.

Retirement benefits are paid in the form of a monthly retirement allowance with various options for continuation of benefits to a surviving spouse following the retired participant's death.

2) Expected Net Cash Flows of the Plan

The plan funds its benefit payments from the assets of the plan, which include, but are not limited to, the proceeds from pension obligation bonds, city contributions, and investment returns. Liquidity is a consideration in the overall asset structure of the plan.

3) Tolerance for Volatility

a) Volatility of Investment Performance

The Board has reviewed the overall expected returns and the related performance volatility of various classes of assets, such as common stocks, and various mixtures of asset classes and has adopted a target mixture which is

expected to capture the higher returns offered by stocks over time and also control short-term performance volatility.

Generally, the Board expects the investment managers/investment counsel to construct diversified investment portfolios.

b) Volatility of the Plan's Assets-to-Liabilities Ratio

The Board places a high priority upon maintaining a strong ratio of funded assets to vested and accrued liabilities as the Plan moves forward in time.

E. ASSET ALLOCATION

1) Asset Classes to be Used

The Board has considered and adopted the use of three significant asset classes:

- a) Domestic Stocks,
- b) International Stocks, and
- c) Fixed Income instruments to include: U.S. Treasury Notes and Bonds, U.S. Government Agency Mortgage-Backed Securities*, U.S. Corporate Notes and Bonds, Collateralized Mortgage Obligations, Yankee Bonds, High Yield bonds/Bank Loans and Non-U.S. issued fixed income securities denominated in foreign currencies

There will be a negligible permanent allocation to cash equivalents.

**Includes Non-Agency issues, which are fully collateralized by Agency paper.*

2) Long-Term Target Allocations

In March, 1996, Oakland voters passed Measure E which amended Article XXVI, Section 2601(e) of the Oakland City Charter to increase the percentage of the invested funds of the System that may be invested in common stocks and mutual funds from forty percent (40%) to fifty percent (50%). In November, 2006, Oakland voters passed Measure M which further amended Article XXVI of the Oakland City Charter to allow the OPFRS Board to make investments solely in accordance with the prudent person standard as required by the California Constitution, Article XVI, Section 17 (a).

Long-Term Asset class targets as adopted by the Board in 4Q 2017 are as follows:

Phase 1

Class	Target	Benchmark
Domestic Stocks	40%	Russell 3000
International Stocks	12%	MSCI ACWI ex U.S.
Fixed Income (to include some non-US exposure)	31%	Barclays U.S. Universal
Covered Calls	5%	BXM Index
Credit	2%	Barclays High Yield
Crisis Risk Offset (CRO)	10%	33% Barclays Capital Long Duration Treasuries, and 66% at a 5% annual return
Cash	0%	90-Day Tbills

Phase 2

Class	Target	Benchmark
Domestic Stocks	40%	Russell 3000
International Stocks	12%	MSCI ACWI ex U.S.
Fixed Income (to include some non-US exposure)	21%	Barclays U.S. Universal
Covered Calls	5%	BXM Index
Credit	2%	Barclays High Yield
Crisis Risk Offset (CRO)	20%	33% Barclays Capital Long Duration Treasuries, and 66% at a 5% annual return
Cash	0%	90-Day Tbills

International stocks may also include stocks of emerging markets, not to exceed 25% of the total international exposure.

3) Allowable Ranges Around Target Allocations

The Board recognizes that a rigid asset allocation would be both impractical and, to some extent, undesirable under various possible market conditions. Therefore, the allocation of the Plan's total assets may vary from time to time within the following ranges, without being considered an exception to this investment policy:

Domestic Equities	34% to 46%
International Equities	10% to 14%
Bonds and Other Fixed Income	18% to 24%

Credit	1% to 3%
Covered Calls	4% to 6%
CRO	17% to 23%

At any point in time when one of the Plan's investment managers wishes to present what it considers compelling evidence for tactical, short-term allocation shifts which would cause the Plan's total asset allocation (all managers) to fall outside the above ranges, the Board will generally consider such requests. However, please see Board's Attitude Towards Market Timing and Short-Term (Tactical) Asset Shifts.

The consultant will be responsible for monitoring the allocations to each of the asset classes. An allocation outside of the permissible ranges for a consecutive 3-month period will result in a rebalancing within the subsequent 3-month period.

4) Allocations Among Different Investment Management Styles

In considering asset classes, the Board, with professional assistance, has concluded that different common stock investment styles would provide a high degree of diversification for the Plan and expand the probability of achieving or exceeding the expected overall return results.

The broad approach, which the Board will generally follow in making allocations among investment managers, will be to:

- a) have "core" allocations in both equities and fixed income. Core management will generally be any style, which attempts to replicate, or closely follow, the performance patterns of a broad market index for that asset class, and
- b) have a relatively equal balance among the major different active management styles which are considered non-core, except there will be a bias toward larger allocations among equity styles which emphasize the large, highly liquid stocks over small, less liquid ones and among fixed income styles which favor liquid bonds over those which are illiquid.

Stocks will be sub-allocated to different investing styles. The allocations may vary from time to time, based upon the Board's consideration of professional advice.

(a) Enhanced Index Replication (Russell 1000 Index) or Active Core Style

An enhanced passive management open end fund, which maintains a portfolio of a significant number of the 1000 stocks, which make up the index. Stocks in the enhanced index fund are held so that the risk characteristics of the fund are very similar to those of the benchmark. The active core style reflects a portfolio that has market-like risk characteristics and the manager attempts to add value through stock selection.

(b) Defensive Equity

A defensive equity portfolio that is designed to limit downside losses in the stock market during bear markets. The portfolio should maintain significant exposure to the U.S. stocks that make up the S&P 500 index. Stocks in the Defensive Equity strategy are held so that the risk characteristics of the portfolio are very similar to those of the benchmark but may vary over different periods. This style of investment is the only equity strategy that may utilize short selling as a tool for investments.

(c) Growth Style

An active management style, which generally emphasizes earnings growth and expected return on equity, with little emphasis upon dividend payout.

(d) Value Style

An active management style which generally concentrates on low relative price-to-earnings ratio, high dividend yield, strong balance sheet characteristics and free cash flow; "Defensive Value" style generally emphasizes relatively high dividend yields.

(e) Market Capitalization Bias

In general, market history has demonstrated that the relative total market value of a stock, in relation to the others traded in that market, produces different performance. There are three categories: large market value stocks ("large cap"), mid cap stocks, and small cap stocks. Most active and passive investment managers concentrate their portfolios in one of the three size categories; some managers attempt to construct portfolios across two, or all three-size categories.

(f) Mid/Small Capitalization Style

Active management style, which concentrates in securities that generally reside within the small to mid company segment of the U.S. equity market as defined by Russell/Mellon in construction of their U.S. small and mid capitalization equity indices.

(g) International Equity Style

Active management through the use of a separate account and/or a commingled account. Funds may be managed on a bottom-up or top-down basis, employ currency hedging, or include emerging market country exposure.

Bonds may be sub-allocated to different investing styles. The allocations may vary from time to time, based upon the Board's consideration of professional advice.

Active Fixed

An active strategy investing in all legally permitted fixed investments, across all maturities and within all sectors. This style contemplates the use of non-US fixed income instruments and some exposure to below investment grade credits.

5) Board's Attitude Toward Market Timing and Short-Term (Tactical) Allocation Shifts

The Board believes the Plan's investment managers should be allowed the opportunity to practice their art without undue interference. However, it is hereby made clear that this policy statement was the product of the Board's study of proven long-term performance patterns in the capital markets. Via this policy, the Board is establishing a carefully determined level of market risk exposure; investment managers are specifically directed not to alter that exposure.

The Board has reviewed considerable evidence that the passage of time causes the greatest rewards to accrue as a result of consistent investing approaches, and that the Plan's risk exposure could become unpredictable without careful adherence to asset allocation guidelines such as the ones in this policy. It is not, therefore, the general intention of this policy to allow anyone's short-term judgments to introduce significant unplanned risk, or, conversely, to reduce intended market risk exposure. Accordingly, the Board recognizes that the mandates of this policy will occasionally appear to be either too risky or too conservative for current market conditions (mostly depending upon the observer's viewpoint). But the Board also recognizes that there is no known source for consistently reliable short-term forecasts of either the market's direction or the magnitude of that direction.

6) Frequency of Asset Allocation / Liability Studies

The Board will formally review long-term strategic asset allocation goals at least every three to five year period. Generally, the Board will review the OPFRS asset allocation after completion of a fiscal year, ending June 30th. The schedule below outlines a projected timetable for completion of future asset-liability projects:

Projected Dates for Asset Liability Studies

Jan-July 2020

Jan-July 2023

Jan-July 2026

7) Unallocated Cash

The Board will generally attempt to see that the Plan's assets include a cash reserve sufficient to pay benefits due within a reasonable future period. Such withdrawals are relatively immaterial and will be communicated to the manager in writing by the Board's staff. Therefore, no investment manager/investment counsel providing services to OPFRS is expected or permitted to accumulate a significant cash position, without prior approval of the Board, unless the basic investing style of that manager includes a routine, temporary use of instruments having a maturity of less than one year (and the Board has been informed and agreed to the use of that style element in advance). In general, "significant" means more than 10% of the value of assets under a particular equity manager's control and 15% of the value of assets under a particular fixed income manager's control.

8) Re-balancing Among Asset Classes and Management Styles and Allocations of Contributions and Net Cash Flows

Because different asset classes and investing styles will perform at different rates, the Board will keep close scrutiny on the asset allocation shifts caused by performance. Accordingly:

- a) The Board will review the relative market values of the asset segments and will generally use cash flow to invest in the category(ies) which are farthest below the target allocations in this policy, and
- b) To the extent that adequate re-balancing among asset categories cannot be effected via cash flow, the Board may re-direct monies from one manager to another, if necessary to avoid violating the target ranges in this policy. This action should be expressed in writing with a corresponding recommendation from the investment consultant.

F. PERFORMANCE OBJECTIVES

1) Overall Investment Goal

The overall investment goal of the retirement system is to generate a long term oriented rate of return for the total portfolio that equals or exceeds the actuarial investment rate assumption. This objective will primarily emanate from the overall asset allocation policy of the plan. The Board will maintain a long-term investment horizon and will monitor on a routine periodic basis the investment performance of the total fund, various asset classes, and investment managers (see Monitoring Procedures).

2) Performance Benchmarks and Targets for the Total Fund and Fund Asset Classes

Total Fund performance is evaluated against two benchmarks: i) a Policy Index (a weighted average of performance using policy targets by asset class), and ii) an Asset Allocation Index (a weighted average of performance using actual allocations by asset class). By doing so, the Board is able to determine whether Fund performance is due to active decisions by its investment managers and/or differences between the target policy allocation and actual asset allocation.

In addition, the Board will compare performance of each asset class against a benchmark that has characteristics representative of a broad market and indicative of the investment managers comprising that asset class.

