

Pursuant to California Government Code section 54953(e), the Oakland Police & Fire Retirement System Board and Committee Members, as well as City staff, will participate via phone/video conference, and no physical teleconference locations are required.

Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-7295.



AUDIT COMMITTEE MEMBERS

John C. Speakman
Chairperson

R. Steve Wilkinson
Member

Kevin Traylor
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, FEBRUARY 23, 2022

9:30 AM

TELE-CONFERENCE BOARD MEETING
VIA ZOOM WEBINAR

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are three ways to submit public comments.

- eComment. To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with "PFRS Board Meeting" in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR AUDIT COMMITTEE MEETING
FEBRUARY 23, 2022**

- To comment by Zoom video conference, click the “Raise Your Hand” button to request to speak when Public Comment is being taken on an eligible agenda item at the beginning of the meeting. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Instructions on how to “Raise Your Hand” is available at: [https://support.zoom.us/hc/en-us/articles/205566129 - Raise-Hand-In-Webinar](https://support.zoom.us/hc/en-us/articles/205566129-Raise-Hand-In-Webinar).
- To comment by phone, please call on one of the above listed phone numbers. You will be prompted to “Raise Your Hand” by pressing “*9” to speak when Public Comment is taken. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Please unmute yourself by pressing “*6.”

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

ORDER OF BUSINESS

- | | |
|----|--|
| 1. | Subject: Oakland Police and Fire Retirement System (“PFRS”) Audit Committee Meeting Minutes
From: Staff of the PFRS Board
<hr/> Recommendation: APPROVE the January 26, 2022 Audit Committee Meeting Minutes |
| 2. | Subject: Administrative Expenses Report
From: Staff of the PFRS Board
<hr/> Recommendation: ACCEPT informational report regarding PFRS administrative expenses as of December 31, 2021 |
| 3. | Subject: PFRS Annual Report for Year Ended June 30, 2021
From: Staff of the PFRS Board
<hr/> Recommendation: RECOMMEND BOARD APPROVAL of printing and publication of the Annual Report of the Oakland Police & Fire Retirement System Year Ended June 30, 2021 |
| 4. | REVIEW OF PENDING AUDIT COMMITTEE MEETING AGENDA ITEMS |
| 5. | OPEN FORUM |
| 6. | FUTURE SCHEDULING |
| 7. | ADJOURNMENT |

AN AUDIT/OPERATIONS COMMITTEE REGULAR MEETING of the Oakland Police and Fire Retirement System ("PFRS") was held on Wednesday, January 26, 2022 via Zoom Webinar.

Committee Members	▪ John C. Speakman	Chairperson
	▪ Kevin R. Traylor	Member
	▪ R. Steven Wilkinson	Member
Additional Attendees	▪ David Jones	PFRS Secretary & Plan Administrator (Excused)
	▪ Téir Jenkins	PFRS Staff Member
	▪ Maxine Visaya	PFRS Staff Member
	▪ Jennifer Logue	PFRS Legal Counsel
	▪ Annie Louie	Macias Gini & O'Connell LLP

The meeting was called to order at 9:32 a.m. PST

1. **PFRS Audit Committee Meeting Minutes** – Chairperson Speakman made a motion to approve the November 17, 2021 Audit Committee minutes, second by Member Traylor. Motion passed.

[SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

2. **Report of the Audit of PFRS Financial Statements for the Year Ending June 30, 2021** – Annie Louie from Macias, Gini, & O'Connell, LLP presented an informational report of the Audit of PFRS Financial Statements for the Year Ending June 30, 2021. Annie Louie noted it was a successful audit, again conducted entirely remotely. MGO has issued an unmodified opinion on the financial statements, which is the highest-level assurance that can be received, and did not identify any material weaknesses over internal controls. No deficiencies in the financial statements or reporting practices were found and there are no matters to report at this time. Staff Member Jenkins acknowledged the contribution of the Retirement Unit's accounting team as the complexity of this project increases and thanked them for their hard work.

MOTION: Member Wilkinson made a motion to accept the informational report regarding the Audit of PFRS Financial Statements for the Year-Ended June 30, 2021 and forward to the Board, second by Member Traylor. Motion passed.

[SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

3. **Administrative Expenses Report** – Staff Member Jenkins presented an informational report on PFRS's administrative expenditures as of November 30, 2021. PFRS has an approved annual budget of approximately \$3.5 million and have expensed just over \$957,000 fiscal year-to-date. Membership consisted of 714 retired members, which included 436 Police Members and 278 Fire Members.

MOTION: Chairperson Speakman made a motion to accept the administrative expenses report as of November 30, 2021 and forward to the Board for approval, second by Member Traylor. Motion passed.

[SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

4. **Resolution No. 8036** – Resolution approving request of Oakland Police and Fire Retirement System Trustee R. Steven Wilkinson to attend the 2022 CALAPRS General Assembly from March 5, 2022 through March 8, 2022 in San Diego, California and for reimbursement of registration fees and travel-related expenses in an amount not to exceed One Thousand Seven Hundred Dollars (\$1,700.00).

MOTION: Chairperson Speakman made a motion to recommend Board approval of Resolution No. 8036, second by Member Traylor. Motion passed.

[SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – ABSTAIN]
(AYES: 2 / NOES: 0 / ABSTAIN: 1)

5. **Review of Pending Audit Committee Meeting Agenda Items** – PFRS Staff Member Jenkins reported on the two (2) pending items on the Audit Committee Agenda. Item 1) the 2006 Management Audit remains ongoing due to COVID-19 restrictions in place; as we anticipate a return to the office we will turn our attention to this project now that we have concluded work on the current audit and annual report. Item 2) Monitoring & Updates regarding upcoming City Council Agendas with scheduled discussions of the 2026 Actuarial Funding Date is ongoing and PFRS Legal Counsel Logue had no updates to report.

6. **Open Forum** – No Report

7. **Future Scheduling** – The next regular Audit Committee meeting is tentatively scheduled to occur February 23, 2022.

8. **Adjournment** – Chairperson Speakman made a motion to adjourn, second by Member Wilkinson. Motion passed.

[SPEAKMAN – Y / WILKINSON – Y / TRAYLOR – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

The meeting adjourned at 9:43 a.m. PST

JOHN C. SPEAKMAN
COMMITTEE CHAIRPERSON

DATE

Table 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Administrative Budget Spent to Date (Preliminary)

As of December 31, 2021

	Approved Budget	December 2021		FYTD		Remaining		Percent Remaining	
Internal Administrative Costs									
PFRS Staff Salaries	\$ 1,212,000	\$ 86,996	\$ 533,191	\$ 678,809	56.0%				
Board Travel Expenditures	52,500	-	-	52,500	100.0%				
Staff Training	20,000	-	-	20,000	100.0%				
Staff Training - Tuition Reimbursement	7,500	-	-	7,500	100.0%				
Board Hospitality	3,600	-	-	3,600	100.0%				
Payroll Processing Fees	40,000	-	-	40,000	100.0%				
Miscellaneous Expenditures	40,000	655	4,575	35,425	88.6%				
Internal Service Fees (ISF)	88,000	-	49,501	38,499	43.7%				
Contract Services Contingency	50,000	-	-	50,000	100.0%				
Internal Administrative Costs Subtotal :	\$ 1,513,600	\$ 87,650	\$ 587,267	\$ 926,333	61.2%				
Actuary and Accounting Services									
Audit	\$ 49,000	\$ 14,004	\$ 42,504	\$ 6,496	13.3%				
Actuary	46,500	-	-	46,500	100.0%				
Actuary and Accounting Subtotal:	\$ 95,500	\$ 14,004	\$ 42,504	\$ 52,996	55.5%				
Legal Services									
City Attorney Salaries	\$ 188,000	\$ 15,080	\$ 59,004	\$ 128,996	68.6%				
Legal Contingency	150,000	-	-	150,000	100.0%				
Legal Services Subtotal:	\$ 338,000	\$ 15,080	\$ 59,004	\$ 278,996	82.5%				
Investment Services									
Money Manager Fees	\$ 1,353,000	\$ -	\$ 330,913	\$ 1,022,087	75.5%				
Custodial Fee	124,000	-	29,125	94,875	76.5%				
Investment Consultant	100,000	25,000	50,000	50,000	50.0%				
Investment Subtotal:	\$ 1,577,000	\$ 25,000	\$ 410,038	\$ 1,166,962	74.0%				
Total Operating Budget	\$ 3,524,100	\$ 141,735	\$ 1,098,812	\$ 2,425,288	68.82%				

Table 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Cash in Treasury (Fund 7100) - Preliminary

As of December 31, 2021

	December 2021
Beginning Cash as of 11/30/2021	\$ 6,478,735
Additions:	
City Pension Contribution - December	\$ 3,651,667
Investment Draw	\$ 1,000,000
Misc. Receipts	5,076
Total Additions:	\$ 4,656,743
Deductions:	
Pension Payment (November Pension Paid on 12/1/2021)	(4,327,395)
Expenditures Paid	(181,569)
Total Deductions	\$ (4,508,964)
Ending Cash Balance as of 12/31/2021*	<u><u>\$ 6,626,514</u></u>

* On 1/3/2022, December pension payment of appx \$4,299,800 will be made leaving a cash balance of \$2,327,000.

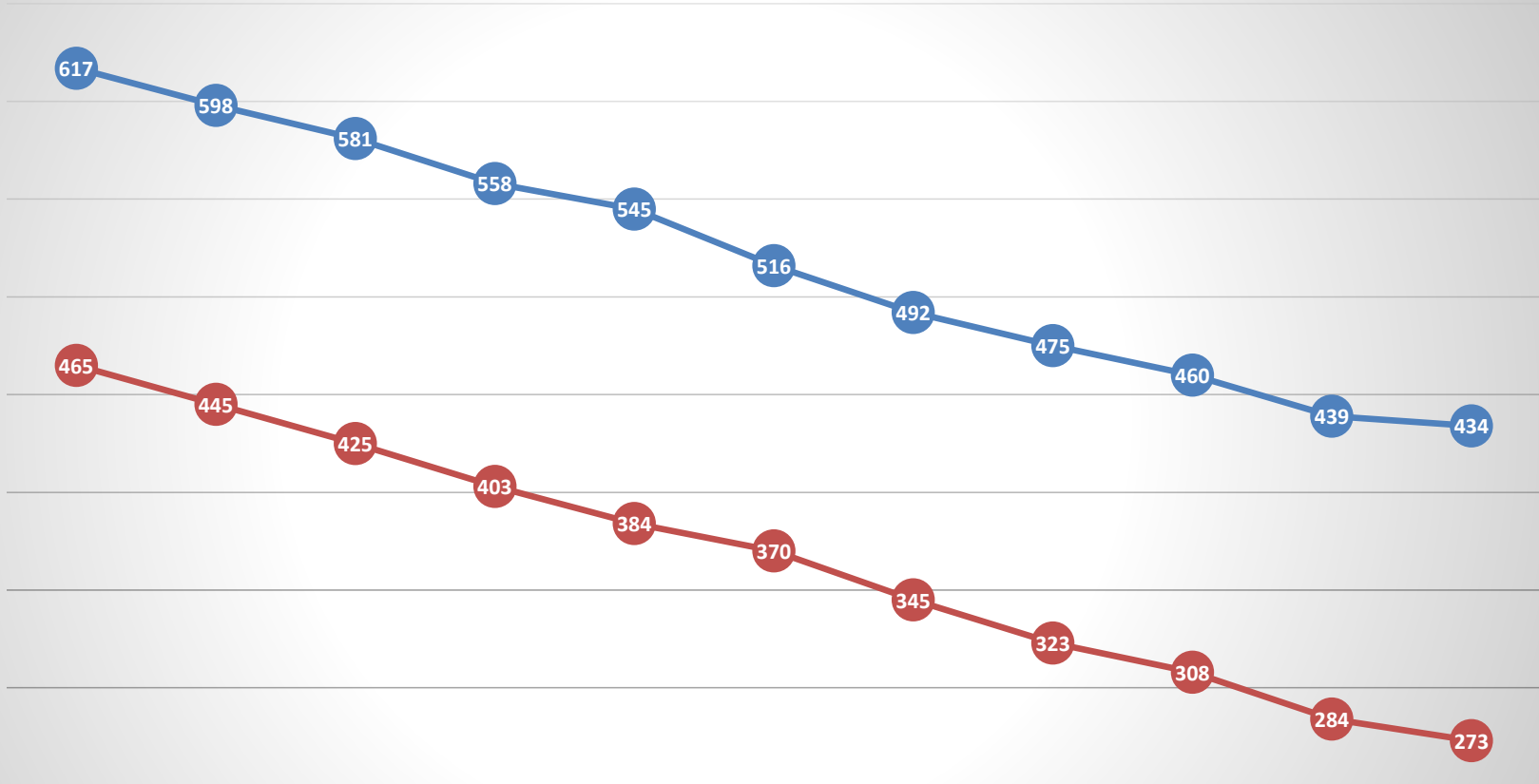
Table 3
CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Census
As of December 31, 2021

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Retiree	306	176	482
Beneficiary	128	97	225
<i>Total Retired Members</i>	434	273	707
<i>Total Membership:</i>	434	273	707

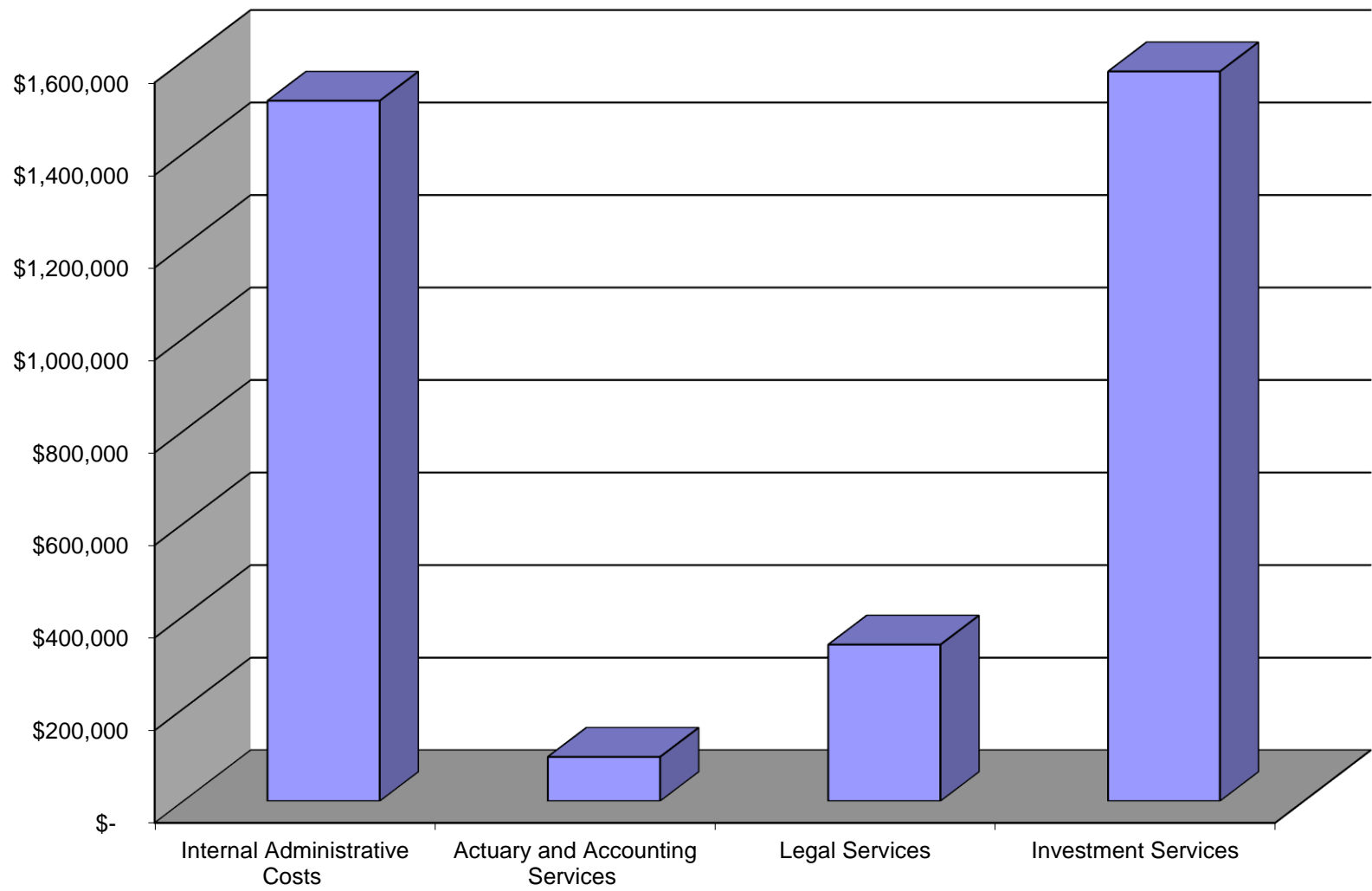
COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Service Retirement	290	137	427
Disability Retirement	133	124	257
Death Allowance	11	12	23
<i>Total Retired Members:</i>	434	273	707
<i>Total Membership as of December 31, 2021:</i>	434	273	707
<i>Total Membership as of June 30, 2021:</i>	439	284	723
<i>Annual Difference:</i>	-5	-11	-16

Oakland Police and Fire Retirement System Pension Plan Membership Count As of December 31, 2021 (FY 2012 - FY 2022)

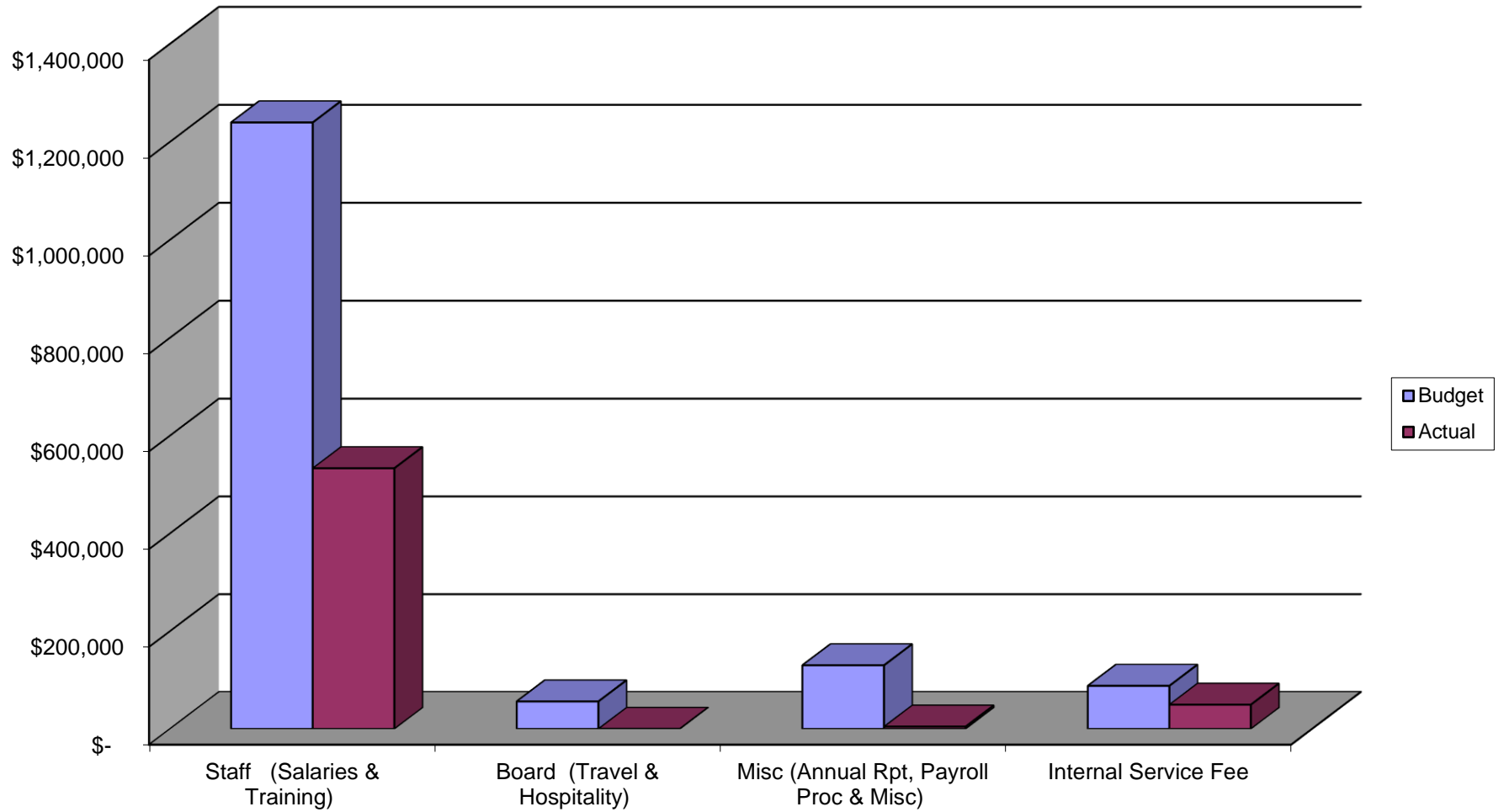


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 FYTD
Police	617	598	581	558	545	516	492	475	460	439	434
Fire	465	445	425	403	384	370	345	323	308	284	273
Total	1082	1043	1006	961	929	886	837	798	768	723	707

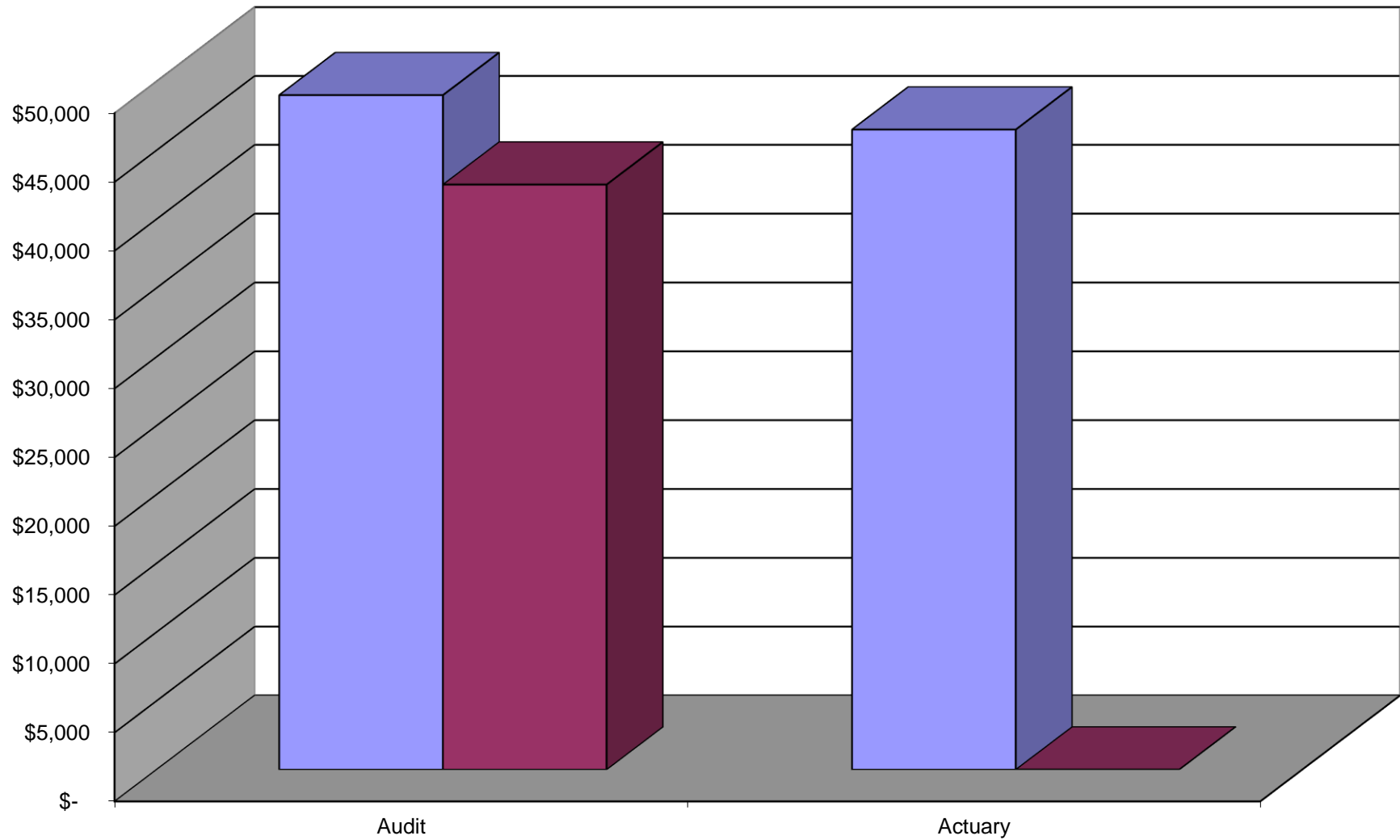
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Approved Budget
FY 2021-2022



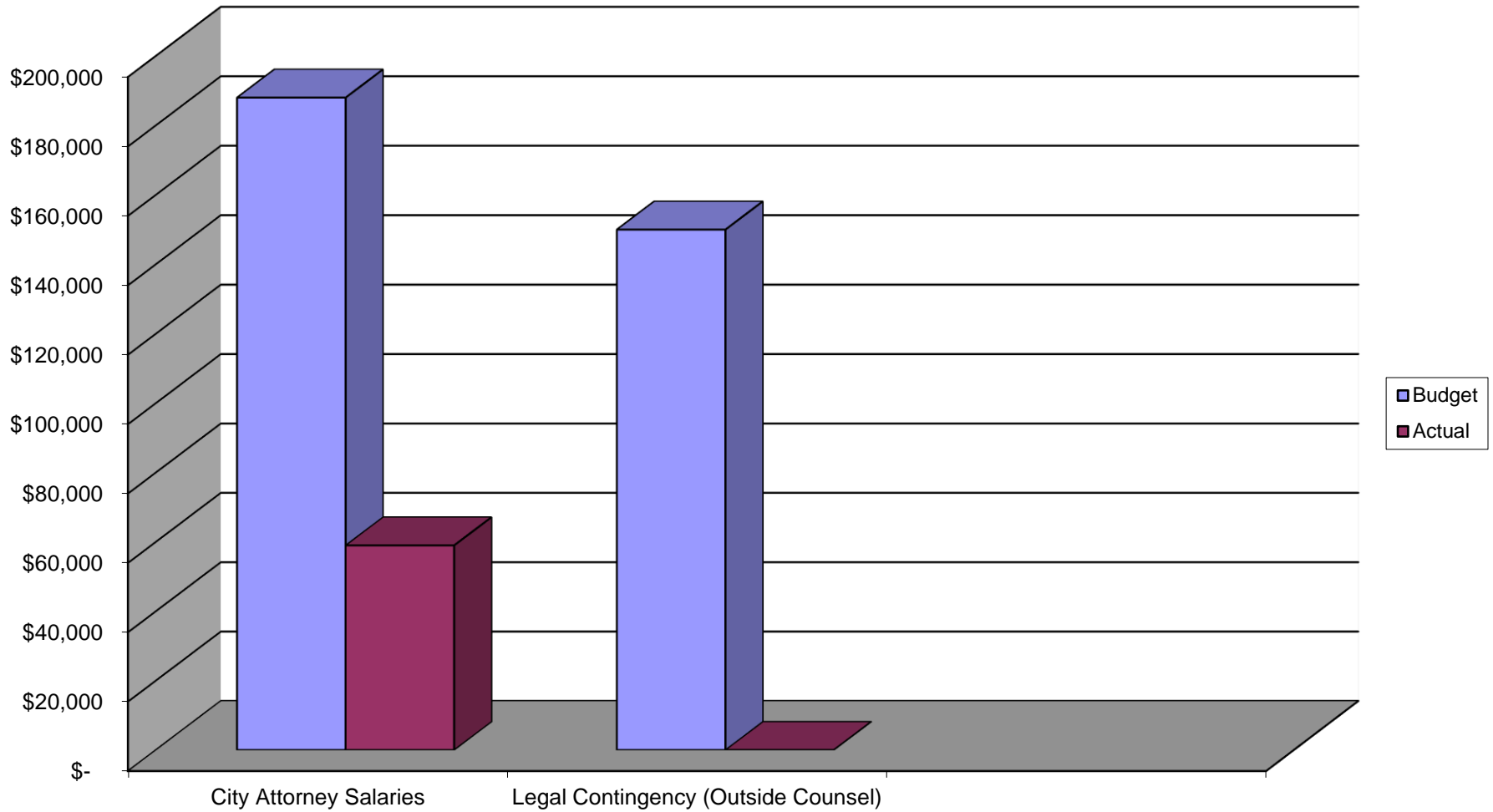
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs Actual as of December 31, 2021
Internal Administrative Costs



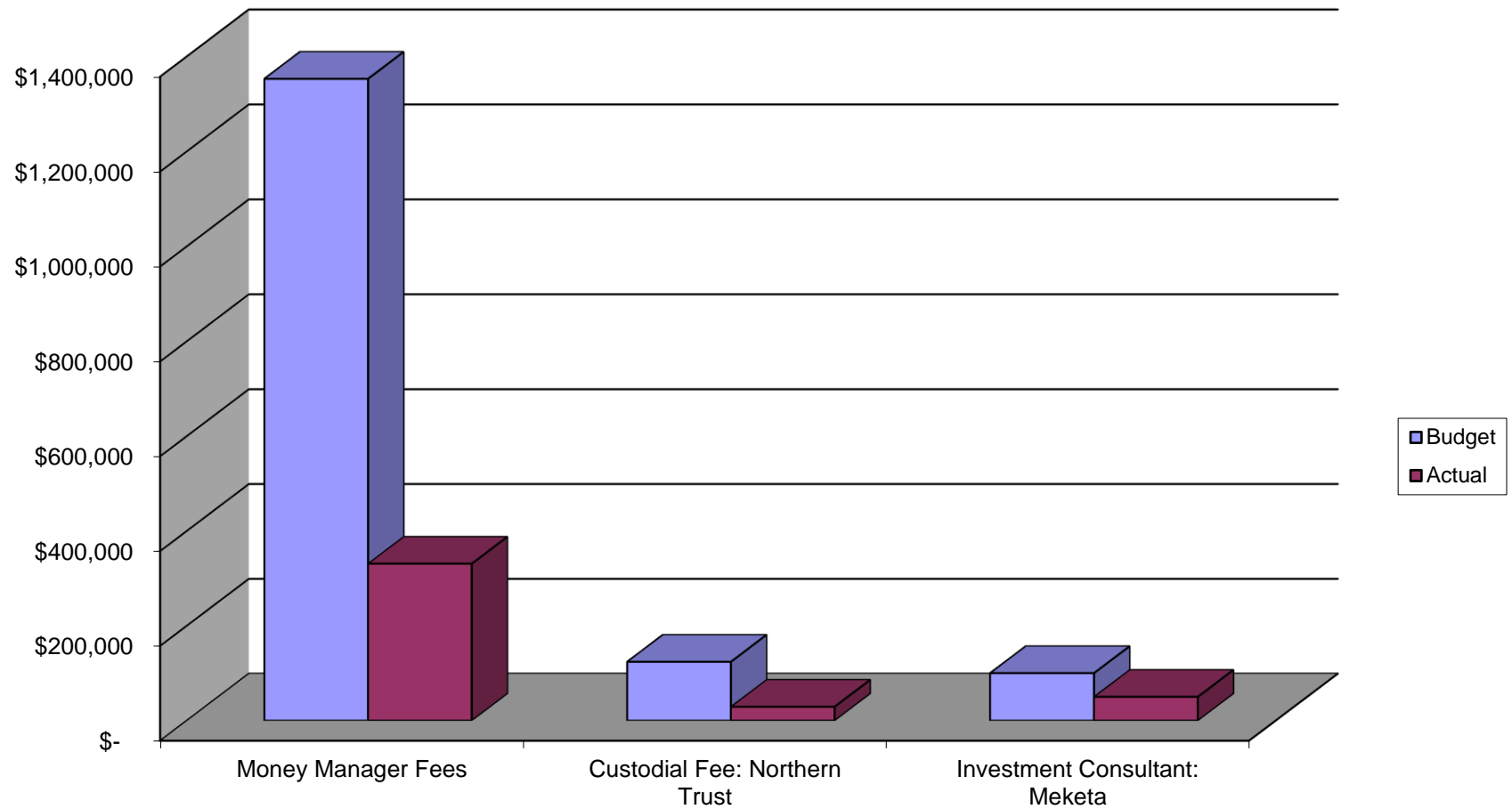
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of December 31, 2021
Actuary and Accounting Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of December 31, 2021
Legal Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of December 31, 2021
Investment Services





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

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** David F. Jones
Plan Administrator & Secretary

SUBJECT: Approve Printing & Distribution of PFRS Annual Report for the Fiscal Year Ended June 30, 2021 **DATE:** February 23, 2022

RECOMMENDATION

The PFRS Annual Report for the Fiscal Year ended June 30, 2021 has been completed and is submitted here for the Board approval for Printing and Distribution.

Respectfully submitted,

David F. Jones
Plan Administrator & Secretary
Oakland Police & Fire Retirement Systems

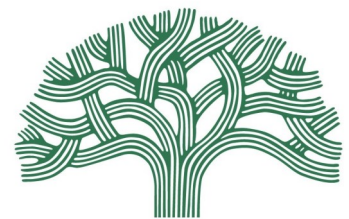
CITY OF OAKLAND

POLICE & FIRE RETIREMENT SYSTEM



Photo: Greg Linhares, City of Oakland

ANNUAL REPORT
Fiscal Year Ended June 30, 2021



City of Oakland

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IN MEMORIAM

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 -Print Production: City of Oakland Copy Services

SECTION 1

INTRODUCTION



*Manny Aquino
Police Officer
Served with Oakland
Police Department
1971 to 1993*

LETTERS OF TRANSMITTAL

CITY OF OAKLAND



150 FRANK H. OGAWA PLAZA, SUITE 3349 · OAKLAND, CALIFORNIA 94612-2021

Finance Department
Treasury Bureau
Retirement Unit

(510) 238-3307
FAX (510) 238-7129
CA RELAY 711

February 23, 2022

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

Honorable Mayor Schaaf and Members of the City Council:

I am pleased to present the annual report of the Oakland Police and Fire Retirement System for the fiscal year ended June 30, 2021. Provided in this report are the Plan's Financial Information, Investment Performance, and Actuarial Valuation and Statistical Information for the corresponding year.

The members of the Board express their appreciation to the Mayor and City Council, City Administrator, 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." with a stylized flourish at the end.

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

LETTERS OF TRANSMITTAL

CITY OF OAKLAND



150 FRANK H. OGAWA PLAZA, SUITE 3349 · OAKLAND, CALIFORNIA 94612-2021

Finance Department
Treasury Bureau
Retirement Unit

(510) 238-3307
FAX (510) 238-7129
CA RELAY 711

February 23, 2022

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 ended June 30, 2021.

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) and the reporting requirements prescribed by the Government Finance Officers' Association of the United States and Canada (GFOA).

The method for recording additions and deductions is on an accrual basis. Additions are taken into account when earned, regardless of the date of the collection, and deductions 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 include 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, 2021 were \$133,840,217.

LETTERS OF TRANSMITTAL

This amount includes a net investment income of \$90,191,309. Net investment income includes appreciation or depreciation in fair value of investments, interest income and dividend income less investment expenses during the fiscal year. In addition, the City contributed \$43,648,000 during the fiscal year. As of June 30, 2021, all the System's members are retired.

DEDUCTIONS

Total deductions from the plan in the fiscal year ended June 30, 2021 were \$54,282,032. This amount includes deductions of \$52,697,378 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 June 30, 2020. Details regarding this actuarial study can be found in Section 4 of this annual report.

As of the most recent actuary study dated June 30, 2020, the System's Unfunded Actuarial Liability is approximately \$225,547,000, and the System had a Funded Ratio of 63.5 percent on a Market Value of Assets (MVA) basis. During fiscal year 2021, the City of Oakland contributed \$43,648,000 to the System. The next required City contribution is projected to be approximately \$43,820,000 in fiscal year 2021.

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 Equity, International Equity, Fixed Income Instruments, Credit, Covered Calls, and Crisis Risk Offset (CRO). In addition, the Policy also allocates among the different investment management styles.

Total investment income resulted in a net gain of \$90,191,309 in fiscal year 2021. The actual money-weighted annual investment return for fiscal year 2021 was 24.4%. 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.

LETTERS OF TRANSMITTAL

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

Total Returns %			
	1 Year	3 Year	5 Year
Total Fund	24.4%	10.2%	11.4%

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 F. 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
Jennifer Logue
Supervising Attorney



Kevin R. Traylor
Alternating Fire/Police Department Representative



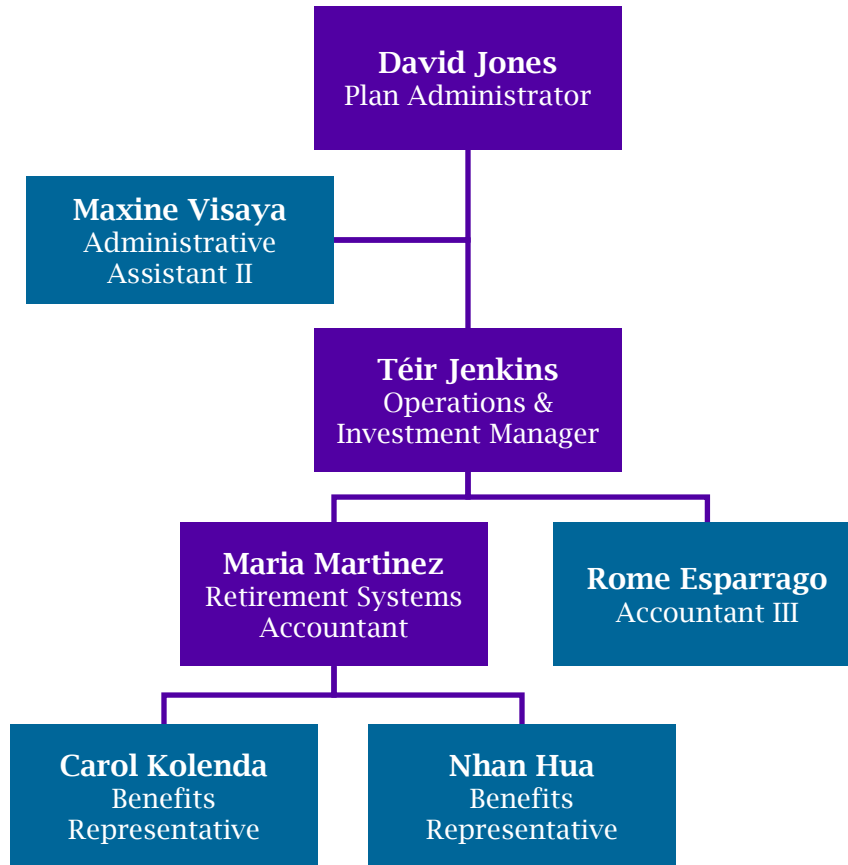
Robert Nichelini
Police Representative



Erin Roseman
Mayoral Designate

ADMINISTRATIVE STAFF

Retirement Unit



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	Meketa Investment Group

A complete list of Investment Professionals is included on page 53 of this Annual Report.

BOARD MEETING INFORMATION

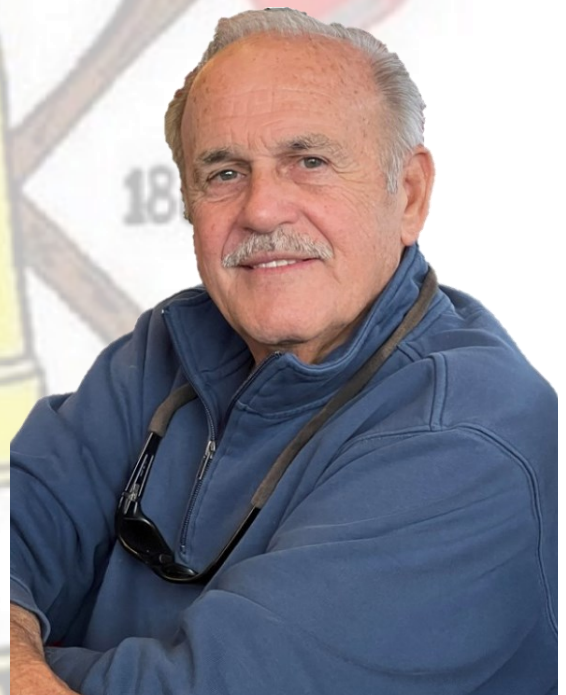
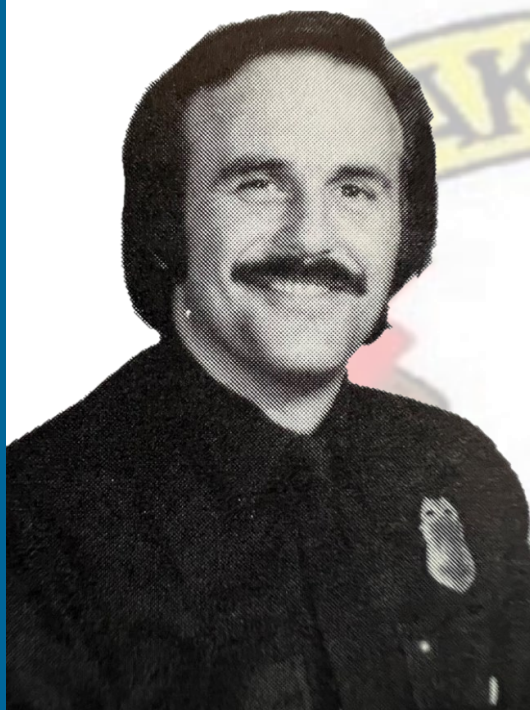
On-Site Meeting Location	1 Frank H. Ogawa Plaza, Oakland, CA 94612
Virtual Meeting	Zoom Webinar
Date	Last Wednesday of each month

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

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SECTION 2

FINANCIAL



Robert Bramante
Lieutenant of Fire
Served with Oakland Fire Department
1968 to 1997

Independent Auditor's Report

For Years Ended June 30, 2021 and 2020



Certified
Public
Accountants

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, 2021 and 2020, and the related notes to the financial statements, which collectively comprise the System's basic 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 fiduciary net position of the System as of June 30, 2021 and 2020, and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

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

www.mgocpa.com

Independent Auditor's Report

For Years Ended June 30, 2021 and 2020

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 audits 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 basic 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 basic financial statements. These sections have not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.



Walnut Creek, California
December 8, 2021

Management's Discussion & Analysis

(Unaudited)

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 years ended June 30, 2021 and 2020. We encourage readers to consider the information presented here in conjunction with the System's financial statements that follow this section. These discussions and analyses are presented in the following sections:

- Organizational Overview and Highlights
- Financial Statement Overview
- Financial Analysis: 2021 vs. 2020
- Financial Analysis: 2020 vs. 2019
- 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, 2021 and 2020, the employee contribution rate was 0% for both years. There are no active participants in the Plan as of June 30, 2021 and 2020.

Management's Discussion & Analysis

(Unaudited)

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, 2021, the total pension liability of \$578.6 million less the fiduciary net position of \$458.5 million results in a net pension liability of approximately \$120.0 million. The fiduciary net position as a percentage of the total pension liability is 79.3 %.

As of June 30, 2020, the total pension liability of \$604.0 million less the fiduciary net position of \$379.0 million results in a net pension liability of approximately \$225.0 million. The fiduciary net position as a percentage of the total pension liability is 62.7%.