<u>Asset Class</u>	<u>Benchmark*</u>
Domestic Equity	Russell 3000 Index
International Equity	MSCI ACWI x U.S.
Fixed Income	Barclays Universal
Credit	BB High Yield
Covered Calls	BXM Index
CRO	33% Barclays Capital Long Duration Treasuries, and 66% at a 5% annual return

* Reported asset class benchmark returns may contain results of prior benchmarks (a blended benchmark)

3) Performance Benchmarks and Targets for the Fund's Investment Managers

a) Market Indices

The Board recognizes that investment managers must use the broad capital markets as their basic tools for investing and that a substantial portion of investment returns will not be attributable to management skills, but rather to the markets themselves. The Board

expects active (non-index) investment managers to add value to the broad markets' returns, net of fees. The Board expects passive (index) investment managers match the broad markets' risk and return attributes, net of fees. Performance expectations (or standards) of individual investment managers are stated in the "Manager Specific Guidelines" (and are an integral part of) this Policy.

b) Universes of Other Managed Funds

The Board expects investment managers to perform credibly within a peer group of other managed funds with similar asset mixes and investing styles. The following standards will be applied:

	Expected Ranking	for every:
Stocks (Style Specific)	Upper half	3 years 5 years
Fixed Income (Style Specific)	Upper half	3 years 5 years

G. OPERATIONAL GUIDELINES

1) Number of Managers to Be Used

In order to improve overall portfolio performance and further reduce risk, the Board has recommended the use of multiple investment managers.

The following standards apply for each manager. Manager Specific Guidelines (see Appendix) include detailed investment guidelines, one for each investment manager separately, in which any expected and approved exceptions to the policy are listed.

2) Standards for Managers

	Equities	Fixed Income
Minimum Diversification Standards		
Single security issue	(a) Maximum 5%*	(a) Maximum 10%* (25% for any U.S. Government Security)
Single industry group (S&P or benchmark definition)	(b) Maximum 25%*	(b) Maximum 15%* (except U.S. Govt.)
* Percentages relate to the market value of any single investment manager's portfolio (not to the total fund).		

	Equities	Fixed Income
Minimum Liquidity Standards	<p>(a) Traded daily on one or more major U.S. or non U.S. national exchanges (including leading OTC markets);</p> <p>(b) Market capitalization no less than that of the smallest security in the Russell 2000 Index.</p>	Remaining outstanding principal value of the issue must be (and remain) at least \$30 million, without Board approval.
Minimum Quality Standards		<p>Quality ratings:**</p> <p>Minimum (issue)*: S&P and Fitch=B, or Moody's=B</p> <p>Minimum (average)*: S&P and Fitch BBB, or Moody's =B</p>

* Quality grades are shown relative to overall long-term rating by major category, which includes sub-categories (i.e., a "B" rating includes the following B+, B, and B- debt).

**If a bond is rated by all three rating agencies, then it must have a minimum (B) rating by two or more rating agencies. If a bond is rated by only two rating agencies, the lower rating applies. If only one rating agency rates the Bond then the rating must be at least (B). The account may continue to hold an investment even if subsequently downgraded below investment grade after purchase, upon approval from OPFRS.

Credit Rating Definitions:

CREDIT RATINGS			
Credit Risk	Moody's	Standard & Poor's	Fitch
INVESTMENT GRADE			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa1	AA+	AA
	Aa2	AA	AA
	Aa3	AA-	AA-
Upper Medium grade	A1	A+	A+
	A2	A	A
	A3	A-	A-
Lower medium grade	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-
NOT INVESTMENT GRADE			
Lower medium grade (somewhat speculative)	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
Low grade (speculative)	B1	B+	B+
	B2	B	B
	B3	B-	B-
Poor quality (may default)	Caa1	CCC+	CCC+
Most speculative	Caa2	CCC	CCC
No interest being paid or bankruptcy petition filed	Caa3	CCC-	CCC-
	Ca	CC	CC+
In default		C	CC
			CC-
	D	D	DDD

	Equities	Fixed Income
Bond Maturities		<p>(a) Minimum (single-issue) maturity: None, but maturities under 12 months will be viewed as 'cash' under this policy.</p> <p>(b) Maximum remaining term (or estimated term) to maturity (single issue) at purchase: no more than 31 years (exception: preferred stock; see below); targeted portfolio: 15 years average.</p> <p>(c) Maximum duration: 10 years; targeted portfolio duration: 3 to 8 years average.</p>
Prohibited Categories	<p>(a) Short sales or "naked options"</p> <p>(b) Margin purchases</p> <p>(c) Issuer related to the investment manager</p> <p>(d) Restricted and Letter stock</p> <p>(e) Writing of covered call options</p> <p>(f) Commodities or commodity futures</p>	<p>(a) Issues related to investment managers</p> <p>(b) Non-rated paper/private placements and revenue bonds</p> <p>(c) Certain derivative instruments (page V-3)</p> <p>(d) Emerging market debt securities are prohibited or securities within countries with ratings below BBB</p>

	Equities	Fixed Income
Special Categories Permitted	(a) Convertible debt (b) Commingled vehicles subject to explicit written consent by OPFRS (c) Exchange-Traded Funds (ETFs)	(a) Bond swaps (b) Zero-Coupon instruments (c) Principal-Only (stripped) instruments (d) Limited exposure to emerging market debt to 10% of the global bond portfolio (e) Limited exposure to preferred stock to 5% of fixed income assets (f) Commingled vehicles subject to explicit written consent by OPFRS (g) Exchange-Traded Funds (ETFs)
Written Reports to the Board and the Investment Consultant	At least quarterly	At least quarterly

The enhanced index manager shall be entitled to purchase stock of any company included in the Russell 1000 index, provided that in making such purchase, the manager complies with the prudent person standard and the provisions of the contract between the Board and the manager.

3) Securities Lending

The Board has adopted and implemented a securities lending program for both its domestic and international assets. Securities lending involves the lending of equity and fixed income securities to qualified borrowers who provide collateral, (usually in the form of cash or cash equivalents), in exchange for the right to use the securities. Incremental income is generated through the investment of the collateral during the loan period.

The Board will select a securities lending provider to manage and administer the securities lending program, including the investment of cash collateral. The securities lending provider has to exercise investment discretion within the overall objective of: preserving principal; providing a liquidity level consistent with market conditions and the lending and trading activities of the OPFRS; and maintaining full compliance with stated objectives and statutory provisions. The securities lending provider shall be subject to the following guidelines:

- a) All loaned securities must be collateralized and marked-to-market daily. Securities must be collateralized on a daily basis at 102% or greater of their market value plus accrued interest.
- b) The securities lending agent must have appropriate screens in place to select brokers to whom it will loan securities. The Investment Committee will have the right to review any list of approved brokers and to disapprove any broker on such list.
- c) Any securities lending agent selected by the Investment Committee must agree to indemnify OPFRS and hold it harmless from any claims, losses or lawsuits of any kind arising from a broker default or other intentional or negligent misconduct.
- d) The securities lending agent must have guidelines and restrictions, acceptable to the Investment Committee, on the types of securities that may be accepted as collateral. The guidelines should ensure that in the event of a default, the entire market value of a security on loan will be recovered.
- e) Any cash collateral investment pools must have guidelines acceptable to the Investment Committee and which are consistent with the objective of preserving capital invested in the pools.
- f) Leverage is strictly prohibited.

4) Derivatives Investment Policy

- a) **Intent:** The intent of this policy is to establish conservative principles with which to judge the suitability of a derivative investment and to provide guidelines for the Board in evaluating proposed investments. Investment managers are not authorized to use derivative securities, or strategies that do not comply with the basic investment objectives of this policy, i.e., an emphasis on the preservation of principal consistent with conservative growth of assets. Managers are specifically prohibited from using derivative or synthetic securities whose characteristics as implemented by the manager include potentially high price volatility and whose returns are speculative or leveraged (when considered together with liquid/short-term securities positions) or whose marketability may be severely limited, without written authority from the Board. Rather than attempt to list all those types of derivatives that are either allowed or disallowed, these guidelines shall provide the tests for determining a security's acceptance.

- b) **Mortgage Derivatives**

Investment in derivative securities known as Collateralized Mortgage Obligations (CMOs) shall be limited to a maximum of 20% of an account's market value with no more than 5% in any one issue, and shall be

collateralized by GNMA, FNMA, or FHLMC mortgages only. Securities must comply with the following guidelines:

- c) **Cash Flow:** The cash flows of a security will be such that its effective maturity will vary by no more than five years and will remain within the parameters established under moves of ± 300 basis points in interest rates and a minimum prepayment assumption of 100 PSA. Bloomberg's median dealer prepayment estimates shall be used as the baseline expectations for prepayment changes under all scenarios.
- d) **Yield:** The expected yield of a security will be such that a positive option adjusted spread over Treasuries will be earned under moves of ± 300 basis points in interest rates and a minimum prepayment assumption of 100 PSA. Bloomberg's median dealer prepayment estimates shall be used as the baseline expectations for prepayment changes under all scenarios.
- e) **Liquidity:** The security must be sufficiently liquid such that at least two dealers will quote prices on request. Its cash flows must be modeled on the Bloomberg and one of either the "Capital Management Sciences" or the "Impact" systems.
- f) **Other Derivatives**

Exchange traded futures and options are allowed if they are to be used for defensive hedging purposes, currency management and adjusting the duration of a fixed income portfolio. Specific guidelines for each manager will be set forth as applicable within Attachment A. At no time will leverage be employed to bring a portfolio to a position greater than 100% invested. Over-the-counter options such as Caps/Floors, covered calls or Swaps are allowed if approved by the Board. Structured notes are allowed if linked to inflation indexes or Treasury yields, but are not allowed when linked to currency exchange rates, equity indexes, or other markets not directly tied to domestic interest rate movements. Non-mortgage derivative investments must mature within the maturity guidelines established by the client and are limited to no more than 10% of the portfolio's market value, except for Asset-backed notes, which, by virtue of their superior credit quality and stable cash flows, may represent up to 30% of a portfolio.

5) Proxy Voting

The responsibility for voting proxies resulting from equity securities owned by the Plan is assigned to the investment manager responsible for management of those shares. Proxies will be voted solely in the best interests of the Plan's participants and beneficiaries and for the exclusive purpose of providing long-term benefits to participants and

beneficiaries. Investment managers will maintain accurate records to document their proxy voting decisions. Each investment manager shall provide a quarterly report detailing the proxy voting decisions pertaining to the Plan's shares along with their firm's proxy voting policy.

6) Trading and Brokerage Practices

Subject to the Board's requirements (1) that the Investment Counsel/Investment Managers each include in the universe of brokers that they use to implement transactions, local brokers identified by the Board and (2) that Investment Counsel/Investment Managers consider such local brokers for each transaction, the Board delegates the responsibility for the selection of brokerage firms to its investment advisors, provided that the investment advisors select and utilize local brokers in order to achieve best execution, minimize trading costs (including both commissions and market impact), and operate exclusively for members and beneficiaries of the OPFRS. The provisions of this paragraph are not applicable in the case of international equity managers.

That notwithstanding, the Board recognizes that commissions are a plan asset and it reserves the right to establish goals for directing commissions to other (non local) brokers in order to recapture some commission costs. OPFRS may request that its advisors direct a proportion of their brokerage activity on behalf of OPFRS provided that the total return of an advisor's portfolio is not adversely affected or that the investment process is not affected so as to place OPFRS assets in a disadvantageous position relative to the investment advisor's other accounts. OPFRS may provide a list of brokerage firms that should be considered to receive such directed commissions, and will communicate this information to its advisors.

The Board understands that all directed brokerage trades require it to monitor commission and trading expenses in order to ensure best execution and to limit commission costs.

7) Coal Divestment and Restricted Holdings

For the purposes of the Investment Policy, a "Coal-Related Company" shall be defined as any publicly traded company which derives at least 50 percent of its revenue from the mining or extraction of Thermal Coal as determined by the Board. Thermal Coal is defined as coal burned to generate heat and steam to run turbines for electricity production. Thermal coal does not mean metallurgical coal or coking coal used to produce steel. After review and consideration, the Board shall identify at the September Meeting of each year, all Coal-Related Companies to which this restriction applies. Said companies shall be shown on a Restricted Holdings Appendix A to this Policy.

Pursuant to OPFRS Resolution No. 6927 passed June 29, 2016, OPFRS investment managers are prohibited from investing OPFRS' funds in Coal-Related companies, as

defined above. This divestment applies to any separate account mandates being managed within the OPFRS portfolio and does not affect commingled or mutual fund vehicle assets. Investment Managers shall divest from Coal-Related Companies by May 1, 2017, and shall gradually sell holdings in a manner which reduces market impact.

8) 144A Equity Instruments

SEC Rule 144A international equity instruments with registration rights are fully permissible. Those instruments without registration rights must not exceed 10% of the lesser of cost or market value of any single international equity portfolio.

H. MONITORING/WATCH PROCEDURES

1) Frequency of Monitoring

The Board will monitor investment performance as frequently as it deems necessary or appropriate; however, the Board expects to measure investment performance at least on a quarterly basis.

2) Expected Interim Progress Toward Multi-Year Objectives

The Board will follow its time horizons, as set forth in this policy, when making judgments about indications of inferior performance. However, investment managers for the fund should be advised that the Board intends to monitor their interim progress toward multi-year goals. If there is a clear indication that performance is so substandard and severe that reasonable hope of recovery to the policy's target level in the remaining time horizon period would require either high risk or good fortune, then the Board should take appropriate action using the following mechanisms.

3) Types of Monitoring

There are two major groups of monitoring activities: Periodic Monitoring and Ongoing Monitoring.

a) Periodic Monitoring

The Board will review several qualitative aspects of an investment manager's investment management practices. Key qualitative indicators of possible inconsistency include, but are not limited to:

- i) Changes in investment strategy and style,
- ii) Instability of investment manager personnel and organization,
- iii) Unusual portfolio activity, trading volume, and execution costs,

- iv) Risk and performance characteristics not logically explainable in terms of the published style or out-of-step with manager's style peer group, and
- v) Failure to comply with all investment guidelines.

None of these indicators will be taken as conclusive evidence of inconsistency. Such a finding would be based upon the facts and circumstances of each situation.

b) Ongoing Monitoring

The Board will evaluate investment performance on an ongoing basis using investment performance criteria relative to fund-specific benchmarks over varying periods of time by asset class. Performance criteria are applicable based on the length of OPFRS' performance history (see next table).

Investment Performance Watch/Probation Criteria by Asset Class

Asset Class	Short-term (rolling 12 mth periods)	Medium-term (rolling 36 mth periods)	Long-term (60+ months)
Active Domestic Equity	Fd return < bench return - 3.5%	Fd annlzd return < bench annlzd return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Active International Equity	Fd return < bench return - 4.5%	Fd annlzd return < bench annlzd return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Passive International Equity	Tracking Error >0.50%	Tracking Error >0.45% for 6 consecutive months	Fd annlzd return < bench annlzd return -0.40% for 6 consecutive months
Fixed Income	Fd return < bench return - 1.5%	Fd annlzd return < bench annlzd return -1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months

All criteria are on an annualized basis.

VRR – Value Relative Ratio – is calculated as: manager cumulative return / benchmark cumulative return.

4) Implementation by Board

A manager having performance that fails to meet the above criteria would be immediately subject to a heightened level of monitoring (“Watch Status”). While under Watch Status, OPFRS may: i) instruct the manager to present in writing and/or before the Board reasons for the underperformance, and/or ii) have the investment consultant provide OPFRS with documentation that discusses the factors contributing to the manager’s underperformance. Once the Board has considered these factors, it may want to consider placing the manager on probation.

If a manager is placed on probation, three actions are then available to the Board: 1) to release a manager from probation, 2) to extend probation in order to determine whether any changes are improving performance, or 3) to terminate the manager if it has been unable to exhibit improvement in performance (generally within a time from of nine to fifteen months, if not sooner). Any of these actions would be supported by additional documentation (produced by the investment consultant and/or Staff). This document would highlight the original reasons for placing the manager on probation and discuss

how these issues have or have not been addressed. Underperformance will be evaluated in light of the manager's stated style and discipline. In the case of material guideline exceptions, the manager will be required to bring the portfolio into immediate compliance.

If the Board determines (with advice from the consultant) that the manager is unlikely to meet the above performance criteria and/or one of the qualitative indicators of inconsistency is violated without signs of improvement (see Periodic Monitoring), the manager may be terminated.

5) Frequency of Meetings

The Board expects to meet with each of the Plan's investment managers (perhaps excluding the market index manager) on an annual basis. The agenda for these meetings should include:

- a) Presentation of investment results compared to the benchmark,
- b) An analysis of the sources of return,
- c) Review of current investment strategies, and
- d) Discussion of any material changes in policy, objectives, staffing, or business conditions of the Manager.

I. MANAGER SELECTION PROCESS

1) Guidelines

The Board will select appropriate investment managers to manage the OPFRS' assets. This selection process shall include the establishment of specific search criteria, documentation of analysis, and due diligence on potential candidates as described below.

The process will begin with a review of OPFRS' existing documents pertinent to investment goals and objectives both at the asset class level and specific manager mandates. Consideration shall be given to the goals behind the search at a macro level in order to confirm and/or identify the fit of current managers, gaps in style or diversification, and other risk/reward structural characteristics.

The search process will be fully documented to support the steps utilized throughout the process. The Board may require periodic memorandums from its investment consultant that update search processes and results.

The Board may initiate the search either through a) the traditional Request for Proposal (RFP) process or b) its investment consultant or c) any other means the Board deems appropriate.

If the Board determines to use the traditional RFP process, OPFRS Staff will work with the investment consultant to write and issue the RFP and related documents. OPFRS Staff and/or the Investment Committee, in conjunction with the investment consultant, will analyze RFP responses and set up interviews for final consideration of the candidates.

If the Board gives limited or full discretion to its investment consultant to conduct the search, the investment consultant will utilize a blend of quantitative and qualitative data to provide objective and subjective analyses. The investment consultant will review the profiles with the Investment Committee and select candidates for the interview portion of the search process.

Manager candidates will be assessed using the following or similar criteria:

Client load of professionals	Portfolio characteristics
Consistency of professional staff	Research capabilities
Consistency of value added over time	Risk and/or attribution analyses
Decision making processes	Size of firm
Existing mandates of similar designation	Stability of staff
Experience of key professionals	Structural fit within existing portfolio
Investment mandate	Style tendencies
Investment processes and methodology	Transaction costs and fees
Ownership structure	Type of client asset base

If necessary, a site visit can be conducted by OPFRS Staff and/or the investment consultant to clarify any issues of concern.

2) Emerging Investment Managers

The City of Oakland Police and Fire Retirement System (OPFRS) has introduced language to define the minimum size of eligible managers for possible inclusion into the OPFRS portfolio. Generally, OPFRS defines eligible managers as those firms where the proposed OPFRS mandate size would constitute no more than a certain percentage of the managers overall AUM. The percentage would also differ based on the asset class of the proposed mandate. An eligible prospective manager should have a track record of at least one year, and Firms that satisfy these preferred requirements will be evaluated based the same criteria as non-emerging managers, as identified in each RFP. This size minimum will be included as Preferred Criteria, and is intended to help quantify the search criteria for OPFRS.

J. POLICY MODIFICATION AND REVISION

1) Frequency of Policy Review

The Board will use each of its periodic investment performance evaluations as occasions to consider also whether any elements of existing policy are either insufficient or inappropriate. Key occurrences, which could result in a policy modification, include:

- a) Significant changes in expected patterns of the Plan's liability stream,
- b) Impractical time horizons,
- c) Changes in applicable governing laws,
- d) Convincing arguments for changes presented by investment managers,
- e) Areas found to be important, but not covered by policy, and
- f) Long-term changes in market trends and patterns that are materially different from those used to set the policy.

2) Board's Philosophy Toward Policy Modification

The Board will periodically review this policy and may make changes in this policy in its sole judgment and discretion. It views this investment policy on the one hand as the framework for the accomplishment of its long term investment goals, and on the other hand as a dynamic document that is responsive to any needs for fundamental or minor change.

K. INVESTMENT MANAGER GUIDELINES

1) Equity Manager Guidelines

Equity managers are expected to adhere to their manager-specific guidelines (as attached) and the following general guidelines.

a) Style Adherence

The Board has decided to adopt a multiple manager structure, which seeks to incorporate the benefits of various styles within the total equity portfolio. Each manager is expected to produce the desired risk characteristics of the stated style as the Board will not tolerate style shifts that result in the portfolio having risk characteristics not expected by the Board. The Board's investment consultant will analyze the portfolio characteristics of each manager on an ongoing basis and report the findings to the Board.

b) Diversification

Managers are expected to construct diversified portfolios unless concentrated portfolios are routinely a feature of a manager's published style. A manager's equity portfolio should not own more than 5% at market value of any one issue and/or 8% at market value of any given issuer. A manager's fixed income portfolio should not own more than 10% at market value of any one issue and not more than 10% of a particular issue. The portfolios will be invested in marketable equity securities whereby restricted and letter stock, etc. are not permitted.

c) Cash

Managers are expected to remain fully invested with maximum cash positions at the 10% level. If there is a situation where the manager expects to raise cash above the 10% level and to maintain same for more than a quarter, then such manager should inform the Board in writing of the circumstances surrounding this investment decision.

d) Evaluation of Investment Performance

Subject to the provisions of Performance Objectives of this document, equity managers are expected to rank within the top 50% of their respective style group and to outperform, over time, their respective style benchmarks.

e) Investment Performance Monitoring Procedures

Subject to the provisions of Monitoring Procedures of this document, equity managers will be monitored on a periodic and ongoing basis according to qualitative considerations and quantitative criteria (see table: Investment Performance Criteria by Asset Class).

f) Portfolio Styles

The following table reflects the existing styles within the Board's portfolio and the associated style benchmarks:

Domestic Equity			
<u>Manager</u>	<u>Style</u>	<u>Benchmark</u>	<u>Peer Group</u>
Northern Trust	Large/Mid Passive Index	Russell 1000	Large Core
SSgA	Large/Mid Value	Russell 1000 Value	Large/Mid Value
SSgA	Large/Mid Growth	Russell 1000 Value	Large/Mid Growth
Earnest Partners	Mid Cap	Russell Mid Cap	Mid Cap
NWQ	Small Value	Russell 2000 Value	Small Value
Rice Hall and James	Small Growth	Russell 2000 Growth	Small Growth
International Equity			
<u>Manager</u>	<u>Style</u>	<u>Benchmark</u>	<u>Peer Group</u>
SSgA	Non-US Equity	MSCI EAFE	Developed Core
Hansberger	Non-US Equity	MSCI ACWI ex US	EAFE+Plus
Fisher	Non-US Equity	MSCI ACWI ex US	EAFE+Plus

2) Fixed Income Guidelines

Fixed income managers are expected to adhere to their manager-specific guidelines (as attached) and the following general guidelines.

a) Diversification

Managers are expected to construct diversified portfolios unless they present compelling reasons for a concentrated portfolio. The portfolio should not own more than 10% at cost of any one issue (unless provided otherwise in the individual manager guidelines) and should not own more than 10% of the outstanding issue of any one issuer. In the case of mortgage-backed securities the portfolio shall not own more than 10% of an outstanding issue and such issue shall be at least \$50 million in face value. There are no restrictions for securities backed by the U.S. Government or its instrumentalities.

b) Evaluation of Investment Performance

Subject to the provisions of Performance Objectives, fixed income managers are expected to rank within the top 50% of their respective style group and to outperform, over time, their respective style benchmarks. The following table reflects the existing styles within the Board's portfolio and the associated style benchmarks:

c) Cash

Managers are expected to remain fully invested with maximum cash positions at the 15% level. If there is a situation where the manager expects to raise cash above the 15% level and to maintain same for more than a quarter, then such

manager should inform the Board in writing of the circumstances surrounding this investment decision.

d) Investment Performance Monitoring Procedures

Subject to the provisions of Monitoring Procedures, fixed income managers will be monitored on a periodic and ongoing basis according to qualitative considerations and quantitative criteria (see table: Investment Performance Criteria by Asset Class).