The System membership at June 30, 2021 is 723, which includes 490 retirees and 233 beneficiaries. The System membership at June 30, 2020 is 768. The following are the significant assumptions used to compute contribution requirements in the July 1, 2020 Actuarial Valuation Report:

- Select and ultimate rates, equal to 5.29% single equivalent investment rate of return
- 2.75% inflation rate, U.S.
- 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 years 2021 and 2020, the City contributions were \$43.6 million and \$43.4 million to the System. The next required City contribution is projected to be approximately \$43.8 million in fiscal year 2022.

FINANCIAL STATEMENT OVERVIEW

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

Management's Discussion & Analysis

(Unaudited)

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 the Basic Financial Statements* and *Required Supplementary Information* are found starting on page 24 and page 47, respectively.

Management's Discussion & Analysis

(Unaudited)

FINANCIAL ANALYSIS 2021 vs. 2020

Table 1 summarizes net position restricted for pensions as of June 30, 2021 and 2020:

Table 1 Statements of Fiduciary Net Position As of June 30, 2021 and 2020				
	June 30		Change	
	2021	2020	Amount	Percentage
Assets				
Cash and cash equivalents	\$ 6,323,835	\$ 6,345,777	\$ (21,942)	-0.3%
Receivables	2,469,425	8,099,428	(5,630,003)	-69.5%
Investments	<u>503,773,621</u>	<u>404,700,887</u>	<u>99,072,734</u>	24.5%
Total Assets	<u>512,566,881</u>	<u>419,146,092</u>	<u>93,420,789</u>	22.3%
Liabilities				
Accounts payable	1,110	8,161	(7,051)	-86.4%
Benefits payable	4,294,620	4,431,728	(137,108)	-3.1%
Investments payable	422,993	13,548,872	(13,125,879)	-96.9%
Investment management fees payable	361,228	278,835	82,393	29.5%
Securities lending liabilities	<u>48,954,055</u>	<u>21,903,806</u>	<u>27,050,249</u>	123.5%
Total liabilities	<u>54,034,006</u>	<u>40,171,402</u>	<u>13,862,604</u>	34.5%
Net Position				
Restricted for pensions	<u>\$ 458,532,875</u>	<u>\$ 378,974,690</u>	<u>\$ 79,558,185</u>	21.0%

Net position restricted for pensions increased \$79.6 million from June 30, 2020 to June 30, 2021. The main sources of this increase were City contribution of \$43.6 million and net investment income of \$90.2 million were more than offset by benefit payments of \$52.7 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.

Management's Discussion & Analysis

(Unaudited)

Table 2 summarizes changes in net position restricted for pensions for the years ended June 30, 2021 and 2020.

Table 2 Statements of Changes in Fiduciary Net Position For the Years Ended June 30, 2021 and 2020				
	June 30		Change	
	2021	2020	Amount	Percentage
Additions				
Contributions	\$ 43,648,000	\$ 43,409,000	\$ 239,000	0.6%
Net investment income	90,191,309	6,996,833	83,194,476	1189.0%
Other additions	908	132	776	587.9%
Total additions	<u>133,840,217</u>	<u>50,405,965</u>	<u>83,434,252</u>	165.5%
Deductions				
Benefits to members and beneficiaries	52,697,378	54,619,079	(1,921,701)	-3.5%
Administrative expenses	<u>1,584,654</u>	<u>1,522,910</u>	<u>61,744</u>	4.1%
Total deductions	<u>54,282,032</u>	<u>56,141,989</u>	<u>(1,859,957)</u>	-3.3%
Changes in net position	79,558,185	(5,736,024)	85,294,209	1487.0%
Net position restricted for pensions				
Beginning of year	<u>378,974,690</u>	<u>384,710,714</u>	<u>(5,736,024)</u>	-1.5%
End of year	<u>\$ 458,532,875</u>	<u>\$ 378,974,690</u>	<u>\$ 79,558,185</u>	21.0%

During fiscal year 2021, the City of Oakland contributed \$43.6 million to the System. In addition, the System's net investment income for the year ended June 30, 2021 was \$90.1 million, mainly due to net appreciation in fair value of the investment portfolio. The time-weighted annual return for the year ended June 30, 2021 was 24.2%, compared to a benchmark return of 22.3% and an actuarial expected rate of return of 5.29 %.

Management's Discussion & Analysis

(Unaudited)

FINANCIAL ANALYSIS 2020 vs. 2019

Table 3 summarizes net position restricted for pensions as of June 30, 2020 and 2019.

Table 3 Statements of Fiduciary Net Position As of June 30, 2020 and 2019				
	June 30		Change	
	2020	2019	Amount	Percentage
Assets				
Cash and cash equivalents	\$ 6,345,777	\$ 6,484,343	\$ (138,566)	-2.1%
Receivables	8,099,428	4,427,785	3,671,643	82.9%
Investments	404,700,887	420,244,755	(15,543,868)	-3.7%
Total Assets	<u>419,146,092</u>	<u>431,156,883</u>	<u>(12,010,791)</u>	-2.8%
Liabilities				
Accounts payable	8,161	15,871	(7,710)	-48.6%
Benefits payable	4,431,728	4,596,563	(164,835)	-3.6%
Investments payable	13,548,872	7,464,071	6,084,801	81.5%
Investment management fees payable	278,835	351,847	(73,012)	-20.8%
Securities lending liabilities	<u>21,903,806</u>	<u>34,017,817</u>	<u>(12,114,011)</u>	-35.6%
Total liabilities	<u>40,171,402</u>	<u>46,446,169</u>	<u>(6,274,767)</u>	-13.5%
Net Position				
Restricted for pensions	<u>\$ 378,974,690</u>	<u>\$ 384,710,714</u>	<u>\$ (5,736,024)</u>	-1.5%

Net position restricted for pensions decreased \$5.7 million from June 30, 2019 to June 30, 2020. The main sources of this decrease were from benefit payments of \$54.6 million offset by contribution of \$43.4 million and net investment income of \$7.0 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.

Management's Discussion & Analysis

(Unaudited)

Table 4 summarizes changes in net position restricted for pensions for the years ended June 30, 2020 and 2019.

Table 4 Statements of Changes in Fiduciary Net Position For the Years Ended June 30, 2020 and 2019				
	June 30		Change	
	2020	2019	Amount	Percentage
Additions				
Contributions	\$ 43,409,000	\$ 44,821,000	\$ (1,412,000)	-3.2%
Net investment income	6,996,833	21,551,868	(14,555,035)	-67.5%
Other additions	132	19,949	(19,817)	-99.3%
Total additions	<u>50,405,965</u>	<u>66,392,817</u>	<u>(15,986,852)</u>	-24.1%
Deductions				
Benefits to members and beneficiaries	54,619,079	56,212,013	(1,592,934)	-2.8%
Administrative expenses	<u>1,522,910</u>	<u>1,446,361</u>	<u>76,549</u>	5.3%
Total deductions	<u>56,141,989</u>	<u>57,658,374</u>	<u>(1,516,385)</u>	-2.6%
Changes in net position	(5,736,024)	8,734,443	(14,470,467)	-165.7%
Net position restricted for pensions				
Beginning of year	<u>384,710,714</u>	<u>375,976,271</u>	<u>8,734,443</u>	2.3%
End of year	<u>\$ 378,974,690</u>	<u>\$ 384,710,714</u>	<u>\$ (5,736,024)</u>	-1.5%

During fiscal year 2020, the City of Oakland contributed \$43.4 million to the System. In addition, the System's net investment income for the year ended June 30, 2020 was \$7.0 million, mainly due to net appreciation in fair value of the investment portfolio as a result of robust returns on investments. The time-weighted annual return for the year ended June 30, 2020 was 2.3%, compared to a benchmark return of 4.6% and an actuarial expected rate of return of 5.37%.

Management's Discussion & Analysis

(Unaudited)

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 System
City of Oakland
150 Frank H Ogawa Plaza, Suite 3349
Oakland, CA 94612**

Financial Statements

Oakland Police and Fire Retirement System Statements of Fiduciary Net Position June 30, 2021 and 2020

	2021	2020
Assets		
Cash and Cash Equivalents	\$ 6,323,835	\$ 6,345,777
Receivables:		
Interest Receivable	758,877	720,730
Dividends Receivable	271,634	122,028
Investments Receivable	1,228,684	7,005,167
Retired Members and Beneficiaries	103,688	137,530
Miscellaneous	106,542	113,973
Total Receivables	2,469,425	8,099,428
Investments, at Fair Value:		
Short-Term Investments	7,786,908	14,097,351
Bonds	134,380,629	123,135,071
Domestic Equities and Mutual Funds	210,506,356	157,386,763
International Equities and Mutual Funds	58,539,803	44,599,350
Alternative Investments	44,016,067	43,589,826
Foreign Currency Contracts, Net	(7,612)	(20,041)
Securities Lending Collateral	48,551,470	21,912,567
Total Investments	503,773,621	404,700,887
Total Assets	512,566,881	419,146,092
Liabilities		
Accounts Payable	1,110	8,161
Benefits Payable	4,294,620	4,431,728
Investments Payable	422,993	13,548,872
Investment Management Fees Payable	361,228	278,835
Securities Lending Liabilities	48,954,055	21,903,806
Total Liabilities	54,034,006	40,171,402
Net Position Restricted for Pensions	\$ 458,532,875	\$ 378,974,690

See accompanying notes to the basic financial statements.

Financial Statements

Oakland Police and Fire Retirement System Statements of Changes in Fiduciary Net Position Years Ended June 30, 2021 and 2020		
	2021	2020
Additions		
Contributions from the City	\$ 43,648,000	\$ 43,409,000
Investment Income:		
Net Appreciation in Fair Value of Investments	84,719,944	677,414
Interest	3,965,167	4,598,569
Dividends	2,735,230	2,775,312
Less: Investment Expenses	(1,354,640)	(1,173,450)
Securities Lending Income:		
Securities Lending Earnings	105,651	521,009
Securities Lending Expenses, Net of Rebates	19,957	(402,021)
Net Securities Lending Income	125,608	118,988
Net Investment Income	90,191,309	6,996,833
Claims and Settlements	26	132
Other Income	882	-
Total Additions	133,840,217	50,405,965
Deductions		
Benefits to Members and Beneficiaries:		
Retirement	32,157,272	33,125,069
Disability	18,803,904	19,696,369
Death	1,736,202	1,797,641
Total Benefits to Members and Beneficiaries	52,697,378	54,619,079
Administrative Expenses	1,584,654	1,522,910
Total Deductions	54,282,032	56,141,989
Change in Net Position	79,558,185	(5,736,024)
Net Position Restricted for Pensions		
Beginning of Year	378,974,690	384,710,714
End of Year	\$458,532,875	\$ 378,974,690

See accompanying notes to the basic financial statements.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020, 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 the Finance Department, Controller's Bureau, City of Oakland, 150 Frank H. Ogawa Plaza, Suite 6353; Oakland, California 94612.

a) System Membership

At June 30, 2021 and 2020, the System membership consisted of only retirees and beneficiaries. The System's membership is as follows:

Retirees and Beneficiaries Currently Receiving Benefits		
	2021	2020
Police	439	460
Fire	284	308
Total	723	768

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

2. Summary of Significant Accounting Policies

a) Basis of Presentation

The financial statements are prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. The System adheres to the reporting requirements established by the Governmental Accounting Standards Board (GASB).

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. Purchases and sales of investments are recorded on a trade date basis.

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, contributed a percentage of their earned salaries based upon entry age as determined by consulting actuaries. Since fiscal year 2015, there were no remaining active members in the System.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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 \$43.65 million and \$43.41 million in the years ended June 30, 2021 and 2020, respectively. The next required contribution for fiscal year 2022 is \$43.82 million.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020, the number of external investment managers was twelve and twelve, respectively.

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 fixed income instruments and some exposure to investments below an investment grade rating, 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020:

Target Allocation		
Asset Class	June 30, 2021	June 30, 2020
Fixed Income	21%	21%
Credit	2	2
Covered Calls	5	5
Domestic Equity	40	40
International Equity	12	12
Crisis Risk Offset	20	20
Total	100%	100%

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, 2021, the System's investments in the Northern Trust Russell 1000 Growth Index Fund represented 24.23% of its fiduciary net position. As of June 30, 2020, the System's investment in the Northern Trust Russell 1000 Growth Index Fund and the Parametric Research Affiliates Systematic U.S. Fund represented 22.5% and 6.3% respectively, of its fiduciary net position.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020, the annual money-weighted rates of return on pension plan investments, net of pension plan investment expenses, were 24.43% and 2.04%, respectively.

d) Cash and Cash Equivalents

As of June 30, 2021 and 2020, 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, 2021 and 2020 basic financial statements. As of June 30, 2021 and 2020, the System's share of the City's investment pool totaled \$6,318,773 and \$6,340,768, respectively. The System also had cash not included in the City's investment pool. As of June 30, 2021 and 2020, the System's cash and cash deposits not held in the City's investment pool totaled \$5,062 and \$5,009, respectively.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021:

Recurring Fair Value Measurements As of June 30, 2021			
	2021		
	Level One	Level Two	Total
Investments by fair value level:			
Bonds	\$ 12,635,465	\$ 104,543,460	\$ 117,178,925
Domestic Equities and Mutual Funds	93,555,401	707,364	94,262,765
International Equities and Mutual Funds	58,539,803	-	58,539,803
Alternative Investments	43,940,518	75,549	44,016,067
Total investments by fair value level	<u>\$ 208,671,187</u>	<u>\$ 105,326,373</u>	<u>\$ 313,997,560</u>
Investments measured at net asset value (NAV):			
Short-Term Investment Funds			7,786,908
Fixed Income Funds			17,201,704
Domestic Equities and Mutual Funds			116,243,591
Foreign Currency Contracts, Net			(7,612)
Securities Lending Collateral - Short-Term Investment Fund			48,551,470
Total investments measured at NAV			<u>189,776,061</u>
Total investments measured at fair value			<u>\$ 503,773,621</u>

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

The System has the following recurring fair value measurements as of June 30, 2020:

Recurring Fair Value Measurements As of June 30, 2020			
	2020		
	Level One	Level Two	Total
Investments by fair value level:			
Short-Term Investment Funds	\$ -	\$ 6,023,223	\$ 6,023,223
Bonds	14,422,008	100,740,951	115,162,959
Domestic Equities and Mutual Funds	66,325,124	-	66,325,124
International Equities and Mutual Funds	44,599,350	-	44,599,350
Alternative Investments	27,764,888	-	27,764,888
Total investments by fair value level	<u>\$ 153,111,370</u>	<u>\$ 106,764,174</u>	<u>\$ 259,875,544</u>
Investments measured at net asset value (NAV):			
Short-Term Investment Funds			8,074,128
Fixed Income Funds			7,972,112
Domestic Equities and Mutual Funds			91,061,639
Hedge Fund			15,824,938
Foreign Currency Contracts, Net			(20,041)
Securities Lending Collateral - Short-Term Investment Fund			21,912,567
Total investments measured at NAV			<u>144,825,343</u>
Total investments measured at fair value			<u>\$ 404,700,887</u>

Investments measured at NAV represent commingled funds where fair value is measured based on the System's pro rata share of the total NAV. As of June 30, 2020, the System's hedge fund investment has monthly liquidity with a notice period of 5 days.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, foreign currency contracts, and securities lending investments was 7.37 years as of June 30, 2021, and 7.69 years as of June 30, 2020.

The following summarizes the System's fixed income investments by category as of June 30, 2021 and 2020:

Short-Term Investment Duration				
Investment Type	2021		2020	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Short-Term Investment Funds	\$7,786,908	n/a	\$8,074,128	n/a
U.S. Treasury Bills	-	n/a	6,023,223	0.21
Foreign Currency Exchange Contracts, Net	(7,612)	n/a	(20,041)	n/a

Long-Term Investment Duration				
Investment Type	2021		2020	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Fixed Income Investments				
U.S. Government Bonds				
U.S. Treasuries	\$ 18,816,292	5.79	\$ 8,153,603	8.03
Government Agencies	32,516,334	8.26	39,171,830	7.23
Total U.S. Government Bonds	51,332,626		47,325,433	
Corporate and Other Bonds				
Corporate Bonds	82,957,273	7.38	75,809,638	7.89
Other Government Bonds	90,730	7.90	-	n/a
Total Corporate and Other Bonds	83,048,003		75,809,638	
Total Fixed Income Investments	\$ 134,380,629	7.37	\$123,135,071	7.69
Securities Lending Collateral	\$ 48,551,470		\$ 21,912,567	

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021:

Investments in CMOs at June 30, 2021				
Investment Type	Weighted Average Coupon Rate	Weighted Average Maturity (Years)	Fair Value	Percent of Total Investments Fair Value
Mortgage-backed securities	2.72%	23.28	\$20,789,617	4.13%

The following are the System's investments in CMOs at June 30, 2020:

Investments in CMOs at June 30, 2020				
Investment Type	Weighted Average Coupon Rate	Weighted Average Maturity (Years)	Fair Value	Percent of Total Investments Fair Value
Mortgage-backed securities	3.07%	23.76	\$27,010,178	6.67%

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020:

Short-Term Investment Ratings				
Investment Type	2021		2020	
	S&P / Moody's Rating	Fair Value	S&P / Moody's Rating	Fair Value
Short-Term Investment Funds	Not Rated	\$7,786,908	Not Rated	\$8,074,128
U.S. Treasury Bills	n/a	-	AA/Aaa	6,023,223
Foreign Currency Exchange Contracts, Net	Not Rated	(7,612)	Not Rated	(20,041)

Long-Term Investment Ratings				
S&P / Moody's Rating	2021		2020	
	Fair Value	Percentage of Total Fair Value	Fair Value	Percentage of Total Fair Value
AAA/Aaa	\$ 53,058,908	39.4%	\$ 48,352,450	39.3%
AA/Aa	34,226,943	25.5%	26,839,048	21.8%
A/A	14,322,857	10.7%	16,270,507	13.2%
BBB/Baa	19,359,029	14.4%	22,504,035	18.3%
BB/Ba	1,831,903	1.4%	1,388,389	1.1%
B/B	9,550,906	7.1%	313,940	0.3%
CCC/CCC	-	-	7,466,702	6.0%
Unrated	2,030,083	1.5%	-	-
	<u>\$ 134,380,629</u>	<u>100.00%</u>	<u>\$123,135,071</u>	<u>100.00%</u>

i) Custodial Credit Risk

Securities Lending Ratings		
S&P / Moody's Rating	2021 Fair Value	2020 Fair Value
Not Rated	\$ 48,551,470	\$ 21,912,567

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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 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 exchange 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

The following summarizes the System's investments denominated in foreign currencies as of June 30, 2021 and 2020:

Investments Denominated in Foreign Currencies As of June 30, 2021 and 2020		
Foreign Currency	Fair Value	
	June 30, 2021	June 30, 2020
Australian Dollar	\$ 1,456,518	\$ 1,165,827
Brazilian Real	901,768	684,785
British Pound	3,406,619	2,900,002
Canadian Dollar	3,395,211	2,916,358
Danish Krone	1,386,946	108,321
Euro	8,778,172	5,257,480
Hong Kong Dollar	3,664,544	2,540,943
Indonesian Rupiah	221,352	179,056
Japanese Yen	5,888,554	5,606,895
Mexican Peso	108,650	652,060
New Israeli Shekel	-	270,619
Norwegian Krone	-	158,176
Singapore Dollar	839,140	506,973
South African Rand	575,339	254,493
South Korean Won	212,370	-
Swedish Krona	1,488,233	837,087
Swiss Franc	2,344,951	2,093,668
Turkish Lira	524,786	612,927
Total	<u>\$ 35,193,153</u>	<u>\$ 26,745,670</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, debentures, corporate debt securities, notes, and mortgages or other obligations held in U.S. Dollar. The minimum collateral level is 105% of market value of loaned securities for any securities held in currencies other than the U.S. Dollar. 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

As of June 30, 2021 and 2020, 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, 2021 and 2020:

Securities Lending as of June 30, 2021			
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	\$ 9,621,902	\$ 5,095,643	\$ 14,717,545
U.S. Corporate Bonds	8,852,719	-	8,852,719
U.S. Equities	29,098,075	97,296	29,195,371
Non-U.S. Equities	182,194	514,214	696,408
Total investments in securities lending transactions	<u>\$ 47,754,890</u>	<u>\$ 5,707,153</u>	<u>\$ 53,462,043</u>
Collateral Received	<u>\$ 48,954,055</u>	<u>\$ 5,840,751</u>	<u>\$ 54,794,806</u>

Securities Lending as of June 30, 2020			
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	\$ 4,674,146	\$ 5,349,244	\$ 10,023,390
U.S. Corporate Bonds	7,480,228	-	7,480,228
U.S. Equities	9,388,017	470,835	9,858,852
Total investments in securities lending transactions	<u>\$ 21,542,391</u>	<u>\$ 5,820,079</u>	<u>\$ 27,362,470</u>
Collateral Received	<u>\$ 21,903,806</u>	<u>\$ 5,913,897</u>	<u>\$ 27,817,703</u>

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

l) 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, 2021 and 2020, 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 2.c). 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020:

As of and for the Year Ended June 30, 2021			
Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Forwards			
Foreign Currency Exchange Contracts	\$ -	\$ (7,612)	\$ -
Options			
Equity Contracts	72	(351,506)	(58,431)
Swaps			
Credit Contracts	1,990,000	50,816	7,768
Total	<u>\$ 1,990,072</u>	<u>\$ (308,302)</u>	<u>\$ (50,663)</u>

As of and for the Year Ended June 30, 2020			
Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Forwards			
Foreign Currency Exchange Contracts	\$ -	\$ (20,041)	\$ -
Options			
Equity Contracts	69	(378,167)	108,759
Rights/Warrants			
Rights/Warrants	5,630	-	-
Swaps			
Credit Contracts	1,920,000	(11,645)	32,754
Total	<u>\$ 1,925,699</u>	<u>\$ (409,853)</u>	<u>\$ 141,513</u>

Counterparty Credit Risk

The System is not exposed to credit risk on non-exchange traded derivative instruments that are in liability positions. As of June 30, 2021 and 2020, the System held forward currency contracts in liability positions of \$7,612 and \$20,041, respectively. The System's counterparties to these contracts held credit ratings of A or better, as assigned by one or more of the major credit rating organizations (S&P, Moody's 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, 2021 and 2020, 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

Interest Rate Risk

The tables below describe the maturity periods of the derivative instruments exposed to interest rate risk at June 30, 2021 and 2020.

Derivative Interest Rate Risk as of June 30, 2021			
Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Forwards			
Forward Foreign Currency Exchange Contracts	\$ (7,612)	\$ (7,612)	\$ -
Options			
Equity Contracts	(351,506)	(351,506)	-
Swaps			
Credit Contracts	50,816	-	50,816
Total	<u>\$ (308,302)</u>	<u>\$ (359,118)</u>	<u>\$ 50,816</u>

Derivative Interest Rate Risk as of June 30, 2020			
Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Forwards			
Forward Foreign Currency Exchange Contracts	\$ (20,041)	\$ (20,041)	\$ -
Options			
Equity Contracts	(378,167)	(378,167)	-
Swaps			
Credit Contracts	(11,645)	-	(11,645)
Total	<u>\$ (389,812)</u>	<u>\$ (378,167)</u>	<u>\$ (11,645)</u>

Foreign Currency Risk

At June 30, 2021 and 2020, the System is exposed to foreign currency risk on \$7,612 and \$20,041, respectively, of its investments in forwards denominated in the Mexican peso.

Contingent Features

At June 30, 2021 and 2020, the System held no positions in derivatives containing contingent features.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

5. Net Pension Liability

The components of the net pension liability of the City at June 30, 2021 and 2020, are as follows:

Net Pension Liability of the City At June 30, 2021 and 2020		
	June 30, 2021	June 30, 2020
Total pension liability	\$ 578,579,190	\$ 603,971,861
Less: Plan fiduciary net position	(458,532,875)	(378,974,690)
City's net pension liability	<u>\$ 120,046,315</u>	<u>\$ 224,997,171</u>
Plan fiduciary net position as a percentage of the total pension liability	79.3%	62.7%

a) Actuarial Method and Assumptions

The total pension liability as of June 30, 2021 was determined based on an actuarial valuation as of June 30, 2020, using the entry age normal actuarial cost method and the following actuarial assumptions, applied to all periods included in the measurement.

Actuarial Assumptions	
Investment Rate of Return	5.29%
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, 2021 are based on the fair value of assets as of June 30, 2021 and the total pension liability as of the valuation date, June 30, 2020, updated to June 30, 2021. There were no significant events between the valuation date and the measurement date. The update only included 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2020 was determined based on an actuarial valuation as of June 30, 2019, updated to June 30, 2020, using the entry age normal actuarial cost method and the actuarial assumptions as described above for the June 30, 2020 valuation, except for the assumed investment rate of return was 5.37%. Measurements as of June 30, 2020 are based on the fair value of assets as of June 30, 2020 and the total pension liability as of the valuation date, June 30, 2019, updated to June 30, 2020.

The actuarial assumptions used in the June 30, 2020 and 2019 valuations were based on the results of actuarial experience studies for the period of July 1, 2014 through June 30, 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020 are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	
	June 30, 2021	June 30, 2020
Fixed Income	(0.30)%	2.29%
Domestic Equity	4.70	5.55
International Equity	5.00	7.69
Covered Calls	2.60	4.64
Crisis Risk Offset	1.95	3.78
Credit	2.10	4.08
Cash	(1.00)	1.92

b) Discount Rate

The discount rates used to measure the total pension liability were 5.29% and 5.37% as of June 30, 2021 and 2020, 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 suspended City contributions until the fiscal year beginning July 1, 2017, after which they would 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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.

City's Net Pension Liability June 30, 2021			
	1% Decrease (4.29%)	Current Discount Rate (5.29%)	1% increase (6.29%)
City's net pension liability	\$ 171,086,474	\$120,046,315	\$76,004,962

City's Net Pension Liability June 30, 2020			
	1% Decrease (4.37%)	Current Discount Rate (5.37%)	1% increase (6.37%)
City's net pension liability	\$279,560,331	\$224,997,171	\$178,053,408

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, 2021 and 2020 equals net position restricted for pensions and comprises the following:

Aggregate Total of the System's Major Reserves		
	2021	2020
Retired member contribution reserve	\$ 26,828,201	\$ 29,205,764
Employer reserve	431,704,674	249,768,926
Total	<u>\$ 458,532,875</u>	<u>\$ 378,974,690</u>

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020 were \$1,388,825 and \$1,257,550, respectively. Other administrative expenses including accounting and audit services, legal fees, annual report and miscellaneous expense for the years ended June 30, 2021 and 2020 were \$195,829 and \$265,360, respectively.

Required Supplementary Information

For Years Ended June 30, 2021 and 2020

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

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Interest	\$ 34,680,418	\$ 36,078,037	\$ 37,621,301	\$ 44,320,094	\$ 44,931,829	\$ 42,480,394	\$ 41,262,826	\$ 42,333,496
Differences between expected and actual experience	(7,375,711)	(5,699,459)	(7,915,210)	(10,656,139)	3,027,944	6,977,470	(21,208,627)	-
Changes of assumptions	-	-	(1,475,030)	17,858,013	-	43,480,232	34,219,433	-
Benefit payments, including refunds of member contributions	(51,697,378)	(54,619,079)	(56,212,013)	(55,998,595)	(57,375,815)	(58,441,353)	(59,007,536)	(57,409,113)
Net change in total pension liability	(24,392,671)	(24,240,501)	(27,980,952)	(4,476,627)	(9,416,042)	34,496,743	(4,733,904)	(15,075,617)
Total pension liability – beginning	603,971,861	628,212,362	656,193,314	660,669,941	670,085,983	635,589,240	640,323,144	655,398,761
Total pension liability – ending (a)	\$579,579,190	\$603,971,861	\$628,212,362	\$656,193,314	\$660,669,941	\$670,085,983	\$635,589,240	\$640,323,144
Plan Fiduciary Net Position								
Contributions - member	\$ 43,448,000	\$ 43,409,000	\$ 44,821,000	\$ 44,860,000	\$ -	\$ -	\$ -	\$ 4,441
Net investment income	90,191,309	6,996,833	21,557,961	35,446,275	50,158,795	(1,418,645)	5,438,586	66,392,409
Benefit payments, including refunds of member contributions	(52,697,378)	(54,619,079)	(56,212,013)	(55,998,595)	(57,375,815)	(58,441,353)	(59,007,536)	(57,409,113)
Administrative expense	(1,584,654)	(1,522,910)	(1,446,361)	(1,543,412)	(1,261,641)	(1,375,749)	(985,227)	(776,112)
Claims and settlements	908	132	13,856	9,145	70,282	3,593,096	-	-
Net change in plan fiduciary net position	79,358,185	(5,736,024)	8,734,443	22,773,413	(8,408,379)	(57,642,651)	(44,554,177)	8,211,625
Plan fiduciary net position – beginning	378,974,690	384,710,714	375,976,271	353,202,858	361,611,237	419,253,888	463,808,065	455,596,440
Plan fiduciary net position – ending (b)	\$458,332,875	\$378,974,690	\$384,710,714	\$375,976,271	\$353,202,858	\$361,611,237	\$419,253,888	\$463,808,065
City's net pension liability – ending (a) – (b)	\$120,046,315	\$224,997,171	\$243,501,648	\$280,217,043	\$307,467,083	\$308,474,746	\$216,335,352	\$176,515,079
Plan fiduciary net position as a percentage of the total pension liability	79%	63%	61%	57%	53%	54%	66%	72%
Covered payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net pension liability as a percentage of covered payroll	N/A	N/A	N/A	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, 2020 and 2019

Schedule of Employer Contributions (Unaudited) (dollars in millions)										
	2021	2020	2019	2018	2017*	2016*	2015*	2014*	2013**	2012
Actuarially determined contribution	\$ 43.6	\$ 43.4	\$ 44.8	\$ 44.9	N/A	N/A	N/A	\$ 20.3	\$ 34.2	\$ 45.1
Contributions in relation to the actuarially determined contribution	\$ 43.6	\$ 43.4	\$ 44.8	\$ 44.9	\$ -	\$ -	\$ -	\$ -	\$ 210.0	\$ 45.5
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -	N/A	N/A	N/A	\$ 20.3	\$ (175.8)	\$ (0.4)
Covered payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.1
Contributions as a percentage of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	210000%	45500%

* Actuarially determined contributions are calculated based on the actuarial valuation one year prior to the beginning of the fiscal year. Although actuarial valuations were performed as of June 30, 2014, June 30, 2015, and June 30, 2016, the System did not determine an actuarially determined contribution for FY 2015-2017, 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)										
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Annual money-weighted rate of return net of investment expense	24.43%	2.04%	6.10%	10.57%	15.57%	-0.75%	3.90%	16.40%	9.70%	1.40%

Note to Required Supplementary Information

For Years Ended June 30, 2021 and 2020

Note to Schedule of Employer Contributions

Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the fiscal year in which contributions are reported. Methods and assumptions used to determine contribution rates are:

Methods and Assumptions Used to Determine Contribution Rates					
Fiscal Year	Valuation Date	Discount Rate	Cost-of-Living Adjustments	Mortality	Other Significant Assumption Changes from Prior Year
2021	6/30/2019	5.50%	3.25%	CalPERS Mortality Table from the 2012-2015 experience study, excluding the 15-year projection using 90% of Scale MP-2016	None
2020	6/30/2018	5.50%	3.25%		Longevity Pay assumption for Fire Members was added
2019	6/30/2017	5.50%	3.25%		None
2018	6/30/2016	6.44%	3.25%		None
2017	6/30/2015	6.50%	3.25%	CalPERS Mortality Table from the 2006-2011 experience study, excluding the 20-year projection using Scale BB	None
2016	6/30/2014	6.54%	3.25%		None
2015	6/30/2013	6.75%	3.975%	RP-2000 Mortality Table from the 1997-2007 experience study, projected with Scale AA	None
2014	6/30/2012	6.75%	3.975%		None
2013	6/30/2011	6.75%	3.975%		None
2012	6/30/2010	7.00%	4.50%	RP-2000 Mortality Table from the 1997-2007 experience study	None

A complete description of the methods and assumptions used to determine contribution rates can be found in the corresponding actuarial valuation reports.

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SECTION 3

INVESTMENT



*Lana Andrews
Widow of
William "Bill" Andrews
Sergeant of Police*

*Served with Oakland Police Department
1972 to 1997*

Investment Consultant's Report



INVESTMENT GROUP

2175 NW Raleigh Street
Suite 300A
Portland, OR 97210

503.226.1050
Meketa.com

December 31, 2021

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, 2021. During this 12-month period, the OPFRS total investment portfolio increased 24.4% 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.

Meketa serves as OPFRS' independent investment consultant. Performance data is provided by the System's custodian, Northern Trust, and is independently calculated by Meketa's performance measurement team.

A major factor influencing overall investment performance is the allocation of the OPFRS portfolio across major asset classes. As of June 30, 2021, the Covered Calls, Cash and Domestic Equity classes were overweight, while Fixed Income and Crisis Risk Offset were underweight relative to policy.

Over the latest 3-year period, the OPFRS portfolio produced an annualized money-weighted, net of fee return of 10.2%, underperforming its benchmark's time-weighted return of 10.5% by (30) basis points. Over the latest 5-year period, OPFRS' average annual money-weighted net return of 11.4% outperformed the Policy Benchmark by 40 basis points.

OPFRS Annualized Money-Weighted Returns As of 6/30/2021

	1 Year	3 Year	5 Year
Total Portfolio ¹	24.4	10.2	11.4
Policy Benchmark ²	22.3	10.5	11.0
Excess Return	2.1	(0.3)	0.4

Sincerely,

David Sancewich, Managing Principal, Meketa Investment Group

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

² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bbg BC Universal, 5% CBOE BXN, 6.7% SG Multi Asset Risk Premia, and 3.3% BB Long Treasury.

List of Investment Professionals

Domestic Equity Managers

Brown Advisory
Earnest Partners
Northern Trust Investments
Rice Hall James and Associates

Fixed Income Managers

DDJ Capital Management
Ramirez Asset Management
Reams Asset Management
Wellington Management

International Equity Managers

Strategic Global Advisors

Investment Consultant

Meketa Investment Group

Covered Calls

Parametric Portfolio Associates, LLC.

Custodian

Northern Trust

Security Lending

Northern Trust

Investment Manager Fees and Other Investment Expenses

Years Ended June 30, 2021 and June 30, 2020

	2021	2020
<u>Investment Manager Fees</u>		
Domestic Equity Managers	\$ 508,064	\$ 446,280
International Equity Managers	251,072	175,856
Domestic Fixed Income Managers	259,176	231,887
Covered Calls	119,828	102,928
Total Investment Manager Fees	<u>\$ 1,138,140</u>	<u>\$ 56,950</u>
<u>Other Investment Fees</u>		
Custodian Fees	\$ 116,500	\$ 116,500
Investment Consulting	100,000	100,000
Total Other Investment Fees	<u>\$ 216,500</u>	<u>\$ 216,500</u>
Total Investment Fees	<u>\$ 1,354,640</u>	<u>\$ 1,173,450</u>

Largest Stock Holdings (by Fair Value)
As of June 30, 2021

Stock	Fair Value
1. Apple	\$2,219,711
2. Microsoft	2,107,331
3. Amazon	1,523,991
4. Synopsys	1,509,399
5. Skyworks Solutions	1,435,824
6. D. R. Horton	1,342,717
7. CBRE Group	1,215,566
8. CMC Materials	1,206,523
9. Keysight Technologies	1,199,920
10. Intercontinental Exchange	1,174,062

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

Largest Bond Holdings (by Fair Value)
As of June 30, 2021

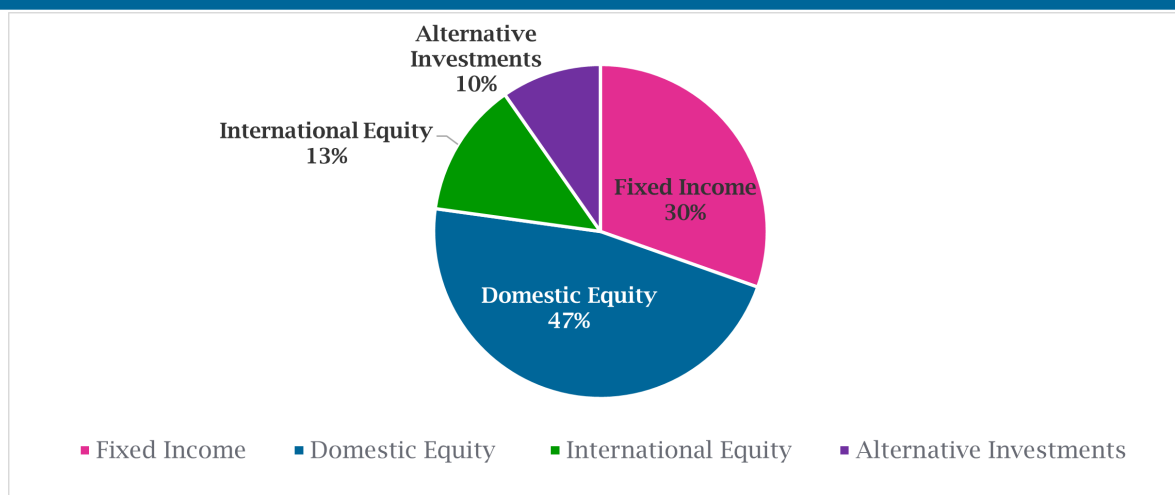
Description	Interest Rate	Maturity Date	Fair Value
1. U.S. Treasury	0.75%	03/31/2026	\$3,588,806
2. U.S. Treasury	2.75%	02/15/2024	3,483,334
3. U.S. Treasury	1.13%	02/15/2031	2,305,605
4. U.S. Treasury	2.00%	02/15/2023	2,109,898
5. U.S. Treasury	2.25%	11/15/2027	1,936,134
6. U.S. Treasury	1.13%	07/31/2021	1,821,629
7. North Shore Long Island Jewish Health Care	6.15%	11/01/2043	1,582,405
8. Metropolitan Transportation Authority New York	7.34%	11/15/2039	1,308,426
9. U.S. Treasury	1.13%	05/15/2040	1,122,266
10. U.S. Treasury	1.38%	08/15/2050	1,083,265

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

Investments by Manager/Exchange-Traded Funds (ETF) As of June 30, 2021

Investment Firm	Portfolio Type	Amount
<u>Fixed Income Managers</u>		
Reams Asset Management	Core Plus	\$ 29,354,805
Ramirez Asset Management	Core	78,984,777
Vanguard Long-Term Treasury Index Fund ETF	Long Duration	13,240,128
Wellington Management	Core	7,639,617
DDJ Capital Management	High Yield/ Bank Loans	9,177,195
Total Fixed Income		\$ 138,369,522
<u>Domestic Equity Managers</u>		
Northern Trust Investments	Large Cap Core	\$ 116,334,895
Earnest Partners	Mid Cap Core	46,718,093
MSCI USA Minimum Volatility (USD) Index Fund ETF	Crisis Risk Offset	21,455,561
Brown Advisory	Small Cap Value	21,455,561
Rice Hall James and Associates	Small Cap Growth	17,079,808
Transition Account	Short-Term	304,029
Total Domestic Equity		\$ 212,962,149
<u>International Equity Managers</u>		
Strategic Global Advisors	International	\$ 41,614,290
Vanguard Developed Markets Index Fund ETF	International	18,033,573
Total International Equity		\$ 59,647,863
<u>Alternative Managers</u>		
Parametric Portfolio Associates, LLC	Covered Calls	\$ 44,220,679
Total Alternative Investments		44,220,679
Total Investments		\$ 455,227,213

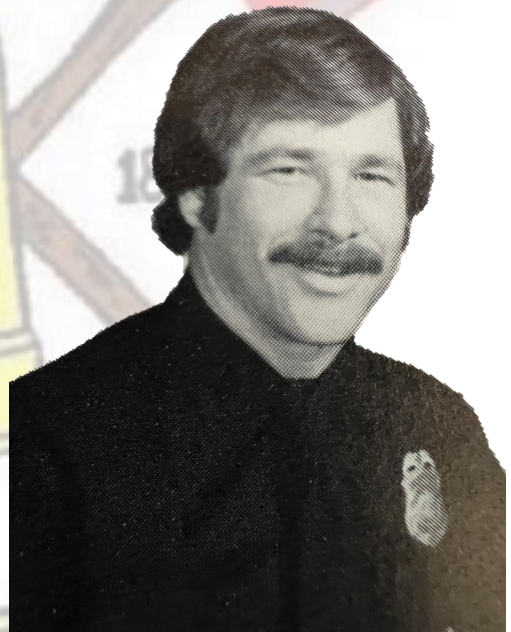
Asset Allocation As of June 30, 2021



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SECTION 4

ACTUARIAL



*Al Valcour
Engineer of Fire
Served with Oakland Fire Department
1974 to 1990*

Actuary's Certification Letter



Classic Values, Innovative Advice

Via Electronic Mail

February 7, 2022

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, 2021. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation report as of June 30, 2020 (transmitted January 14, 2021) and the GASB 67/68 report as of June 30, 2021 (transmitted November 18, 2021).

Actuarial Valuation Report as of June 30, 2020

The purpose of the annual actuarial valuation report as of June 30, 2020 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, 2019.

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 2021 PFRS Annual Report, based on the June 30, 2020 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

February 7, 2022

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 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, 2021

The purpose of the GASB 67/68 report as of June 30, 2021 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 (TPL) is based on the June 30, 2020 actuarial valuation updated to the measurement date of June 30, 2021. The update included the addition of interest cost offset by actual benefit payments.

Beginning of year measurements are based on the actuarial valuation as of June 30, 2019, updated to the measurement date of June 30, 2020. The June 30, 2021 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, 2020.

Please refer to our GASB 67 report as of June 30, 2021 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the 2021 PFRS Annual Report based on the June 30, 2021 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

February 7, 2022

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.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect our reports.

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. Other users of these reports are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

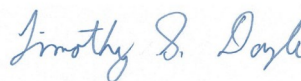
We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted,

Cheiron



Graham A. Schmidt, ASA, EA, FCA, MAAA
Consulting Actuary
703-893-1456, x1137
gschmidt@cheiron.us



Timothy S. Doyle, ASA, EA, MAAA
Consulting Actuary
703-893-1456, x1140
tdoyle@cheiron.us



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 June 30, 2020, there are no active members. 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 June 30, 2020. The key results of the actuarial valuation are as follows:

- The actuarially determined employer contribution amount for Fiscal Year 2021-2022 is \$43.8 million, based on projecting the Actuarial Liabilities and the Actuarial Value of Assets to the end of the 2020-2021 Fiscal Year. This represents a decrease of \$0.3 million from the estimated amount in the prior valuation for the same Fiscal Year. The contribution is assumed to be paid in equal installments throughout the year, or on average at approximately January 1, 2022.
- During the year ended June 30, 2020, the return on Plan assets was 1.85% on a market value basis net of investment expenses, as compared to the 6.00% assumption for the 2019-2020 Plan year. This resulted in a market value loss on investments of \$15.7 million. The Actuarial Value of Assets (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 6.53%, for an actuarial asset gain of \$1.9 million.