The following table reflects the existing styles within the Board's portfolio and the associated style benchmarks:

<u>Manager</u>	<u>Style</u>	<u>Benchmark</u>	<u>Peer Group</u>
Ramirez	Core Bond	Barclays Aggregate	Core
Reams Asset Mgmt.	Enhanced Core Bond	Barclays Universal	Core Plus
DDJ	Credit	BB High Yield	High Yield

L. Crisis Risk Offset (CRO) and Portfolio Component Definitions

In accordance with the objectives of the Statement of Investment Policy and Procedures of the Oakland Police and Fire Retirement System (the "System" or "OPFRS"), the System has created a CRO strategic class. The role of the CRO class is to mitigate the effects of growth risk on the portfolio by focusing on investment strategies that further enhance asset diversification within the portfolio with strategies that exhibit lower correlations with equities and fixed-income.

This class can include investments in commingled funds, interests in the following categories:

- Long Duration Treasury Bonds
- Systematic Trend Following
- Alternative Risk Premia

1) Objective

The CRO Class is to be structured as a combination of multiple underlying assets and/or vehicles, so that the aggregate class exhibits uncorrelated returns and characteristics. The objective of this class is to diversify both the equity risk and nominal interest rate risk of the total portfolio.

2) Benchmark

Given the long-term nature of CRO strategies, the overall asset class will be measured against a custom benchmark that is 33% Barclays Capital Long Duration Treasuries and 66% at a 5% annual return.

3) Eligible Investment Approaches

- a) Long Duration
 - i) Portfolios of long-dated (maturities in excess of 10 years) high-quality bonds (Treasury and Government-backed high-quality agencies).
 - ii) Portfolios of cash-collateralized derivatives that mirror the performance of long-dated high-quality bonds.
- b) Systematic Trend Following
 - i) Long-short portfolios using both cash and derivatives-based instruments to capture both periodic appreciation and periodic depreciation trends that evolve and dissipate across a very wide array of liquid global markets. Risk/volatility is calibrated to a pre-determined level using cash and derivatives-based leverage.
- c) Alternative Risk Premia
 - i) Long-short portfolios using both cash and derivatives-based instruments to capture well-researched/documented non-market risk premia (e.g., momentum, carry, value, low-volatility, etc.) on a continuous basis, using an array of liquid global markets. Risk/volatility is calibrated to a pre-determined level using cash and derivatives-based leverage.

The CRO investments are managed by external investment managers to the asset allocation targets and ranges adopted by the Board and set forth in the Asset Allocation Policy INV 0100.

The target to CRO is long-term and may deviate in the short-term as a result of interim market movement or ongoing rebalancing. Consideration will be given to market impact and costs when implementing any reallocations within the asset class.

4) Performance Objectives

The managers are expected to exceed the 5% benchmark performance, pre-fee, on an annual basis as well as rolling one, three, and five year periods.

<u>Manager</u>	<u>Style</u>	<u>Benchmark</u>	<u>Peer Group</u>
TBD	Long Duration Fixed	BB Long Treasury Index	N/A
TBD	Risk Premia/Trend	5% Annual	N/A

M. Covered Call Asset Class and Portfolio Component Definitions

- 1) Covered Calls** – The primary role of the covered call portfolio is to provide some form of downside protection while diversifying the Plan's investment assets. The Board expects that over the long run, covered calls will produce total returns in line with public equity with less volatility, but will vary markedly from public equity during market extremes. Under a bull/recovery market scenario, covered calls underperform public equity, but still tend to produce substantial upside returns. During a bear/down market scenario, covered calls are likely to decline in value, but by a lesser degree than public equity, providing investors with principal protection. As a result of these attributes, covered calls tend to compound at a smoother rate than public equities, allowing for a high potential amount of wealth creation over a long-horizon holding period (i.e. 10 years).

The structure of the Covered Calls program is expected to be up to 80% Chicago Board Options Exchange (CBOE) S&P 500 BuyWrite Index (Ticker symbol: BXM) replication strategy. With up to 20% of the program could be invested in a Non-BXM Replication strategy.

- 2) Covered Call Replication Guidelines**

The Plan has appointed Manager(s) to manage a portion of the Plan's assets. These assets will be managed in conformance with the objectives and guidelines delineated below and in accordance with a formal contract with the Retirement Board.

- 3) Portfolio Component Definition**

The Manager will manage a passive BXM portfolio ("Portfolio") for the Plan that will attempt to replicate the performance of the CBOE S&P 500 BuyWrite Index (Ticker symbol: BXM). Given this orientation, the goal of the Portfolio is to meet or exceed the performance of the BXM Index on a pre-fee basis over various time periods. The BXM Index has historically offered S&P 500 like returns at 2/3 of the risk (standard deviation). The Portfolio will be measured in USD.

- 4) Portfolio Guidelines**

- a) Eligible securities for this account include long positions in S&P 500, either through Exchange Traded Funds (ETFs) or replication, short positions in S&P 500 near the money one month listed call options, and cash.
- b) The Manager shall invest in securities specifically authorized in these written guidelines. Prohibited securities for this account include Puts and over-the-counter (OTC) options.
- c) Leverage may not be used in the portfolio.

- d) Derivatives used for risk control and income are permitted. However, the notional value of the options may not exceed the total value of the underlying equity portfolio.
- e) Diversification - The nature of the Covered Call equity investment approach is to be short multiple strike options and multiple maturities with the ability to repurchase early and roll strikes as needed.
- f) The cash equivalent portion should not normally exceed 1% of the Portfolio.
- g) All holdings will be of sufficient size and held in issues that are traded actively enough to facilitate transactions at minimum cost and accurate market valuation.

5) Portfolio Characteristics

- a) It is expected that the Portfolio's market sensitivity (beta) should be no less than 0.85 and no greater than 1.25 versus the S&P 500 Index on a rolling 24-month basis, using monthly holdings data.
- b) The volatility of the Portfolio's incremental return compared to that of the benchmark (i.e. tracking error) should not exceed 3.0% annualized over 3-5 years.
- c) It is expected that the Portfolio's performance correlation (R-Squared) to the BXM Index should not be less than 0.90.

6) Performance Objectives

The manager is expected to meet or exceed the BXM benchmark performance, pre-fee, on an annual basis as well as rolling one, three, and five year periods.

Manager
Parametric

Style
Passive Covered Calls

Benchmark
BXM Index

Peer Group
N/A

Active Covered Call Guidelines

The Plan has appointed Manager(s) to manage a portion of the Plan's assets. These assets will be managed in conformance with the objectives and guidelines delineated below and in accordance with a formal contract with the Retirement Board.

1) Portfolio Component Definition

The Manager will manage an active portfolio ("Portfolio") for the Plan. Given this orientation, the goal of the Portfolio is to exceed the performance of the BXM Index on a pre-fee basis over various time periods. The Portfolio will be measured in USD.

2) Portfolio Guidelines

- a) Eligible securities for this account include long positions in domestic equities or Exchange Traded Funds (ETFs), short positions in S&P 500 near the money one month listed call options, and cash.
- b) The Manager shall invest in securities specifically authorized in these written guidelines. Prohibited securities for this account include Puts and over-the-counter (OTC) options.
- c) Leverage may be not be used in the portfolio.
- d) Derivatives used for risk control and income are permitted. However, the notional value of the options may not exceed the total value of the underlying equity portfolio.
- e) Diversification - The nature of the Covered Call equity investment approach is to be short multiple strike options and multiple maturities with the ability to repurchase early and roll strikes as needed.
- f) The cash equivalent portion should not normally exceed 1% of the Portfolio.
- g) All holdings will be of sufficient size and held in issues that are traded actively enough to facilitate transactions at minimum cost and accurate market valuation.

3) Portfolio Characteristics

- a) It is expected that the Portfolio's market sensitivity (beta) should be no less than 0.75 and no greater than 1.40 versus the S&P 500 Index on a rolling 24-month basis, using monthly holdings data.
- b) The volatility of the Portfolio's incremental return compared to that of the benchmark (i.e. tracking error) should not exceed 4.0% annualized over 3-5 years.
- c) It is expected that the Portfolio's performance correlation (R-Squared) to the BXM Index should not be less than 0.80.

4) Performance Objectives

The manager is expected to exceed the BXM benchmark performance, pre-fee, on an annual basis as well as rolling one, three, and five year periods.