- The Plan experienced a gain on the Actuarial Liability of \$0.4 million, the net result of changes in the population and changes in benefits. Combining the liability and asset gains, the Plan experienced a total gain of \$2.3 million.
- A new Memorandum of Understanding (MOU) went into effect for Fire members since the previous valuation, changing Fire retirees' Cost-of-Living Adjustments (COLAs). This change in COLAs decreased the Actuarial Liability by \$6.5 million since the scheduled increases under the new MOUs were lower than the amounts originally assumed, in aggregate.
- The Plan's smoothed funded ratio, the ratio of Actuarial Value of Assets over Actuarial Liability, increased from 58.0% last year to 62.2% on an AVA basis as of June 30, 2020.
- The Plan's funded ratio increased from 61.8% to 63.5% on a Market Value of Assets (MVA) basis.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan experienced a decrease in the UAL from \$261.8 million to \$225.5 million as of July 1, 2020.
- Overall participant membership decreased compared to last year. 28 members died, 15 of whom had their benefits continue to a surviving spouse. In addition, 17 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 2021-2022 would be \$42.4 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 2021-2022.

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)			
	July 1, 2019	July 1, 2020	% Change
Participant Counts			
Active Participants	0	0	
Participants Receiving a Benefit	798	768	-3.8%
Total	798	768	-3.8%
Annual Pay of Active Members	\$ 0	\$ 0	
Assets and Liabilities			
Actuarial Liability (AL)	\$ 622,836	\$ 597,014	-4.1%
Actuarial Value of Assets (AVA)	\$ 361,037	\$ 371,467	2.9%
Unfunded Actuarial Liability (UAL)	\$ 261,798	\$ 225,547	-13.8%
Funded Ratio (AVA)	58.0%	62.2%	4.3%
Funded Ratio (MVA)	61.8%	63.5%	1.7%
Contributions			
Employer Contribution (FY2020-21)	\$ 43,648	N/A	
Employer Contribution (FY2021-22)	\$ 44,091	\$ 43,820	-0.6%

ACTUARIAL DEFINITIONS

The **Present Value of Future Benefits** (PVFB) is used for measuring all future Plan obligations, the obligations of the Plan earned as of the valuation date and those to be earned in the future by current plan participants under the current Plan provisions, if all assumptions are met.

The **Actuarial Liability** (AL) is calculated taking the Present Value of Future Benefits and subtracting the Present Value of Future Normal Costs under an acceptable actuarial funding method. Because the Plan has no active members, the Actuarial Liability is equal to the Present Value of Future Benefits (i.e., all benefits are fully accrued).

The **Unfunded Actuarial Liability** (UAL) is the excess of the Actuarial Liability over the Actuarial Value of Assets.

The **Actuarial Value of Assets** (AVA) is the value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

ACTUARIAL METHODS AND ASSUMPTIONS

ACTUARIAL METHODS

The actuarial funding method used to determine the 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 Plan's Actuarial Liability (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 2021-2022 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 below. The equivalent single discount rate for these returns using the Plan's expected projected benefit payments is 5.37%.

Benefit Payment Year	Expected Return
2020 - 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 %

Cost of Living Adjustments and Long-Term Salary Increases

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 shows salary increases based on the current Police contract which expires on June 30, 2023, and the Fire contract which expires on December 31, 2023. All increases shown after those dates are assumptions.

Inflation

Post-Retirement Benefit Increases (Based on Salary Increases for Rank at Retirement)		
Date of Increase	Police	Fire
July 1, 2020	2.50%	N/A
January 1, 2021	N/A	2.50% / 4.50% ¹
July 1, 2021	3.00%	1.50%
January 1, 2022	N/A	2.00%
July 1, 2022	3.50%	1.00%
July 1, 2023	3.50%	0.00%
December 1, 2023	N/A	2.00%
Annual Increases Starting July 1, 2024	3.25%	3.25%

¹ 4.50% For Fire Engineers, 2.50% for all other Fire

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).

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.

Rates of Mortality for Disabled 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 assumed to be related to injuries arising out of the performance of duty, entitling the surviving spouse to a 100% continuance.

Changes in Assumptions since the Last Valuation

A new Memorandum of Understanding (MOU) went into effect for Fire members after the previous valuation, changing Fire retirees' Cost-of-Living Adjustments (COLAs). No other changes were made to the actuarial assumptions.

Administrative Expenses

Administrative expenses for the Fiscal Year Ending June 30, 2021 are assumed to be \$1,645,600, growing at 2.85% per year.

Membership Information

Service Retired Participants

Age	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	0	\$0	0	\$0	0	\$0
65-69	23	\$1,777,267	0	\$0	23	\$1,777,267
70-74	78	\$6,276,173	21	\$1,474,645	99	\$7,750,818
75-79	80	\$5,984,336	31	\$2,606,491	111	\$8,590,827
80-84	27	\$2,080,540	13	\$1,034,257	40	\$3,114,796
85-89	11	\$1,057,010	13	\$1,153,340	24	\$2,210,350
90-94	8	\$712,274	12	\$1,159,797	20	\$1,872,071
95-99	2	\$169,124	5	\$349,694	7	\$518,818
100+	0	\$0	0	\$0	0	\$0
Total	229	\$18,056,724	100	\$7,778,223	324	\$25,834,947

Disability Retired Participants

Age	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	0	\$0	0	\$0	0	\$0
65-69	3	\$216,288	8	\$564,708	11	\$780,996
70-74	50	\$3,801,265	29	\$2,011,326	79	\$5,812,591
75-79	30	\$2,137,626	34	\$2,617,554	64	\$4,755,180
80-84	11	\$831,149	16	\$1,370,309	27	\$2,201,458
85-89	5	\$425,200	4	\$304,430	9	\$729,630
90-94	0	\$111,785	4	\$355,113	4	\$355,113
95-99	0	\$0	1	\$65,195	1	\$65,195
100+	0	\$0	0	\$0	0	\$0
Total	99	\$7,411,529	96	\$7,288,635	195	\$14,700,164

Membership Information

Beneficiaries

Age	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	\$50,602	1	\$85,277	2	\$135,879
60-64	3	\$170,562	4	\$212,960	7	\$383,522
65-69	14	\$816,499	5	\$320,391	19	\$1,136,890
70-74	27	\$1,364,399	16	\$897,233	43	\$2,261,632
75-79	29	\$1,520,104	17	\$1,013,126	46	\$2,533,230
80-84	12	\$658,412	17	\$1,016,633	29	\$1,675,045
85-89	16	\$1,086,277	22	\$1,114,420	38	\$2,200,697
90-94	24	\$1,356,037	27	\$1,479,502	51	\$2,835,539
95-99	4	\$194,177	8	\$435,205	12	\$629,382
100+	2	\$138,651	0	0	2	\$138,651
Total	127	\$7,355,720	117	\$6,574,747	249	\$13,930,466

Membership Information

Participant Data Summary

	July 1, 2018			July 1, 2019		
	Police	Fire	Total	Police	Fire	Total
Active Participants						
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	\$0	\$0	\$0	\$0	\$0
Service Retirees						
Number	250	110	360	241	100	341
Average Age	75.0	80.8	76.8	75.7	80.9	77.2
Average Annual Benefit	\$77,420	\$77,216	\$77,358	\$76,879	\$80,605	\$77,972
Disabled Retirees						
Number	109	101	210	107	99	206
Average Age	74.2	75.6	74.9	75.2	76.4	75.8
Average Annual Benefit	\$73,959	\$72,635	\$73,322	\$73,598	\$74,879	\$74,214
Beneficiaries						
Number	133	134	267	127	124	251
Average Age	80.5	83.4	82.0	80.6	83.2	81.8
Average Annual Benefit	\$55,952	\$54,306	\$55,126	\$54,889	\$55,549	\$55,215
All Inactive						
Number	492	345	837	475	323	798
Average Age	76.3	80.3	77.9	76.9	80.4	78.3
Average Annual Benefit	\$70,850	\$66,976	\$69,253	\$70,261	\$69,231	\$69,844

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In Memoriam



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Oakland Police and Fire Department

Retiree & Beneficiary Deaths

Fiscal Year

2020—2021

Fire Members

Robert Allan	Retiree
Randal Bernard	Retiree
Dorothy Bovyer	Beneficiary
Alda M. Conner	Beneficiary
Mary Rose De Marco	Beneficiary
Barbette L. Graves	Beneficiary
Diane Green	Beneficiary
Roberta Heath	Beneficiary
Shirley Hill	Beneficiary
Robert Kenney	Retiree
Margaret King	Beneficiary
Ines Klingler	Beneficiary
Agnes D. Morrison	Beneficiary
Elaine Odell-Maier	Beneficiary
Patricia Opsahl	Beneficiary
Gino Pacini	Retiree
Lawrence Pinto	Retiree
James Powers	Retiree
Rose Prola	Beneficiary
Jeanne F. Ray	Beneficiary
Lawrence Ross	Retiree
Phyllis Spencer	Beneficiary
Robert Thorsen	Retiree
Lois Wilkinson	Beneficiary
Melvin Woolcock	Retiree

Police Members

Mary Alves	Beneficiary
John Beauchamp	Retiree
Richard Cademartori	Retiree
Delores Campbell	Beneficiary
William Carlson	Retiree
Cesar Celada	Retiree
Vaune Dillman	Retiree
Dennis Downum	Retiree
Lamar Dunster	Retiree
Donald Edwards	Retiree
Jacqueline Freitas-Hoeppner	Beneficiary
Victor Grant	Retiree
Robert Heritage	Retiree
Gloria Ann Kearns	Beneficiary
James Kennemore	Retiree
Jerry Kramer	Retiree
Evangeline Loey	Beneficiary
Raul Martin	Retiree
Patricia McCormac	Beneficiary
James McCuen	Retiree
Paddy McGrew	Retiree
Walter McIntyre	Retiree
Florine Mullins	Beneficiary
Elmer Pruitt	Retiree
Tillie E. Roehl	Beneficiary
Barbara Smith	Beneficiary
Valerie S. Smith	Beneficiary
Henry Tarabochia	Retiree
Steven Todar	Retiree
Winifred Walden	Beneficiary
Grace Wilson	Beneficiary
Artris Wiseman	Retiree

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

TO: Oakland Police and Fire
Retirement System Board (PFRS)

FROM: David F. Jones
Plan Administrator & Secretary

SUBJECT: Audit Committee Agenda
Pending List

DATE: February 23, 2022

	SUBJECT	TENTATIVE SCHEDULED MTG DATE	STATUS
1	Staff Review of the 2006 Management Audit	TBD	Pending
2	Monitor & Update PFRS Board of Upcoming City Council Agendas Regarding Discussion of the 2026 Actuarial Funding Date	Ongoing	Ongoing

Respectfully submitted,

David F. Jones
Plan Administrator & Secretary
Oakland Police & Fire Retirement Systems

Pursuant to California Government Code section 54953(e), the Oakland Police & Fire Retirement System Board and Committee Members, as well as City staff, will participate via phone/video conference, and no physical teleconference locations are required.

Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-7295.



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

AGENDA

INVESTMENT COMMITTEE MEMBERS

Jaime T. Godfrey
Chairperson

R. Steve Wilkinson
Member

Robert W. Nichelini
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, FEBRUARY 23, 2022

10:00 AM

**TELE-CONFERENCE BOARD MEETING
VIA ZOOM WEBINAR**

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
 - To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
 - iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
 - US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
 - International numbers available: <https://us02web.zoom.us/j/82880493983>
 - Webinar ID: 828 8049 3983.
- If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are three ways to submit public comments.

- To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with "PFRS Board Meeting" in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR INVESTMENT COMMITTEE MEETING
FEBRUARY 23, 2022**

- To comment by Zoom video conference, click the “Raise Your Hand” button to request to speak when Public Comment is being taken on an eligible agenda item at the beginning of the meeting. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Instructions on how to “Raise Your Hand” is available at: [https://support.zoom.us/hc/en-us/articles/205566129 - Raise-Hand-In-Webinar](https://support.zoom.us/hc/en-us/articles/205566129-Raise-Hand-In-Webinar).
- To comment by phone, please call on one of the above listed phone numbers. You will be prompted to “Raise Your Hand” by pressing “*9” to speak when Public Comment is taken. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Please unmute yourself by pressing *6.

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov

ORDER OF BUSINESS

- | | |
|------------------------|---|
| 1. Subject: | Police and Fire Retirement System (“PFRS”) Investment Committee Meeting Minutes |
| From: | Staff of the PFRS Board |
| Recommendation: | APPROVE January 26, 2022 Investment Committee Meeting Minutes |
| <hr/> | |
| 2. Subject: | Investment Manager Performance Update – Earnest Partners |
| From: | Earnest Partners |
| Recommendation: | ACCEPT informational report regarding managerial assessment, diversity and inclusion policy and practices, and investment performance of Earnest Partners, a PFRS Domestic Equity Mid-Cap Core Asset Class Investment Manager |
| <hr/> | |
| 3. Subject: | Investment Manager Performance Review – Earnest Partners |
| From: | Meketa Investment Group |
| Recommendation: | ACCEPT Meketa Investment Group’s review and evaluation of Earnest Partners, a PFRS Domestic Equity Mid-Cap Core Asset Class Investment Manager regarding managerial assessment, diversity and inclusion policy and practices, and investment performance |

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR INVESTMENT COMMITTEE MEETING
FEBRUARY 23, 2022

4. **Subject:** Resolution 8038 – Resolution authorizing one-year extension of professional services agreement with Earnest Partners for the provision of Domestic Equity Mid-Cap Core Asset Class Investment Manager Services
From: Staff of the PFRS Board
Recommendation: REVIEW and RECOMMEND BOARD APPROVAL of Resolution 8038 – Resolution authorizing one-year extension of professional services agreement with Earnest Partners for the provision of Domestic Equity Mid-Cap Core Asset Class Investment Manager Services
5. **Subject:** Investment Market Overview as of January 31, 2022
From: Meketa Investment Group
Recommendation: ACCEPT informational report regarding the Global Investment Markets as of January 31, 2022
6. **Subject:** Preliminary Investment Fund Performance Update as of January 31, 2022
From: Meketa Investment Group
Recommendation: ACCEPT informational report regarding the Preliminary Investment Fund Performance Update as of January 31, 2022
7. **Subject:** Investment Fund Quarterly Performance Update as of December 31, 2021
From: Meketa Investment Group
Recommendation: ACCEPT the Investment Fund Quarterly Performance Update as of December 31, 2021
8. **Subject:** Annual Diversity Report of Current PFRS Investment Managers
From: Meketa Investment Group
Recommendation: ACCEPT an informational report regarding the diversity representation of current PFRS Investment Managers as of December 31, 2021
9. **Schedule of Pending Investment Committee Meeting Agenda Items**
10. **Open Forum**
11. **Future Scheduling**
12. **Adjournment**

A REGULAR MEETING OF THE INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the Oakland Police and Fire Retirement System (“PFRS”) was held Wednesday, January 26, 2022 via Zoom Webinar.

Committee Members	<ul style="list-style-type: none"> Jaime T. Godfrey Robert W. Nichelini R. Steven Wilkinson 	Chairperson Member Member
Additional Attendees	<ul style="list-style-type: none"> David F. Jones Jennifer Logue Téir Jenkins Maxine Visaya David Sancewich Jason Leong Campbell Kenzie Wedge Ben Santonelli Jim Haymes Jade Brown 	PFRS Secretary & Plan Administrator (Excused) PFRS Legal Counsel PFRS Staff Member PFRS Staff Member Meketa Investment Group Meketa Investment Group DDJ Capital Management, LLC DDJ Capital Management, LLC Polen Capital Management, LLC Polen Capital Management, LLC

The meeting was called to order at 10:01 a.m. PST

- Approval of Investment Committee Meeting Minutes** Member Nichelini made a motion to approve the November 17, 2021 Investment Committee Meeting Minutes, as written, second by Member Wilkinson. Motion Passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSENT: 0)

- Investment Manager Performance Update – DDJ Capital Management, LLC** – Kenzie Wedge & Ben Santonelli of DDJ Capital Management, LLC (“DDJ”), a PFRS Fixed Income Asset Class Investment Manager, presented an informational report regarding a firm overview, the acquisition of DDJ by Polen that is set to occur at the end of the month, and the firm’s investment process, strategies and portfolio performance. Jim Haymes & Jade Brown of Polen Capital Management, LLC (“Polen”) provided a firm overview of Polen, their firm’s Diversity & Inclusion policy, practices, and goals which included ESG initiatives.

Member Wilkinson and Staff Member Jenkins inquired about both firms Diversity, Equity, and Inclusion policy and practices to further the discussion on the topic. Chairperson Godfrey requested performance statistics for Polen over the past 1, 3, and 5-year periods.

MOTION: Member Wilkinson made a motion to accept the informational report presented by DDJ and Polen and forward to the Board, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

3. **Consent Form Regarding Acquisition of DDJ Capital Management, LLC by Polen Capital Management, LLC** – David Sancewich of Meketa Investment Group provided an informational report regarding the consent form regarding the acquisition of DDJ by Polen and recommended the Board approves consent.

MOTION: Chairperson Godfrey made a motion accept the informational report and recommend Board approval for the assignment of PFRS investment advisory agreement resulting from the change of control of DDJ to Polen, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

4. **Investment Manager Performance Review – DDJ Capital Management, LLC** – David Sancewich of Meketa provided an overview memo regarding DDJ, a PFRS Fixed Income Asset Class Investment Manager. D. Sancewich highlighted the strategy remains competitive and Meketa views the acquisition of DDJ by Polen as positive movement and recommended DDJ remain on watch status and continue to monitor over the next 6 – 9 months. Committee members expressed confidence in the acquisition and agreed the firm remain on watch.

MOTION: Member Nichelini made a motion to accept and forward to the Board Meketa's review, evaluation, and recommendation DDJ, a PFRS Fixed Income Asset Class Investment Manager, remain on watch status, second by Member Wilkinson. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSENT: 0)

5. **Investment Market Overview as of December 31, 2021** – David Sancewich of Meketa presented an informational report regarding the Investment Market Overview as of December 31, 2021 and highlighted market returns and current factors impacting outcomes. Chairperson Godfrey requested Meketa bring the Committee forward to “now” as much has happened since December 31, 2021 and inquired about the impact of psychology on the markets. D. Sancewich discussed current market activity and how behavioral finance, behavioral investing, and behavioral thinking effects the market.

MOTION: Chairperson Godfrey made a motion to accept the informational report presented by Meketa regarding the Investment Market Overview as of December 31, 2021 and forward to the Board, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

6. **Preliminary Investment Performance Update as of December 31, 2021** – David Sancewich of Meketa presented an informational report regarding the Preliminary Investment Fund Performance Update as of December 31, 2021 and highlighted the Asset Class Performance Summary.

MOTION: Chairperson Godfrey made a motion to accept the informational report presented by Meketa regarding the Preliminary Investment Fund Performance Update as of December 31, 2021 and forward to the Board, second by Member Wilkinson. Motion passed.

DUE TO TECHNICAL DIFFICULTIES, MEMBER NICHELINI WAS UNABLE TO PARTICIPATE IN THE VOTE

[GODFREY – Y/ NICHELINI – ABSENT/ WILKINSON – Y]
(AYES: 2/ NOES: 0/ ABSENT: 1)

7. **\$13.9 Million Drawdown for Member Retirement Allowances Fiscal Year 2021/2022 (Quarter Ending March 2022)** – David Sancewich of Meketa presented an informational report regarding the \$13.9 million drawdown, which includes a \$10.9 Million contribution from the City of Oakland and a \$3.0 Million contribution from the PFRS Investment Fund, to be used to pay for the January 1, 2022 through March 31, 2022 Member Retirement Allowances.

MOTION: Chairperson Godfrey made a motion to accept the informational report and recommended Board approval of Meketa's recommendation of a \$13.9 million drawdown, which includes a \$10.9 Million contribution from the City of Oakland and a \$3.0 Million contribution from the PFRS Investment Fund, to be used to pay for the January 1, 2022 through March 31, 2022 Member Retirement Allowances, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

8. **Asset Allocation Review and Update of the PFRS Fund** – David Sancewich provided an informational report and led a continued discussion regarding the Asset Allocation Review and Update of the PFRS Fund which highlighted a comparison of 20-year return expectations between the current long-term policy, the current interim policy, and a long-term policy with an inflation component.

D. Sancewich addressed the Committee's inquiry regarding the impact of gold on the policy and Meketa did not recommend adding it as a component as it relates to the needs of the portfolio. Additionally, Meketa identified inflation as a short to mid-term concern and further recommends PFRS continue with its current long-term policy and not add an inflation component at this time.

MOTION: Chairperson Godfrey made a motion to recommend Board approval of Meketa's recommendation that PFRS maintain its current long-term policy and not add an inflation component, second by Member Nichelini. Motion passed.

[GODFREY – Y/ NICHELINI – Y/ WILKINSON – Y]
(AYES: 3/ NOES: 0/ ABSTAIN: 0)

9. **Informational Overview Regarding Developments in Environmental, Social, and Governance (“ESG”) Investing** – David Sancewich of Meketa provided an informational report regarding developments in ESG investing within the SEC and Department of Labor and noted the work is ongoing; Meketa is monitoring the activity and will provide updates to the Board as information becomes available. D. Sancewich noted a typo on the agenda referencing the report as being from Northern Trust Investments and indicated the correct source of the report as Meketa.

MOTION: Chairperson Godfrey made a motion to accept the informational report regarding developments in ESG investing and forward to the Board, second by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

10. **Schedule of Pending Investment Committee Meeting Agenda Items** – David Sancewich presented the 2022 Ongoing Strategic Investment Agenda for discussion.
11. **Open Forum** – No Report
12. **Future Scheduling** – The next regular Investment Committee meeting is tentatively scheduled to occur February 23, 2022.
13. **Adjournment** – Member Nichelini made a motion to adjourn, second by Member Wilkinson. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0)

The meeting adjourned at 11:26 a.m. PST

JAIME T. GODFREY
COMMITTEE CHAIRPERSON

DATE



EARNEST
PARTNERS

1180 PEACHTREE STREET + SUITE 2300
ATLANTA + GA + 30309

INVEST@EARNESTPARTNERS.COM
WWW.EARNESTPARTNERS.COM

***Oakland Police and Fire Retirement Board
December 31, 2021***

Patmon Malcom, CFA
Partner

Mr. Malcom is responsible for product management at EARNEST Partners. Prior to joining EARNEST Partners, he worked for JPMorgan Chase in New York. He was a member of the Global Investment Bank providing corporate finance coverage to natural resource companies. He is a graduate of the United States Military Academy at West Point and holds an MBA from Emory University, where he was a Donald Keough Scholar. Mr. Malcom led the Varsity Football team at West Point in scoring for three consecutive years. In his senior year, he was named the "Chevrolet Player of the Game" in the annual Army-Navy game. He also served as a helicopter pilot in the United States Army for more than seven years, an experience that included commanding a Blackhawk Helicopter Company along the demilitarized zone between North and South Korea. Mr. Malcom is a member of the CFA Institute and the CFA Society Atlanta.

Jeffrey Jackson
Director

Mr. Jackson is a member of the product management team at EARNEST Partners. Prior to joining EARNEST Partners, he worked for the global investment bank, Evercore, in New York where he helped lead their Real Estate advisory practice as a Managing Director. His extensive background also includes experience in acquisitions, development and debt restructuring within Real Estate. He is a graduate of the Tuck School of Business at Dartmouth where he holds an MBA and was a Consortium Fellow and he holds a BS in Finance from Hampton University where he was a Presidential Scholar. Mr. Jackson was a member of the SEO Career Program and later served as a member of the SEO Junior Leadership Board. Mr. Jackson is a former collegiate basketball player and maintains an active lifestyle with his passion for cycling.



Guidelines and Investment Policy Audit

Oakland Police and Fire Retirement Board
December 31, 2021

	Yes	No
• Benchmark: Exceed Russell Midcap® Index over a full market cycle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Cash position is less than 10% of total portfolio value*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• No industry sector weight greater than 25% of total portfolio	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• No security held is greater than 5% of total portfolio value* or 8% at market	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Proxies voted in accordance with guidelines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• No prohibited securities held	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EARNEST Partners believes that the attached information, along with other submissions, represents all the required reporting information. Please notify us immediately if any required information is missing.

**Threshold may be temporarily exceeded due to market conditions.*



Global equity markets were generally positive in the fourth quarter of 2021 as investors continued to gain confidence in the global economy. The S&P 500® rose 11.0% during the quarter and finished the year up 28.7% to hit a new record. The U.S. large cap market, as represented by the Russell 1000® Index, gained 9.8%. The U.S. midcap market, as represented by the Russell Midcap® index, rose by 6.4%. Small cap equities, as represented by the Russell 2000®, rose by 2.1%. International equity markets, as represented by the MSCI ACWI ex-U.S.® Index, rose by 1.9%. Emerging markets was the only segment to post a negative return as investors continued to incorporate uncertainty surrounding government regulations into their future price expectations. The MSCI Emerging Markets Index declined by 1.2%, while the MSCI EAFE rose by 2.7% during the quarter.

Domestic equities continued their march into record-setting territory as investors embraced economic growth, falling unemployment, and strengthening consumer demand. Despite marginally higher interest rate expectations and heightened inflation reports, investors continued to have faith in the ability of American businesses to expand their margins. American employers added a record number of jobs in 2021 and layoffs fell to the lowest level since 1969 as employment stayed near a 50-year low. As in the previous quarter, large-cap U.S. equities continued to be the biggest winners as investors embraced continued economic expansion and businesses' ability to adapt to the restrictions put on by the coronavirus pandemic. Larger businesses typically get better financing terms, which enabled them to refinance and/or raise funding at historically low rates as corporate debt hit record levels. Value stocks generally outperformed growth stocks as higher future rate expectations and prospects for more expensive future financing drove investors to favor consistent cash flow over potential future earnings growth. Despite concerns about the pandemic surrounding the emergence of a new variant, retail sales grew, and overall GDP grew at an annualized rate of 2.3% in the third quarter of the year. Vaccination distribution continued as the majority of Americans received shots, and new measures such as pills and booster shots were developed and approved to combat the ongoing pandemic.

Fed Chair Jerome Powell was nominated for a second four-year term, and the Fed began reducing asset purchases by \$15 billion a month, affirming that an improved economy and strengthening labor market reduced the need for continued stimulus. In December, the Fed acknowledged that the recent increases in CPI (6.2% annualized in October followed by 6.8% in November) warranted accelerated tapering of its \$120 billion a month stimulus program and it will reduce asset repurchases by \$30 billion a month (\$20B in treasuries and \$10B in mortgage-backed securities) beginning in January, meaning that new asset repurchase will end in March, although they did not shed any color on whether they would reduce the size of the balance sheet as a whole. The Fed's latest projections indicate that it expects to incorporate three hikes to the Federal Funds rate next year as it is forecasting a rate of 0.9% by the end of next year, 1.6% at the end of 2023 and 2.5% over the longer-run. The central bank forecast a 5.5% growth in GDP for 2021, slightly below its September estimate of 5.9%, but raised its forecast for 2022 growth to 4.0% from its earlier 3.8% estimate in September. After hitting a record high of 14.8% in April of last year, unemployment steadily declined to 4.2% in November.

Congress passed a \$1.2 Trillion infrastructure bill which provided for \$550 billion in new spending on transportation, roads/bridges, and utilities, but did not pass any stimulus measures directly linked to coronavirus. Since the pandemic began, Congress approved approximately \$5.3 Trillion in stimulus that included forgivable small business loans, direct payments to households, expanded unemployment benefits and vaccine funding.

Fixed income markets experienced their first negative year since 2013 as the Bloomberg Barclays Aggregate fell by about 1.5% during the year. The yield curve shifted up as demand for safe-haven fixed income instruments decreased and the Fed began to wind down stimulus measures. The yield on the 30-year finished the year at about 1.9%, well off of last year's lows, indicating that investors expect low to moderate long-term growth and inflation despite recent CPI readings. Within fixed income, only high yield securities posted a positive return during the year as their spread continued to tighten following weakening demand for treasuries and investors' confidence that these borrowers will meet their obligations.



EARNEST Partners

Mid Cap Core Portfolio Review

**Oakland Police and Fire Retirement
Board
December 31, 2021**

The U.S. mid cap equity market, as represented by the Russell Midcap® Index, generated strong performance in the fourth quarter expanding by more than 6% for the three-month period ended December 31, 2021. All but one sector generated positive returns with economic indicators continuing to improve as the market recovers from the impact of Covid and the numerous variants that have emerged. Real Estate, Utilities, and Materials were the top performing sectors while Communication Services, Health Care, and Consumer Discretionary were the worst performing sectors. The EARNEST Partners Mid Cap Core strategy meaningfully outperformed the Index, net of fees, in the quarter generating an absolute return in excess of 10% as a result of favorable stock selection notably in the Consumer Discretionary and Information Technology sectors. EARNEST Partners' focus on high-quality companies well-positioned to benefit over the long term resulted in an absolute return in excess of 20% for the year and relative benchmark outperformance over the trailing 1, 3, 5, 7, and 10-year periods, net of fees.

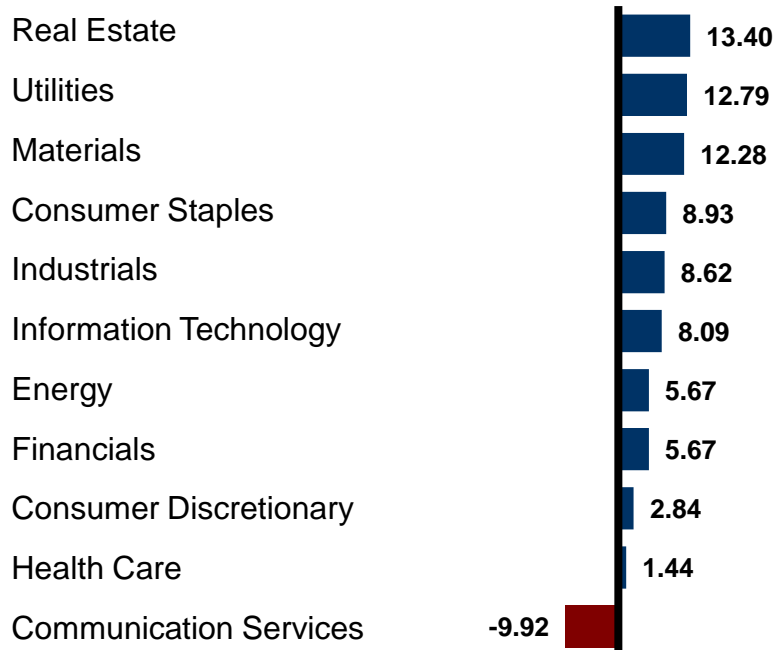
Contributing to performance was GATX Corporation. Based in Chicago, IL, GATX is a leader in leasing transportation assets and controls a large railcar fleet. The company leases, operates and manages long-lasting, widely used assets in rail, marine and industrial equipment markets across North America, Europe and Asia. The stock outperformed the index gaining 16% for the quarter as the company beat consensus EPS estimates by nearly 4%. Strong performance reflected increased demand for freight assets with GATX reporting a 99% and 98% utilization rate on the company's fleet domestically and internationally, respectively. GATX continues to be well positioned to benefit from shippers decreasing the size of their owned railcar fleets and increasingly moving to outsourced models. Earnings should continue to trend favorably as demand for railcars recovers driven by improvement in broader trade activity and the trend toward outsourcing continues with GATX benefiting disproportionately given its presence as a leading railcar lessor with long-standing relationships with shippers.

Eastman Chemical Company is a specialty chemical company that produces a variety of advanced materials and specialty additives found in every-day items ranging from tires to crop protection to animal nutrition. Eastman maintains four business segments: Additives & Functional Products, Advanced Materials, Chemical Intermediaries, and Fibers. The stock outperformed the Index gaining over 20% in the quarter as the company announced the sale of its adhesive resins business, the second divestiture in as many quarters. The deal was executed on an earnings neutral basis for a division that was underperforming, further reducing the complexity of Eastman's overall business and facilitating growth in core businesses. Eastman is well positioned given its favorable valuation metrics when compared to industry peers. The company displays considerable room for multiple expansion given recent divestitures, a strategic decision that should fund growth and facilitate margin improvement for the remaining business lines. The divestitures also provide the requisite cash needed to execute the share repurchase program which is expected to reduce shares outstanding by ~15%.

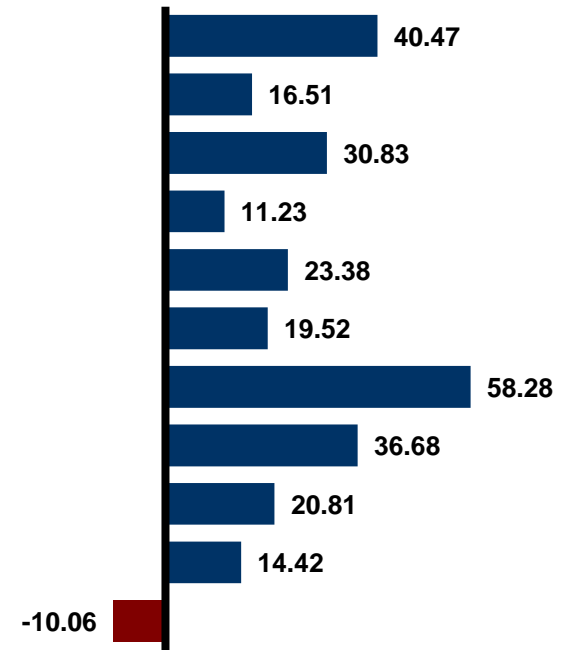
Detracting from performance, Darden Restaurants, Inc. is the world's largest full-service restaurant operator and holds a portfolio of some of the most recognizable concepts in full-service dining including Olive Garden, LongHorn Steakhouse, Bahama Breeze, The Capital Grille, and Seasons 52. Darden operates more than 1,700 restaurant locations and employs over 150,000 staff members. Darden shares underperformed for the quarter losing nearly 2% as labor shortages and inflationary pressures weighed on the stock. Despite these headwinds, the company reported better than expected earnings as the company continued to focus on its brands while optimizing operations and expenses. Darden is uniquely positioned to outperform its peers given its scale and operational expertise. Management has consistently demonstrated an ability to offset cost inflation through moderate price increases, reduced customer incentives, and productivity gains through process and menu simplification. Cost savings have enabled management to improve the quality of its food and size of its portions which is driving increased market share within the casual dining segment and growing earnings.

Equity Market Performance By Sector

Russell Midcap® Index
4th Quarter 2021 Returns
Percent



Russell Midcap® Index
YTD Returns
Percent

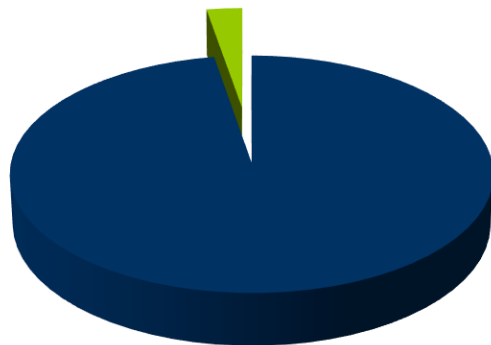




Fund Totals

Ending Portfolio Value	\$51,504,585
Estimated Annual Income	\$464,526
Yield on Equities	0.9%

Asset Distribution



Equities

97.3%

Short-term Investments

2.7%

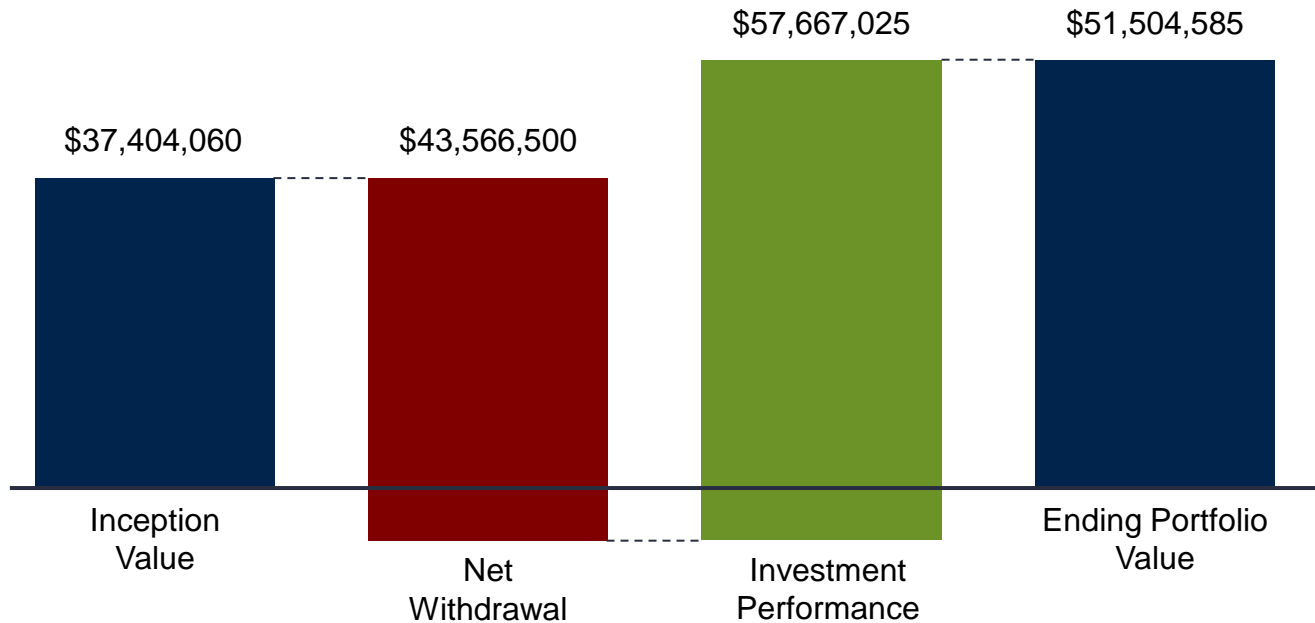


Performance

	<u>Total Portfolio</u>	<u>Russell Midcap® Index</u>	<u>Excess Return (Basis Points)</u>
1 Year	25.74%	22.58%	316
3 Years	28.20	23.26	494
5 Years	19.17	15.09	408
7 Years	16.08	12.22	386



Asset Growth Since Inception



GATX Corporation



- Based in Chicago, IL, GATX Corporation is a leader in leasing transportation assets and controls a large railcar fleet. The company leases, operates and manages long-lasting, widely used assets in rail, marine and industrial equipment markets across North America, Europe and Asia.
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Eastman Chemical



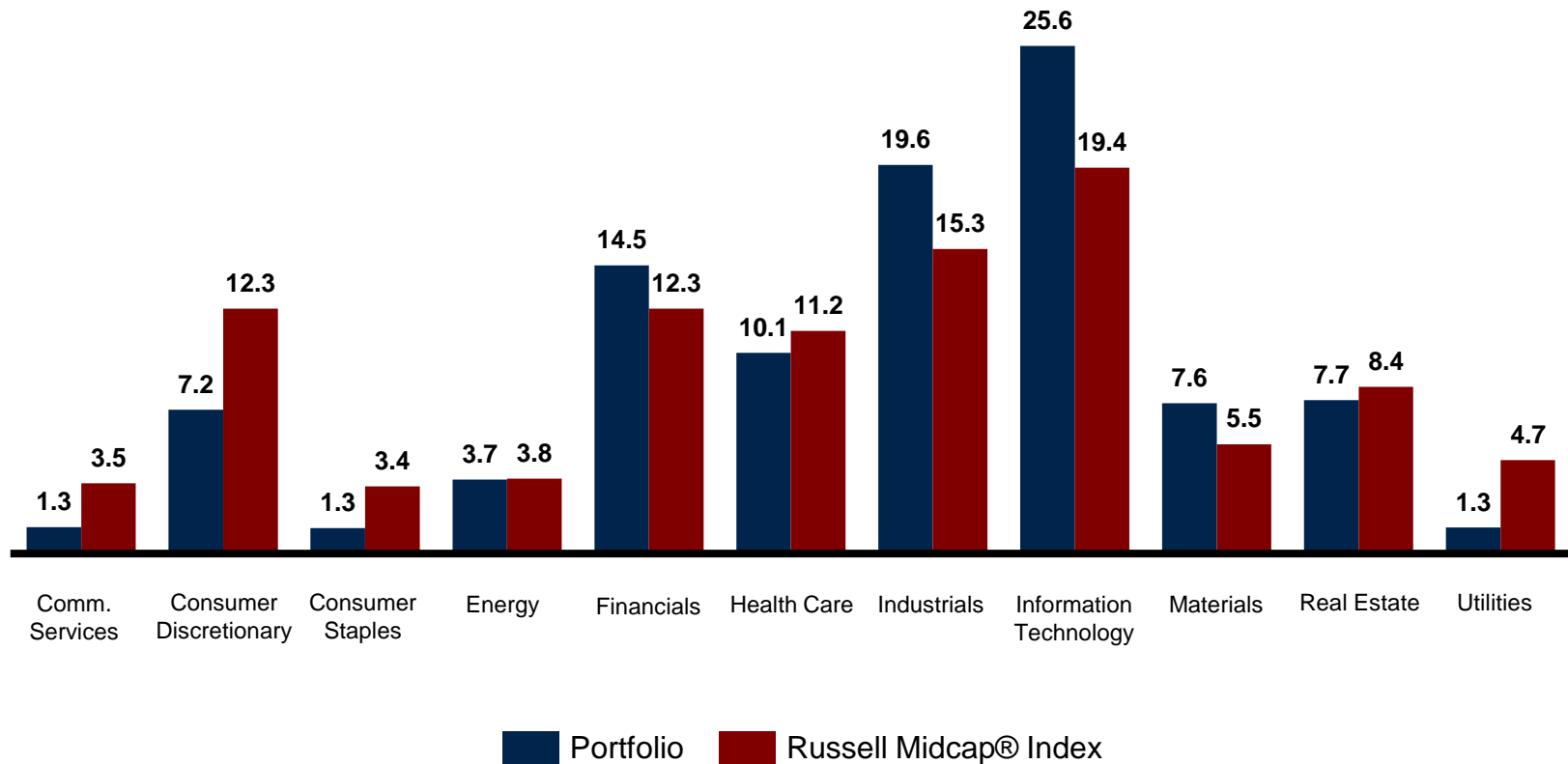
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Darden Restaurants, Inc.