<u>Manager</u>	<u>Style</u>	<u>Benchmark</u>	<u>Peer Group</u>
Parametric	Active Covered Calls	BXM Index	N/A

APPENDIX

Thermal Coal Companies as of 6/30/2018

ISSUER NAME	ISSUER ID	ISSUER TICKER	ISSUER SEDOL	ISSUER ISIN	ISSUER COUNTRY
AGRITECH RESOURCES LIMITED	IID000000002124346	1131	BFWMB94	BMG0130N1130	HK
ALLIANCE RESOURCE OPERATING PARTNERS, L.P.	IID000000002764255	ALARP	BD2M5N2	US01879NAA37	US
ARCH COAL, INC.	IID000000002132043	ARCH	BYHHNV6	US0393804077	US
Banpu Power Public Company Limited	IID000000002404296	BPP	BD5NFC1	TH7462010003	TH
Banpu Public Company Limited	IID000000002159164	BANPU	B3RJVNO	TH0148036401	TH
Bukit Asam (Persero) Tbk PT	IID000000002186146	PTBA	6565127	ID1000094006	ID
CLOUD PEAK ENERGY INC.	IID000000002386343	CLD	B57LN89	US18911Q1022	US
COAL INDIA LTD	IID000000002235890	COALINDIA	B4Z9XF5	INE522F01014	IN
CONSOL ENERGY INC.	IID000000002820324	C9X	BD5NFC1	US20854L1089	US
EXXARO RESOURCES LIMITED	IID000000002126148	EXX	6418801	ZAEO00084992	ZA
FORESIGHT ENERGY LLC	IID000000002597538	FELP	BF1B879	US345525AE90	US
GEO COAL INTERNATIONAL PTE. LTD.	IID000000002861777	GECLN	BF25319	US37255AAB70	SG
GEO ENERGY RESOURCES LIMITED	IID000000002653872	7GE	B8G3G55	SG2F24986083	SG
GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED	IID000000002141069	532181	6101639	INE131A01031	IN
Hallador Energy Company	IID000000002126834	HNRG	2404978	US40609P1057	US
INNER MONGOLIA YITAI COAL CO., LTD	IID000000002170666	3948	B4PPPY6	CNE100001FW6	CN
Indo Tambora Energy Megah Tbk PT	IID000000002133986	3IB	B2NBLH7	ID1000108509	ID
Lubelski Wegiel Bogdanka SA	IID000000002402375	UXX	B8J56X6	PLLWBGD00016	PL
MURRAY ENERGY CORPORATION	IID000000002284479	MURRE	BWT6K35	US62704PAE34	US
NACCO INDUSTRIES, INC.	IID000000002152662	NA6A	B3FH039	US6295791031	US
NEW HOPE CORPORATION LIMITED	IID000000002149750	NHC	6681960	AU000000NHC7	AU
PEABODY ENERGY CORPORATION	IID000000002179181	BTU	BDVPZV0	US7045511000	US
PT Adaro Energy Tbk	IID000000002355568	A64	B3BQG54	ID1000111305	ID
PT Bukit Makmur Mandiri Utama	IID000000002361398	DOID	BYP2536	US74445NAA54	ID
PT Bumi Resources Minerals Tbk	IID000000002605865	BRMS	B3R5893	ID1000117609	ID
PT Bumi Resources Tbk	IID000000002160294	BUMI	BDC3JK0	IDC000013409	ID
PT Delta Dunia Makmur Tbk	IID000000002163859	D5A	B5W7GK5	ID1000110505	ID
PT Harum Energy Tbk	IID000000002573419	44H	B4VN2Q5	ID1000116601	ID
SHANGHAI DATUN ENERGY RESOURCES CO., LTD.	IID000000002183325	600508	6397524	CNE000001915	CN
Semirara Mining and Power Corporation	IID000000002183138	SCC	BQ13Z04	PHY7628G1124	PH
WASHINGTON H. SOUL PATINSON AND COMPANY LIMITED	IID000000002150028	SOL	6821807	AU000000SOL3	AU
WESTMORELAND COAL COMPANY	IID000000002189509	WLBA	2954956	US9608781061	US
WESTMORELAND RESOURCE PARTNERS, LP	IID000000002594997	2OR1	BV1VRK7	US96108P1030	US
WHITEHAVEN COAL LIMITED	IID000000002133460	WC2	B1Y1S56	AU000000WHC8	AU
YANCOAL AUSTRALIA LTD	IID000000002570123	YA1	B8GH992	AU000000YAL0	AU
Yancoal International Resources Development Co., Limited	IID000000002646180	YZCLM	B8BTZR3	US984745AB51	HK
Yanzhou Coal Mining Company Limited	IID000000002190075	YZCA	B07LWN2	CNE1000004Q8	CN

Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC (PCA)

CC: David Sancewich – PCA
Sean Copus, CFA – PCA
Teir Jenkins – OPFRS
David Jones - OPFRS

RE: Parametric Organizational Update

Summary

In late November 2018 it was announced that Jack Hansen, CFA, Parametric's Investment Research & Strategy CIO will retire on November 1, 2019. Upon Mr. Hansen's retirement, Parametric has announced that its Investment Research & Strategy division will be led by co-CIOs Timothy Atwill, PhD, CFA and Thomas Lee, CFA. Until Mr. Hansen's retirement in 2019, Parametric will keep the current leadership structure in place while Mr. Atwill and Mr. Lee work closely with Parametric CEO Brian Langstraat, Mr. Hansen, and other senior leaders to execute a successful transition.

As managers of Oakland PFRS's Covered Calls and Systemic Alternative Risk Premia (CRO) mandates, any major organization changes should be closely scrutinized. After taking into account Parametric's organizational structure and the effects any changes may have on both of OPFRS's Parametric-managed portfolios, PCA does not have any reservations regarding the announced organizational changes. Parametric is a large organization with a deep senior leadership team which includes multiple CIOs and redundancies across its operational groups and committees. This structure should allow for a seamless transition over the next year with minimal to zero disruption to the organization. It should also be noted that both mandates managed by Parametric on behalf of Oakland PFRS are of a more quantitative nature and are not directly managed by Mr. Hansen, so his departure should not have any effect on the day-to-day operation of the portfolios.

Conclusion

Given its current organizational structure and deep, long-tenured senior leadership team, PCA believes Parametric is well positioned to successfully manage the announced retirement of CIO Jack Hansen over the next year. The announced future co-CIOs Mr. Atwill and Mr. Lee are both well qualified and the expected organization changes should have no effect on the day-to-day operations of the two mandates (Covered Calls, CRO) Parametric manages on behalf of Oakland PFRS. Therefore, PCA does not have any issue with the announced organizational changes at Parametric and does not believe any additional action should be taken at this time.

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Parametric Organizational Update

Parametric Portfolio Associates LLC (Parametric), an affiliate of Eaton Vance Corp., is announcing the retirement of Jack Hansen, CFA, Chief Investment Officer of Parametric's Minneapolis Investment Center, effective November 1, 2019.

Following Mr. Hansen's retirement, Parametric will fully integrate the leadership of investments and research under the Office of the CIO, which will be led by newly appointed co-CIOs Timothy Atwill, PhD, CFA and Thomas Lee, CFA. They will report to Brian Langstraat, Parametric's Chief Executive Officer. In addition, Parametric is creating a unified global Research and Development function that will be led by Paul Bouchey.

From now until November 1, 2019, things will operate as they do currently with the existing CIO and investment leadership structures. Over the course of the next year, Tim Atwill and Tom Lee will work closely with Brian Langstraat, Jack Hansen, Paul Bouchey and other senior leaders at Parametric to execute a successful transition.

This transition is intended to create more alignment and collaboration between investment teams. Additionally, we anticipate that our organization will be more efficient and better able to produce innovative solutions to enhance your overall experience with Parametric.

We believe our clients benefit from a stable firm and an investment team that can successfully execute leadership changes. The length of the time from this announcement to the effective date gives not only our firm time to implement the transition thoughtfully, but also provides you with an ample opportunity to study and evaluate the changes made.

We look forward to discussing this further with you and thank you for your business.

Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC (PCA)

CC: David Sancewich – PCA
Sean Copus, CFA – PCA
Teir Jenkins – OPFRS
David Jones - OPFRS

RE: Pension Consulting Alliance (PCA) Organizational Update

Summary

In mid-January 2019 it was announced that Pension Consulting Alliance (PCA) will be merging with Meketa Investment Group. This merger was signed and announced as a result of PCA seeking to transition the firm's ownership from its founder Allan Emkin. The deal is expected to close by the end of March 2019.

It is important to note that the PCA team currently servicing OPFRS will remain unchanged. David Sancewich, Sean Copus, Kristen Chase and Eric White remain committed and will continue to act as the consulting team and working with OPFRS staff to review, monitor, and implement the investment portfolio on behalf of OPFRS and its beneficiaries.

Upon completion of the merger, Meketa co-CEOs Steve McCourt and Peter Woolley, supported by their existing senior management team, will lead the organization, which will continue to be named Meketa Investment Group, Inc. Meketa's Executive Committee, and other management committees, will include representatives from both Meketa and PCA. Allan Emkin will serve on Meketa's Board of Directors and will continue to work as a consultant for several client relationships. PCA Managing Director Christy Fields will also join the Meketa Board of Directors and Managing Directors Judy Chambers and Neil Rue will join Meketa's Executive Committee. All of PCA's board members will become Meketa shareholders and equity will be offered to additional PCA employees as well. There is no planned reduction in staff, with all Meketa and PCA employees remaining with the combined company. We will serve clients from six locations across the United States, as well as London.

Currently PCA represents roughly \$1.4 trillion in institutional investors assets with 32 employees. Together the firms will represent roughly \$1.7 trillion and 190 employees when combined.

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MEKETA INVESTMENT GROUP AND PENSION CONSULTING ALLIANCE TO JOIN FORCES

*COMBINATION UNITES LONG-ESTABLISHED, HIGHLY RESPECTED INVESTMENT CONSULTANCIES WITH
DEMONSTRATED PUBLIC, PRIVATE MARKETS & REAL ESTATE EXPERTISE*

BOSTON, MA and PORTLAND, OR – January 16, 2019 – Investment consulting and advisory firms Meketa Investment Group, Inc. ("Meketa") and Pension Consulting Alliance, LLC ("PCA") today announced that they have entered into an agreement to join forces. The integration is expected to happen in the first half of 2019 and the combined firm will be called Meketa Investment Group, Inc.

The combination of Meketa and PCA brings together two of the industry's most experienced and highly-regarded firms, known for providing creative investment solutions to leading institutions and organizations.

Founded in 1978, Meketa serves a variety of public and private institutional investors, including defined benefit and defined contribution plans as well as non-profits and corporations, in discretionary and non-discretionary capacities. Meketa serves over 170 clients with collective assets totaling approximately \$1.1 trillion.

PCA, founded in 1988 by Allan Emkin, serves U.S. tax-exempt and public pension fund clients and has non-discretionary consulting relationships representing more than \$1.4 trillion in institutional investor assets. PCA has expertise in general, real estate and private markets consulting.

Together, Meketa and PCA's collective client assets will represent approximately \$1.7 trillion and the combined firm will consult on over \$100 billion in private markets and real estate assets. The combined firm will continue to serve as an independent fiduciary and remain fully employee-owned.

"This is a true combination of two well respected and innovative institutional investment firms," said Stephen McCourt, Co-CEO, Meketa. "It is a pleasure to join forces with the team at PCA and with Allan, a pioneer in the pension consulting industry who will continue to provide valuable services to institutional clients under a larger umbrella. Furthermore, the combination significantly enhances our private markets resources, particularly in real estate, an area of the marketplace ripe for growth. We believe leveraging the best ideas and concepts learned by the respective firms will result in an even stronger combined organization for our clients and employees."

The staffs of Meketa and PCA, all of whom are intended to remain at the combined company, number approximately 160 and 30, respectively. The combined firm will serve clients from six locations across the United States, as well as London. Co-CEOs McCourt and Peter Woolley, supported by their existing senior management team, will continue to lead the organization. Allan

Emkin, Founder and Managing Director of PCA, will serve on Meketa's Board of Directors and will continue to work as a consultant for several clients. Christy Fields, Managing Director at PCA, will also join the Meketa Board of Directors. PCA Managing Directors Judy Chambers and Neil Rue will join Meketa's Executive Committee. Other management committees will include representatives from both Meketa and PCA. All of PCA's board members will become Meketa shareholders and equity will be offered to additional PCA employees as well.