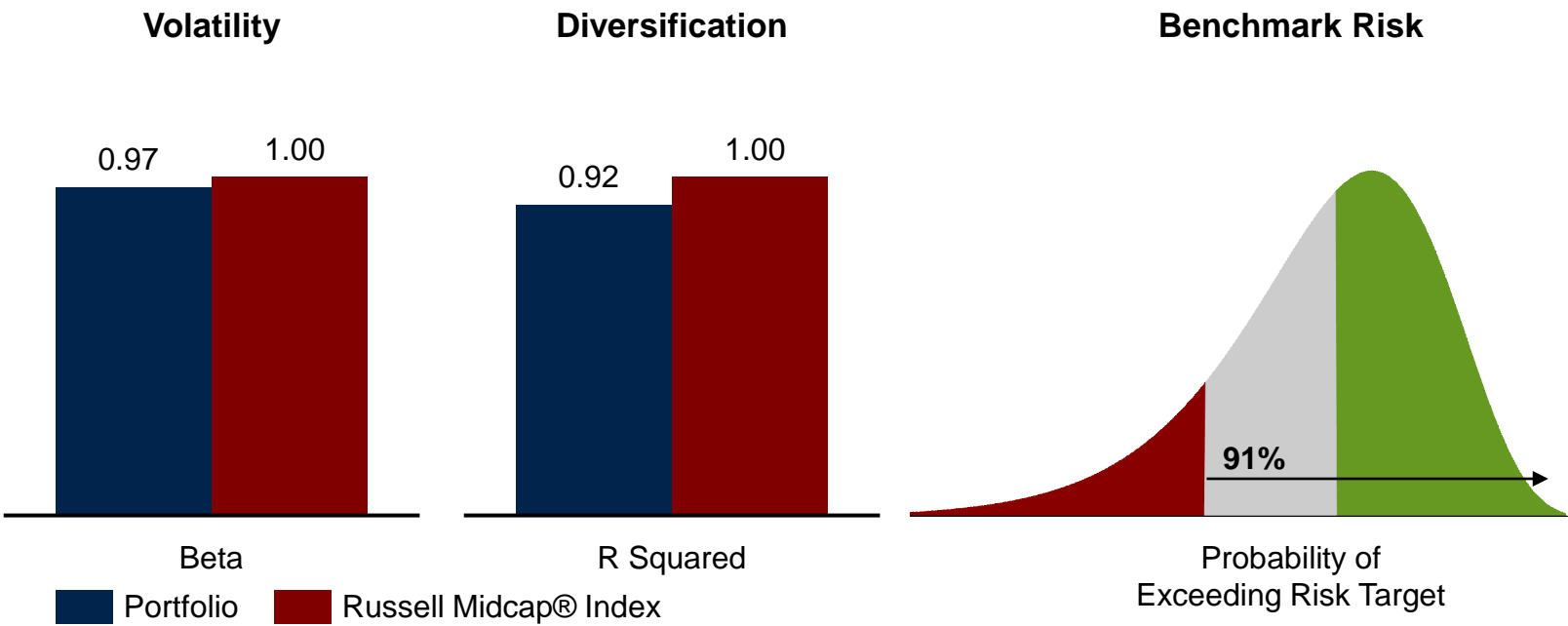
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Percentage Held





Risk Profile

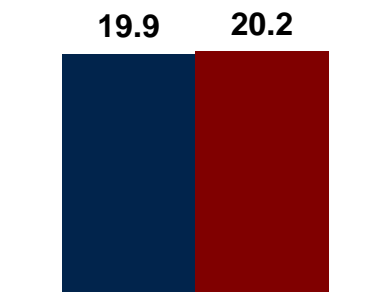




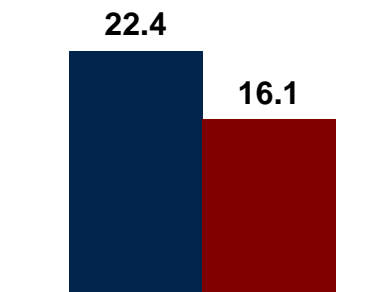
Equity Portfolio Characteristics

Oakland Police and Fire Retirement
Board
December 31, 2021

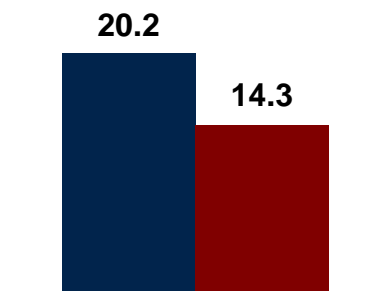
Price to Earnings



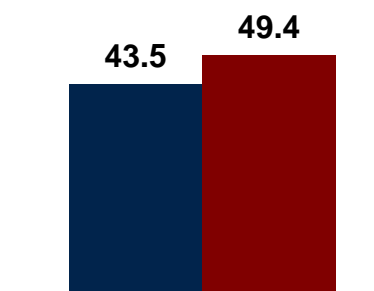
Earnings Growth



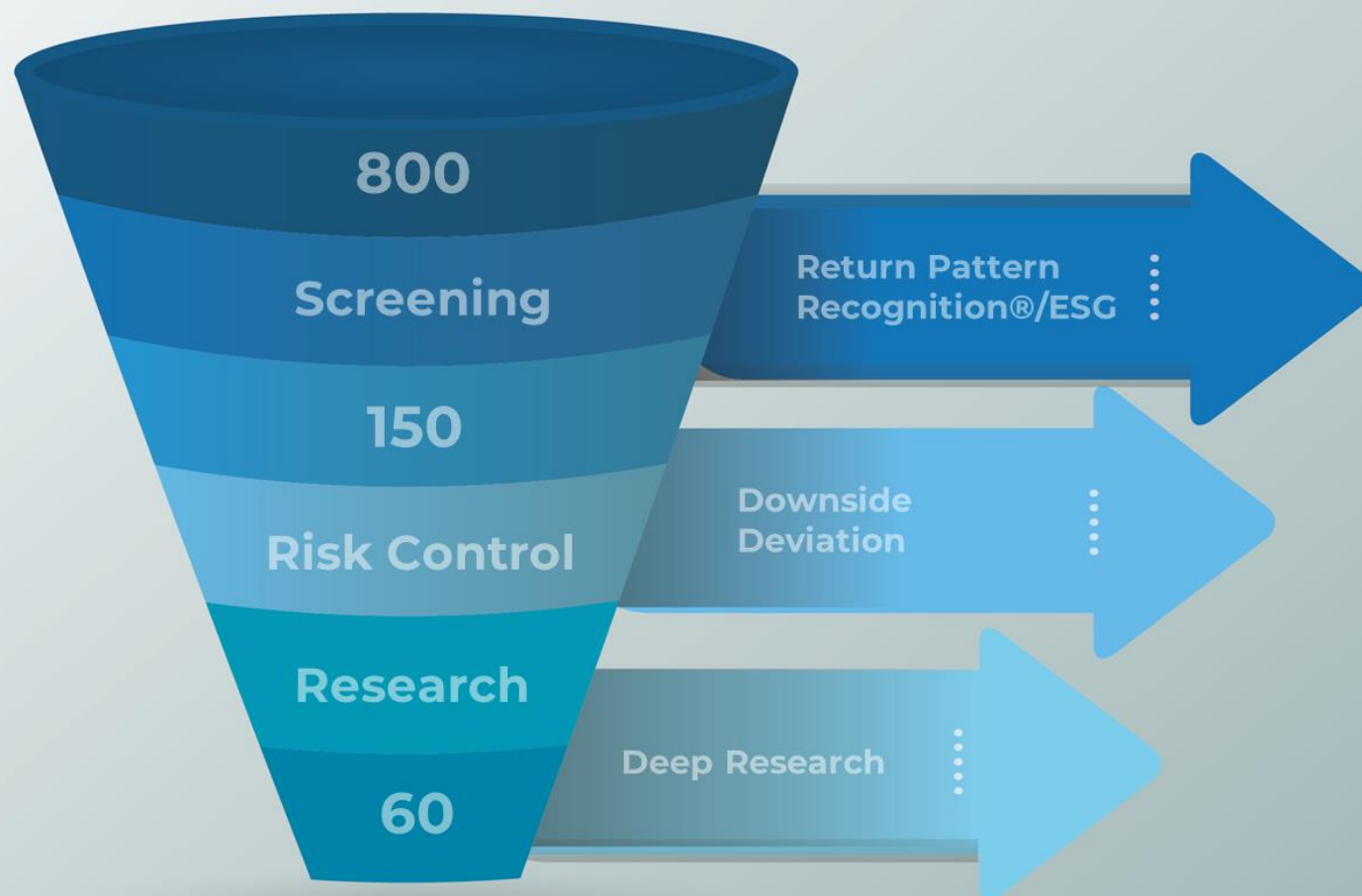
Return on Equity



Debt to Capitalization



Portfolio Russell Midcap® Index



For those clients on whose behalf the Firm votes proxies, clients can elect to have the Firm utilize (a) the client's own proxy voting policies and procedures ("P&P") or (b) the Firm's P&P.

Proxy Policy-Overview

- As a general rule, the Firm will seek to vote the proxies received timely and in good order, in accordance with its then current proxy voting policies and procedures. A partial list of issues that may require special attention are as follows: classified boards, change of state of incorporation, poison pills, unequal voting rights plans, provisions requiring supermajority approval of a merger, executive severance agreements, and provisions limiting shareholder rights.
- In addition, the following will generally be adhered to:
 - The Firm will not (1) actively engage in conduct that involves an attempt to change or influence the control of a portfolio company, (2) announce its voting intentions or the reasons for a particular vote, (3) participate in a proxy solicitation or otherwise seek proxy voting authority from any other portfolio company shareholder, or (4) act in concert with any other portfolio company shareholders in connection with any proxy issue or other activity involving the control or management of a portfolio company.
 - All communications with portfolio companies or fellow shareholders will be for the sole purpose of expressing and discussing the Firm's concerns for its Clients' interests and not in an attempt to influence the control of management.

Proxy Procedures-Overview

The Firm has designated a Proxy Director. The Proxy Director, in consultation with the Firm's Investment Team, will consider each issue presented on each portfolio company proxy. The Proxy Director will also use available resources, including proxy evaluation services, to assist in the analysis of proxy issues. Absent any written direction from the Client, proxy issues presented to the Proxy Director will be voted in accordance with the judgment of the Proxy Director, taking into account the general policies outlined above and the Firm's Proxy Voting Guidelines. Therefore, it is possible that actual votes may differ from the general policies and the Firm's Proxy Voting Guidelines. In the case where the Firm believes it has a material conflict of interest with a Client, the Proxy Director will utilize the services of outside third party professionals (currently ISS) to assist in its analysis of voting issues and the actual voting of proxies to ensure that a decision to vote the proxies was based on the Client's best interest and was not the product of a conflict of interest. In the event the services of an outside third party professional are not available in connection with a conflict of interest, the Firm will seek the advice of the Client.

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
Common Stock						
Communication Services						
10,010.00	ACTIVISION BLIZZ	66.53	665,965.30	1.29	2,978.93	0.45
			665,965.30	1.29	2,978.93	0.45
Consumer Discretionary						
14,514.00	DR HORTON INC	108.45	1,574,043.30	3.06	19,451.85	1.24
7,886.00	DARDEN RESTAURAN	150.64	1,187,947.04	2.31	32,998.53	2.78
11,404.00	TJX COS INC	75.92	865,791.68	1.68	14,167.99	1.64
			3,627,782.02	7.04	66,618.37	1.84
Consumer Staples						
8,169.00	SYSCO CORP	78.55	641,674.95	1.25	13,518.83	2.11
			641,674.95	1.25	13,518.83	2.11
Energy						
20,722.00	CONTL RES INC/OK	44.76	927,516.72	1.80	0.00	
49,323.00	CABOT OIL & GAS	19.00	937,137.00	1.82	9,506.04	1.01
			1,864,653.72	3.62	9,506.04	0.51
Financials						
8,420.00	HOULIHAN LOKEY I	103.52	871,638.40	1.69	18,303.90	2.10
8,407.00	INTERCONTINENTAL	136.77	1,149,825.39	2.23	14,948.98	1.30
36,150.00	KEYCORP	23.13	836,149.50	1.62	20,477.13	2.45
9,269.00	PROGRESSIVE CORP	102.65	951,462.85	1.85	0.00	

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
7,608.00	REINSURANCE GROU	109.49	832,999.92	1.62	12,490.63	1.50
10,275.00	RAYMOND JAMES RENAISSANCERE HOLDINGS	100.40	1,031,610.00	2.00	0.00	
4,212.00	LTD	169.33	713,217.96	1.38	7,848.67	1.10
12,639.00	STIFEL FINANCIAL	70.42	890,038.38	1.73	0.00	
			7,276,942.40	14.13	74,069.30	1.02
Health Care						
7,071.00	AGILENT TECH INC	159.65	1,128,885.15	2.19	10,977.58	0.97
4,245.00	AMERISOURCEBERGE	132.89	564,118.05	1.10	9,958.88	1.77
1,547.00	BIO-RAD LABS-A	755.57	1,168,866.79	2.27	0.00	
2,443.00	LABORATORY CP	314.21	767,615.03	1.49	0.00	
8,106.00	SYNEOS HEALTH IN	102.68	832,324.08	1.62	0.00	
10,901.00	DENTSPLY SIRONA	55.79	608,166.79	1.18	4,877.60	0.80
			5,069,975.89	9.84	25,814.05	0.51
Industrials						
16,343.00	AIR LEASE C	44.23	722,850.89	1.40	6,973.96	0.96
2,943.00	CUMMINS INC	218.14	641,986.02	1.25	20,814.92	3.24
22,050.00	CSX CORP	37.60	829,080.00	1.61	0.00	
4,408.00	DOVER CORP	181.60	800,492.80	1.55	20,680.59	2.58
5,652.00	GATX CORP	104.19	588,881.88	1.14	15,003.36	2.55
3,389.00	GENERAL DYNAMICS	208.47	706,504.83	1.37	14,021.54	1.98
13,595.00	MASCO CORP	70.22	954,640.90	1.85	0.00	

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
10,130.00	REPUBLIC SVCS	139.45	1,412,628.50	2.74	28,314.12	2.00
3,350.00	SNAP-ON INC	215.38	721,523.00	1.40	14,608.61	2.02
10,283.00	STERICYCLE INC	59.64	613,278.12	1.19	0.00	0.00
16,142.00	SENSATA TECHNOLO	61.69	995,799.98	1.93	0.00	0.00
7,584.00	WOODWARD INC	109.46	830,144.64	1.61	0.00	
			9,817,811.56	19.06	120,417.10	1.23
Information Technology						
6,209.00	AKAMAI TECHNOLOG	117.04	726,701.36	1.41	0.00	
5,129.00	APPLIED MATERIAL	157.36	807,099.44	1.57	14,256.56	1.77
3,257.00	ANSYS INC	401.12	1,306,447.84	2.54	0.00	
6,656.00	ARROW ELECTRONIC	134.27	893,701.12	1.74	0.00	
8,653.00	BLACK KNIGHT	82.89	717,247.17	1.39	0.00	
4,257.00	BROADRIDGE FINL	182.82	778,264.74	1.51	9,921.13	1.27
5,349.00	CMC MATERIALS INC	191.69	1,025,349.81	1.99	15,506.23	1.51
20,859.00	CDK GLOBAL INC	41.74	870,654.66	1.69	7,970.59	0.92
5,381.00	GLOBAL PAYMENTS	135.18	727,403.58	1.41	264.53	0.04
7,584.00	KEYSIGHT TEC	206.51	1,566,171.84	3.04	0.00	
2,093.00	LUMENTUM HOL	105.77	221,376.61	0.43	0.00	
2,863.00	SYNOPSYS INC	368.50	1,055,015.50	2.05	0.00	
7,325.00	SKYWORKS Solutio	155.14	1,136,400.50	2.21	0.00	
4,694.00	XILINX INC	212.03	995,268.82	1.93	22,005.03	2.21

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
			12,827,102.99	24.90	69,924.07	0.55
Materials						
4,652.00	ALBEMARLE CORP	233.77	1,087,498.04	2.11	15,562.23	1.43
5,141.00	EASTMAN CHEMICAL	120.91	621,598.31	1.21	13,965.70	2.25
3,978.00	PACKAGING CORP	136.15	541,604.70	1.05	15,270.08	2.82
14,180.00	SEALED AIR CORP	67.47	956,724.60	1.86	14,430.92	1.51
3,652.00	SCOTTS MIRACLE	161.00	587,972.00	1.14	0.00	
			3,795,397.65	7.37	59,228.93	1.56
Real Estate						
13,851.00	CBRE GROUP INC	108.51	1,502,972.01	2.92	0.00	
			1,502,972.01	2.92	0.00	0.00
Utilities						
6,746.00	WEC ENERGY GROUP	97.07	654,834.22	1.27	22,450.88	3.43
			654,834.22	1.27	22,450.88	3.43
			47,745,112.71	92.70	464,526.51	0.97
Real Estate Investment Trust						
Real Estate						
6,383.00	BOSTON PROPERTIE	115.18	735,193.94	1.43	0.00	
24,307.00	AMERICOLD REALTY	32.79	797,026.53	1.55	0.00	
2,151.00	SBA COMM CORP	389.02	836,782.02	1.62	0.00	
			2,369,002.49	4.60	0.00	0.00



Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
			2,369,002.49	4.60	0.00	0.00
Cash and Equivalents						
1,354,610.69	U.S. DOLLARS	1.00	1,354,610.69	2.63	0.00	
35,859.15	USD - DIVIDENDSRECEIVABLE	1.00	35,859.15	0.07	0.00	
			1,390,469.84	2.70	0.00	0.00
			1,390,469.84	2.70	0.00	0.00
Total Portfolio			51,504,585.04	100.00	464,526.51	0.90

Statement Of Transactions

From 10/1/2021 to 12/31/2021

<u>Quantity</u>	<u>Security</u>	<u>Sec Symbol</u>	<u>Unit Price</u>	<u>Total Amount</u>
PURCHASES				
3,517.00	CDK GLOBAL INC	CDK	41.27	145,145.59
2,093.00	LUMENTUM HOL	LITE	105.83	221,497.46
2,106.00	TJX COS INC	TJX	74.21	156,295.32
1,583.00	WOODWARD INC	WWD	106.95	169,305.32
3,168.00	REINSURANCE GROU	RGA	102.40	324,396.91
6,404.00	AMERICOLD REALTY	COLD	29.77	190,645.08
				<u>1,207,285.68</u>
SALES				
1,064.00	CMC Materials Inc	CCMP	185.23	197,087.84
8,090.00	DOLLAR TREE INC	DLTR	136.65	1,105,464.50
1,198.00	APPLIED MATERIAL	AMAT	143.56	171,982.80
913.00	INTERCONTINENTAL	ICE	129.36	118,101.78
2,050.00	TJX COS INC	TJX	69.27	141,997.85
				<u>1,734,634.77</u>



Historical Performance Measurement

Oakland Police and Fire Retirement
Board
December 31, 2021

Performance

	Total Portfolio	Russell Midcap® Index
<i>Inception 3/28/2006</i>		
2006	3.56%	7.92%
2007	8.78	5.60
2008	-37.51	-41.46
2009	37.48	40.48
2010	27.22	25.47
2011	-0.79	-1.56
2012	16.36	17.29
2013	31.25	34.78
2014	10.32	13.22
2015	1.40	-2.44
2016	16.55	13.80
2017	26.22	18.52
2018	-9.63	-9.05



Historical Performance Measurement

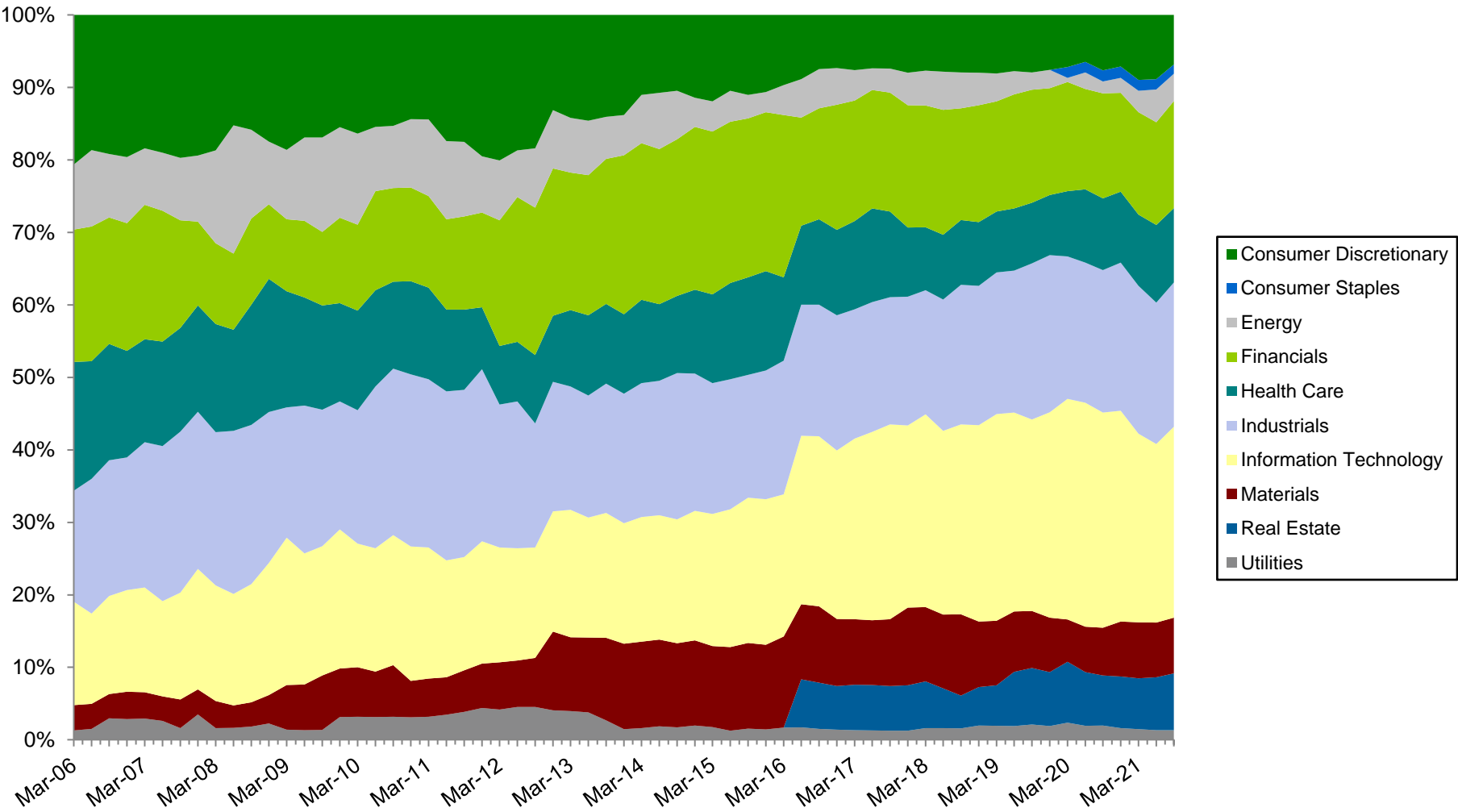
Oakland Police and Fire Retirement Board
December 31, 2021

Performance

	Total Portfolio	Russell Midcap® Index
2019	38.36	30.54
2020	21.20	17.10
3/31/2021	9.62	8.14
6/30/2021	4.11	7.50
9/30/2021	-1.02	-0.93
12/31/2021	11.30	6.44
Year-to-Date	25.74	22.58
Since Inception		
-Annualized	11.85	10.22
-Cumulative	484.95	364.55



EARNEST Partners' Model Portfolio





Asset Growth

Period Ending	Ending Portfolio Value	Withdrawals	Contributions	Investment Change	
				Period	Since Inception
3/28/2006	\$37,404,060				
2006	\$38,599,735	\$0	\$0	\$1,195,675	\$1,195,675
2007	51,982,630	3,500,000	14,238,849	2,644,046	3,839,721
2008	26,001,788	10,000,000	0	-15,980,842	-12,141,121
2009	32,406,299	3,000,000	0	9,404,511	-2,736,610
2010	31,053,473	8,500,000	0	7,147,174	4,410,564
2011	23,758,477	7,500,000	0	205,004	4,615,568
2012	27,646,027	0	0	3,887,550	8,503,118
2013	40,899,931	0	3,802,146	9,451,898	17,955,016
2014	31,527,407	13,001,627	0	3,629,103	21,584,119
2015	29,934,966	2,000,704	0	408,263	21,992,382

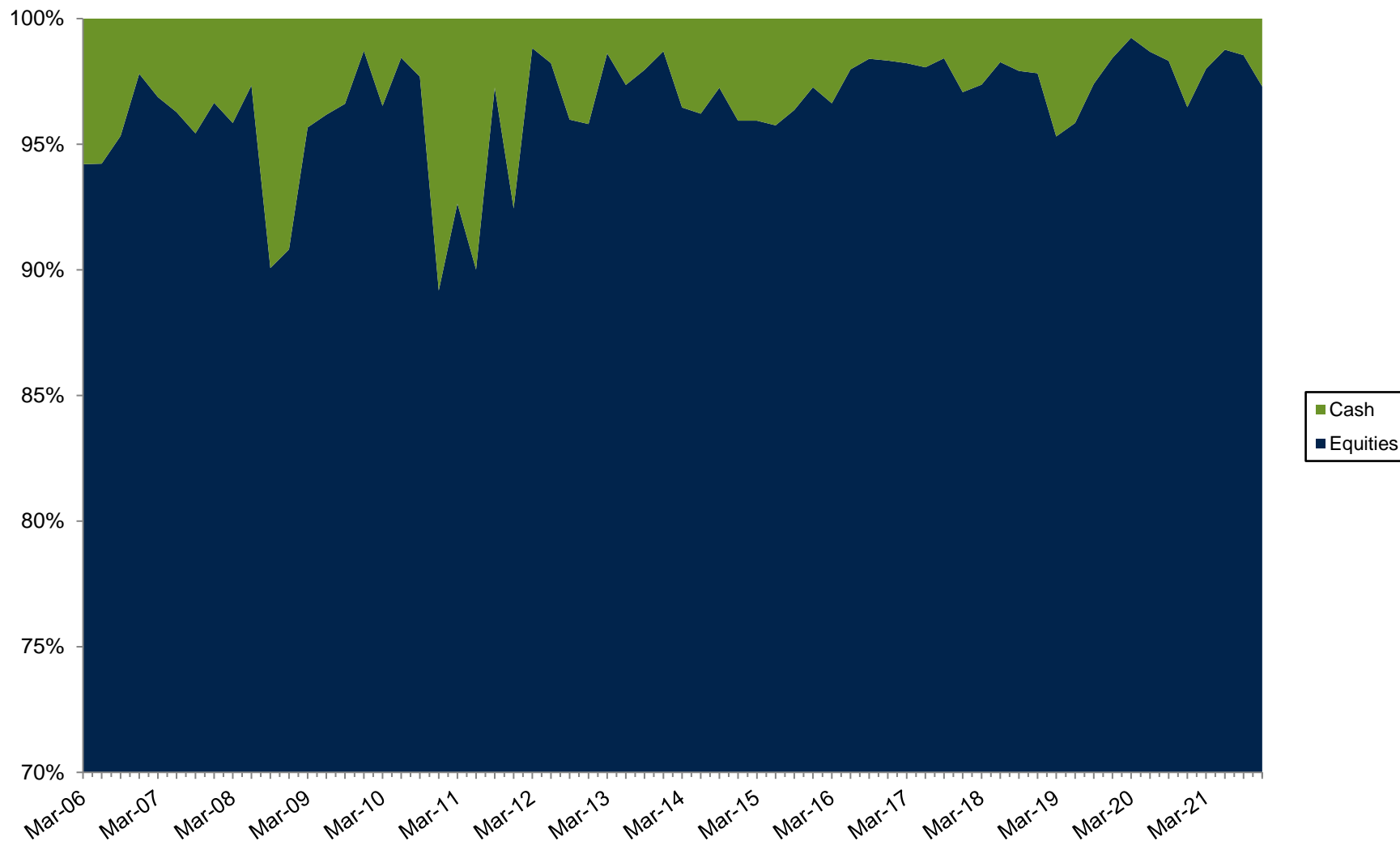
Asset Growth

Period Ending	Ending Portfolio Value	Withdrawals	Contributions	Investment Change	
				Period	Since Inception
2016	\$27,890,394	\$6,500,289	\$0	\$4,455,717	\$26,448,099
2017	29,426,736	5,000,733	0	6,537,075	32,985,174
2018	25,674,345	1,000,929	0	-2,751,462	30,233,712
2019	33,800,363	1,601,235	0	9,727,253	39,960,965
2020	40,963,482	0	0	7,163,875	47,124,840
3/31/2021	44,905,670	0	0	3,942,679	51,067,519
6/30/2021	46,751,367	0	0	1,846,015	52,913,534
9/30/2021	46,275,569	0	0	-475,589	52,437,945
12/31/2021	\$51,504,585	0	0	5,229,080	57,667,025



Asset Allocation

Oakland Police and Fire Retirement Board
December 31, 2021





Broker Commission Report
Oakland Police and Fire Retirement Board

Broker	Quantity	Commission Per Share	Commission Paid	% of Total Commission	Total Value of Trades	BP Cost Comm
BLAYLOCK BEAL VAN LLC (0443)	15,526	0.020	310.52	35.14	1,430,102.85	0.0002



Diversity Representation Survey for Oakland Police and Fire

DATA AS OF 01/31/2022

Firm Name	EARNEST Partners
Product Name	EARNEST Partners Mid Cap Core
Total Number of Employees	42

	Percentage (%) of Board of Directors / Managing Members	Percentage(%) of Firm (Entire Staff)	Percentage (%) of Firm (Investment Professionals)
Race and Ethnicity*			
African American/Black		21%	13%
Asian/Hawaiian/Pacific Islander		24%	33%
Latino/Hispanic			
White		55%	53%
American Indian/Alaska Native			
Other			
Gender			
Male		60%	73%
Female		40%	27%
Non-Identified/Other			

* Racial/ethnic categories appear as defined by EEOC guidance.

Russell Midcap® Index

The Russell Midcap® Index offers investors access to the mid-cap segment of the U.S. equity universe. It is constructed to provide a comprehensive and unbiased barometer for the mid-cap segment and is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true mid-cap opportunity set. The Russell Midcap® Index includes the smallest 800 securities in the Russell 1000® Index. The index is unmanaged and it is not possible to invest directly in an index.



Nothing presented herein is intended to constitute investment advice and no investment decision should be made based on any information provided herein. Investments cited may not represent current or future holdings of EARNEST Partners, LLC (“EP”) investment products and nothing presented should be construed as a recommendation to purchase or sell a particular type of security or follow any investment technique or strategy. Information provided reflects EP's views as of a particular time. Such views are subject to change at any point and EP shall not be obligated to provide any notice of such change. Any forward-looking statements or forecasts are based on assumptions and actual results are expected to vary from any such statements or forecasts. No reliance should be placed on any such statements or forecasts when making any investment decision. While EP has used reasonable efforts to obtain information from reliable sources, we make no representations or warranties as to the accuracy, reliability or completeness of third-party information presented herein. Performance assumes the reinvestment of dividends and capital gains. No guarantee of investment performance is being provided and no inference to the contrary should be made.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon, Jason Campbell
Meketa Investment Group
DATE: February 23, 2022
RE: EARNEST Partners – Manager Update

Manager: EARNEST Partners

Inception Date: 04/2006 **OPFRS AUM (12/31/21):** \$51.50 Million (10.5%)

Management Fee: 79 bps (\$406,866)¹

Investment Strategy: Domestic Mid-Cap Equity

Benchmark: Russell Midcap Index **Firm-wide AUM (12/31/21):** \$28.6 billion²

Summary & Recommendation

EARNEST Partners has managed the Midcap Core portfolio since the first quarter of 2006. Since inception, EARNEST has outperformed its benchmark. *Meketa does not have any major concerns with Earnest Partners and recommends renewal of its contract with OPFRS.*

Discussion

In reviewing EARNEST, Meketa considered investment performance and recent organizational / personnel issues.

Annualized Investment Performance (as of 12/31/2021)

	MKT Value (\$000)	Quarter	1 YR	3 YR	5 YR	Since Inception	Inception Date ³
Earnest Partners (Gross of Fees)	51,502	11.3	25.7	28.2	19.2	11.8	3/2006
Earnest Partners (Net of Fees)	51,502	11.1	24.9	27.4	18.4	11.0	--
<i>Russell Midcap Index</i>	--	6.4	22.6	23.3	15.1	10.2	--
Excess Return (Net of Fees)	--	+3.7	+2.3	+4.1	+3.3	+0.8	--

EARNEST has outperformed the Russell Midcap Index by 80 basis points since inception in 2006. EARNEST has been a part of the portfolio for over a decade and continues to deliver outperformance, even in recent years.

¹ Estimate based on AUM as of 12/31/21.

² Source: Manager

³ Inception date reflects the first full month after portfolio received initial funding.

Organizational Issues

EARNEST Partners		Areas of Potential Impact			
	Level of Concern^	Investment process (client portfolio)	Investment Team	Performance Track Record	Team/ Firm Culture
Product					
Key people changes	None				
Changes to team structure/individuals' roles	None				
Product client gain/losses	None				
Changes to the investment process	None				
Personnel turnover	None				
Organization					
Ownership changes	None				
Key people changes	None				
Firm wide client gain/losses	None				
Recommended Action	None - X		Watch Status	Termination	

Investment Philosophy & Process, per manager

EARNEST Partners is a fundamental, bottom-up investment manager. The investment objective is to outperform the assigned benchmark while seeking to control volatility and risk. EARNEST implements this philosophy using an internally developed screen called Return Pattern Recognition® that seeks to identify the specific drivers of each stock rather than attempting to apply the same dogma to each stock. They believe that companies are unique and consider the specific characteristics of each company when selecting companies. They continue to search for mispriced and misunderstood opportunities within the market.

EARNEST Partners does not target sector or industry weights. Instead, the weightings are an outgrowth of the bottom-up, fundamental stock selection process. The process is designed to put the client in the individual securities that the firm believes have the most attractive expected returns; relative overweights and underweights are an outgrowth of where the team is finding those individual opportunities. The risk management process also influences the weights taken in any one sector. As a general rule, larger sectors will not represent more than 2x the benchmark weight. No individual holding generally exceeds 5.0% of the portfolio's value.

DS/PN/JC/ep

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8038

*Approved to Form
and Legality*



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION AUTHORIZING ONE-YEAR EXTENSION OF
PROFESSIONAL SERVICES AGREEMENT WITH EARNEST PARTNERS,
LLC FOR THE PROVISION OF DOMESTIC EQUITY MID-CAP CORE
ASSET CLASS INVESTMENT MANAGER SERVICES FOR THE CITY OF
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM**

WHEREAS, Oakland City Charter section 2601(e) states that the Board of the Oakland Police and Fire Retirement System (“PFRS Board”) shall possess power to make all necessary rules and regulation for its guidance and shall have exclusive control of the administration and investment of the funds established for the maintenance and operation of the system; and

WHEREAS, Oakland City Charter section 2601(e) also states that the PFRS Board may secure from competent investment counsel such counsel and advice as to investing the funds of the Retirement System as it deems necessary and that discretionary powers granted such investment counsel will be at the option of the Board; and

WHEREAS, at the November 30, 2005 Board meeting, the PFRS Board awarded a professional service agreement (“the Agreement”) to Earnest Partners, LLC (“Investment Counsel”) to provide advice and counsel regarding investments of the assets of the Police and Fire Retirement Fund (“Fund”) for a five-year term commencing March 24, 2006 and ending March 24, 2011; and

WHEREAS, Section XXVII of the Agreement allows for modification of the Agreement by written agreement of all parties; and

WHEREAS, Section IV(B) of the Agreement gave the PRFRS Board the option to extend the initial term of the Agreement for three additional one-year terms; and

WHEREAS, on January 26, 2011, the Agreement with Investment Counsel was extended by Board motion for an additional five-year term, commencing March 24, 2011, and

WHEREAS, on March 30, 2016, the Agreement with Investment Counsel was

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8038

extended by Board motion for an addition one-year term, effective March 24, 2016, and

WHEREAS, on March 29, 2017, the PFRS Board passed Resolution No. 6957 which authorized amendment of Section IV(B) of the Agreement to provide the PFRS Board with unlimited one-year extension options, and

WHEREAS, on January 31, 2018, the PFRS Board passed Resolution No. 6993 which authorized a one-year extension of the Agreement with Investment Counsel commencing March 24, 2018, and

WHEREAS, on January 30, 2019, the PFRS Board passed Resolution No. 7036 which authorized a one-year extension of the Agreement with Investment Counsel, commencing March 24, 2019, and

WHEREAS, on January 29, 2020, the PFRS Board passed Resolution No. 7080 which authorized a one-year extension of the Agreement with Investment Counsel, commencing March 24, 2020, and

WHEREAS, on February 24, 2021, the PFRS Board passed Resolution No. 8011 which authorized a one-year extension of the Agreement with Investment Counsel, commencing March 24, 2021, and

WHEREAS, the Board now wishes to exercise its option to renew the Agreement with Investment Council for an additional one-year term, commencing March 24, 2022; now, therefore, be it

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8038

RESOLVED: That the Board hereby authorizes a one-year extension of the professional service agreement between the City of Oakland Police and Fire Retirement System and Earnest Partners, LLC for the provision of Domestic Equity Mid-Cap Core Asset Class Investment Manager Services, commencing March 24, 2022 and ending March 24, 2023.

IN BOARD MEETING, VIA ZOOM TELE-CONFERENCE **FEBRUARY 23, 2022**

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

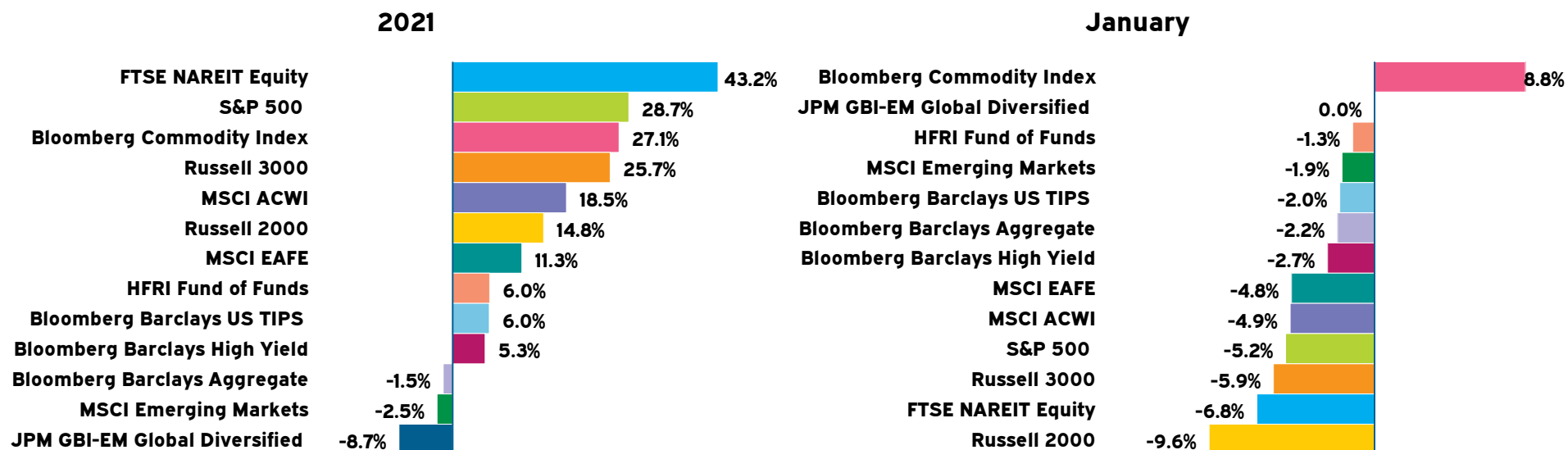
Economic and Market Update

January 2022 Report

January Commentary

- Expectations for policy tightening to happen faster than previously expected given persistent inflation led to significant volatility to start the year.
 - With a few exceptions most asset classes were down in January.
 - Volatility in equities, as represented by the VIX, spiked.
 - Equity markets led declines with the US down the most.
 - Rates increased across the US yield curve, with flattening continuing.
 - Value once again outpaced growth in the US given higher rates.
 - The dollar strengthened against a broad basket of peers with a few commodity-sensitive currencies outperforming.
 - Inflation expectations fell but remain elevated.
- Looking ahead, the pace of policy tightening, the track of inflation, geopolitical issues, and the path of the virus will all be key.

Index Returns¹



- Outside of emerging markets and the broad US investment grade bond market (Barclays Aggregate), most asset classes increased in 2021.
- In comparison, 2022 is off to a weak start with all major asset classes declining given expectations for policy tightening.

¹ Data Source: Bloomberg and FactSet. Data is as of January 31, 2022.

Domestic Equity Returns¹

Domestic Equity	January (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	-5.2	23.3	20.7	16.8	15.4
Russell 3000	-5.9	18.8	19.9	16.1	15.0
Russell 1000	-5.6	20.3	20.5	16.6	15.3
Russell 1000 Growth	-8.6	17.5	26.4	22.3	18.0
Russell 1000 Value	-2.3	23.4	13.8	10.5	12.3
Russell MidCap	-7.4	13.9	16.1	12.8	13.4
Russell MidCap Growth	-12.9	-1.5	17.4	15.8	14.2
Russell MidCap Value	-4.3	23.1	14.1	9.9	12.4
Russell 2000	-9.6	-1.2	12.0	9.7	11.3
Russell 2000 Growth	-13.4	-15.0	11.4	10.9	11.7
Russell 2000 Value	-5.8	14.8	11.7	7.9	10.6

US Equities: Russell 3000 Index -5.9%, and value indices outperformed growth in January.

- All US stock indices posted negative returns in January 2022 as the prospect of a faster tightening of monetary policy was priced in.
- As the economic impact of the virus continued to recede and rates rose, value stocks continued to outpace growth stocks partly driven by strong double-digit results in the energy sector given rising prices and weak results in technology (large cap space) and health care (small cap space).
- Large company stocks (Russell 1000) declined less than small company stocks (Russell 2000).

¹ Source: Bloomberg. Data is as of January 31, 2022.

Foreign Equity Returns¹

Foreign Equity	January (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI	-4.9	13.2	15.4	12.6	10.7
MSCI ACWI Ex US	-3.7	3.6	9.1	8.0	6.2
MSCI EAFE	-4.8	7.0	9.3	7.9	6.9
MSCI EAFE (Local Currency)	-3.6	14.8	10.0	7.5	9.3
MSCI EAFE Small Cap	-7.3	2.4	9.9	8.6	9.1
MSCI Emerging Markets	-1.9	-7.2	7.2	8.3	4.2
MSCI Emerging Markets (Local Currency)	-1.8	-5.6	8.8	9.3	7.1

International Developed Market Equities: MSCI EAFE -4.8% and MSCI ACWI ex US -3.7%.

- Non-US stocks also posted negative returns in January given the outlook for global interest rates but declined less than US equities.
- Developed markets trailed emerging markets with tensions between Russia and the Ukraine and higher inflation weighing on Europe. The dynamic of value outpacing growth also persisted in Europe and Japan.
- A strong US dollar weighed on developed foreign markets for US investors.

Emerging Markets: MSCI EM -1.9% in January.

- Emerging markets declined the least during the month of January partly due to some oil exporters benefiting from higher energy prices.
- Currency dynamics had less of an impact on results compared to developed markets.

¹ Source: Bloomberg. Data is as of January 31, 2022.

Fixed Income Returns¹

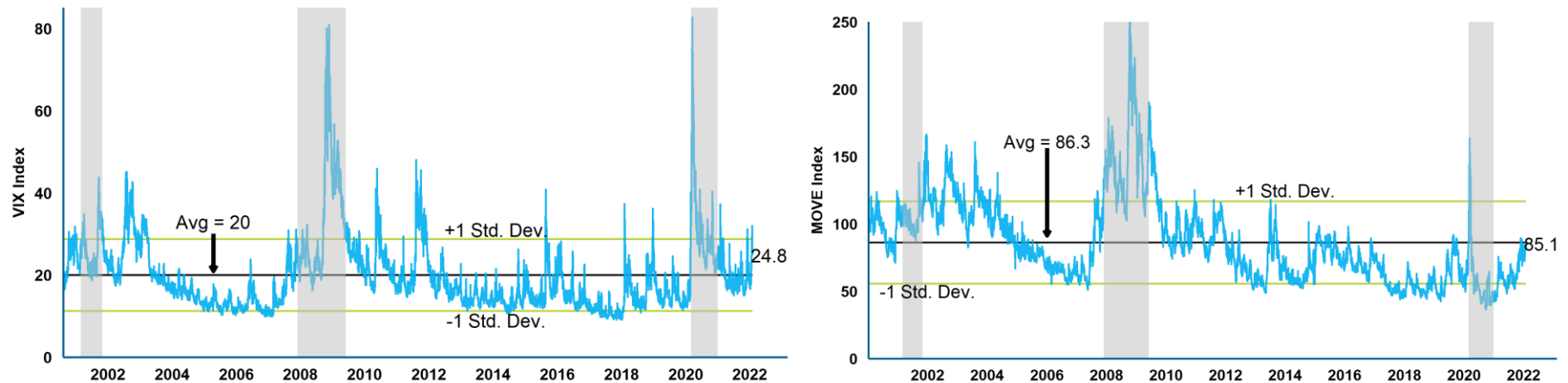
Fixed Income	January (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-2.2	-2.7	3.9	3.3	3.0	2.5	6.5
Bloomberg Aggregate	-2.2	-3.0	3.7	3.1	2.6	2.1	6.7
Bloomberg US TIPS	-2.0	3.5	7.2	4.7	2.7	1.7	7.6
Bloomberg High Yield	-2.7	2.1	6.3	5.4	6.2	5.3	4.5
JPM GBI-EM Global Diversified	0.0	-7.8	0.3	2.4	0.0	5.7	5.2

Fixed Income: Barclays Universal -2.2% in January.

- Given expectations for a faster than previously expected pace of rate increases and balance sheet reduction by the Federal Reserve to combat persistent inflation, the broad US bond market (Barclays Aggregate) declined in January. The nominal 10-year Treasury yield rose to nearly 2%.
- Yields for TIPS rose given expectations for tighter policy from the Federal Reserve.
- Credit spreads widened but continued to trade at historically tight levels given relatively strong corporate health and high investor demand in the low-rate environment.
- Outside of the US, global sovereign debt yields across developed and emerging economies also generally rose on inflation concerns and expectations for higher policy rates.

¹ Source: Bloomberg. JPM GBI-EM is from InvestorForce, data is as of January 31, 2022.

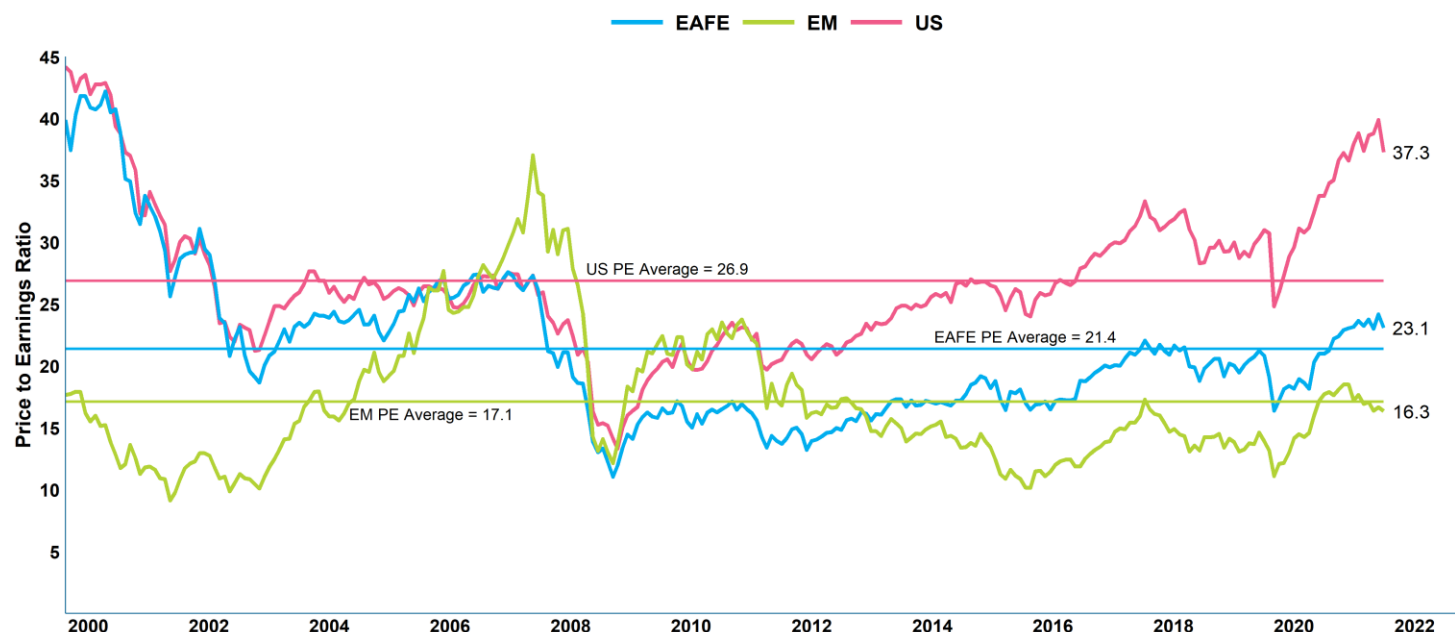
Equity and Fixed Income Volatility¹



- Volatility in equity (VIX) and fixed income (MOVE) increased at the start of the year, driven largely by expectations that the Federal Reserve would tighten monetary policy faster than previously expected.

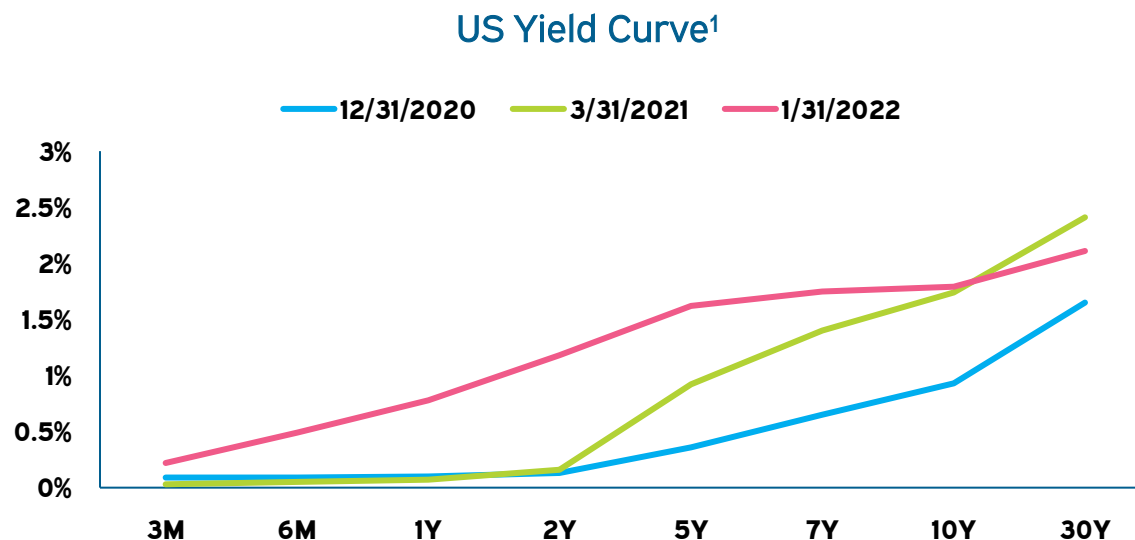
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of January 31, 2022. The average line indicated is the average of the VIX and MOVE values between January 2000 and the present month-end respectively.

Equity Cyclically Adjusted P/E Ratios¹



- Valuations in the US equity market declined in January with the market pullback, but they remain well above long-term averages (near +2 standard deviations).
- International developed market valuations remain below the US with emerging markets under the long-term average.

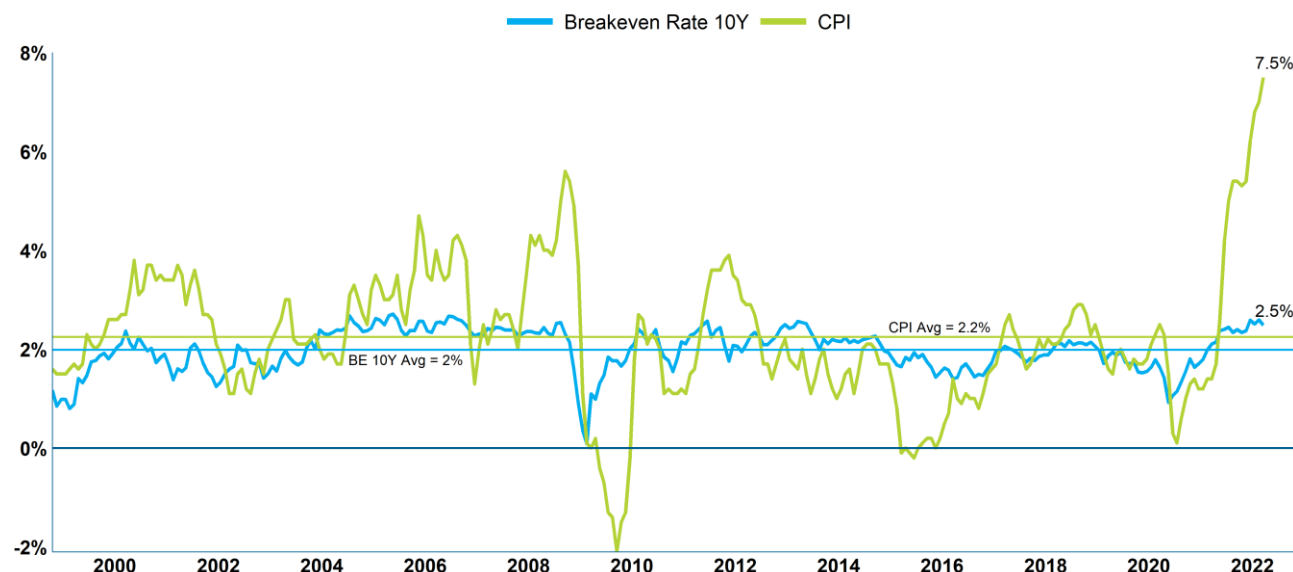
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of January 31, 2022. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to month-end respectively.



- To start the year, interest rates rose across the yield curve with the trend of the curve flattening continuing. The spread between a two-year and ten-year Treasury declined by about 0.18% for the month, ending at 0.60%.
- The main driver of these dynamics was the expectation that the Federal Reserve would accelerate the pace of their policy withdrawal given persistently high inflation and improvements in the labor market.
- After month-end, the release of above expectation January CPI (see next page) furthered the trend of rising rates and curve flattening.

¹ Source: Bloomberg. Data is as of January 31, 2022.

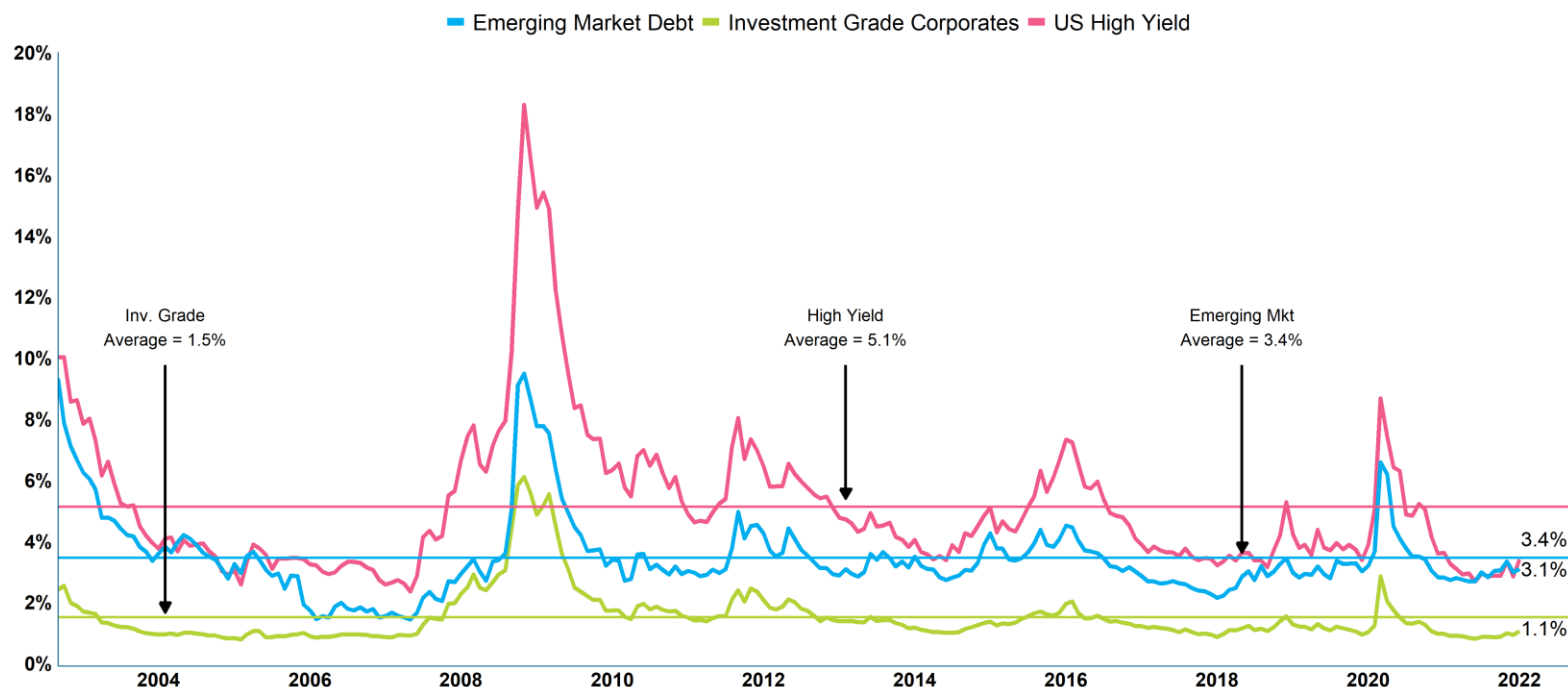
Ten-Year Breakeven Inflation and CPI¹



- Inflation expectations (breakevens) remain well above long-term averages with the economy reopening and supply chain issues persisting as key drivers.
- In January, trailing twelve-month CPI hit 7.5% for the first time since the early 1980s, a level more than triple the long-term average of 2.2%.
- Rising prices for energy and food, as well as for new and used cars, have been key drivers of higher inflation.
- Real weekly average wages declined 2.7% year over year, as price inflation outpaced rising wages over the past year.

¹ Source: Bloomberg. Data is as of January 31, 2022. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end.

Credit Spreads vs. US Treasury Bonds¹



- Credit spreads (the spread above a comparable maturity Treasury) for emerging market debt, investment-grade corporates, and high yield corporate debt remain historically narrow despite widening in January.
- The search for yield in a low-rate environment and still strong corporate fundamentals with low default risk have been key drivers in the decline in credit spreads to below long-term averages here in the US.

¹ Sources: Barclays Live and Bloomberg. Data is as of January 31, 2022. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the present month-end.

Global Economic Outlook

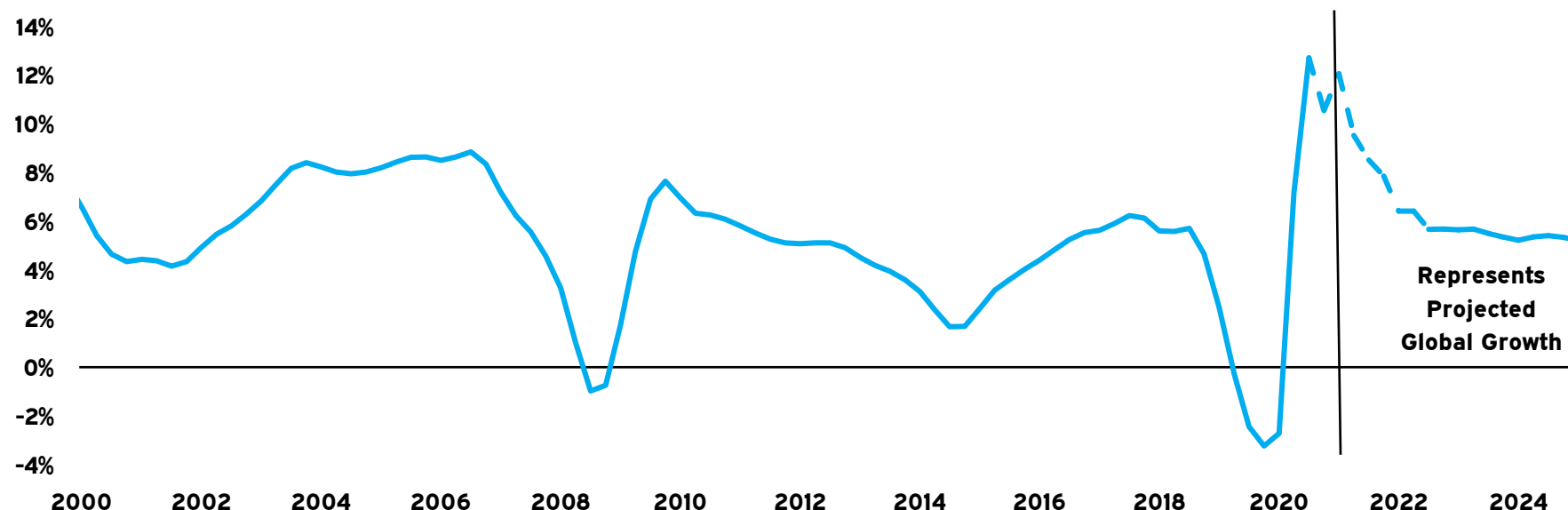
The IMF is forecasting strong growth again this year but continues to downgrade expectations given the lingering pandemic and persistent inflation.

- The IMF forecasts final global GDP to come in at 5.9% in 2021 and 4.4% in 2022 (0.5% below the prior estimate); still well above the past ten-year average of 3.1%.
- In advanced economies, GDP is projected to increase 3.9% in 2022 and 2.6% in 2023. These levels are still above potential as economies re-open and vaccination progress is made. The US forecast experienced a significant reduction in 2022 (4.0% versus 5.2%) given earlier policy reduction than previously expected, high inflation, and struggles in passing fiscal programs. The euro area economy is expected to grow 3.9% in 2022 and 2.5% in 2023, while the Japanese economy is expected to grow 3.3% in 2022 and 1.8% in 2023.
- Growth projections for emerging markets are higher compared to developed markets at 4.8% in 2022 and 4.7% in 2023. China's growth was notably downgraded 0.8% to 4.8% in 2022 given tight COVID-19 restrictions and continued issues in the property sector.
- Globally, inflation is projected to be above long-term averages in 2022 but decline from current levels.

	Real GDP (%) ¹			Inflation (%) ¹		
	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average
World	4.4	3.8	3.1	3.8	3.3	3.4
Advanced Economies	3.9	2.6	1.6	2.3	1.9	1.4
US	4.0	2.6	2.0	3.5	2.7	1.8
Euro Area	3.9	2.5	1.0	1.7	1.4	1.2
Japan	3.3	1.8	0.5	0.5	0.7	0.5
Emerging Economies	4.8	4.7	4.3	4.9	4.3	5.0
China	4.8	5.2	7.0	1.8	1.9	2.1

¹ Source: IMF World Economic Outlook. Real GDP forecasts from January WEO Update. Inflation as of the October 2021 Update. "Actual 10 Year Average" represents data from 2012 to 2021.

Global Nominal Gross Domestic Product (GDP) Growth¹

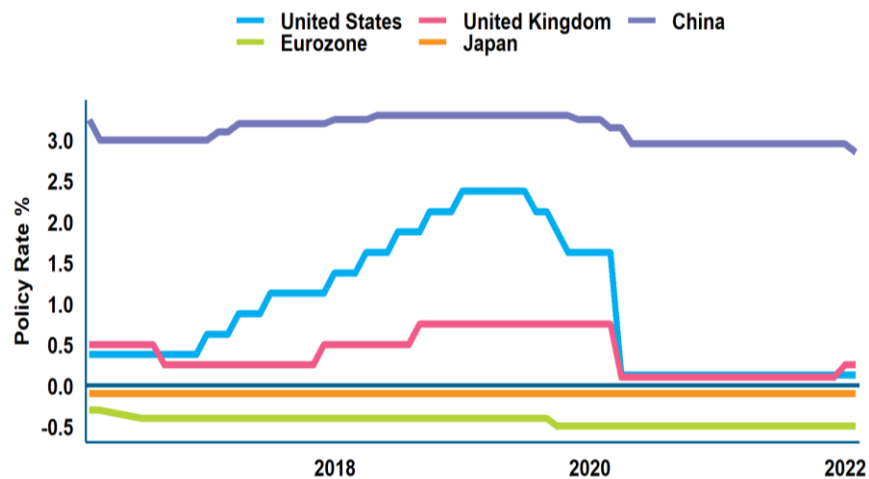


- Global economies are expected to slow in 2022 compared to last year but are forecasted to have another year of largely above-trend growth as economies continue to emerge from the pandemic.
- Looking forward, continued supply chain issues, on-going inflationary pressures, tighter monetary policy, and lingering pandemic problems remain key.

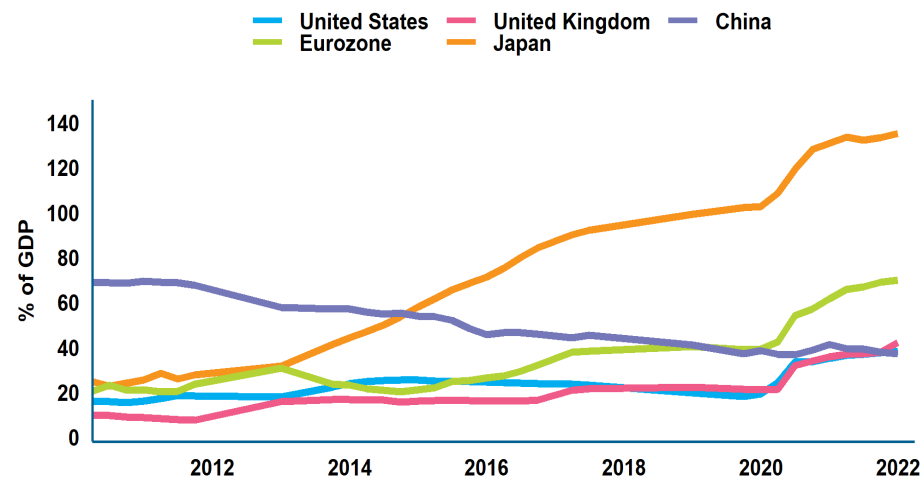
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, nominal, % change YoY). Updated January 2022.

Central Bank Response¹

Policy Rates

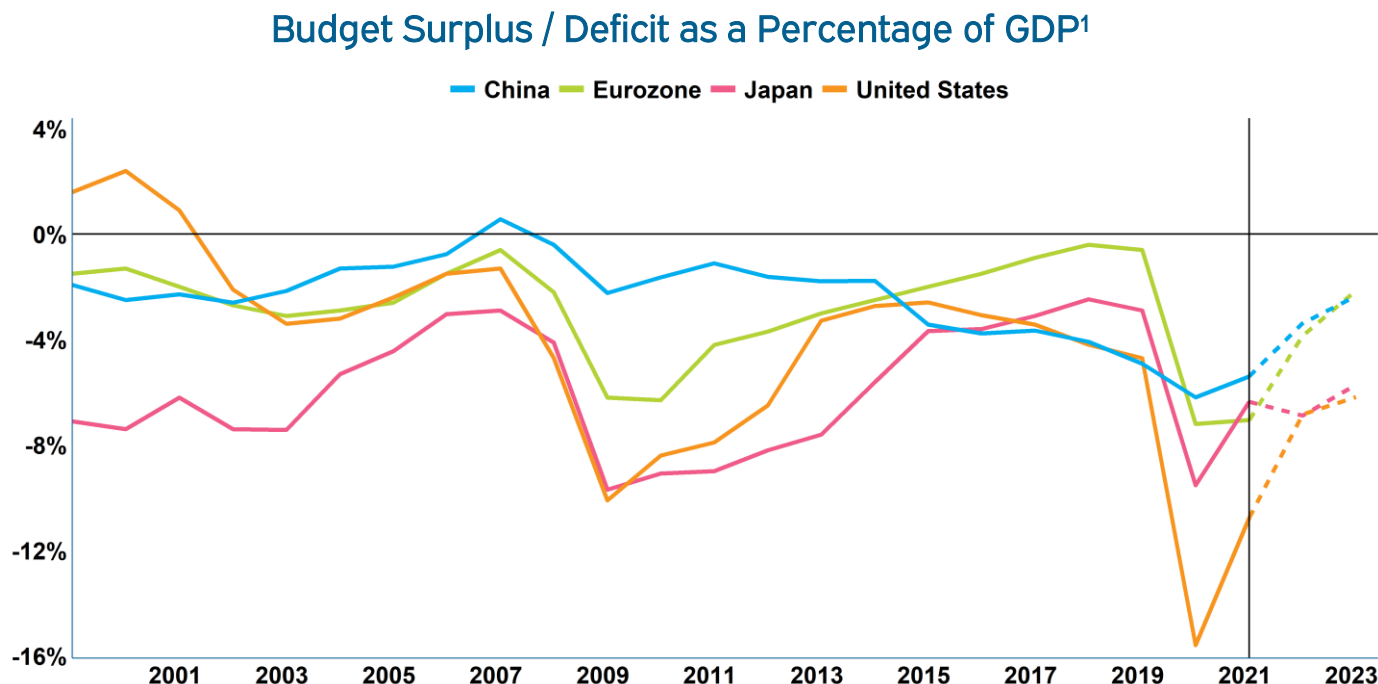


Balance Sheet as % of GDP



- After global central banks took significant action to support the economy during the pandemic including policy rate cuts and emergency stimulus through quantitative easing (QE), many are now considering reducing support given inflation levels.
- The pace of withdrawing support will likely vary across central banks with the US expected to take one of the more aggressive approaches.
- The one notable exception is China, where they have recently lowered rates and reserve requirements in response to slowing growth.

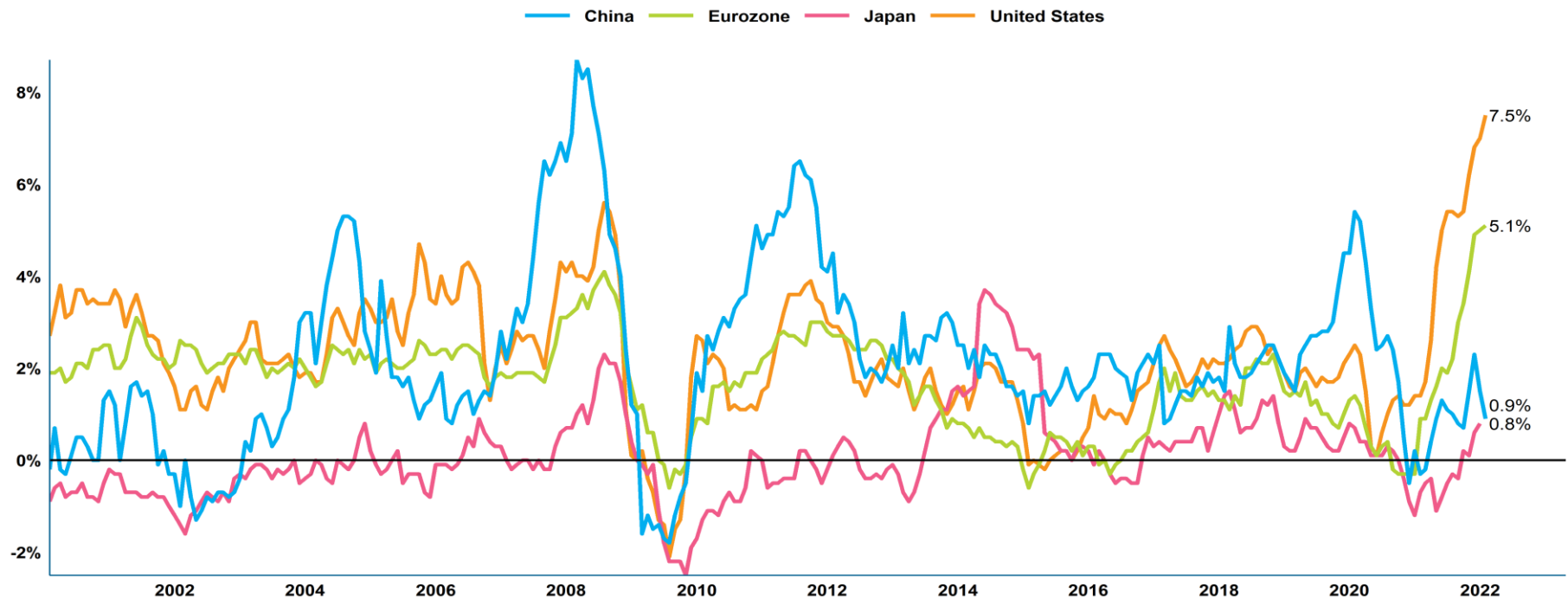
¹ Source: Bloomberg. Data is as of January 31, 2022. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data.



- Budget deficits as a percentage of GDP drastically increased for major world economies, particularly the US, due to massive fiscal support and the severe economic contraction's effect on tax revenue in 2020 and 2021.
- As fiscal stimulus programs end, and economic recoveries continue deficits should improve in the coming years.

¹ Source: Bloomberg. Data is as of January 31, 2022. Projections via IMF Forecasts from October 2021 Report. Dotted lines represent 2022 and 2023 forecasts.

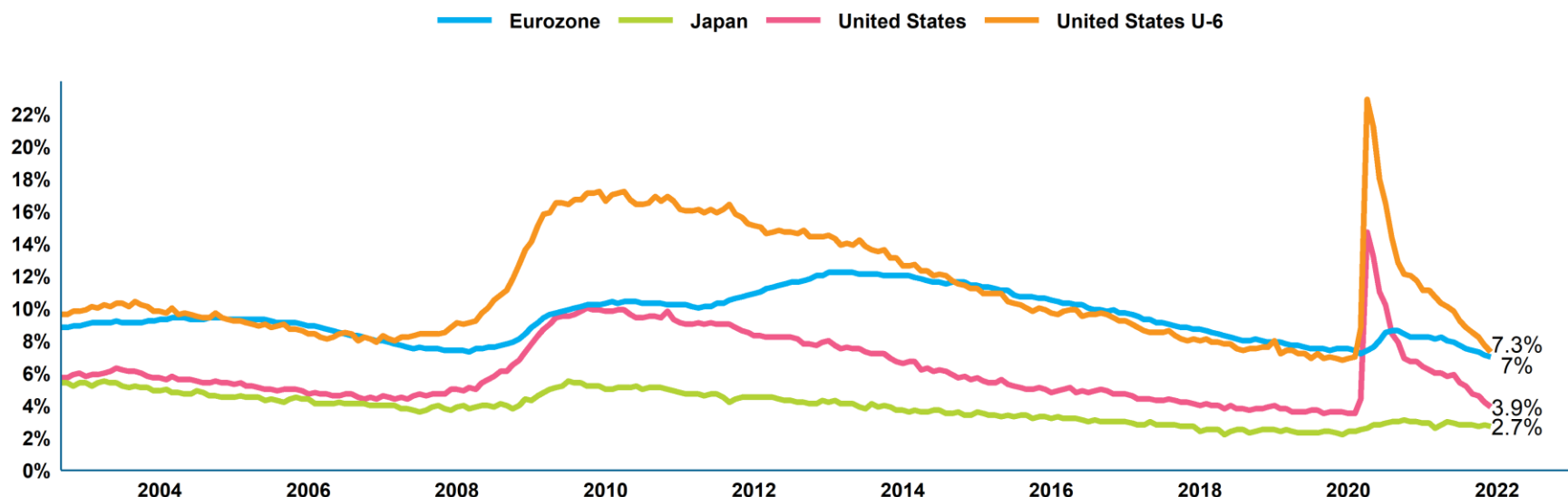
Inflation (CPI Trailing Twelve Months)¹



- Inflation has increased dramatically from the lows of the pandemic, particularly in the US and Eurozone.

¹ Source: Bloomberg. Data is as of January 31, 2022, except for Japan, where the most recent data available is as of December 31, 2021.

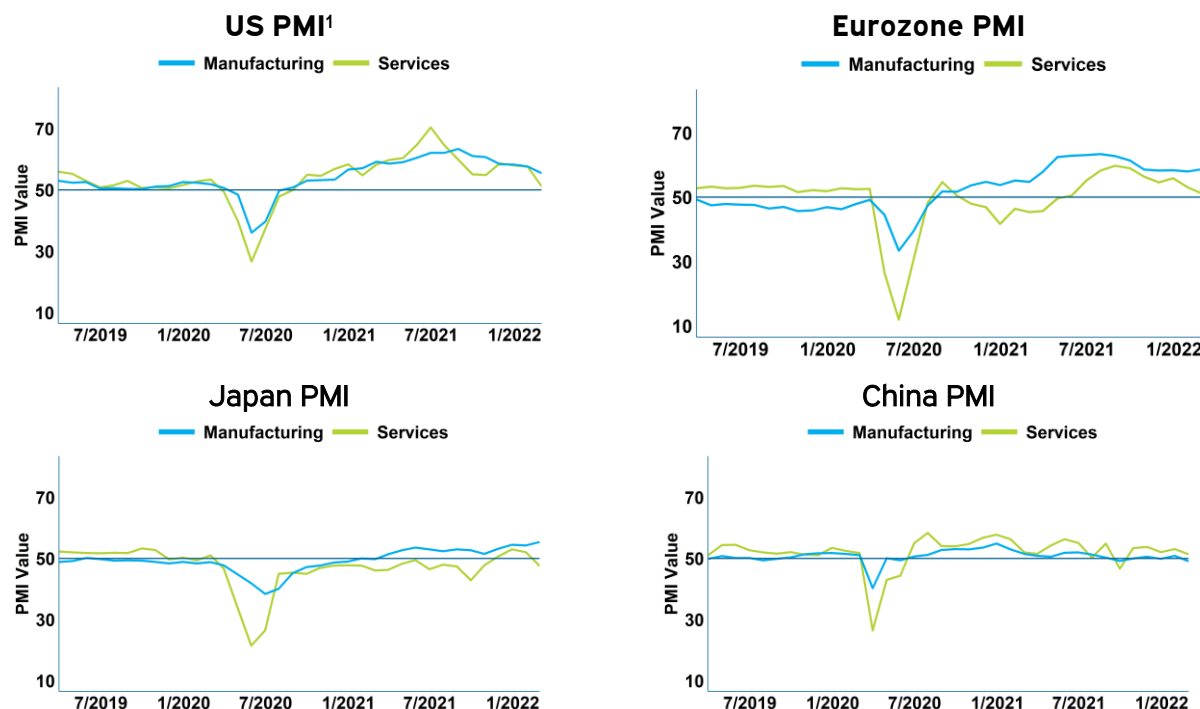
Unemployment¹



- As economies have largely reopened due to vaccines for the virus, improvements have been seen in the labor market.
- US unemployment, which experienced the steepest rise from the pandemic, declined to under 4% as the economy reopens. The broader measure (U-6) that includes discouraged and underemployed workers has declined but is much higher at 7.0%.

¹ Source: Bloomberg. Data is as of January 31, 2022.

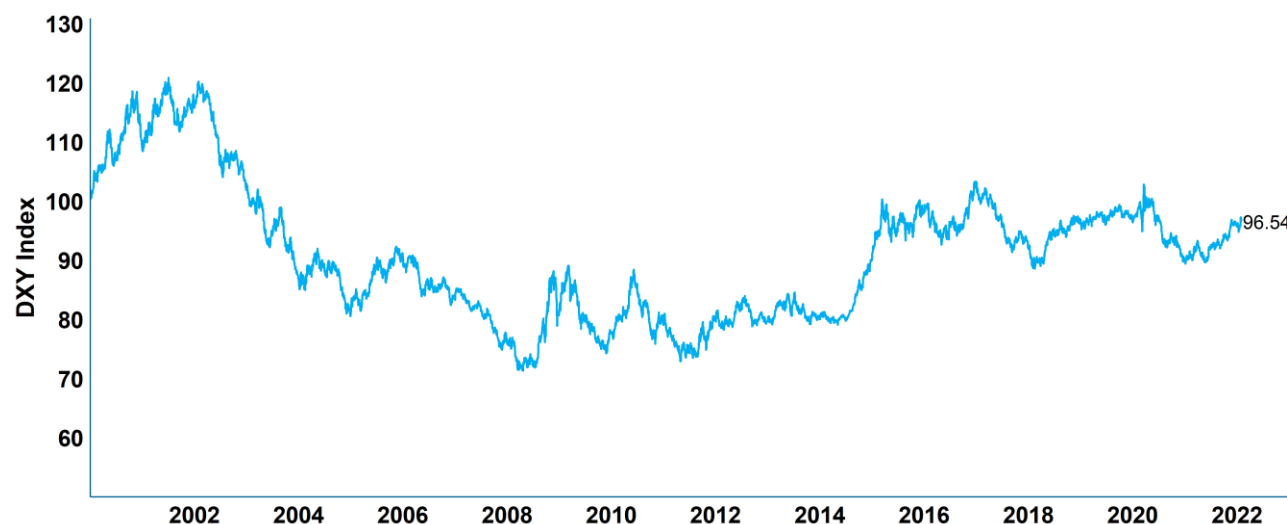
Global PMIs



- After improvements from the lows of the pandemic, Purchasing Managers Indices (PMI), based on surveys of private sector companies, have experienced pressures recently.
- PMIs in the services sector across developed economies have declined to neutral, or in the case of Japan contraction, levels largely due to the impact of the Omicron variant. Notably, China's manufacturing PMI dipped into contraction territory in January given on-going strict COVID-19 related restrictions.

¹ Source: Bloomberg. US Markit Services and Manufacturing PMI, Caixin Services and Manufacturing PMI, Eurozone Markit Services and Manufacturing PMI, Jibun Bank Services and Manufacturing PMI. Data is as of January 2022. Readings below 50 represent economic contractions.

US Dollar versus Broad Currencies¹



- The US dollar continued its 2021 trend of strengthening against a broad basket of peers in January given expectations for rising rates.
- A few commodity-sensitive currencies like the Brazilian real and South African rand have recently outpaced the dollar though given persistently high commodity prices.

¹ Source: Bloomberg Data as of January 31, 2022.

Summary

Key Trends in 2022:

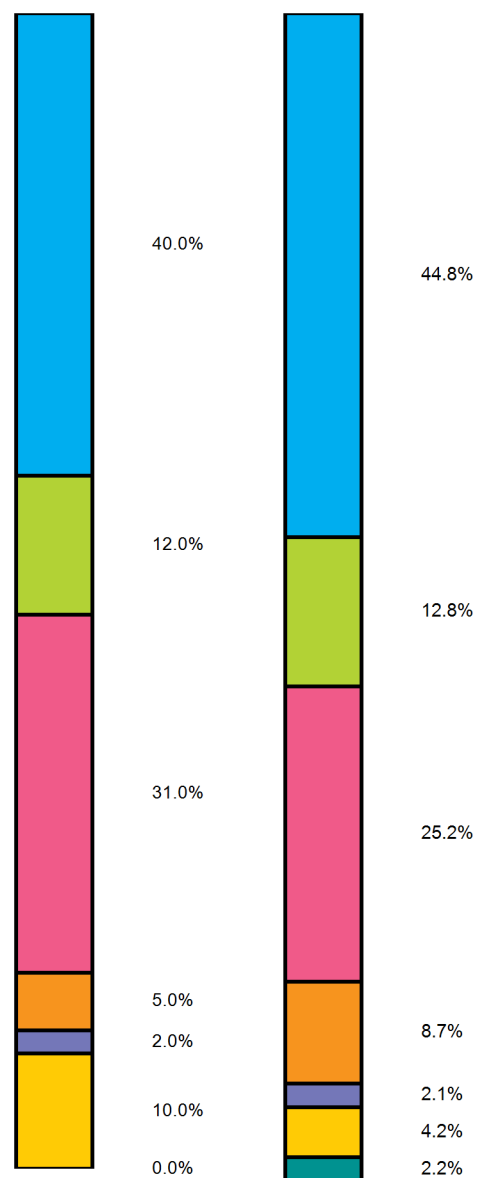
- Expect growth to slow globally in 2022 but remain above trend. The track of the pandemic will be key.
- Inflationary pressures could linger, particularly if COVID-19 related restrictions persist.
- The end of many fiscal programs will put the burden of continued growth on consumers.
- Monetary policy will likely tighten globally but will remain relatively low.
- Valuations remain high in the US, but low rates and strong margins should be supportive.
- Outside the US, valuations remain lower in both emerging and developed markets, but risks remain.
- Questions remain about the future path of the US yield curve.
- Geopolitical risk in Asia and Eastern Europe could create volatility.