"The combination with Meketa marks a significant new chapter in the continuing evolution of PCA," said Emkin. "Joining together is a logical next step for both firms, as we have worked collaboratively on certain client relationships for many years and share a similar approach to capital markets and institutional investing. We look forward to fully combining our workforces and to serving our clients even more effectively."

"This combination provides a unique opportunity to share and build upon best practices developed over the course of 40 years of industry experience," said Woolley. "The talented professionals at PCA have a well-earned reputation for providing clients with thoughtful and independent analysis and advice. We are confident the integration of our firms' people, cultures, decision-making and ownership will yield meaningful benefits, helping us to both expand our research and thought leadership. With the combination of Meketa and PCA, we are well positioned to enhance our leadership position in the industry."

About Meketa

Founded in 1978, Meketa is an employee-owned, full service investment consulting and advisory firm. As an independent fiduciary, the firm serves institutional investors in discretionary and non-discretionary capacities. The firm serves over 170 clients with collective assets totaling approximately \$1.1 trillion. For more information, please visit www.meketagroup.com.

About PCA

Founded in 1988, PCA is an independent, full-service investment consulting firm that provides investment advisory services to pension plans and institutional investors in the areas of general, alternative investments and real estate consulting. For 30 years, delivering investment consulting services to U.S. tax-exempt and public pension fund clients has been PCA's only line of business, and client advocacy is the firm's top priority. PCA serves over 30 clients with collective assets totaling approximately \$1.4 trillion. To learn more about PCA, visit www.pensionconsulting.com.

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Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC (PCA)

CC: David Sancewich – PCA
Sean Copus, CFA – PCA
Teir Jenkins – OPFRS
Katano Kasaine - OPFRS

RE: Fisher Investments – Contract Renewal

Manager: Fisher Investments

Inception Date:	April 2011	OPFRS AUM:	\$14.3 million (4.1%)
Product Name:	All Foreign Equity	Management Fee:	75 bps (\$107,288)*
Investment Strategy:	International Equity	Firm-wide AUM (9/30/18):	\$103.2 billion
Benchmark:	MSCI ACWI ex USA	Strategy AUM (12/31/18):	\$3.4 billion

*Estimated based on manager account AUM as of 12/31/2018

Summary and Recommendation

PCA recommends that OPFRS renew its contract with Fisher Investments before the current contract date of expiration. OPFRS contracts reserve the right for the Board to terminate the agreement, with or without cause, at any time upon 30 calendar days' prior written notice. In making this recommendation, PCA considered investment performance and recent organizational / personnel issues. Since the last contract renewal, Fisher Investments has exhibited acceptable performance and organizational stability, therefore PCA believes that there are no issues that should prevent a contract extension for this manager.

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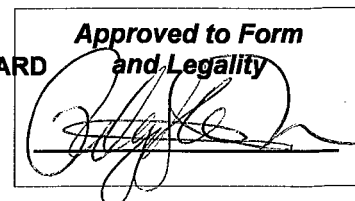
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OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7035



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION AUTHORIZING EXERCISE OF A ONE-YEAR OPTION
TO EXTEND THE AGREEMENT WITH FISHER INVESTMENT TO
PROVIDE INTERNATIONAL EQUITY ASSET CLASS INVESTMENT
MANAGER SERVICES FOR THE CITY OF OAKLAND POLICE AND
FIRE RETIREMENT SYSTEM BOARD COMMENCING FEBRUARY 16,
2019 THROUGH FEBRUARY 16, 2020**

WHEREAS, the City of Oakland Police and Fire Retirement System Board ("Board") approved by motion at the October 27, 2010 Board meeting to enter into an agreement ("The Agreement") with Fisher Investments ("Investment Counsel"), effective February 15, 2011 through February 15, 2016, to provide advice and counsel regarding investments of the assets of the Police and Fire Retirement Fund ("Fund"); and

WHEREAS, Article XX of said agreement allows for modification to this agreement only by written agreement of all parties; and

WHEREAS, Article IV(B) permits the Board the option to extend the term of the agreement for additional one-year terms by giving Investment Counsel written notice of its intent to exercise its option not less than sixty days prior to the expiration of the term or extended term of the agreement; and

WHEREAS, On February 24, 2016, the Board approved a one-year agreement extension by a motion, which expired on February 16, 2017; and

WHEREAS, On March 29, 2017, the Board approved Resolution No. 6958, authorizing a one-year extension of the Agreement, which expired on February 16, 2018; and

WHEREAS, On January 31, 2018, the Board approved Resolution No. 6994 authorizing a one-year extension of the Agreement, which expires on February 16, 2019; and

WHEREAS, The Board wishes to extend the current agreement with Investment Counsel for another one-year term (at the same rates and on the same terms and conditions as the January 31, 2018 extension), effective February 16, 2019; now therefore, be it

Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC (PCA)

CC: David Sancewich – PCA
Sean Copus, CFA – PCA
Teir Jenkins – OPFRS
Katano Kasaine - OPFRS

RE: **EARNEST Partners – Contract Renewal**

Manager: EARNEST Partners

Inception Date:	3/01/2006	OPFRS AUM:	\$25.7 million (7.3%)/
Product Name:	Mid-Cap Core	Management Fee:	84 bps (\$216,700)*
Investment Strategy:	Domestic Mid-Cap Equity	Firm-wide AUM (9/30/18):	\$22.1 billion
Benchmark:	Russell Mid-Cap Index	Strategy AUM (9/30/18):	\$928 million

*Estimated based on manager account AUM as of 12/31/2017

Summary and Recommendation

PCA recommends that OPFRS renew its contract with EARNEST Partners before the current contract date of expiration. OPFRS contracts reserve the right for the Board to terminate the agreement, with or without cause, at any time upon 30 calendar days' prior written notice. In making this recommendation, PCA considered investment performance and recent organizational / personnel issues. Since the last contract renewal, EARNEST Partners has exhibited acceptable performance and organizational stability, therefore PCA believes that there are no issues that should prevent a contract extension for this manager.

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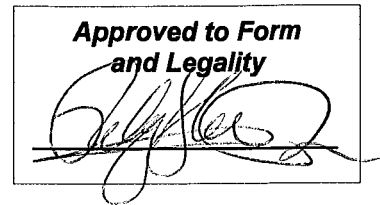
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OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 7036



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION AUTHORIZING EXERCISE OF A ONE-YEAR OPTION
TO EXTEND THE AGREEMENT WITH EARNEST PARTNERS, LLC, TO
PROVIDE MID-CAP CORE ASSET CLASS INVESTMENT MANAGER
SERVICES FOR THE CITY OF OAKLAND POLICE AND FIRE
RETIREMENT SYSTEM BOARD COMMENCING MARCH 24, 2019
THROUGH MARCH 24, 2020**

WHEREAS, the City of Oakland Police and Fire Retirement System Board ("Board") approved by Board motion at the November 30, 2005 Board meeting to enter into an agreement ("the Agreement") with EARNEST Partners, LLC ("Investment Counsel") effective March 16, 2006 to provide advice and counsel regarding investments of the assets of the Police and Fire Retirement Fund ("Fund"); and

WHEREAS, Section XXIV of Agreement allows for modification to the Agreement only by written agreement of all parties; and

WHEREAS, Section IV(B) grants the Board the option to extend the term of the Agreement for three additional one-year terms by giving Investment Counsel written notice of its intent to exercise its option not less than sixty days prior to the expiration of the term or extended term of the Agreement; and

WHEREAS, the Agreement was amended by writing dated April 19, 2015 (the First Amendment); and

WHEREAS, On March 30, 2016, the Board approved by a motion of the Board the second of three one-year extension options, which expired on March 24, 2017 (the Second Amendment); and

WHEREAS, On March 29, 2017, the Board approved Resolution No. 6957 amending Section IV, subsection B of the Service Agreement to provide for unlimited extension options for one-year terms; and

WHEREAS, On March 29, 2017, the Board approved by a motion of the Board the third one-year extension of the Agreement, which expires on March 24, 2018 (the Third Amendment); and

WHEREAS, On January 31, 2018, the Board approved Resolution No. 6994 by a motion of the Board for a one-year extension of the Agreement, which expires on March 24, 2019; and

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

WHEREAS, The Board desires to extend the Agreement with Investment Counsel for another one-year term, effective March 24, 2019; now therefore, be it

RESOLVED: That the Board authorizes the extension of the service Agreement between the City of Oakland Police and Fire Retirement System and EARNST Partners, LLC, a Mid-Cap Core asset class investment manager, for one additional year commencing March 24, 2019 through March 24, 2020.

IN BOARD MEETING, CITY HALL, OAKLAND, CA **JANUARY 30, 2019**

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, KASAIN, MELIA, MUSZAR, SPEAKMAN, WILKINSON
AND PRESIDENT JOHNSON

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

MEMORANDUM

Date: January 30, 2019

To: Oakland Police and Fire Retirement System (OPFRS)

From: Pension Consulting Alliance, LLC. (PCA)

CC: David Sancewich - PCA
 Sean Copus, CFA - PCA
 Kristen Chase - PCA
 Teir Jenkins - OPFRS
 David Jones - OPFRS

RE: 2019 Preliminary Strategic Investment Agenda

Approximately once a year, PCA develops a list of projects that we expect to work closely with OPFRS to complete over the next twelve-plus months (see table below). In an attempt to coordinate the scheduling of these tasks, this memo details a Preliminary Investment Project Agenda by calendaring and prioritizing the expected tasks and deliverables that would be required to fulfill the Agenda. PCA welcomes any suggestions and/or modifications to the proposed timeline.

2019 Preliminary Investment Project Agenda

Expected Completion Date	Task
February 2019	<ul style="list-style-type: none"> 2019 Capital Markets Review International Equity Manager Review Quarterly Performance Report (4Q 2018) Manager Update: State Street (Int'l)
March 2019	<ul style="list-style-type: none"> Manager Update: DDJ Update: International Equity Review Cash Flow Report (2Q 2019)
April 2019	<ul style="list-style-type: none"> Flash Performance (1Q 2019)
May 2019	<ul style="list-style-type: none"> Quarterly Performance Report (1Q 2019) TBD: Educational topic Manager Update: Rice Hall James
June 2019	<ul style="list-style-type: none"> Asset Allocation Review and Update Cash Flow Report (3Q 2019)

Expected Completion Date	Task
July 2019	<ul style="list-style-type: none"> Flash Performance Report (2Q2019) Asset Class Review: Fixed Income TBD: Educational Topic
August 2019	<ul style="list-style-type: none"> PCA Performance Report (2Q 2019) Manager Update: Reams
September 2019	<ul style="list-style-type: none"> TBD: Educational Topic Cash Flow Report (4Q2019) Thermal Coal List Report - Update
October 2019	<ul style="list-style-type: none"> Flash Performance Report (3Q 2019) Manager Update: Parametric Service Contract Extension - Parametric
November 2019	<ul style="list-style-type: none"> PCA Performance report (3Q2019) Manager Update: Ramirez
December 2019	<ul style="list-style-type: none"> TBD: Depends on meeting schedule Cash Flow Report (1Q2020)

Bold are priority strategic items.

This agenda continues forward with the implementation of a new potential asset allocation as a result of the asset liability modeling in 2017.