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Oakland Police and Fire Retirement System

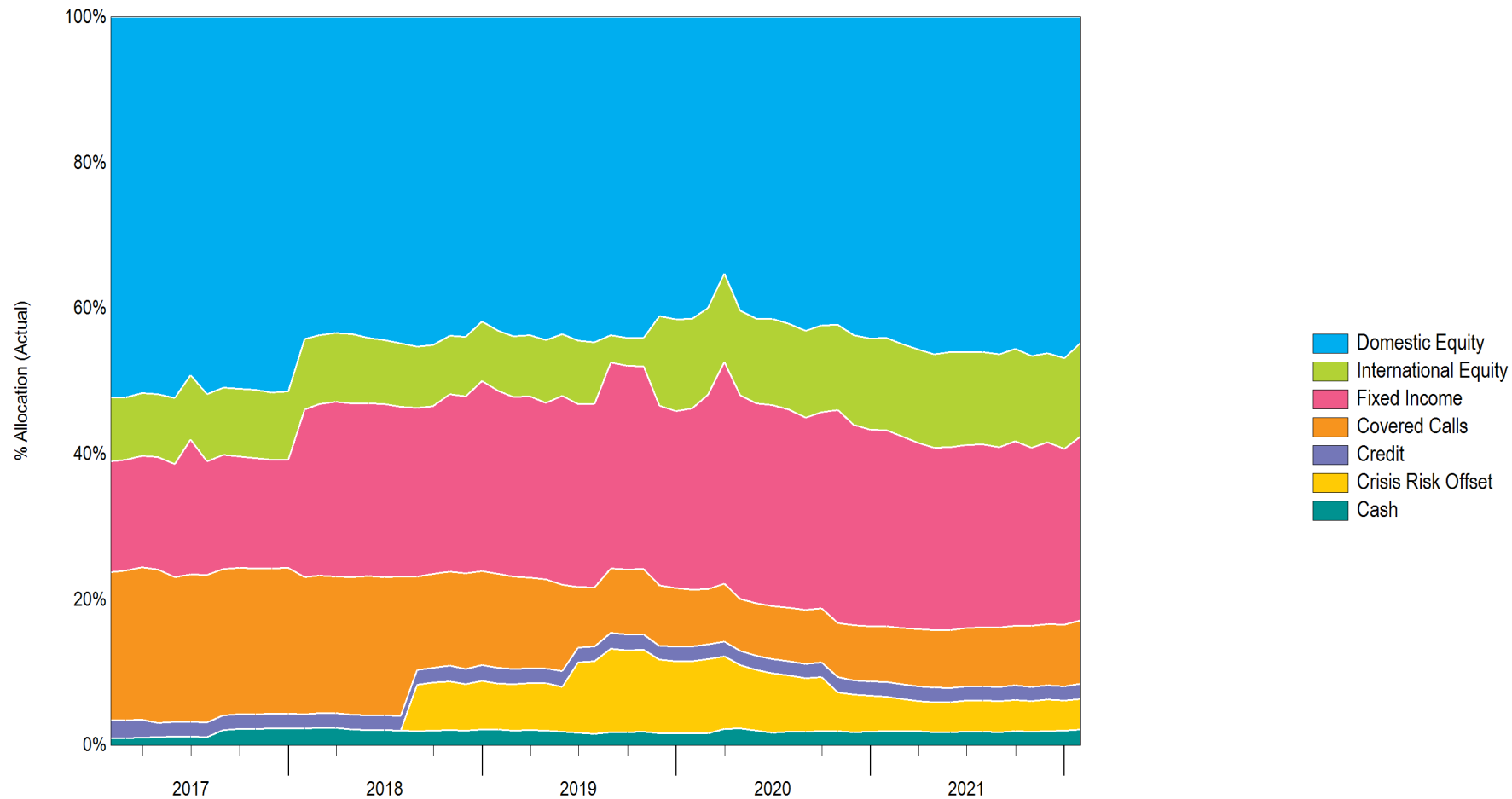
January Flash Report

OPFRS Total Plan As of January 31, 2022



Allocation vs. Targets and Policy					
	Current Balance	Current Allocation	Policy	Difference	Within IPS Range?
<div></div> Domestic Equity	\$202,672,105	44.8%	40.0%	4.8%	Yes
<div></div> International Equity	\$58,026,618	12.8%	12.0%	0.8%	Yes
<div></div> Fixed Income	\$114,275,259	25.2%	31.0%	-5.8%	Yes
<div></div> Covered Calls	\$39,473,776	8.7%	5.0%	3.7%	Yes
<div></div> Credit	\$9,317,744	2.1%	2.0%	0.1%	Yes
<div></div> Crisis Risk Offset	\$19,154,050	4.2%	10.0%	-5.8%	No
<div></div> Cash	\$9,831,782	2.2%	0.0%	2.2%	Yes
Total	\$452,751,334	100.0%	100.0%		

Asset Allocation History 5 Years Ending January 31, 2022



Asset Class Performance Summary

	Market Value (\$)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
OPFRS Total Plan	452,751,334	100.0	-4.1	1.2	9.7	11.2	9.9	8.9	7.0	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>-3.7</i>	<i>0.4</i>	<i>8.1</i>	<i>11.2</i>	<i>9.4</i>	<i>8.4</i>	<i>8.3</i>	<i>Dec-88</i>
Domestic Equity	202,672,105	44.8	-5.7	3.1	18.2	18.5	15.3	14.6	9.5	Jun-97
<i>Russell 3000 (Blend)</i>			<i>-5.9</i>	<i>2.7</i>	<i>18.8</i>	<i>19.9</i>	<i>16.1</i>	<i>15.0</i>	<i>9.7</i>	<i>Jun-97</i>
International Equity	58,026,618	12.8	-3.4	-2.1	6.7	10.7	9.2	7.5	5.7	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>-3.7</i>	<i>-4.7</i>	<i>4.1</i>	<i>9.6</i>	<i>8.5</i>	<i>6.7</i>	<i>5.9</i>	<i>Jan-98</i>
Fixed Income	114,275,259	25.2	-2.0	-1.7	-1.8	4.4	3.9	3.3	5.3	Dec-93
<i>Bloomberg Universal (Blend)</i>			<i>-2.2</i>	<i>-2.1</i>	<i>-2.7</i>	<i>3.9</i>	<i>3.3</i>	<i>3.0</i>	<i>5.1</i>	<i>Dec-93</i>
Credit	9,317,744	2.1	-0.5	1.9	7.5	6.6	6.4	--	6.4	Feb-15
<i>Bloomberg US High Yield TR</i>			<i>-2.7</i>	<i>-1.2</i>	<i>2.1</i>	<i>6.3</i>	<i>5.4</i>	<i>6.2</i>	<i>5.6</i>	<i>Feb-15</i>
Covered Calls	39,473,776	8.7	-3.9	5.7	20.3	15.7	12.1	--	10.4	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>-2.5</i>	<i>5.6</i>	<i>17.2</i>	<i>8.7</i>	<i>7.0</i>	<i>7.2</i>	<i>6.7</i>	<i>Apr-14</i>
Crisis Risk Offset	19,154,050	4.2	-3.7	-1.8	-6.9	-8.3	--	--	-8.8	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>1.2</i>	<i>2.8</i>	<i>7.9</i>	<i>-1.9</i>	<i>--</i>	<i>--</i>	<i>-1.6</i>	<i>Aug-18</i>

Fiscal year begins on July 1.

Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

Trailing Net Performance											
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
OPFRS Total Plan	452,751,334	100.0	--	-4.1	1.2	9.7	11.2	9.9	8.9	7.0	Dec-88
<i>OPFRS Policy Benchmark</i>				<i>-3.7</i>	<i>0.4</i>	<i>8.1</i>	<i>11.2</i>	<i>9.4</i>	<i>8.4</i>	<i>8.3</i>	<i>Dec-88</i>
Domestic Equity	202,672,105	44.8	44.8	-5.7	3.1	18.2	18.5	15.3	14.6	9.5	Jun-97
<i>Russell 3000 (Blend)</i>				<i>-5.9</i>	<i>2.7</i>	<i>18.8</i>	<i>19.9</i>	<i>16.1</i>	<i>15.0</i>	<i>9.7</i>	<i>Jun-97</i>
Northern Trust Russell 1000	104,626,124	23.1	51.6	-5.8	3.6	20.1	20.4	16.5	15.3	15.1	Jun-10
<i>Russell 1000</i>				<i>-5.6</i>	<i>3.8</i>	<i>20.3</i>	<i>20.5</i>	<i>16.6</i>	<i>15.3</i>	<i>15.2</i>	<i>Jun-10</i>
EARNST Partners	49,054,976	10.8	24.2	-4.8	4.9	20.3	21.3	17.1	15.6	11.4	Apr-06
<i>Russell MidCap</i>				<i>-7.4</i>	<i>-2.3</i>	<i>13.9</i>	<i>16.1</i>	<i>12.8</i>	<i>13.4</i>	<i>9.6</i>	<i>Apr-06</i>
iShares Edge MSCI Min Vol ETF	21,646,600	4.8	10.7	-6.0	4.0	16.8	--	--	--	22.4	Apr-20
<i>MSCI USA Minimum Volatility GR USD</i>				<i>-5.9</i>	<i>4.2</i>	<i>17.0</i>	<i>13.4</i>	<i>13.0</i>	<i>13.3</i>	<i>22.6</i>	<i>Apr-20</i>
Rice Hall James	16,028,150	3.5	7.9	-8.1	-6.1	2.7	13.2	--	--	11.8	Jul-17
<i>Russell 2000 Growth</i>				<i>-13.4</i>	<i>-18.3</i>	<i>-15.0</i>	<i>11.4</i>	<i>10.9</i>	<i>11.7</i>	<i>10.1</i>	<i>Jul-17</i>
Brown Fundamental Small Cap Value	11,316,255	2.5	5.6	-4.3	2.6	--	--	--	--	6.0	Apr-21
<i>Russell 2000 Value</i>				<i>-5.8</i>	<i>-4.7</i>	<i>14.8</i>	<i>11.7</i>	<i>7.9</i>	<i>10.6</i>	<i>-0.3</i>	<i>Apr-21</i>
International Equity	58,026,618	12.8	12.8	-3.4	-2.1	6.7	10.7	9.2	7.5	5.7	Jan-98
<i>MSCI ACWI ex US (Blend)</i>				<i>-3.7</i>	<i>-4.7</i>	<i>4.1</i>	<i>9.6</i>	<i>8.5</i>	<i>6.7</i>	<i>5.9</i>	<i>Jan-98</i>
SGA ACWI ex-U.S. Equity	41,171,910	9.1	71.0	-2.9	-0.8	7.0	--	--	--	7.3	Dec-19
<i>MSCI ACWI ex USA Gross</i>				<i>-3.7</i>	<i>-4.7</i>	<i>4.1</i>	<i>9.6</i>	<i>8.5</i>	<i>6.7</i>	<i>9.2</i>	<i>Dec-19</i>
Vanguard Developed Markets ETF	16,438,523	3.6	28.3	-3.9	-4.7	4.8	--	--	--	10.0	Sep-19
<i>FTSE Developed All Cap Ex US TR USD</i>				<i>-5.0</i>	<i>-3.5</i>	<i>7.2</i>	<i>10.2</i>	<i>8.4</i>	<i>5.7</i>	<i>11.9</i>	<i>Sep-19</i>

Fiscal year begins July 1.

Throughout the report performance for new funds will be shown after one full month of investment.

International equity performance inclusive of residual cash in Hansberger transition.

OPFRS Total Plan As of January 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Fixed Income	114,275,259	25.2	25.2	-2.0	-1.7	-1.8	4.4	3.9	3.3	5.3	Dec-93
<i>Bloomberg Universal (Blend)</i>				-2.2	-2.1	-2.7	3.9	3.3	3.0	5.1	Dec-93
Ramirez	77,805,831	17.2	68.1	-2.0	-1.8	-1.5	4.4	3.8	--	3.8	Jan-17
<i>Bloomberg US Aggregate TR</i>				-2.2	-2.1	-3.0	3.7	3.1	2.6	3.1	Jan-17
Reams	29,004,549	6.4	25.4	-1.9	-1.5	-2.2	7.7	5.7	4.3	5.8	Feb-98
<i>Bloomberg Universal (Blend)</i>				-2.2	-2.1	-2.7	3.9	3.3	3.0	4.8	Feb-98
Wellington Core Bond	7,464,835	1.6	6.5	-2.2	-2.2	--	--	--	--	-0.4	Apr-21
<i>Bloomberg US Aggregate TR</i>				-2.2	-2.1	-3.0	3.7	3.1	2.6	-0.3	Apr-21
Credit	9,317,744	2.1	2.1	-0.5	1.9	7.5	6.6	6.4	--	6.4	Feb-15
<i>Bloomberg US High Yield TR</i>				-2.7	-1.2	2.1	6.3	5.4	6.2	5.6	Feb-15
DDJ Capital	9,317,744	2.1	100.0	-0.5	1.9	7.5	6.6	6.4	--	6.4	Feb-15
<i>ICE BofA High Yield Master TR</i>				-2.7	-1.2	2.1	6.0	5.2	6.1	5.5	Feb-15
Covered Calls	39,473,776	8.7	8.7	-3.9	5.7	20.3	15.7	12.1	--	10.4	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				-2.5	5.6	17.2	8.7	7.0	7.2	6.7	Apr-14
Parametric DeltaShift	22,358,240	4.9	56.6	-4.7	6.8	23.8	19.8	14.9	--	12.9	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				-2.5	5.6	17.2	8.7	7.0	7.2	6.7	Apr-14
Parametric BXM	17,115,536	3.8	43.4	-3.0	4.4	16.0	11.3	8.9	--	8.2	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				-2.5	5.6	17.2	8.7	7.0	7.2	6.7	Apr-14
Crisis Risk Offset	19,154,050	4.2	4.2	-3.7	-1.8	-6.9	-8.3	--	--	-8.8	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>				1.2	2.8	7.9	-1.9	--	--	-1.6	Aug-18
Vanguard Long-Term Treasury ETF	19,154,050	4.2	100.0	-3.7	-1.8	-6.9	--	--	--	3.6	Jul-19
<i>Bloomberg US Govt Long TR</i>				-4.1	-0.7	-5.1	7.0	5.6	4.1	4.2	Jul-19

Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

OPFRS Total Plan As of January 31, 2022

Cash Flow Summary				
Month to Date				
	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Brown Fundamental Small Cap Value	\$11,838,425	\$0	-\$522,170	\$11,316,255
Cash	\$3,022,983	\$11,480	\$9,219	\$3,043,682
Cash - Treasury	\$6,676,000	\$112,100	\$0	\$6,788,100
DDJ Capital	\$9,372,205	\$0	-\$54,461	\$9,317,744
EARNEST Partners	\$51,502,726	\$0	-\$2,447,750	\$49,054,976
Hansberger Transition	\$600,651	\$0	-\$184,467	\$416,185
iShares Edge MSCI Min Vol ETF	\$23,024,059	\$0	-\$1,377,459	\$21,646,600
Northern Trust Russell 1000	\$122,696,981	-\$11,000,000	-\$7,070,857	\$104,626,124
Parametric BXM	\$17,636,781	\$0	-\$521,245	\$17,115,536
Parametric DeltaShift	\$23,455,117	\$0	-\$1,096,878	\$22,358,240
Ramirez	\$79,372,600	\$0	-\$1,566,769	\$77,805,831
Reams	\$29,560,445	\$0	-\$555,896	\$29,004,549
Reams Low Duration	\$44	\$0	\$0	\$44
Rice Hall James	\$17,436,537	\$0	-\$1,408,387	\$16,028,150
Securities Lending Northern Trust	\$0	-\$11,480	\$11,480	\$0
SGA ACWI ex-U.S. Equity	\$42,401,389	\$0	-\$1,229,479	\$41,171,910
Vanguard Developed Markets ETF	\$17,098,207	\$0	-\$659,684	\$16,438,523
Vanguard Long-Term Treasury ETF	\$19,890,317	\$0	-\$736,266	\$19,154,050
Wellington Core Bond	\$7,635,510	\$0	-\$170,675	\$7,464,835
Total	\$483,220,978	-\$10,887,900	-\$19,581,743	\$452,751,334

Benchmark History

As of January 31, 2022

Total Plan x Securities Lending x Reams LD Exception Comp

1/1/2019	Present	40% Russell 3000 / 12% MSCI ACWI ex USA Gross / 33% Bloomberg US Universal TR / 5% CBOE BXM / 6.7% SG Multi Alternative Risk Premia Index / 3.3% Bloomberg US Treasury Long TR
5/1/2016	12/31/2018	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% Bloomberg US Universal TR / 20% CBOE BXM
10/1/2015	4/30/2016	43% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% Bloomberg US Universal TR / 15% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
1/1/2014	9/30/2015	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% Bloomberg US Universal TR / 10% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
3/1/2013	12/31/2013	40% Russell 3000 / 10% MSCI ACWI ex USA Gross / 17% Bloomberg US Universal TR / 33% ICE BofA 3M US Treasury TR USD
8/1/2012	2/28/2013	20% Russell 3000 / 7% MSCI ACWI ex USA Gross / 18% Bloomberg US Universal TR / 55% ICE BofA 3M US Treasury TR USD
10/1/2007	7/31/2012	53% Russell 3000 / 17% MSCI ACWI ex USA Gross / 30% Bloomberg US Universal TR
4/1/2006	9/30/2007	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% Bloomberg US Universal TR
1/1/2005	3/31/2006	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% Bloomberg US Aggregate TR
4/1/1998	12/31/2004	50% Bloomberg US Aggregate TR / 10% Russell 1000 / 20% Russell 1000 Value / 5% Russell MidCap / 15% MSCI EAFE
9/1/1988	3/31/1998	40% S&P 500 / 55% Bloomberg US Aggregate TR / 5% FTSE T-Bill 3 Months TR

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Oakland Police and Fire Retirement System

Q4 2021 Performance Report

Agenda

1. Total Portfolio Summary
2. Economic and Market Update
3. Asset Class and Manager Commentary
4. 4Q 2021 Performance as of December 31, 2021
5. Manager Monitoring / Probation List
6. Disclaimer, Glossary, and Notes

Total Portfolio Summary

Total Portfolio Summary

As of December 31, 2021, the City of Oakland Police and Fire Retirement System (OPFRS) portfolio had an aggregate value of \$483.2M. This represents a \$26.7M increase in investment value after (\$3.2M) in benefit payments over the quarter. Over the one-year period (calendar year 2021), the OPFRS Total Portfolio value is higher by \$61.2M, after withdrawals totaling (\$12.7M) for benefit payments.

Asset Allocation Trends

- The asset allocation targets throughout this report reflect those as of December 31, 2021. Target weightings reflect the interim phase (CRO = 10%) of the Plan's previously approved asset allocation (effective 5/31/2017).
- Relative to policy targets, the portfolio ended the latest quarter overweight Equities, Covered Calls and Cash, while underweight Crisis Risk Offset and Fixed Income. The Crisis Risk Offset asset class was below its acceptable ranges from the policy target.

Recent Investment Performance

- During the most recent quarter, the OPFRS portfolio generated an absolute return of 5.7%, gross of fees, outperforming its policy benchmark by 1.2%. The portfolio also outperformed its benchmark over the 1-, 3-, and 5-year periods, by 2.1%, 0.4%, and 0.6% respectively.

- In comparison to its peers, the OPFRS portfolio outperformed the Median fund's return over the quarter and 1-year trailing period by 1.6% and 0.3% respectively. Over the intermediate 3-year trailing period, the OPFRS portfolio trailed the Median fund by (0.7%); however, over the long-term 5-year trailing period, the portfolio is on par with its peers.

	Quarter	CYTD	1 Year	3 Year	5 Year
Total Portfolio ¹	5.7%	13.9%	13.9%	14.8%	11.3%
Policy Benchmark ²	4.5%	11.8%	11.8%	14.4%	10.7%
Excess Return	1.2%	2.1%	2.1%	0.4%	0.6%
Reference: Median Fund ³	4.1%	13.6%	13.6%	15.5%	11.3%
Reference: Total Net of Fees ⁴	5.6%	13.6%	13.6%	14.5%	10.9%

- Over the quarter, positive absolute return was driven by the domestic equity segment following a strong earnings season and general optimism around the reopening of the US economy. Reflecting the broad fixed income market's ups and downs during the quarter, OPFRS's fixed income segment stayed flat over the quarter.

¹ Gross of Fees. Performance since 2005 includes securities lending.

² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bloomberg Universal, 5% CBOE BXN, 6.7% SG Multi Asset Risk Premia, 3.3% Bloomberg Long Treasury.

³ Investment Metrics < \$1 Billion Public Plan Universe.

⁴ Longer-term (>1 year) Net of fee returns include estimates based on OPFRS manager fee schedule (approximately 34 bps).

Economic and Market Update

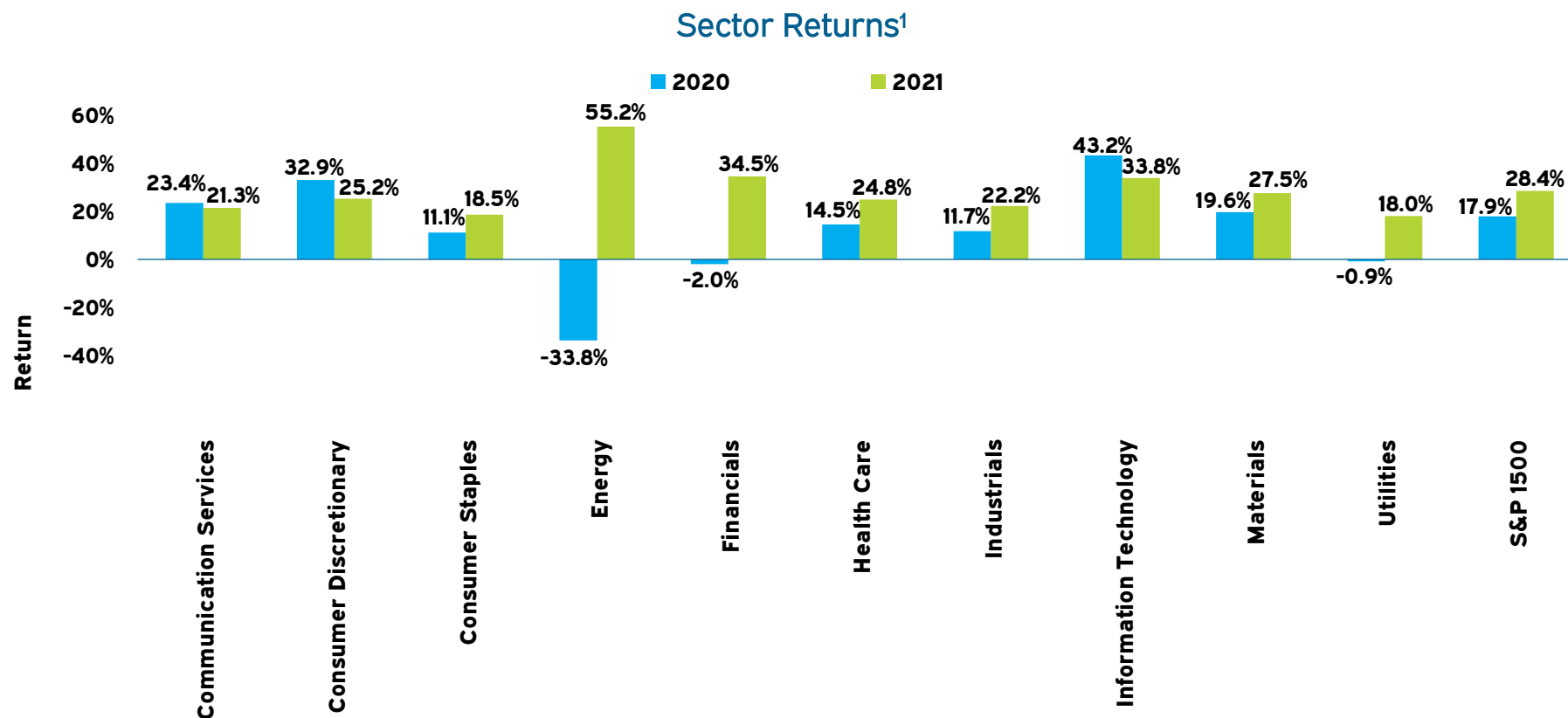
Data as of December 31, 2021

Market Returns¹

Indices	December	1 Year	3 Year	5 Year	10 Year
S&P 500	4.5%	28.7%	26.1%	18.5%	16.6%
MSCI EAFE	5.1%	11.3%	13.5%	9.6%	8.0%
MSCI Emerging Markets	1.9%	-2.5%	10.9%	9.9%	5.5%
MSCI China	-3.2%	-21.7%	7.8%	9.4%	7.2%
Bloomberg Barclays Aggregate	-0.3%	-1.5%	4.8%	3.6%	2.9%
Bloomberg Barclays TIPS	0.3%	6.0%	8.4%	5.3%	3.1%
Bloomberg Barclays High Yield	1.9%	5.3%	8.8%	6.3%	6.8%
10-year US Treasury	-0.4%	-3.6%	5.1%	3.5%	2.4%
30-year US Treasury	-2.1%	-4.6%	9.7%	7.0%	4.4%

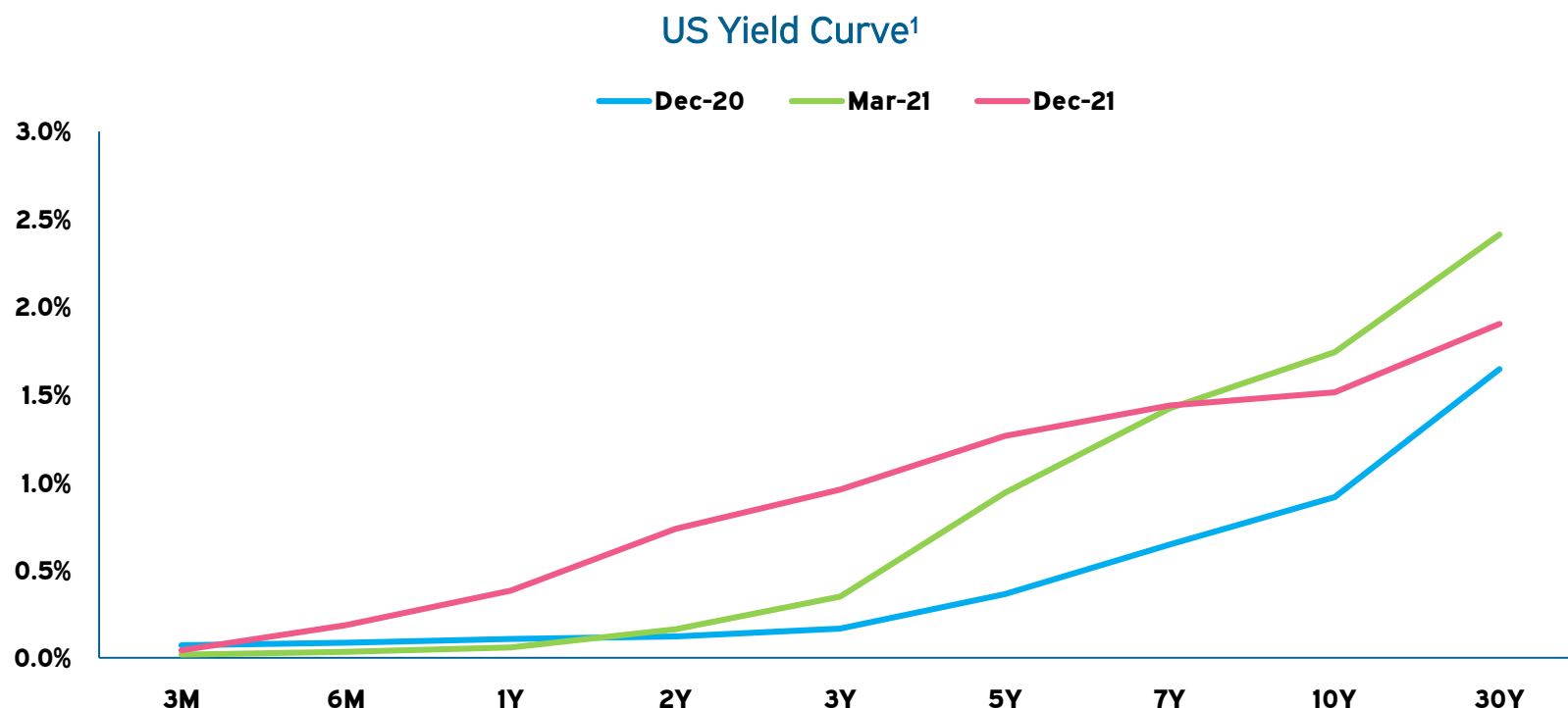
- Declining fears over the Omicron variant and expectations for continued corporate strength contributed to global equity markets posting positive returns for December. Developed markets led the way with international equities (MSCI EAFE) outpacing US equities (S&P 500). Emerging markets lagged mainly due to continued concerns related to China. Overall in 2021, US equities had the best results given continued policy support, relative success in reopening the economy, and strong corporate fundamentals.
- In December, rising inflation and expectations for less accommodative policy led to the US bond market (Bloomberg Barclays Aggregate) declining slightly, while high yield bonds increased in the risk-on environment. For the year, TIPS led the way in bonds, up 6%, followed by high yield with the broad bond market index declining by 1.5%.

¹ Source: Investment Metrics and Bloomberg. Data is as of December 31, 2021.



- All sectors advanced in 2021 with energy leading the way followed by financials, a reversal of the 2020 trend.
- The technology sector also produced strong results last year building on the 40%+ returns in the prior year.

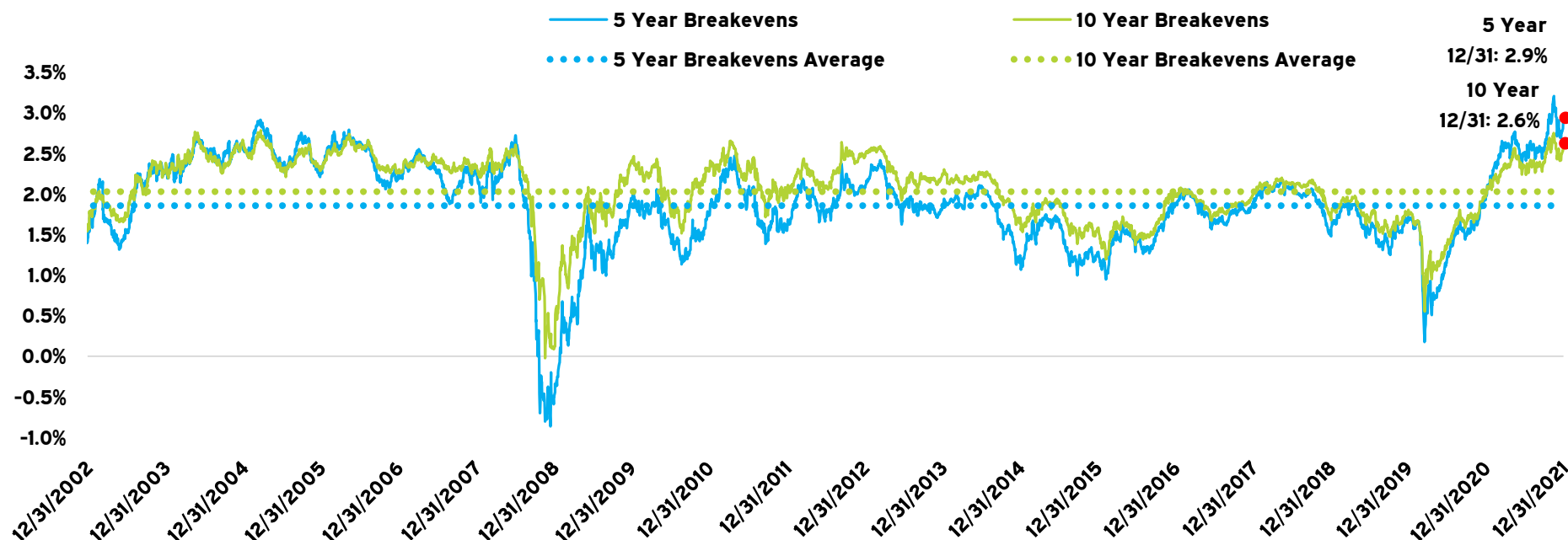
¹ Source: Bloomberg. Data is as of December 31, 2021.



- During the first half of 2021, the Treasury yield curve steepened on both higher growth and inflation expectations as vaccines were deployed and economic growth prospects improved on the opening of the economy, while monetary policy anchored short-dated rates near 0%.
- Over the latter-half of the year, however, shorter-dated yields from 1- to 5-years rose sharply as the FOMC signaled that policy rates may be tightened more aggressively than previously anticipated.

¹ Source: Bloomberg. Data is as of December 31, 2021.

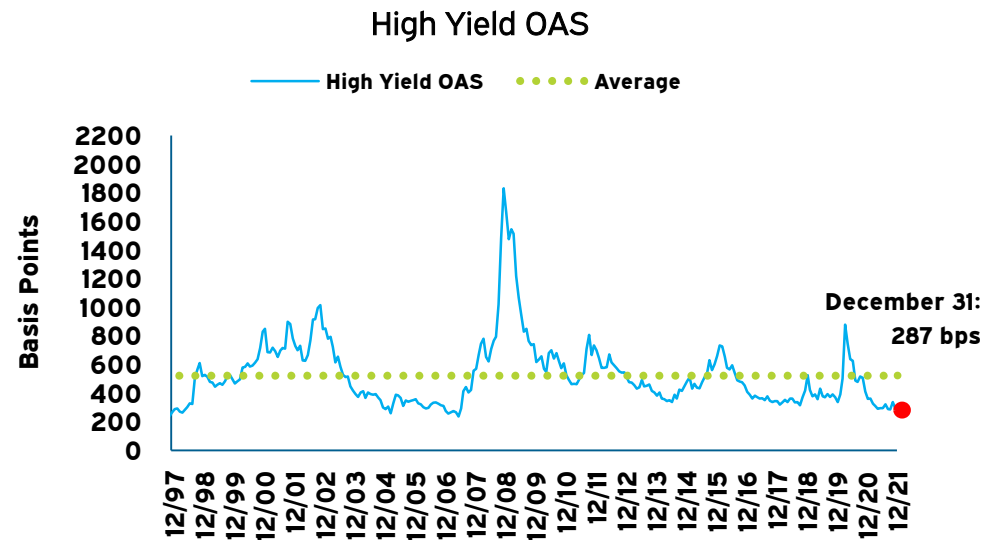
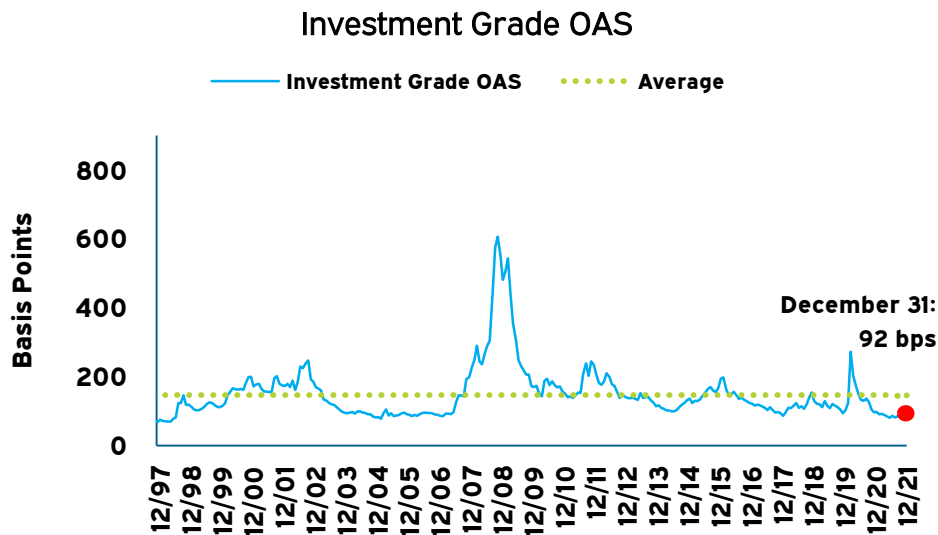
Breakeven Inflation¹



- Inflation expectations finished the year higher than they started, ending at a level well above the Fed's 2% target.
- Supply chain issues potentially persisting as new variants of the virus increase the risk of re-shuttering sectors of the global economy and wage pressures remain key drivers of inflation expectations.
- Additionally, changes to Fed policy focused on an average inflation target may play a role in inflation market dynamics and, specifically, the risk that consumer inflation expectations get entrenched at higher inflation growth rates.

¹ Source: Bloomberg. Data is as of December 31, 2021.

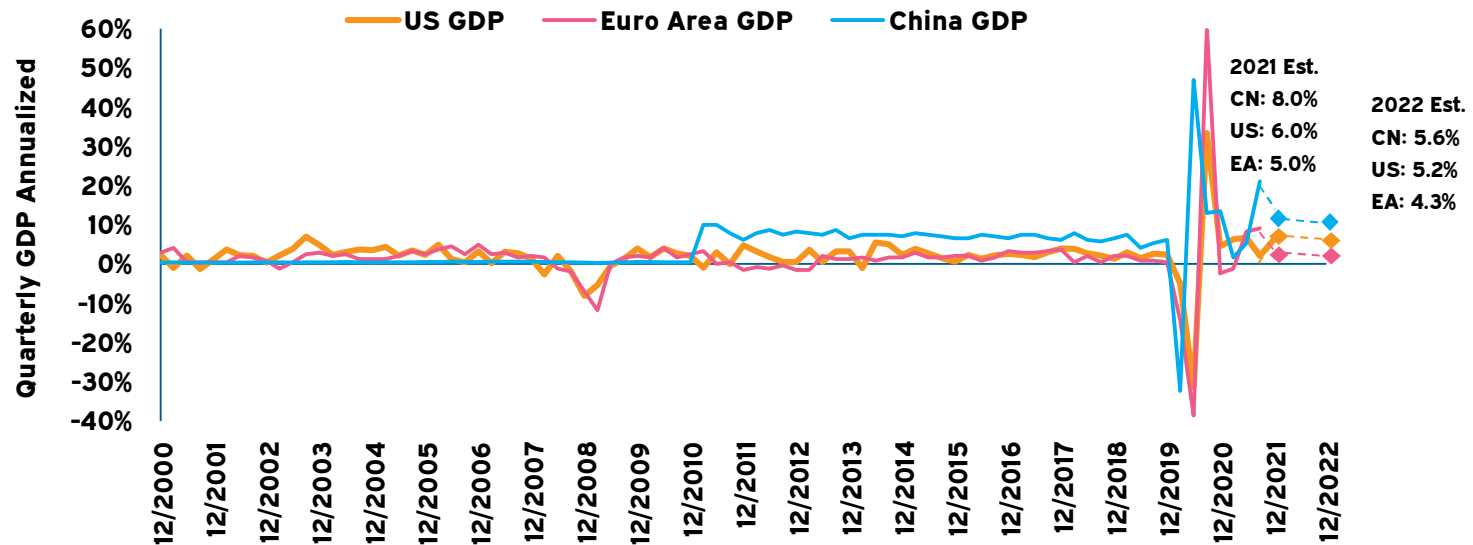
Credit Spreads (High Yield & Investment Grade)¹



- Credit spreads (the yield spread above a comparable maturity Treasury) narrowed in December after the modest widening in November on the discovery of the new virus variant (Omicron).
- Policy support, strong corporate fundamentals, and the search for yield in a low-rate environment have been key drivers in the decline in US credit spreads to well below long-term averages, particularly for high yield issuers.

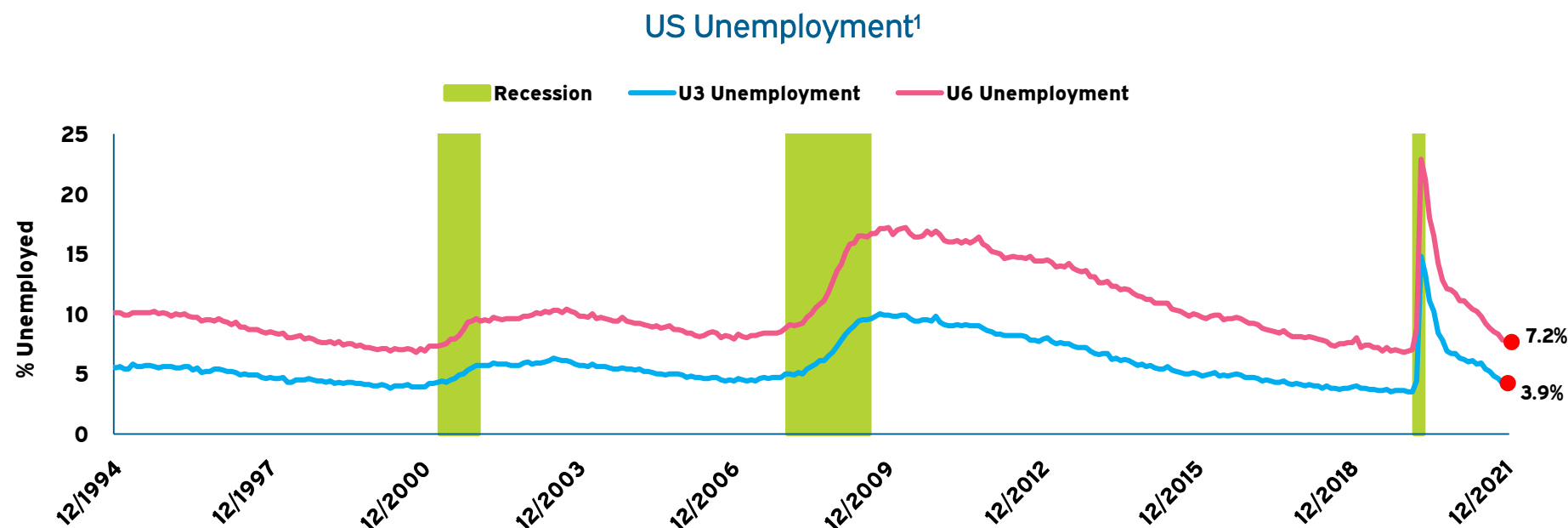
¹ Source: Barclays Live. Data represents OAS and is as of December 31, 2021.

GDP Data Shows Slowing Growth in 2022¹



- In late 2020 and early 2021, major economies grew at rates far above potential. These high rates of growth are expected to decline slightly, with projections continuing to decline due to supply disruptions, reopening trends moderating, and some countries continuing to struggle with the virus.
- The US is expected to grow faster than the euro area again in 2022, with some growth pulled forward due to the relative success in distributing the vaccine and a substantially larger fiscal stimulus response to the pandemic.
- China is projected to grow at 8.0% in 2021 and 5.6% in 2022, both above the expected US growth rate. Questions remain, though, about the highly levered property market and increased government regulations.

¹ Source: Bloomberg, and IMF; Euro Area and China figures annualized by Meketa. Projections via October 2021 IMF World Economic Outlook and represent annual numbers.



- The US labor market continues to recover, and the unemployment rate (U3) fell from 4.2% to 3.9% in December. It still remains slightly above pre-pandemic levels though, but far below the pandemic peak.
- The broader measure of unemployment (U6) that includes discouraged and underemployed workers also continued to decline but is much higher at 7.2%. Also, the labor force participation rate remains quite low at 61.9% and is below the 63.4% level of January 2020.
- Continued improvements in the labor market have contributed to recent expectations that the Federal Reserve will increase its pace of policy removal in 2022.

¹ Source: Bloomberg. Data is as of December 31, 2021. Bars represent recessions as observed by the National Bureau of Economic Research.

Asset Class and Manager Commentary

Domestic Equity

- Over the quarter ending December 31, 2021, domestic equity returned 9.8%, outperforming the Russell 3000 benchmark by 0.5%. The passive strategies, namely Northern Trust Russell 1000 and iShares Edge MSCI Minimum Volatility, performed in line with their respective benchmarks with acceptable tracking error. The active managers, namely Earnest Partners, Rice Hall James, and Brown Fundamental, all outperformed their respective benchmarks and earned above average quarterly ranking in their respective peer groups.
- **Earnest Partners**, the Plan's active mid cap core manager, returned 11.3%, outperforming the Russell Midcap benchmark by 4.9%, and placing in the 16th percentile of its peer group for the quarter. Earnest has also outperformed its benchmark over all other time periods measured as of December 31.
- **Rice Hall James**, the Plan's active small cap growth manager, returned 4.6%, outperforming the Russell 2000 Growth benchmark, which virtually stayed flat in Q4, by 4.6%, and placing in the 33rd percentile for the quarter. The manager also outperformed its benchmark over the 1-year trailing period and since inception by 13.4% and 0.4% respectively. Due to its performance in 2018, Rice Hall James trailed its benchmark by (1.4%) over the 3-year trailing period.
- **Brown Fundamental**, the Plan's active small cap value manager funded in April 2021, returned 9.9% over the quarter outperforming its Russell 2000 Value benchmark by 5.5%, placing it in the 10th percentile amongst its peers.

International Equity

- For the quarter, the international equity segment returned 2.9%, outperforming the MSCI ACWI ex US benchmark by 1.0%. Within this portfolio, the Vanguard passive international developed markets portfolio posted 1.1%. Due to Vanguard's fair-value pricing methodology, the strategy has deviated from its tracked index's return of 2.6%; however, this is expected to equalize over the longer term.
- **SGA MSCI ACWI ex US ETF**, the Plan's active core international equity manager, returned 3.2% outperforming its benchmark by 1.3% over the quarter ranking at 42nd percentile amongst its peers. It has also outperformed its benchmark over the 1-year trailing period by 2.5% even though it has trailed the benchmark by (2.5%) since inception in December 2019.

Fixed Income

- Over the quarter, the Fixed Income aggregate returned 0.1%, outperforming the Bloomberg Universal benchmark, which stayed virtually flat, by 0.1%. Reflecting the broad market trends, core fixed income managers in this portfolio posted virtually flat returns.
- **Ramirez** returned (0.1%) over the quarter, trailing the benchmark by (0.1%) placing in the 57th percentile of its peer group. However, Ramirez has outperformed its benchmark over the 1- and 3-year trailing periods by 1.6% and 0.7% respectively, and by 0.7% since inception in January 2017.

Fixed Income (continued)

- **Reams** posted modest positive returns for the quarter, trailing its benchmark by 0.4% and placing in the 9th percentile of its peer group. While it trailed the Bloomberg Universal benchmark by (0.1%) in the 1-year trailing period, it outperformed its benchmark by 3.5%, 2.4%, and 1.0% over 3- and 5-year trailing period and since inception respectively.
- **Wellington Core Bond**, the core fixed income manager funded in April 2021, returned (0.1%) over the quarter trailing the benchmark by (0.1%) ranking at the 67th percentile.

Covered Calls

- Over the quarter, the Covered Calls portfolio returned 9.2% outpacing its benchmark by 2.2%.
- **Parametric BXM**, the Plan's passive covered calls allocation returned 6.9%, trailing its benchmark, the CBOE BXM index, by (0.1%). Though the portfolio has trailed its benchmark over the most recent quarter and the trailing 1-year period, it has outperformed over the longer 3- and 5-year periods and since inception by 2.9%, 2.0%, and 1.6% respectively.
- **Parametric DeltaShift**, the Plan's active covered calls allocation returned 11.0%, outperforming its benchmark, the CBOE BXM, index by 4.0% over the quarter. Similarly, the portfolio has outperformed the benchmark over all other the time periods measured by 8.8%, 13.6%, 8.5%, and 6.7% over 1-, 3-, 5-year trailing periods and since inception respectively.

Credit

- With **DDJ Capital** as the Plan's sole High Yield & Bank Loan manager, the Credit portfolio returned 0.5% over the quarter, trailing its benchmark, Bloomberg US High Yield, by (0.2%). It outperformed the benchmark over the 1-year and 5-year periods by 4.3% and 0.7% respectively but trailed the benchmark by (1.2%) over the 3-year trailing period. Due to the recent acquisition of DDJ by Polen Capital, the manager will remain on the Watchlist to monitor its progress and organization changes.

Crisis Risk Offset

- Over the quarter, the Crisis Risk Offset portfolio posted 2.0%, modestly outperforming its benchmark by 0.5%. **Vanguard Long Duration ETF** is currently the only funded component of the Crisis Risk Offset portfolio as of December 31, 2021. The Alternative Risk Premia and Systematic Trend Following components of the Crisis Risk Offset portfolio are underway to be funded in coming quarters.

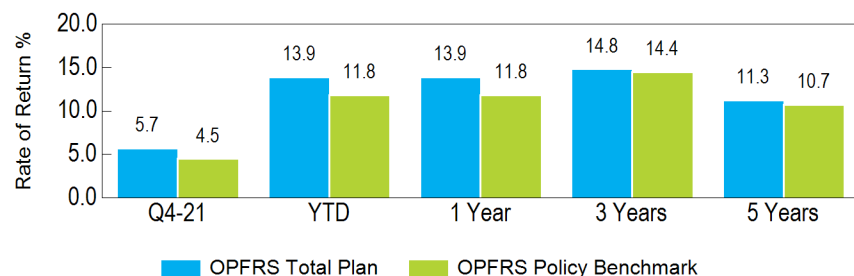
**4Q 2021 Performance
as of December 31, 2021**

OPFRS Total Plan | As of December 31, 2021

1 Year Ending December 31, 2021		
	Anlzd Return	Standard Deviation
OPFRS Total Plan	13.89%	1.86%
OPFRS Policy Benchmark	11.83%	1.68%
InvMetrics Public DB \$250mm-\$1B Gross Median	13.59%	1.68%

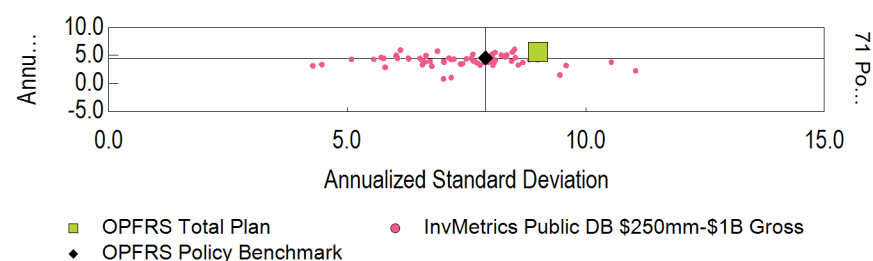
1 Year Ending December 31, 2021		
	Anlzd Return	Standard Deviation
OPFRS Total Plan	13.89%	1.86%
OPFRS Policy Benchmark	11.83%	1.68%

Return Summary Ending December 31, 2021

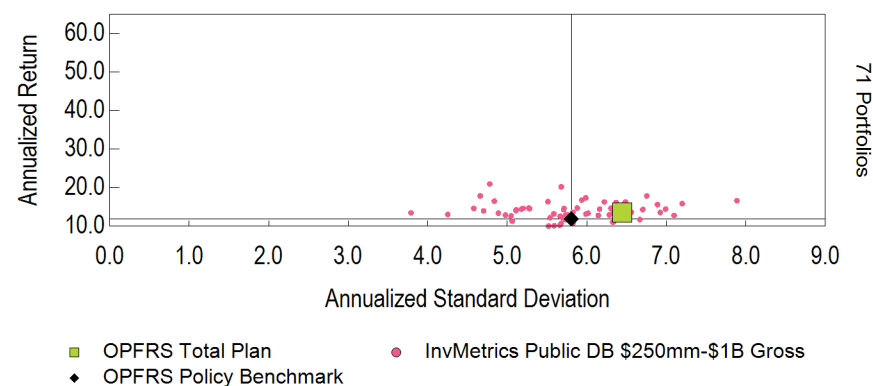


Summary of Cash Flows		
	Quarter-To-Date	One Year
Beginning Market Value	\$459,712,578	\$434,118,470
Net Cash Flow	-\$3,188,809	-\$12,749,737
Capital Appreciation	\$26,697,208	\$61,851,965
Ending Market Value	\$483,220,978	\$483,220,978

Annualized Return vs. Annualized Standard Deviation 3 Months Ending December 31, 2021



Annualized Return vs. Annualized Standard Deviation 1 Year Ending December 31, 2021



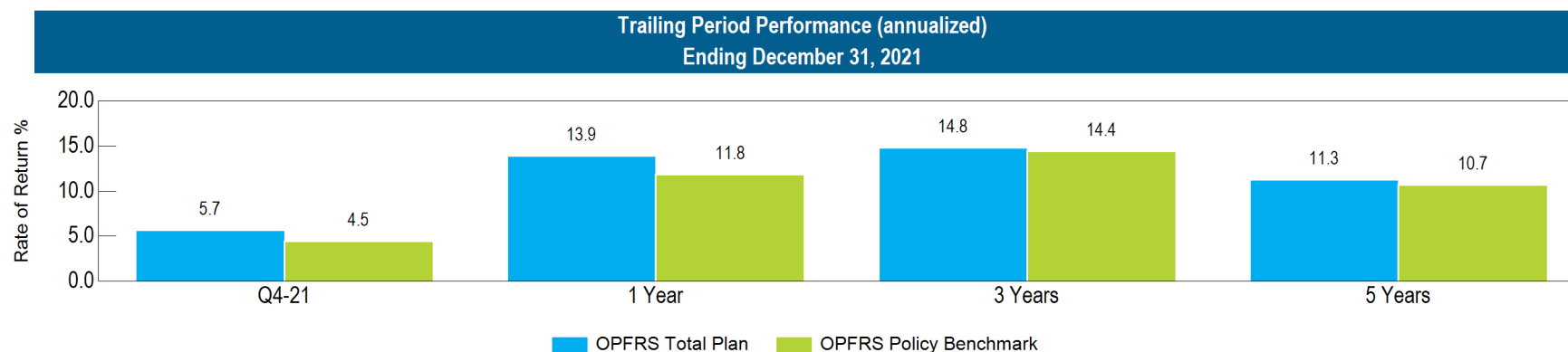
Evolving Policy Benchmark consists of 40% russell 3000, 12% MSCI ACWI ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury

Asset Class Performance (gross of fees) | As of December 31, 2021

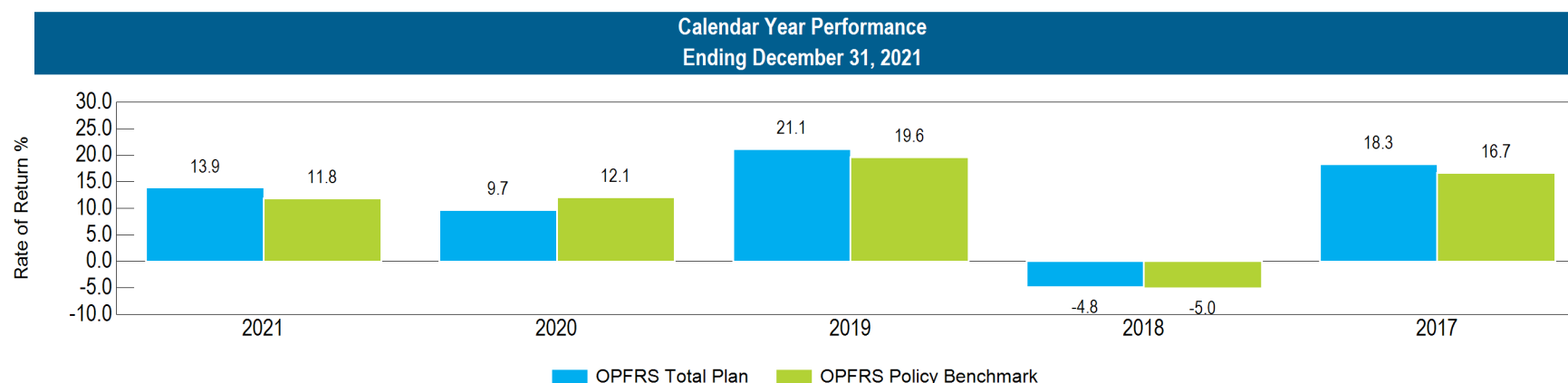
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
OPFRS Total Plan	5.7	13.9	13.9	14.8	11.3	9.3	9.8
<i>OPFRS Policy Benchmark</i>	<u>4.5</u>	<u>11.8</u>	<u>11.8</u>	<u>14.4</u>	<u>10.7</u>	<u>9.0</u>	<u>9.3</u>
Excess Return	1.2	2.1	2.1	0.4	0.6	0.3	0.5
Domestic Equity	9.8	25.0	25.0	24.5	17.2	14.0	15.8
<i>Russell 3000 (Blend)</i>	<u>9.3</u>	<u>25.7</u>	<u>25.7</u>	<u>25.8</u>	<u>18.0</u>	<u>14.5</u>	<u>16.3</u>
Excess Return	0.5	-0.7	-0.7	-1.3	-0.8	-0.5	-0.5
International Equity	2.9	10.6	10.6	14.5	10.8	7.9	8.6
<i>MSCI ACWI ex US (Blend)</i>	<u>1.9</u>	<u>8.3</u>	<u>8.3</u>	<u>13.7</u>	<u>10.1</u>	<u>7.1</u>	<u>7.8</u>
Excess Return	1.0	2.3	2.3	0.8	0.7	0.8	0.8
Fixed Income	0.1	-0.3	-0.3	5.5	4.3	3.8	3.6
<i>Bloomberg Universal (Blend)</i>	<u>0.0</u>	<u>-1.1</u>	<u>-1.1</u>	<u>5.2</u>	<u>3.8</u>	<u>3.4</u>	<u>3.3</u>
Excess Return	0.1	0.8	0.8	0.3	0.5	0.4	0.3
Credit	0.5	9.6	9.6	7.6	7.0	--	--
<i>Bloomberg US High Yield TR</i>	<u>0.7</u>	<u>5.3</u>	<u>5.3</u>	<u>8.8</u>	<u>6.3</u>	--	--
Excess Return	-0.2	4.3	4.3	-1.2	0.7	--	--
Covered Calls	9.2	24.7	24.7	19.4	13.4	11.6	--
<i>CBOE S&P 500 BuyWrite USD</i>	<u>7.0</u>	<u>20.3</u>	<u>20.3</u>	<u>10.9</u>	<u>8.0</u>	<u>7.5</u>	--
Excess Return	2.2	4.4	4.4	8.5	5.4	4.1	--
Crisis Risk Offset	2.0	-6.7	-6.7	-6.8	--	--	--
<i>SG Multi Alternative Risk Premia Index</i>	<u>1.5</u>	<u>7.6</u>	<u>7.6</u>	<u>-1.7</u>	--	--	--
Excess Return	0.5	-14.3	-14.3	-5.1	--	--	--

1. Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI Acwi ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury,
2. Domestic Equity Benchmark consists of S&P 500 thru 3/31/98 10% Russell 1000, 20% Russell 1000 Value, 5% RMC from 4/1/98 - 12/31/04 and Russell 3000 from 1/1/05 to present.
3. International Equity Benchmark consists of MSCI EAFE thru 12/31/04 and MSCI ACWI x US thereafter.
4. Fixed Income Benchmark consists of Bbg BC Aggregate prior to 4/1/06, and Bbg BC Universal thereafter.
5. Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

Portfolio Relative Performance Results | As of December 31, 2021



	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)	2021 (%)
OPFRS Total Plan	5.7	13.9	13.9	14.8	11.3	18.3	-4.8	21.1	9.7	13.9
<i>OPFRS Policy Benchmark</i>	<i>4.5</i>	<i>11.8</i>	<i>11.8</i>	<i>14.4</i>	<i>10.7</i>	<i>16.7</i>	<i>-5.0</i>	<i>19.6</i>	<i>12.1</i>	<i>11.8</i>
<i>InvMetrics Public DB \$250mm-\$1B Gross Median</i>	<i>4.2</i>	<i>13.6</i>	<i>13.6</i>	<i>15.6</i>	<i>11.4</i>	<i>15.8</i>	<i>-4.1</i>	<i>18.6</i>	<i>13.1</i>	<i>13.6</i>

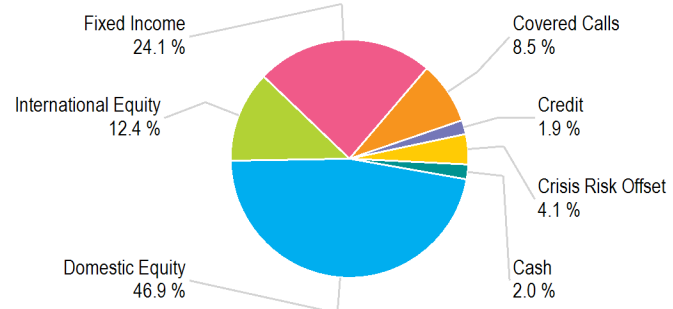


Asset Allocation | As of December 31, 2021

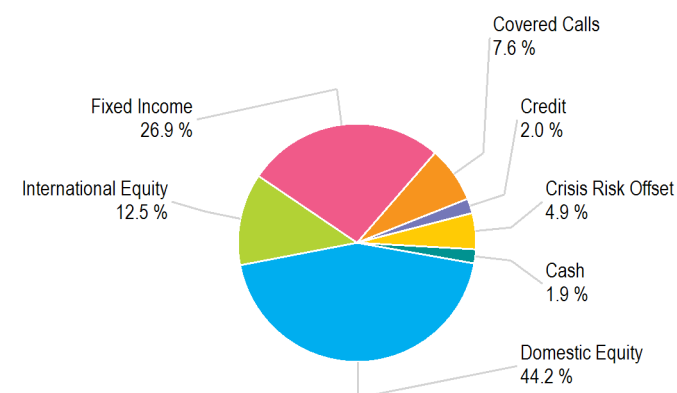
Asset Allocation vs. Target As Of December 31, 2021

	Current	%	Policy	Difference*
Domestic Equity	\$226,498,729	46.9%	40.0%	6.9%
International Equity	\$60,100,247	12.4%	12.0%	0.4%
Fixed Income	\$116,568,599	24.1%	31.0%	-6.9%
Covered Calls	\$41,091,899	8.5%	5.0%	3.5%
Credit	\$9,372,205	1.9%	2.0%	-0.1%
Crisis Risk Offset	\$19,890,317	4.1%	10.0%	-5.9%
Cash	\$9,698,983	2.0%	0.0%	2.0%

December 31, 2021: \$483,220,978



December 31, 2020: \$434,118,470



Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

Target weightings reflect the Plan's evolving asset allocation (effective 5/31/2017.)

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Domestic Equity	226,498,729	100.0	9.8	25.0	24.5	17.2	9.8	Jun-97
<i>Russell 3000 (Blend)</i>			9.3	25.7	25.8	18.0	10.0	Jun-97
Excess Return			0.5	-0.7	-1.3	-0.8	-0.2	
Northern Trust Russell 1000	122,696,981	54.2	9.8	26.5	26.2	18.4	15.8	Jun-10
<i>Russell 1000</i>			9.8	26.5	26.2	18.4	15.8	Jun-10
Excess Return			0.0	0.0	0.0	0.0	0.0	
eV US Large Cap Core Equity Gross Rank			64	65	37	42	41	Jun-10
EARNEST Partners	51,502,726	22.7	11.3	25.7	28.2	19.2	11.8	Apr-06
<i>Russell MidCap</i>			6.4	22.6	23.3	15.1	10.2	Apr-06
Excess Return			4.9	3.1	4.9	4.1	1.6	
eV US Mid Cap Core Equity Gross Rank			16	60	14	19	27	Apr-06
iShares Edge MSCI Min Vol ETF	23,024,059	10.2	10.4	20.8	--	--	28.0	Apr-20
<i>MSCI USA Minimum Volatility GR USD</i>			10.4	21.0	--	--	28.2	Apr-20
Excess Return			0.0	-0.2			-0.2	
eV US Low Volatility Equity Gross Rank			40	70	--	--	78	Apr-20
Rice Hall James	17,436,537	7.7	4.6	16.2	19.8	--	14.2	Jul-17
<i>Russell 2000 Growth</i>			0.0	2.8	21.2	--	13.8	Jul-17
Excess Return			4.6	13.4	-1.4		0.4	
eV US Small Cap Growth Equity Gross Rank			33	37	91	--	92	Jul-17

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
International Equity	60,100,247	100.0	2.9	10.6	14.5	10.8	5.9	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>1.9</i>	<i>8.3</i>	<i>13.7</i>	<i>10.1</i>	<i>6.0</i>	<i>Jan-98</i>
Excess Return			1.0	2.3	0.8	0.7	-0.1	
SGA ACWI ex-U.S. Equity	42,401,389	70.6	3.2	10.8	--	--	9.1	Dec-19
<i>MSCI ACWI ex USA Gross</i>			<i>1.9</i>	<i>8.3</i>	--	--	<i>11.6</i>	<i>Dec-19</i>
Excess Return			1.3	2.5			-2.5	
eV ACWI ex-US All Cap Core Eq Gross Rank			42	50	--	--	93	Dec-19
Vanguard Developed Markets ETF	17,098,207	28.4	1.1	8.2	--	--	12.2	Sep-19
<i>FTSE Developed All Cap Ex US TR USD</i>			<i>2.6</i>	<i>11.9</i>	--	--	<i>14.8</i>	<i>Sep-19</i>
Excess Return			-1.5	-3.7			-2.6	
eV ACWI ex-US All Cap Core Eq Gross Rank			78	81	--	--	89	Sep-19

Total International Equity market value includes cash held in closed accounts Fisher and Hansberger.

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Fixed Income	116,568,599	100.0	0.1	-0.3	5.5	4.3	5.4	Dec-93
<i>Bloomberg Universal (Blend)</i>			<i>0.0</i>	<i>-1.1</i>	<i>5.2</i>	<i>3.8</i>	<i>5.2</i>	<i>Dec-93</i>
Excess Return			0.1	0.8	0.3	0.5	0.2	
Ramirez	79,372,600	68.1	-0.1	0.1	5.5	--	4.3	Jan-17
<i>Bloomberg US Aggregate TR</i>			<i>0.0</i>	<i>-1.5</i>	<i>4.8</i>	--	<i>3.6</i>	<i>Jan-17</i>
Excess Return			-0.1	1.6	0.7		0.7	
eV US Core Fixed Inc Gross Rank			57	7	50	--	30	Jan-17
Reams	29,560,445	25.4	0.4	-1.2	8.7	6.2	5.9	Feb-98
<i>Bloomberg Universal (Blend)</i>			<i>0.0</i>	<i>-1.1</i>	<i>5.2</i>	<i>3.8</i>	<i>4.9</i>	<i>Feb-98</i>
Excess Return			0.4	-0.1	3.5	2.4	1.0	
eV US Core Plus Fixed Inc Gross Rank			9	94	3	4	43	Feb-98

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Covered Calls	41,091,899	100.0	9.2	24.7	19.4	13.4	11.1	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>7.0</i>	<i>20.3</i>	<i>10.9</i>	<i>8.0</i>	<i>7.1</i>	<i>Apr-14</i>
Excess Return			2.2	4.4	8.5	5.4	4.0	
Parametric DeltaShift	23,455,117	57.1	11.0	29.1	24.5	16.5	13.8	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>7.0</i>	<i>20.3</i>	<i>10.9</i>	<i>8.0</i>	<i>7.1</i>	<i>Apr-14</i>
Excess Return			4.0	8.8	13.6	8.5	6.7	
<i>eV US Large Cap Core Equity Gross Rank</i>			<i>39</i>	<i>37</i>	<i>57</i>	<i>71</i>	<i>68</i>	<i>Apr-14</i>

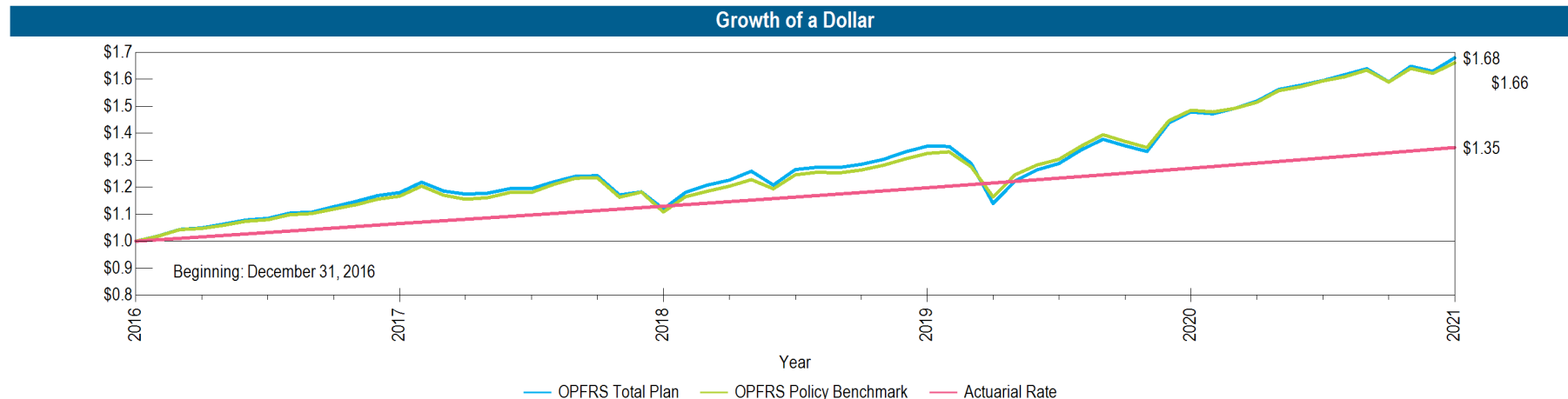
Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Credit	9,372,205	100.0	0.5	9.6	7.6	7.0	6.6	Feb-15
<i>Bloomberg US High Yield TR</i>			<i>0.7</i>	<i>5.3</i>	<i>8.8</i>	<i>6.3</i>	<i>6.1</i>	<i>Feb-15</i>
Excess Return			-0.2	4.3	-1.2	0.7	0.5	
DDJ Capital	9,372,205	100.0	0.5	9.6	7.6	7.0	6.6	Feb-15
<i>ICE BofA High Yield Master TR</i>			<i>0.7</i>	<i>5.4</i>	<i>8.6</i>	<i>6.1</i>	<i>6.0</i>	<i>Feb-15</i>
Excess Return			-0.2	4.2	-1.0	0.9	0.6	
<i>eV US High Yield Fixed Inc Gross Rank</i>			<i>84</i>	<i>6</i>	<i>80</i>	<i>21</i>	<i>27</i>	<i>Feb-15</i>

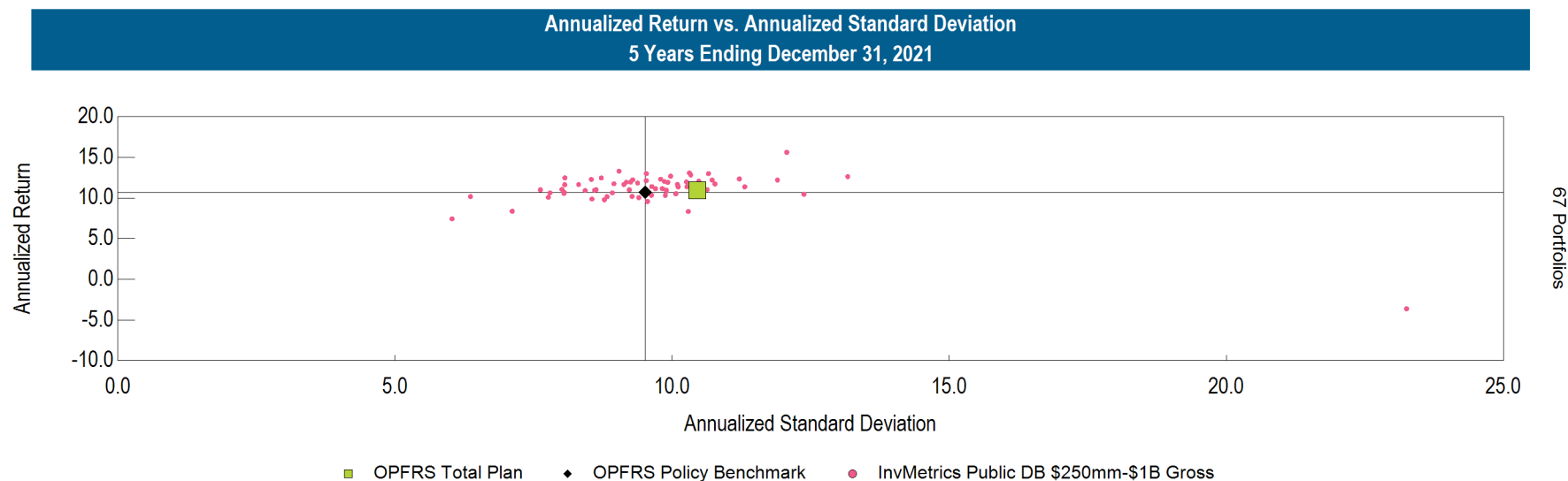
Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Crisis Risk Offset	19,890,317	100.0	2.0	-6.7	-6.8	--	-8.0	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>1.5</i>	<i>7.6</i>	<i>-1.7</i>	<i>--</i>	<i>-2.0</i>	<i>Aug-18</i>
Excess Return			0.5	-14.3	-5.1		-6.0	
Vanguard Long-Term Treasury ETF	19,890,317	100.0	2.0	-6.7	--	--	5.3	Jul-19
<i>Bloomberg US Govt Long TR</i>			<i>3.0</i>	<i>-4.6</i>	<i>--</i>	<i>--</i>	<i>6.1</i>	<i>Jul-19</i>
Excess Return			-1.0	-2.1			-0.8	
<i>eV US Long Duration - Gov/Cred Fixed Inc Net Rank</i>			<i>41</i>	<i>99</i>	<i>--</i>	<i>--</i>	<i>98</i>	<i>Jul-19</i>

Total Portfolio 5-Year Performance | As of December 31, 2021

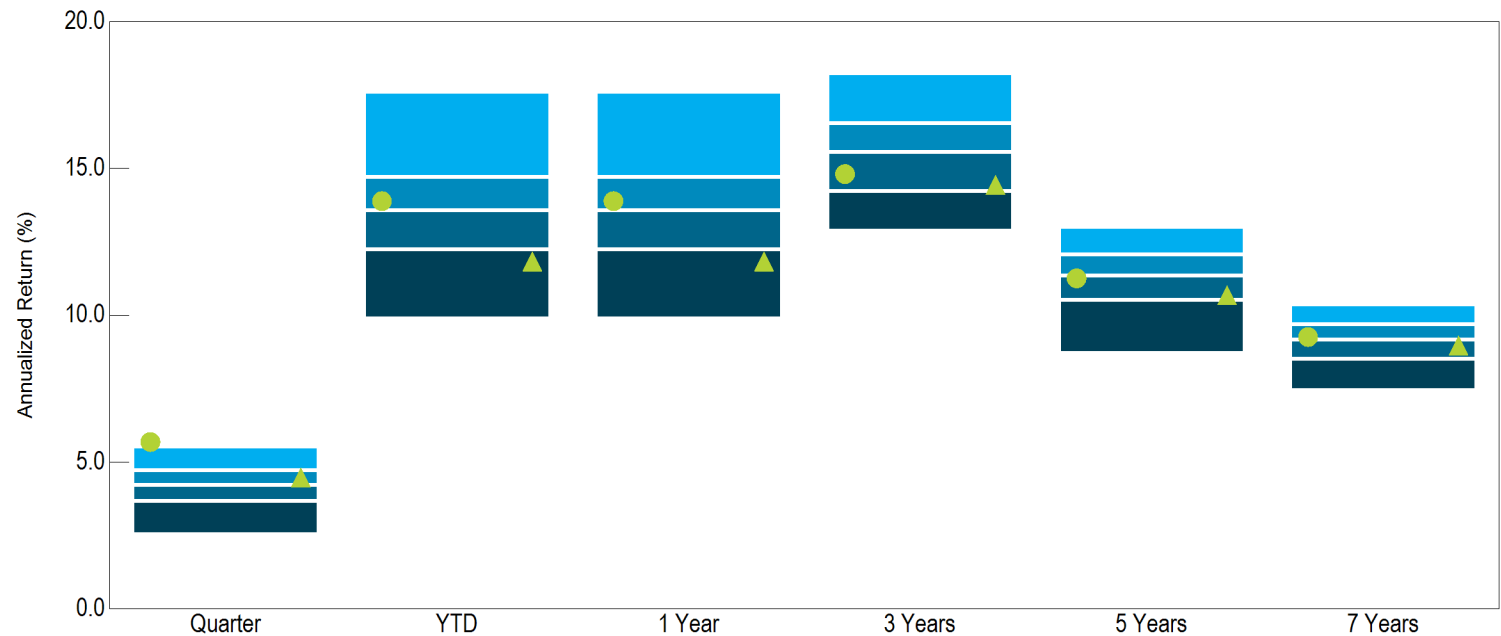


The actuarial expected rate of return was 8% through 6/30/2009, 7.5% through 6/30/2010, 7% through 6/30/2011, 6.75% through 6/30/2014, 6.5% through 2/31/2017 and 6.0% currently



Plan Sponsor Peer Group Analysis | As of December 31, 2021

InvMetrics Public DB \$250mm-\$1B Gross Return Comparison



	Return (Rank)											
5th Percentile	5.5		17.6		17.6		18.2		13.0		10.4	
25th Percentile	4.7		14.7		14.7		16.6		12.1		9.7	
Median	4.2		13.6		13.6		15.6		11.4		9.2	
75th Percentile	3.7		12.3		12.3		14.2		10.5		8.5	
95th Percentile	2.6		9.9		9.9		12.9		8.7		7.5	
# of Portfolios	71		71		71		70		67		65	
● OPFRS Total Plan	5.7	(4)	13.9	(47)	13.9	(47)	14.8	(62)	11.3	(53)	9.3	(49)
▲ OPFRS Policy Benchmark	4.5	(34)	11.8	(81)	11.8	(81)	14.4	(72)	10.7	(71)	9.0	(59)

Manager Monitoring/Probation Status

Return vs. Benchmark since Corrective Action (As of December 31, 2021)

Portfolio	Status	Concern	Months Since Corrective Action	Performance ¹ Since Corrective Action (Gross, %)	Peer Group Percentile Ranking ²	Date of Corrective Action ³
DDJ Capital	On Watch	Performance/ Org changes	30	7.1	6	5/29/2019
Ice BofAML US High Yield				7.0		
Rice Hall James	On Watch	Performance	30	20.5	37	5/29/2019
Russell 2000 Growth				19.7		
Parametric	On Watch	Org changes	12	33.8	NA	10/28/2020
CBOE S&P 500 BuyWrite USD				28.8		

Investment Performance Criteria for Manager Monitoring/Probation Status

Asset Class	Short-term (Rolling 12 months)	Medium-term (Rolling 36 months)	Long-term (60 + months)
Active Domestic Equity	Fund return < benchmark return by 3.5%	Annualized Fund return < benchmark return by 1.75% for 6 consecutive months	VRR ⁴ < 0.97 for 6 consecutive months
Active International Equity	Fund return < benchmark return by 4.5%	Annualized Fund return < benchmark return by 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	Annualized Fund return < benchmark return by 0.40% for 6 consecutive months
Fixed Income	Fund return < benchmark return by 1.5%	Annualized Fund return < benchmark return by 1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months

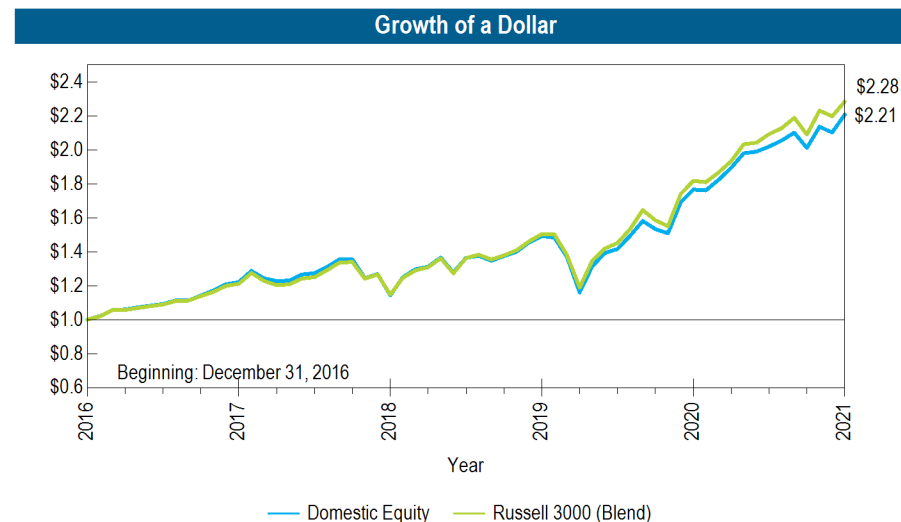
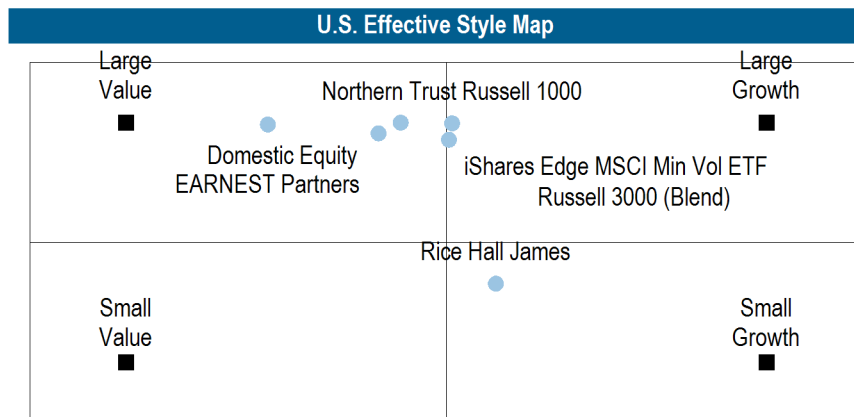
¹ Annualized performance if over one year

² Ranking over most recent quarter if on watch for less than 1 year, or over 1 year if on watch for more than a year.

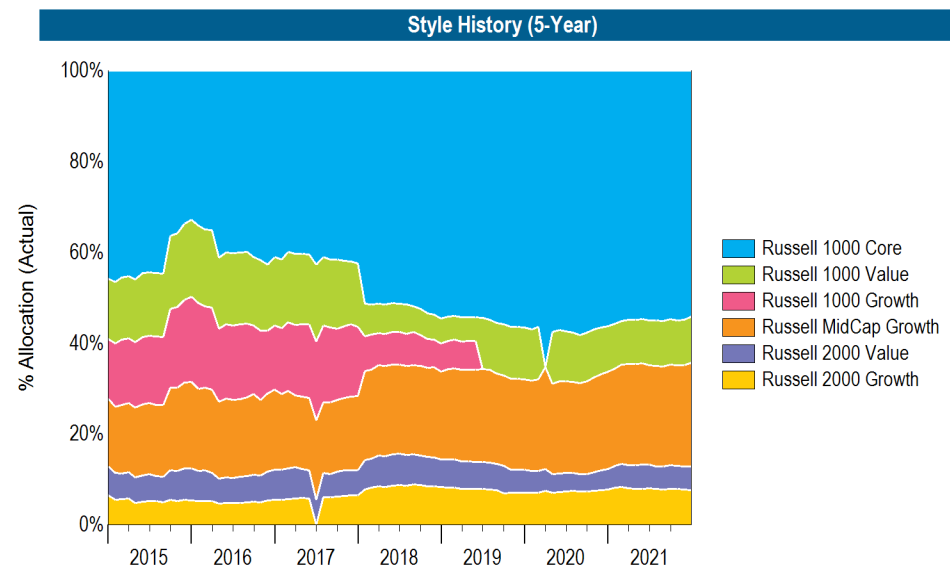
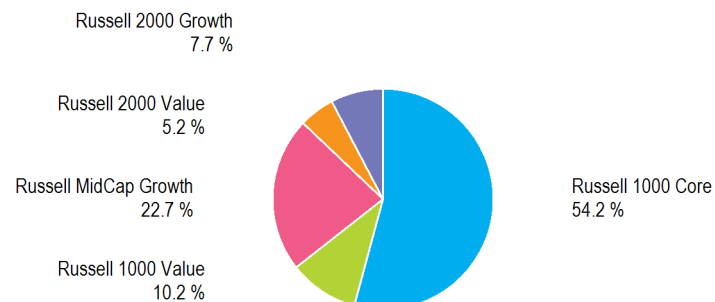
³ Approximate date based on when the Board voted to either monitor a manager at a heightened level or place it on probation.

⁴ VRR (Value Relative Ratio) is calculated as manager cumulative return/ benchmark return.

Domestic Equity | As of December 31, 2021

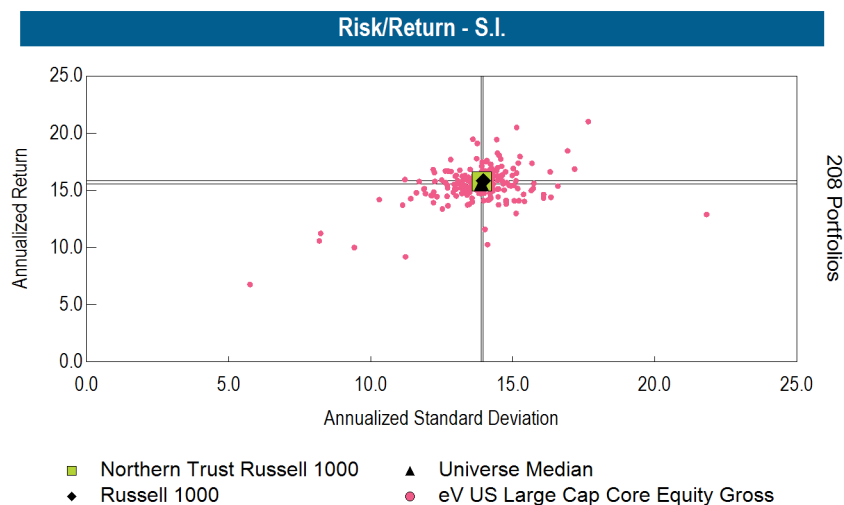
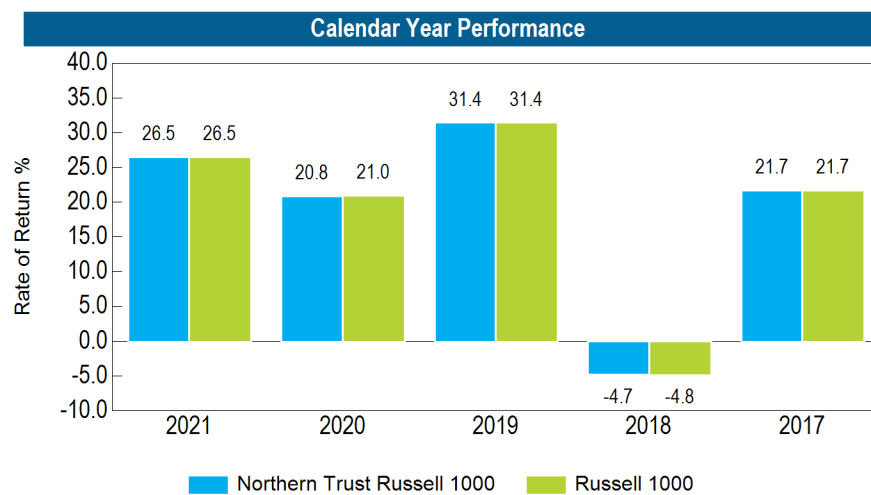
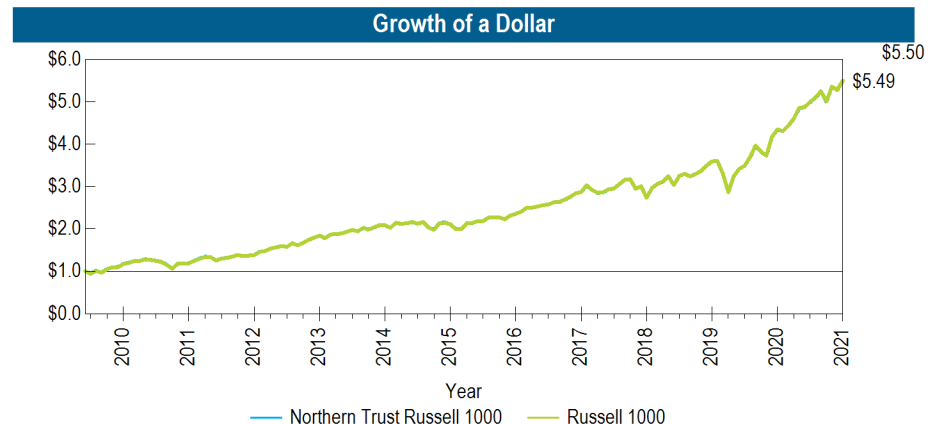
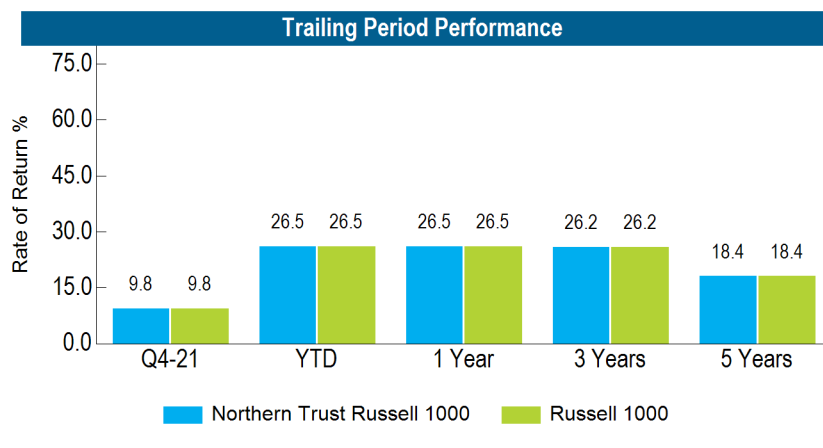


Style Exposure



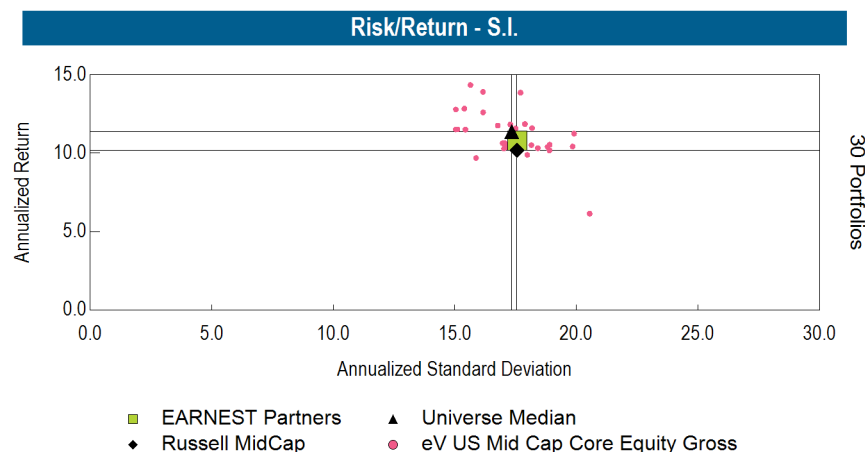
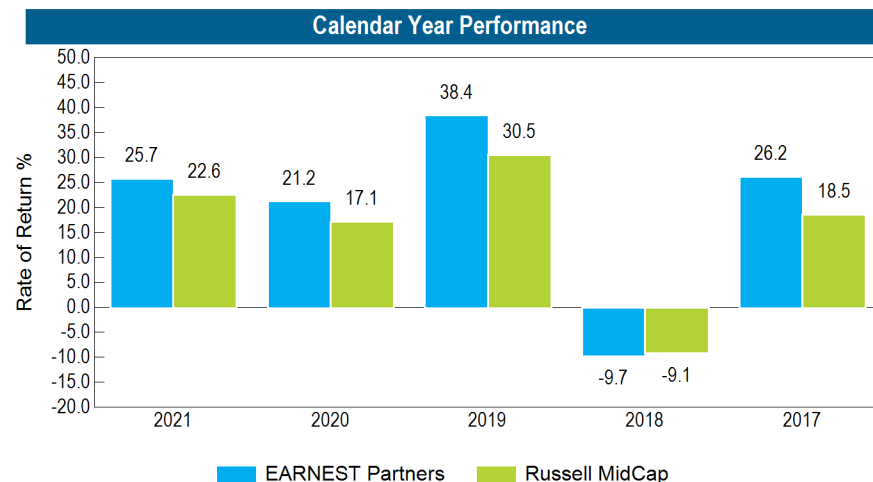
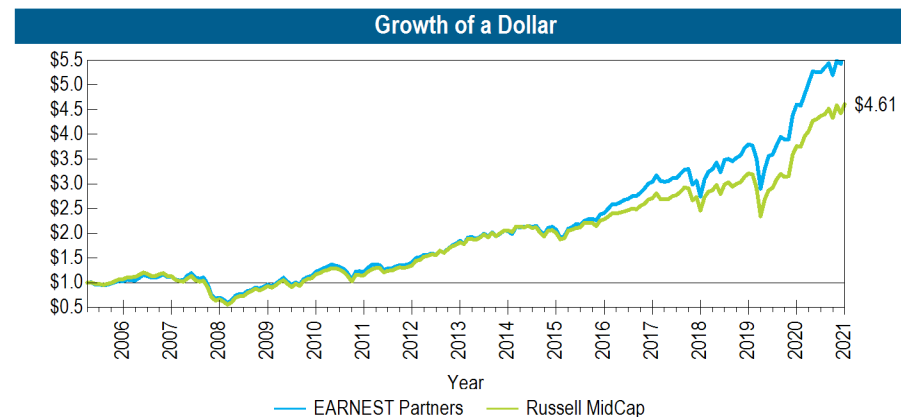
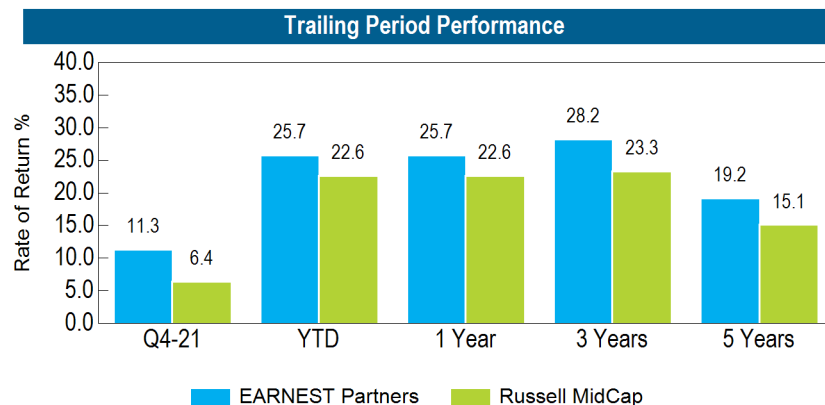
Northern Trust Russell 1000 | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Northern Trust Russell 1000	15.76%	13.91%	0.00%	1.00	0.13%	98.36%	99.77%
Russell 1000	15.85%	13.96%	0.00%	1.00	0.00%	100.00%	100.00%



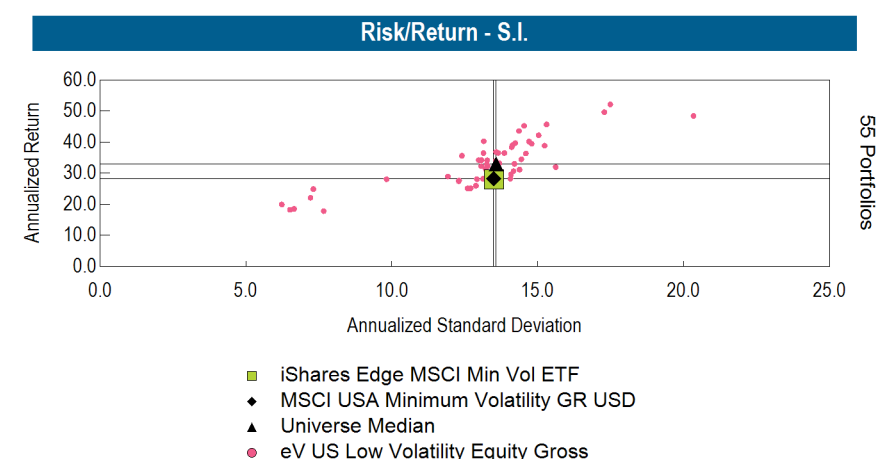
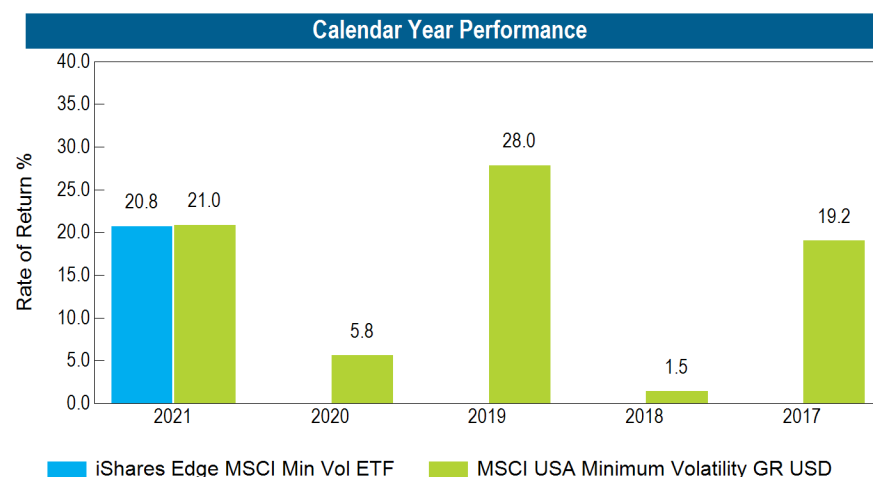
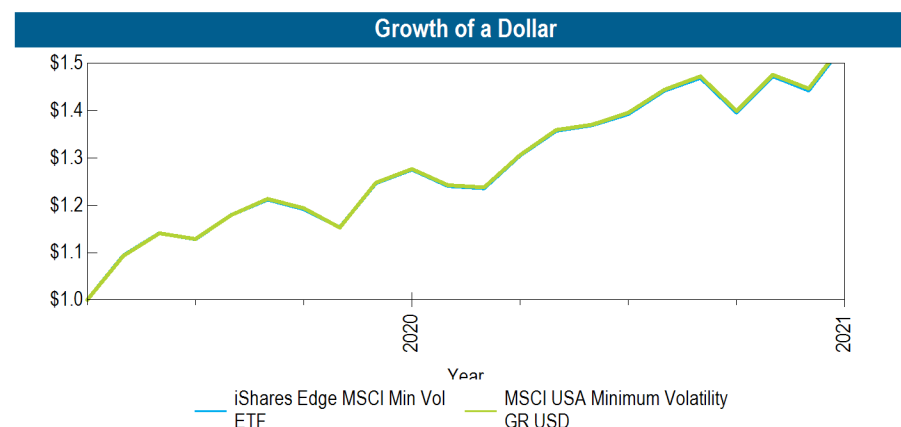
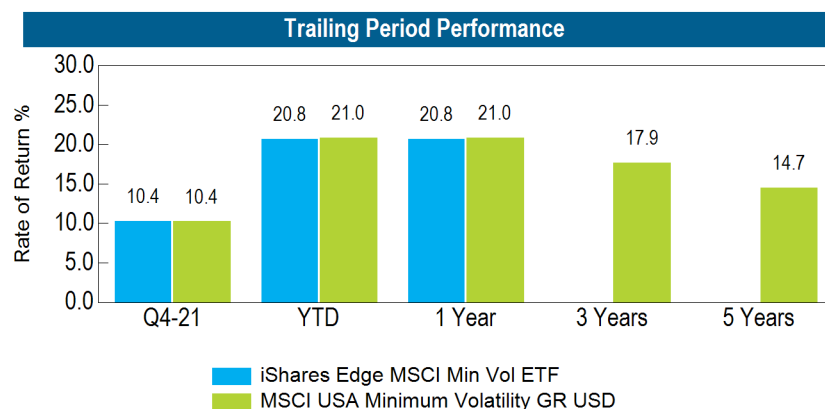
EARNEST Partners | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
EARNEST Partners	10.81%	17.58%	0.06%	0.98	0.18	3.45%	94.81%	99.03%
Russell MidCap	10.19%	17.56%	0.00%	1.00	--	0.00%	100.00%	100.00%



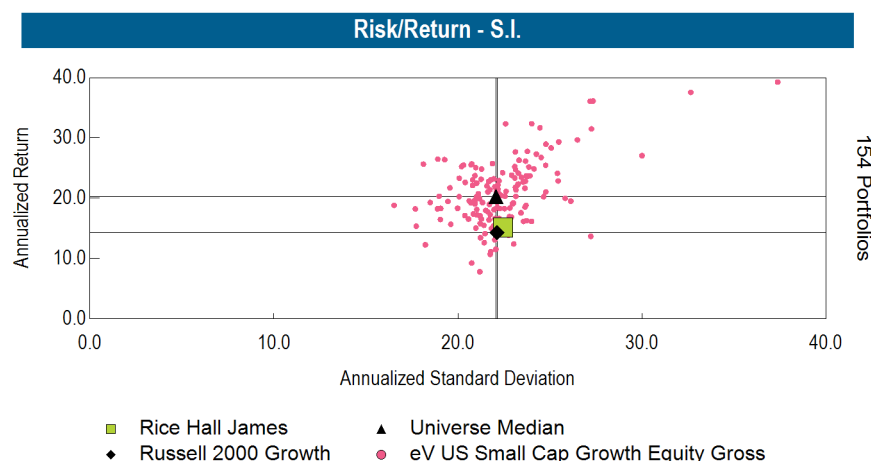
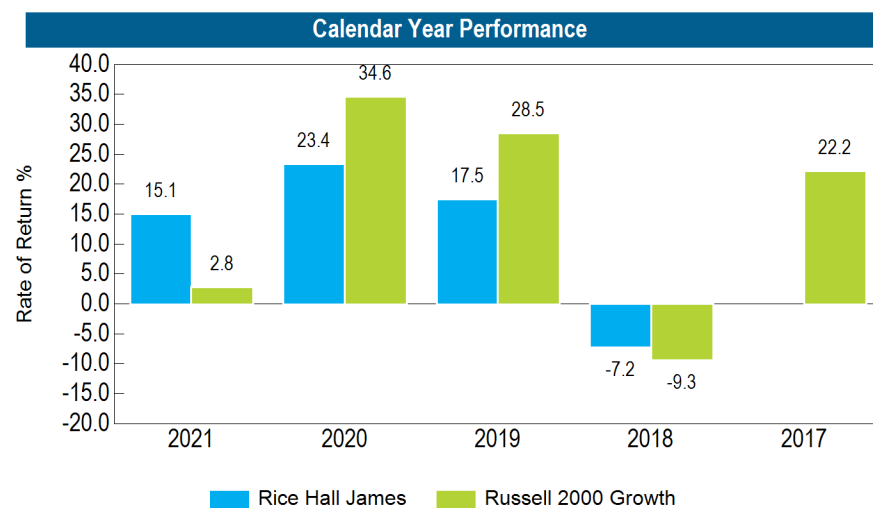
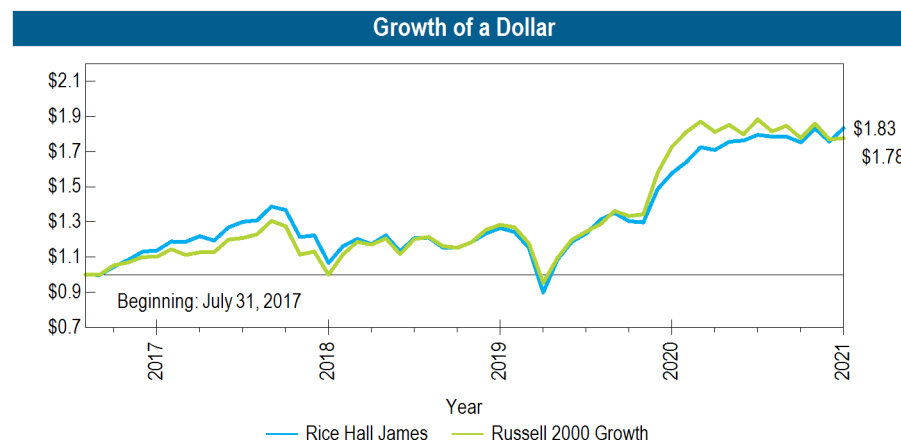
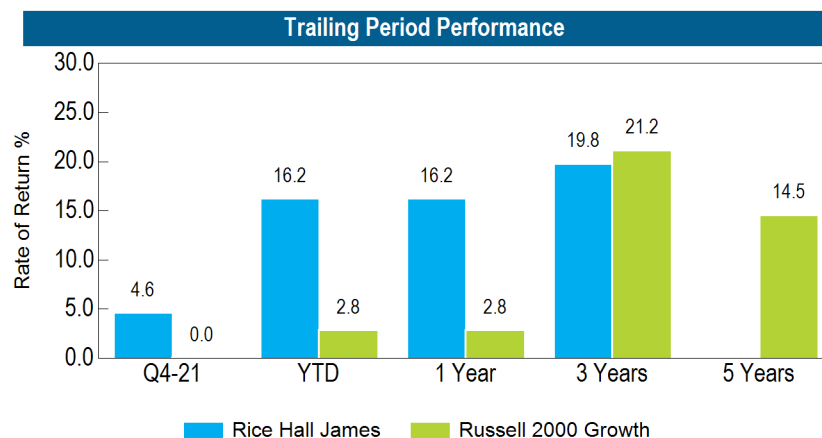
iShares Edge MSCI Min Vol ETF | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
iShares Edge MSCI Min Vol ETF	28.03%	13.50%	-0.01%	1.00	-0.59	0.28%	99.60%	100.27%
MSCI USA Minimum Volatility GR USD	28.20%	13.49%	0.00%	1.00	--	0.00%	100.00%	100.00%



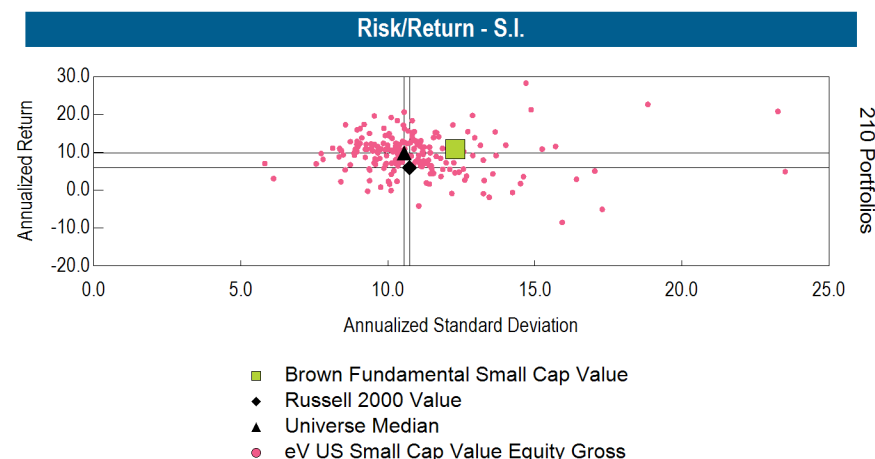
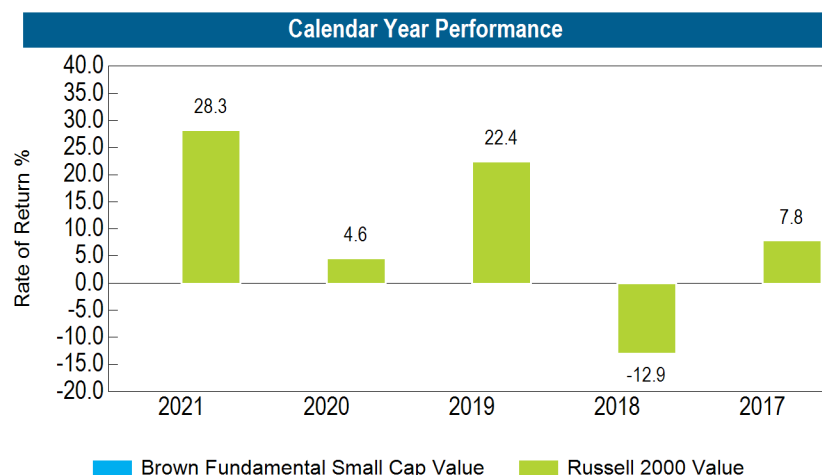
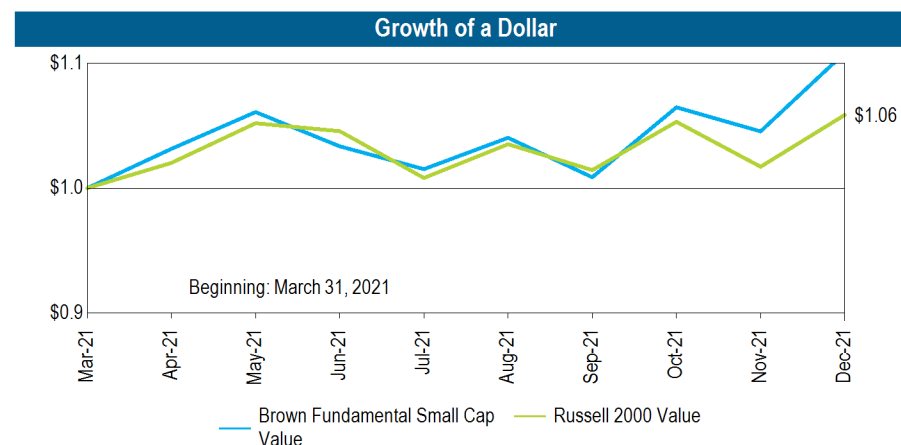
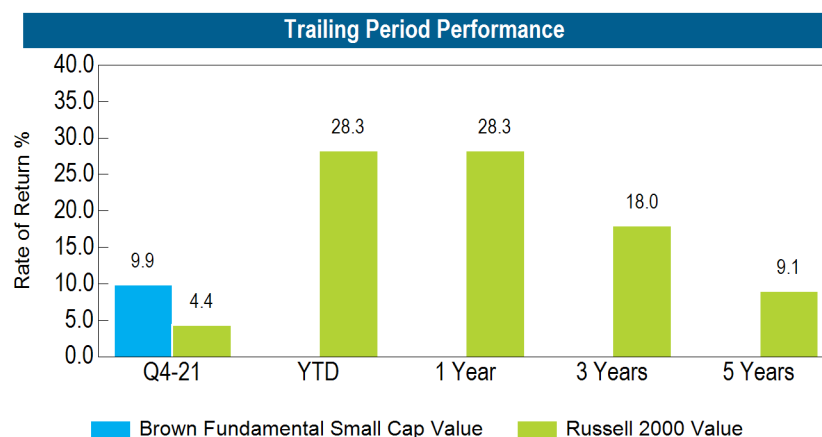
Rice Hall James | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Rice Hall James	13.56%	22.25%	0.03%	0.97	-0.05	6.82%	89.54%	95.36%
Russell 2000 Growth	13.90%	21.92%	0.00%	1.00	--	0.00%	100.00%	100.00%



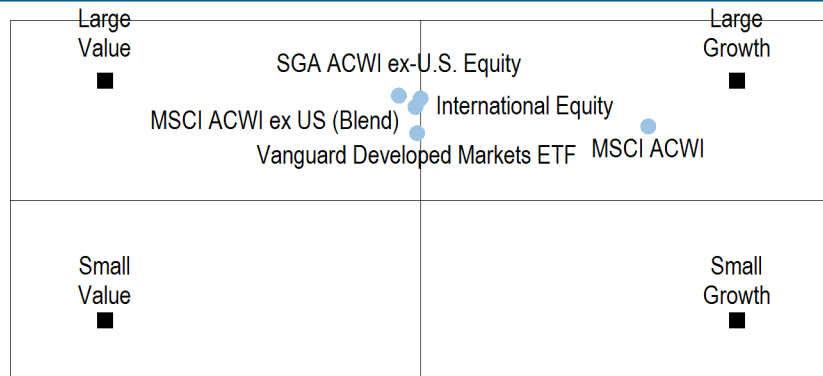
Brown Fundamental Small Cap Value | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Brown Fundamental Small Cap Value	10.14%	12.27%	0.43%	1.05	0.86	4.98%	127.14%	98.53%
Russell 2000 Value	5.86%	10.74%	0.00%	1.00	--	0.00%	100.00%	100.00%

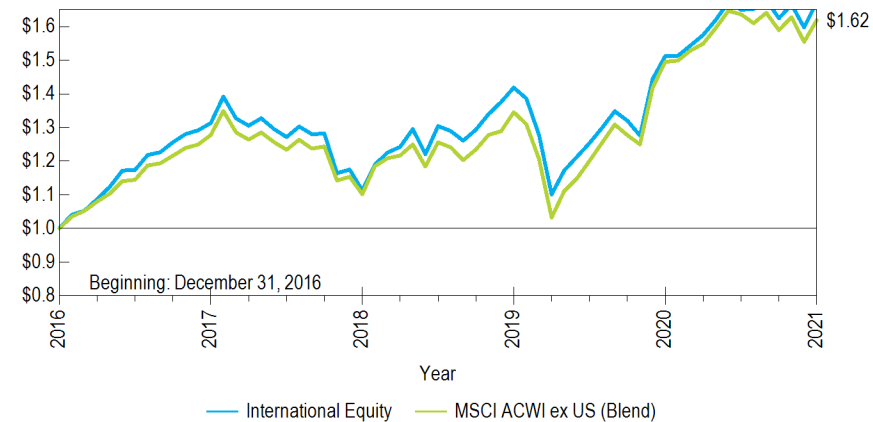


International Equity | As of December 31, 2021

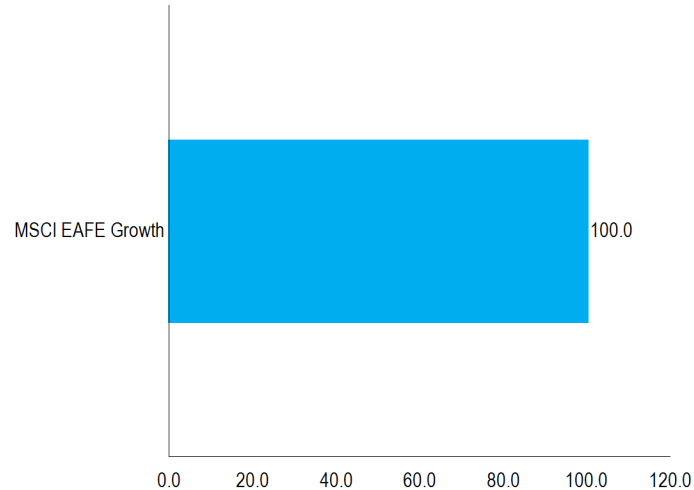
Non U.S. Effective Style Map vs. EAFE



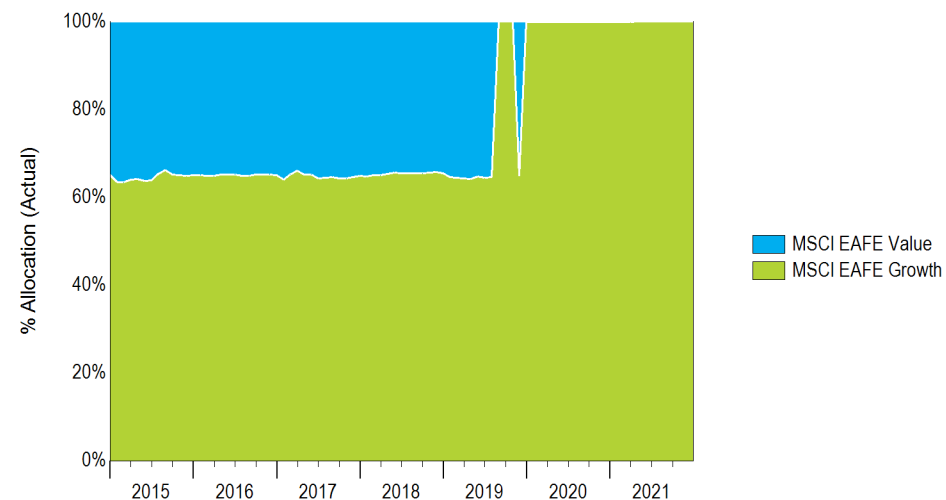
Growth of a Dollar
5 Years Ending December 31, 2021



Style Exposure

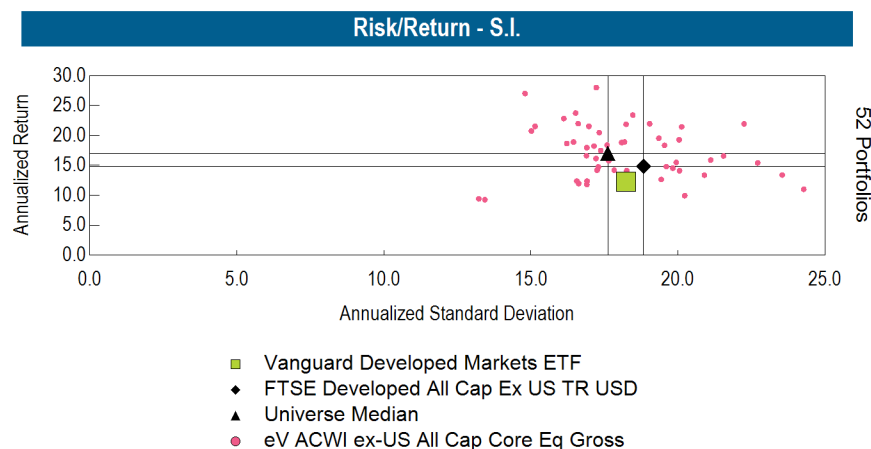
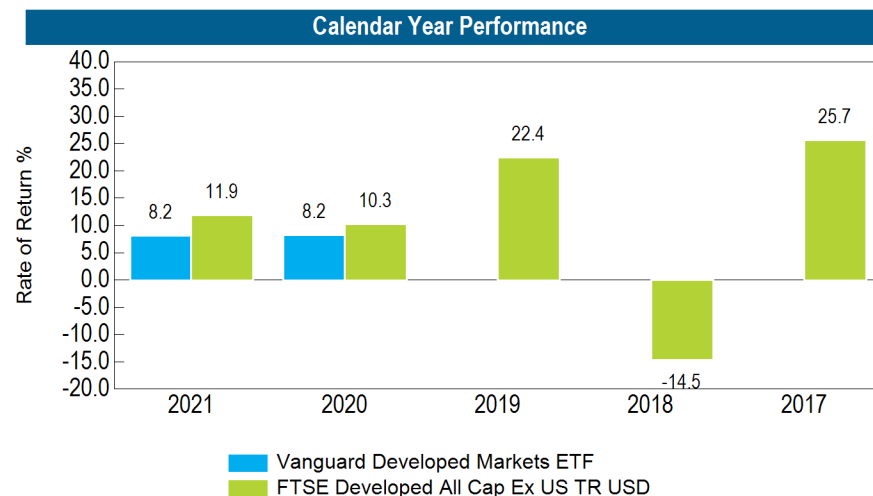
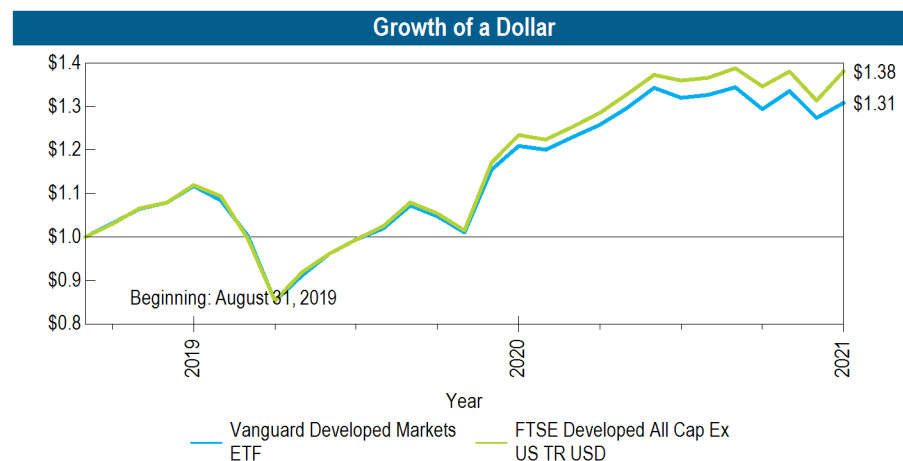
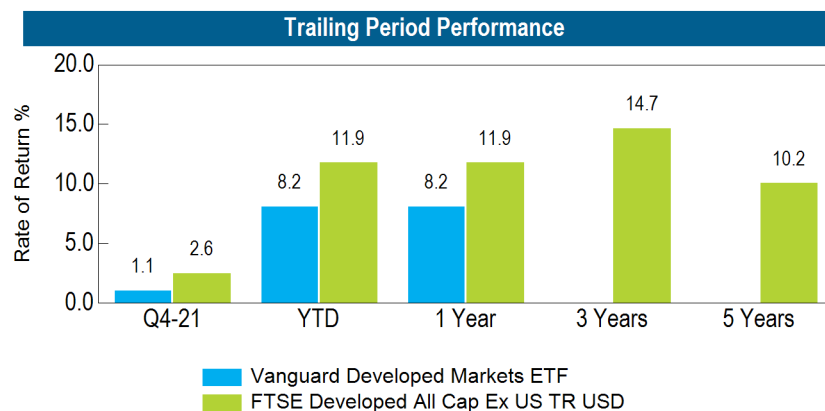


Style History (5-Year)



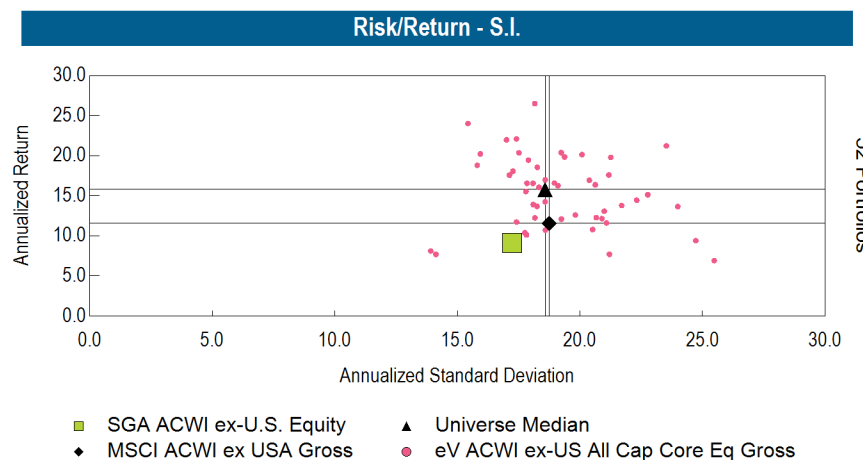
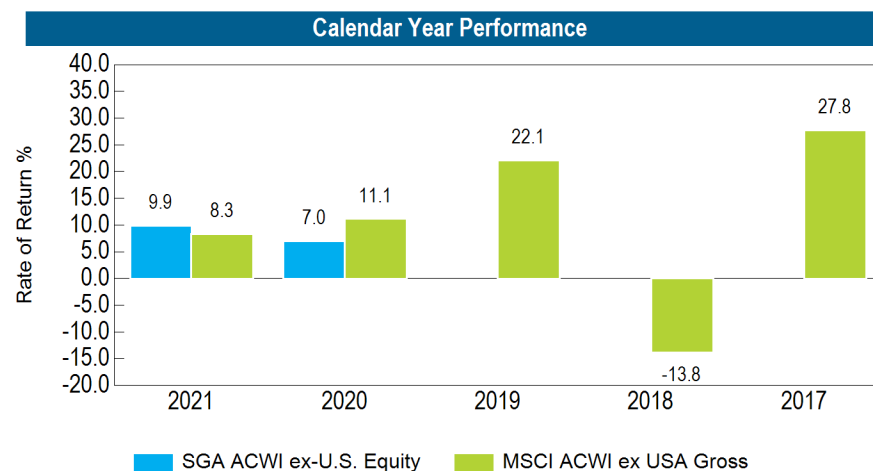
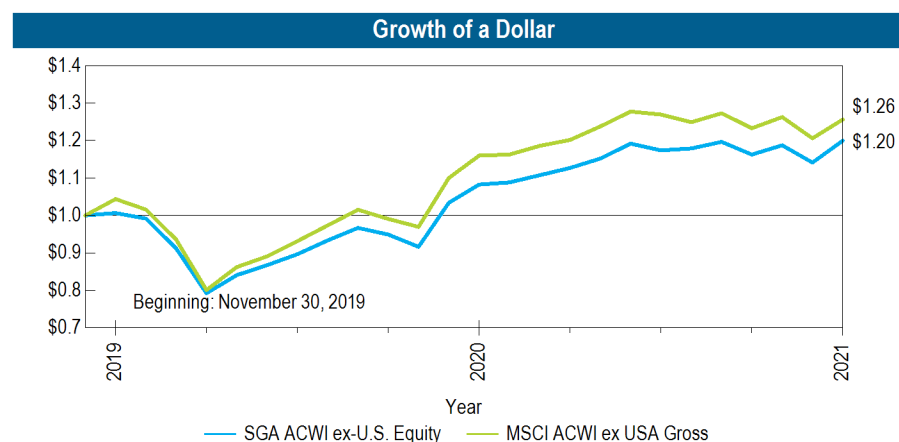
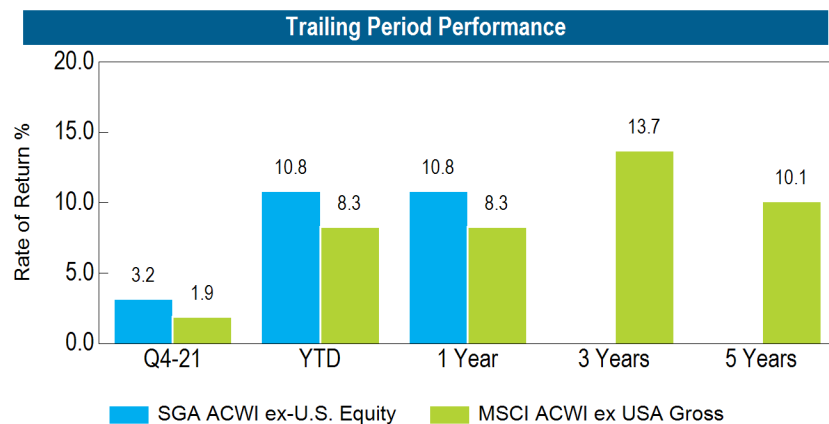
Vanguard Developed Markets ETF | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Vanguard Developed Markets ETF	12.17%	18.22%	-0.15%	0.96	-1.12	2.38%	91.50%	101.62%



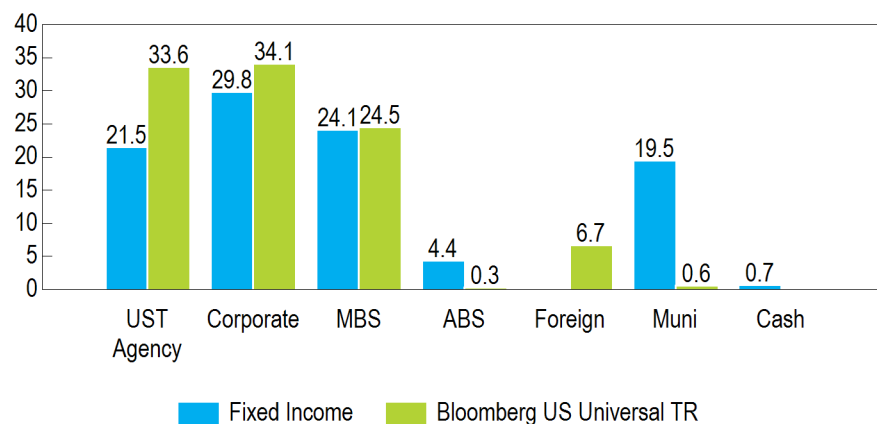
SGA ACWI ex-U.S. Equity | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
SGA ACWI ex-U.S. Equity	8.42%	17.19%	-0.15%	0.90	-0.80	3.94%	80.95%	93.03%
MSCI ACWI ex USA Gross	11.56%	18.75%	0.00%	1.00	--	0.00%	100.00%	100.00%

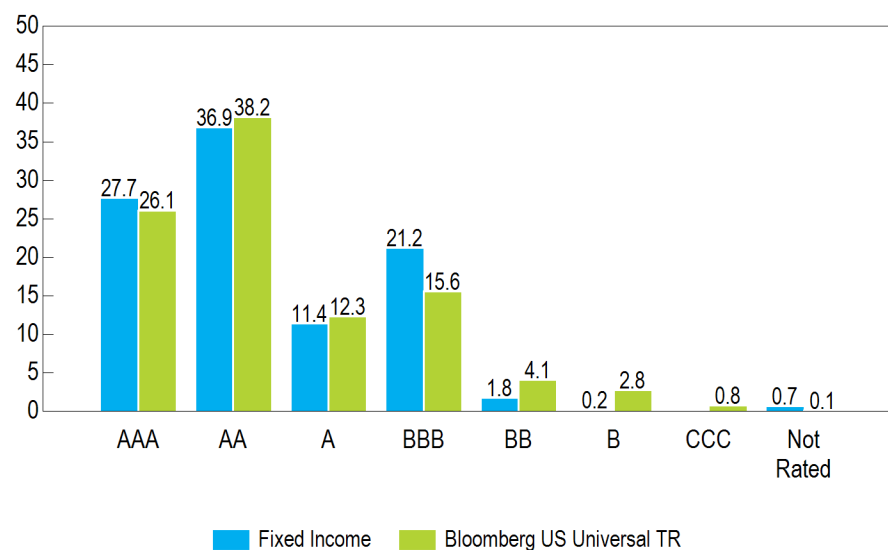


Fixed Income | As of December 31, 2021

US Sector Allocation

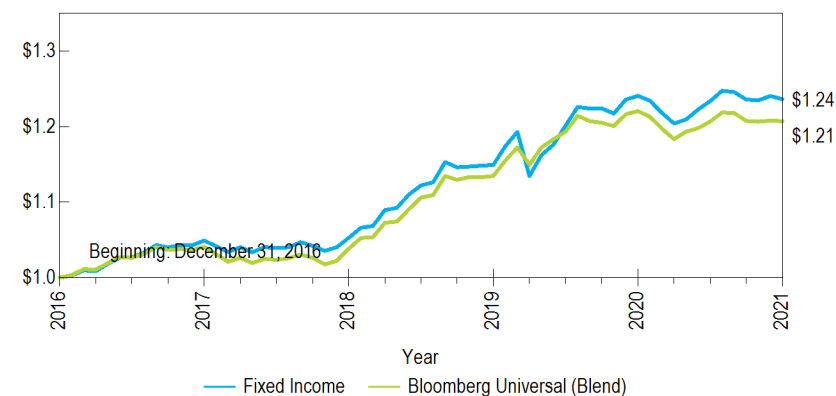


Credit Quality Allocation



Growth of a Dollar

5 Years Ending December 31, 2021

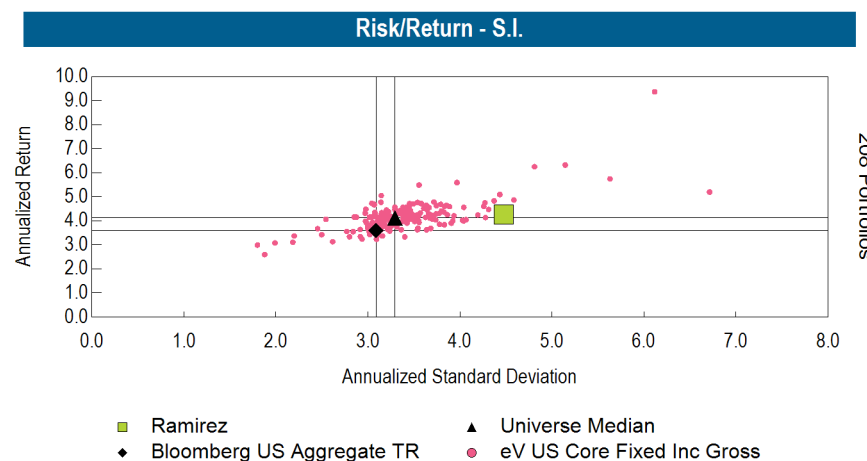
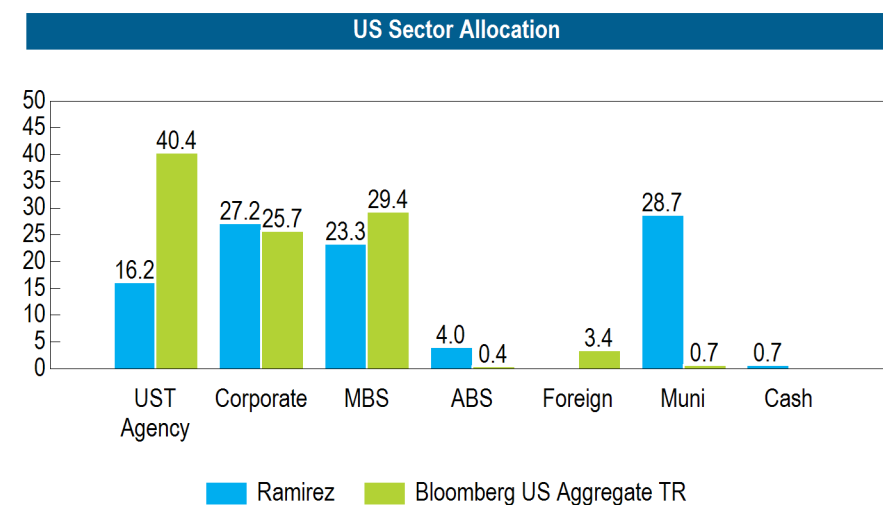