This agenda includes only major strategic items. PCA also expects to work with the Staff and Board to complete more routine tasks and projects, as expected.

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Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

RETIREMENT BOARD MEMBERS

Walter L. Johnson, Sr.
President

Jaime T. Godfrey
Vice President

Katano Kasaine
Member

Martin J. Melia
Member

Robert J. Muszar
Member

John C. Speakman
Member

Steven Wilkinson
Member

REGULAR MEETING of the BOARD OF ADMINISTRATION of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Wednesday, January 30, 2019 – 11:00 am
One Frank H. Ogawa Plaza, Hearing Room 1
Oakland, California 94612

- - - ORDER OF BUSINESS - - -

A. CLOSED SESSION

B. Report of PFRS Board Action from Closed Session (if any)

C. Subject: PFRS Board Meeting Minutes
From: Staff of the PFRS Board

Recommendation: APPROVE November 28, 2018 PFRS Board meeting minutes.

D. **AUDIT AND OPERATIONS COMMITTEE AGENDA – JANUARY 30, 2019**

D1. Subject: Administrative Expenses Report
From: Staff of the PFRS Board

Recommendation: ACCEPT an informational report regarding PFRS administrative expenses from July 1, 2018 through November 30, 2018.

D2. Subject: Annual Report for Fiscal Year ending June 30, 2018
From: Staff of the PFRS Board

Recommendation: APPROVE printing and publication of the Annual Report of the Oakland Police and Fire Retirement System for the Fiscal Year ending June 30, 2018.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

- D3. Subject:** PFRS Policy Governing the Overpayment or Underpayment of Member Benefits
From: Staff of the PFRS Board
-
- Recommendation:** **DISCUSSION** regarding PFRS Policy Governing the Overpayment or Underpayment of Member Benefits.
- D4. Subject:** Resolution No 7037 – Travel authorization for PFRS Board Member R. Steven Wilkinson for attendance at the 2018 Markets Group California Institutional Forum Conference (“2018 Markets Group Conference”) on December 5, 2018 in Sonoma, CA with an estimated budget of Seventy-seven Dollars (\$77.00)
From: Staff of the PFRS Board
-
- Recommendation:** **APPROVE Resolution No. 7037** – Travel authorization for PFRS Board Member R. Steven Wilkinson for attendance at the 2018 Markets Group California Institutional Forum Conference (“2018 Markets Group Conference”) on December 5, 2018 in Sonoma, CA with an estimated budget of Seventy-seven Dollars (\$77.00).
- D5. Subject:** Resolution No 7038 – Travel authorization for PFRS board member Martin Melia to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00)
From: Staff of the PFRS Board
-
- Recommendation:** **APPROVE Resolution No. 7038** – Travel authorization for PFRS board member Martin Melia to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00).
- D6. Subject:** Resolution No 7039 – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00)
From: Staff of the PFRS Board
-

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

Recommendation: **APPROVE Resolution No. 7039** – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of Two Hundred Ninety Dollars (\$290.00).

D7. Subject: **Resolution No 7040 – Travel authorization for PFRS board member Jaime Godfrey to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of One Thousand Four Hundred Dollars (\$1,400.00)**

From: Staff of the PFRS Board

Recommendation: **APPROVE Resolution No. 7040** – Travel authorization for PFRS board member Jaime Godfrey to travel and attend the 2019 Pension Bridge Conference (“Pension Bridge Conference”) from April 9, 2019 to April 10, 2019 in San Francisco, CA with an estimated budget of One Thousand Four Hundred Dollars (\$1,400.00).

D8. Subject: **Resolution No 7041 – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS Conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00)**

From: Staff of the PFRS Board

Recommendation: **APPROVE Resolution No. 7041** – Travel authorization for PFRS board member R. Steven Wilkinson to travel and attend the 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS Conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00).

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

D9. Subject: Resolution No 7042 – Travel authorization for PFRS board Member Katano Kasaine To Travel and Attend The 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00)

From: Staff of the PFRS Board

Recommendation: **APPROVE Resolution No. 7042** – Travel authorization for PFRS board Member Katano Kasaine To Travel and Attend The 2019 California Association of Public Retirement Systems General Assembly Conference (“2019 CALAPRS conference”) from March 2, 2019 to March 5, 2019 in Monterey, CA with an estimated budget of One Thousand Two Hundred Fifty Dollars (\$1,250.00).

**E. INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA –
JANUARY 30, 2019**

E1. Subject: Investment Market Overview

From: Pension Consulting Alliance

Recommendation: **ACCEPT** an informational report on the global investment markets through January 2019.

E2. Subject: Preliminary Investment Fund Performance Report for the Quarter Ending December 31, 2018

From: Pension Consulting Alliance

Recommendation: **ACCEPT** a Preliminary Investment Fund Performance Report for the Quarter Ending December 31, 2018.

E3. Subject: Investment Asset Class Review - Crisis Risk Offset (CRO)-Long Duration

From: Pension Consulting Alliance

Recommendation: **ACCEPT** an informational report of the Investment Asset Class Review - Crisis Risk Offset (CRO)-Long Duration.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

- E4. Subject:** **Investment Policy Amendment – Addition of the Description of the Defensive Equity Investment Management Style**
From: Pension Consulting Alliance
-
- Recommendation:** **APPROVE** an amendment to the Investment Policy of the Oakland Police and Fire Retirement System with the addition of a description of the Defensive Equity investment management style.
- E5. Subject:** **Management change Update Report - Parametric Portfolio Advisors**
From: Pension Consulting Alliance
-
- Recommendation:** **ACCEPT** an informational report regarding a planned management change at Parametric Portfolio Advisors in 2019.
- E6. Subject:** **Report About A Change of Management and Ownership of PFRS Investment Advisor Pension Consulting Alliance**
From: Pension Consulting Alliance
-
- Recommendation:** **ACCEPT** an informational report about the joining of management and ownership of PFRS's investment advisor Pension Consulting Alliance with Meketa Investment Group, and provide direction to staff on continuing services.
- E7. Subject:** **Resolution No. 7035 - Resolution authorizing exercise of a one-year option to extend the agreement with Fisher Investment to provide International Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing February 16, 2019 through February 16, 2020**
From: Staff of the PFRS Board
-
- Recommendation:** **APPROVE** Resolution No. 7035 - Resolution authorizing exercise of a one-year option to extend the agreement with Fisher Investment to provide International Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing February 16, 2019 through February 16, 2020.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
JANUARY 30, 2019

ORDER OF BUSINESS, continued

E8. Subject: Resolution No. 7036 - Resolution authorizing exercise of a one-year option to extend the agreement with Earnest Partners to provide Mid Cap Core Domestic Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing March 24, 2019 through March 24, 2020

From: Staff of the PFRS Board

Recommendation: **APPROVE** Resolution No. 7036 - Resolution authorizing exercise of a one-year option to extend the agreement with Earnest Partners to provide Mid Cap Core Domestic Equity asset class investment manager services for the City of Oakland Police and Fire Retirement System Board commencing March 24, 2019 through March 24, 2020.

F. Subject: **Member Resolution(s) No. 7043**
From: Staff of the PFRS Board

Recommendation: **APPROVE** Member Resolution(s) No. 7043

F1. Resolution No. 7043 Resolution approving death benefit payments and directing warrants thereunder in the total sum of \$1,000.00 payable to the beneficiaries of deceased members as follows: (1) Estate of Frederick R. Lietzke, (2) Estate of Melvin Lawrence, and (3) Steven Moyles

G. NEW BUSINESS

H. OPEN FORUM

I. FUTURE SCHEDULING

All persons wishing to address the Board must complete a speaker's card, stating their name and the agenda item (including "Open Forum") they wish to address. The Board may take action on items not on the agenda only if findings pursuant to the Sunshine Ordinance and Brown Act are made that the matter is urgent or an emergency.

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Oakland, California 94612

AGENDA

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Vice President

Katano Kasaine
Member

Martin J. Melia
Member

Robert J. Muszar
Member

John C. Speakman
Member

R. Steven Wilkinson
Member

CLOSED SESSION of the BOARD OF ADMINISTRATION of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

Wednesday, January 30, 2018 –during regular meeting starting at 11:00 am
One Frank H. Ogawa Plaza, Hearing Room 1
Oakland, California 94612

- - - ORDER OF BUSINESS - - -

THE PFRS BOARD WILL MEET IN CLOSED SESSION DURING ITS SCHEDULED BOARD MEETING

Please see the meeting agenda for open session items. The board will convene in open session prior to the closed session. Speakers may address the items of business on the closed session agenda prior to closed session. All speakers must fill out a speaker's card and submit it to the Secretary to the Board. The Board will reconvene in open session following the closed session to report any final decisions that the board makes in closed session.

Pursuant to California Government Code Section 54956.9(a) and 54956.9(d)(1):

1. CONFERENCE WITH LEGAL COUNSEL – PENDING LITIGATION

Retired Oakland Police Officers Association v. Oakland Police and Fire Retirement System, et al.,
Alameda County Superior Court Action No. RG16838274

A BOARD MEETING of the Oakland Police and Fire Retirement System ("PFRS") was held on November 28, 2018 in Hearing Room 1, One Frank Ogawa Plaza, Oakland, California.

Board Members Present:

- Walter L. Johnson, President
- Jaime T. Godfrey, Vice President
- Katano Kasaine, Member
- R. Steven Wilkinson, Member
- John C. Speakman, Member
- Robert J. Muszar, Member
- Martin J. Melia, Member

Additional Attendees:

- David Jones, PFRS Plan Administrator
- Pelayo Llamas, Jr., PFRS Legal Counsel
- David Low & Teir Jenkins, Staff Member
- David Sancewich, Pension Consulting Alliance

The meeting was called to order at 11:37 am.

A. Closed Session –No persons submitted cards to make public comment. President Johnson asked members of the public to leave the hearing room so the Board could convene closed session at 11:38 am.

B. Report of Board Actions from Closed Session – The PFRS Board meeting reconvened following the conclusion of Closed Session at 12:33 pm. No reportable action by the Board was made during closed session. President Johnson reported that Vice President Jaime Godfrey had departed the Board meeting at 12:30 pm.

C. Approval of PFRS Board Meeting Minutes – Member Kasaine made a motion to approve the October 31, 2018 PFRS Board meeting minutes, second by Member Melia. Motion Passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

D. Appointment of Secretary of the PFRS Board – Following some Board discussion, Member Muszar made a motion that the PFRS board appoints David Jones as the PFRS Board Secretary, second by Member Melia. Motion Passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

E. Report Regarding the Method of Calculating PFRS Police Retiree Holiday Pay for Ranks Below Captain; and a Resolution Adopting a Revised Method for Calculating Police Holiday Retirement Allowances for Ranks below Captain – Member Kasaine made a motion to withdraw PFRS Agenda item E from today's PFRS Board Agenda, second by member Melia. All public speakers waived their opportunity to comment. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

- F. Report Regarding the Method of Calculating PFRS Police Retiree Holiday Pay for Captains and Deputy Chiefs; and a Resolution Adopting a Revised Method for Calculating Police Holiday Retirement Allowances for Captains and Deputy Chiefs** – Staff distributed a printed handout of speaking points to the PFRS Board and the public prior to their presentation. PFRS Legal Counsel clarified that the handout presentation included information addressing Holiday Pay for PFRS Police members below the rank of captain of police (today's Item E), and that pages 7, 8, 9, and 10 are not being submitted as evidence on the pending Holiday Pay matter for the ranks of captain and deputy chief of police. PFRS Investment Officer Teir Jenkins and PFRS Legal Counsel Pelayo Llamas summarized points from the agenda report about staff's recommended methodology to calculate prospective Holiday pay benefit for PFRS police members who are the rank of Captain and Deputy Chief.

Pete Peterson, President of the Retired Oakland Police Officers Association (ROPOA), stated the ROPOA's concerns of the staff analysis of holiday pay for the ranks of retired Captains and retired Deputy Chiefs. Mr. Peterson said that PFRS retirees whose ranks at retirement were Captain or Deputy Chief have historically calculated their retirement allowances based on the Memorandum of Understanding for the Oakland Police Officers Association (OPOA) and that retired PFRS members who retired with the rank of Captain or Deputy Chief are not associated with current Oakland Sworn officers of the similar rank. Mr. Peterson objected to staff calculation of holidays for PFRS police retirees holding the ranks of Captain or Deputy Chief based on the MOU for the Oakland Police Management Association (OPMA). However, should this computation method be adopted, Mr. Peterson said staff should thoroughly review ALL pay benefits in the OPMA MOU to clarify and list which OPMA compensations may apply toward PFRS Retired Captains and Deputy Chiefs.

Member Muszar stated that he has a financial conflict of interest in this matter but that this conflict of interest fits under an exception in the law and does not disqualify him from engaging in discussion on this matter. PFRS Legal Counsel Pelayo Llamas stated he "did not disagree" with this statement. Member Muszar added additional comments consistent with Pete Peterson's position.

The PFRS Staff and the Board explained the details of their calculations for Holiday Pay affecting PFRS Police retirees who retired with the rank of Captain and Deputy Chief. Staff reported that the aggregate hours by Active Captains and Active Deputy Chiefs on holidays since 2015 were limited, indicating that very few Active Captains and Deputy Chief worked on holidays since 2015. President Johnson stated that the Board's job today is to ascertain the correct salaries of the Police Captains and Deputy Chiefs according to what their existing MOU requires.

MOTION: Member Muszar made a motion that Retired PFRS Police Captain and Deputy Chief have their pension benefits calculated as though they are covered by the Oakland Police Management Association MOU, and that staff be directed to return at a future meeting with an evaluation of the OPMA MOU to determine which benefits are attached to the ranks of Captains and Deputy Chiefs, second by member Speakman. Discussion continued.

The Board discussed the potential significance of other benefits or pay stated in OPMA MOU. Member Muszar explained why the entire OPMA MOU must be considered in this discussion.

Member Muszar said it would be unfair to enact a board action affecting retirees before a complete examination of possible benefit changes are completed. President Johnson said the Board should act to stop any incorrect disbursement of benefits immediately.

SUBSTITUTE MOTION: Member Kasaine made a substitute motion to approve staff recommendation regarding the computation of certain holiday pay to PFRS Police Captains and Deputy Chiefs as outlined in Resolution No. 7030 (with each rank calculated separately) effective in the February 1 check for the month of January 2019, for staff to come back with a future report showing any overpayments, and to bring back in December or January a report detailing any other changes which could impact the ranks of Captains and Deputy Chiefs based on the OPMA MOU, second by Member Melia. A voice vote was taken. The Substitute Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – N / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 5 / NOES: 1 / ABSTAIN: 0)

G. PFRS AUDIT COMMITTEE MEETING – NOVEMBER 28, 2018

G1. Report of the Audit of the Financial Statements of the Oakland PFRS as of, and for, the year ended June 30, 2018 – Member Speakman reported that Annie Louie from Macias Gini and O'Connell, the PFRS financial auditor, presented her audit findings of the financial statements of the Oakland PFRS as of, and for, the year ended June 30, 2018. Member Muszar made a motion to approve the Report of the Audit of the Financial Statements of the Oakland PFRS as of, and for, the year ended June 30, 2018, second by member Speakman. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

G2. Administrative Expenses Report – Investment Officer Teir Jenkins presented the administrative expenses report from July 1, 2018 through September 30, 2018. Member Speakman made a motion to accept the administrative expenses report, second by member Melia. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

G3. City of Oakland Travel Insurance for PFRS Board Member Travel on Board Business – Member Speakman reported that staff presented a report to the Audit Committee explaining travel-related insurance that is available to PFRS Board members when they travel on Board Business. He reported that the City of Oakland provides travel-related insurance to all City Boards at no additional costs to the PFRS System. Member Speakman said Staff was previously asked to review the cost of additional insurance that might be paid by the System as well as a review of what other retirement systems provide to their board members. Member Speakman said that staff presented its findings and recommend that no

changes be made (to continue the current level of City-provided insurance). Following some Board discussion, Member Muszar made a motion to accept the Staff recommendation that the PFRS Board make no changes and continue the current level of Travel Insurance offered by the City, second by member Speakman. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

G4. PFRS Policy Governing the Overpayment or Underpayment of Member Benefits – Member Speakman reported that the Audit Committee deferred discussion on this matter to the next scheduled Audit Committee meeting and that staff and the committee would fine-tune the current work for this presentation.

H. PFRS INVESTMENT COMMITTEE MEETING – NOVEMBER 28, 2018

H1. Investment Manager Performance Review – Fisher Investments – David Sancewich from Pension Consulting Alliance reported that representatives from Fisher Investments presented their report of the investment performance and market conditions affecting this investment portfolio. Member Muszar made a motion to accept the informational report from PCA regarding the Investment Manager performance review of Fisher Investments, second by member Melia. Motion passed.

[GODFREY – ABSENT / JOHNSON – ABSENT / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / ABSTAIN: 0)

H2. Investment Manager Overview – Fisher Investments – Mr. Sancewich presented PCA's overview of Fisher Investment's presentation of the investment performance and market conditions affecting this investment portfolio. Member Muszar made a motion to accept the informational report from PCA regarding the Investment Manager performance review of Fisher Investments, second by member Melia. Motion passed.

[GODFREY – ABSENT / JOHNSON – ABSENT / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / ABSTAIN: 0)

H3. Investment Market Overview – David Sancewich from Pension Consulting Alliance reported on the global economic factors affecting the PFRS Fund. Member Wilkinson made a motion to accept the informational report from PCA regarding the Investment Market Overview, second by member Melia. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

H4. \$14.2 million 1st Quarter 2019 Member Benefits Drawdown – Mr. Sancewich presented PCA's recommendation on drawdowns to be made to pay for January 2019 through March 2019 member retirement benefits. Mr. Sancewich reported that PCA recommended withdrawing \$3.0 million from the funds managed by Parametric Portfolio Advisors (Covered Calls) and \$11.2 million from Cash from the City of Oakland. Following Committee discussion, Member Wilkinson made a

motion to approve the \$14.2 million drawdown, which includes an \$11.2 million contribution from the City of Oakland and a \$3.0 million contribution from the PFRS Investment Fund, to be used to pay for January 2019 through March 2019 member retirement benefits, second by member Speakman. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

H5. Investment Fund Performance Report for the Quarter Ending September 30, 2018 – Mr. Sancewich presented PCA's Investment Fund Performance Report of the PFRS Investment Portfolio for the Quarter ending September 30, 2018. Following the presentation, Member Wilkinson made a motion to approve the Investment Fund Performance Report for the Quarter Ending September 30, 2018, second by member Melia. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

Mr. Sancewich reported that the Staff and PCA presenting this performance report to the Finance and Management Committee on December 4, 2018.

H6. Resolution No. 7033 - Resolution modifying the agreement with Parametric Portfolio Associates, LLC to provide Covered Calls asset class investment manager services for the City of Oakland Police and Fire Retirement System Board in order to (1) provide for unlimited one-year extension options under in section IV, subsection B; and (2) to exercise a one-year option to extend the agreement commencing December 23, 2018 through December 23, 2019 – Member Melia made a motion to approve resolution no. 7033 - Resolution modifying the agreement with Parametric Portfolio Associates, LLC to provide Covered Calls asset class investment manager services for the City of Oakland Police and Fire Retirement System Board in order to (1) provide for unlimited one-year extension options under in section IV, subsection B; and (2) to exercise a one-year option to extend the agreement commencing December 23, 2018 through December 23, 2019, second by member Speakman. Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

I. Member Resolutions – Member Kasaine made a motion to approve Resolutions No. 7034 – Resolution fixing the monthly allowance of Barbara J. Stevenson, spouse of Norman L. Stevenson retired member of the Police and Fire Retirement System, second by member Muszar, Motion passed.

[GODFREY – ABSENT / JOHNSON – Y / KASAIN – Y / MELIA – Y / MUSZAR – Y / SPEAKMAN – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0)

J. NEW BUSINESS – No Report.

K. OPEN FORUM – No Report.

L. FUTURE SCHEDULING – The next PFRS Board meeting was scheduled for Wednesday, December 19, 2018.

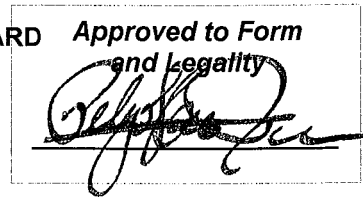
The meeting adjourned at 2:09 pm.

DAVID JONES, BOARD SECRETARY

DATE

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 7043



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

RESOLUTION APPROVING DEATH BENEFIT PAYMENTS AND DIRECTING WARRANTS THEREUNDER IN THE SUM OF \$1,000.00 EACH PAYABLE TO THE BENEFICIARIES OF DECEASED MEMBERS AS FOLLOWS: (1) ESTATE OF FREDERICK R. LIETZKE, (2) ESTATE OF MELVIN LAWRENCE, AND (3) STEVEN MOYLES

WHEREAS, due proof having been received of the death of the persons named in Column (1) below, retired members of the Oakland Police or Fire Department, under Article XXVI of the Charter of the City of Oakland; and

WHEREAS, the beneficiaries to whom the death benefit provided in Charter Section 2612 are payable, are the persons whose names are stated in Column (2) opposite the respective names of the deceased retired member; and

WHEREAS, the amount of said death benefit is stated in Column (4) opposite said respective names; now, therefore, be it

RESOLVED: That the Retirement Board does hereby approve the Death Benefit payment to the persons named in Column (2); and be it

FURTHER RESOLVED: That the Director of Finance, be and is hereby directed to draw and sign warrants for the amount in Column (4) payable to the respective persons whose name(s) appear(s) in Column (2):

(1) Name of Deceased Member	(2) Name of Beneficiary(ies)	(3) Relationship of Beneficiary(ies)	(4) Death Benefit Amount
Frederick R. Lietzke (P)	Estate		\$1,000.00
Melvin Lawrence (F)	Estate		\$1,000.00
Francis J. Moyles (F)	Steven Moyles	Son	\$1,000.00

IN BOARD MEETING, CITY HALL, OAKLAND, CA JANUARY 30, 2019

PASSED BY THE FOLLOWING VOTE:

AYES: GODFREY, KASAIN, MELIA, MUSZAR, SPEAKMAN, WILKINSON,
AND PRESIDENT JOHNSON

NOES:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY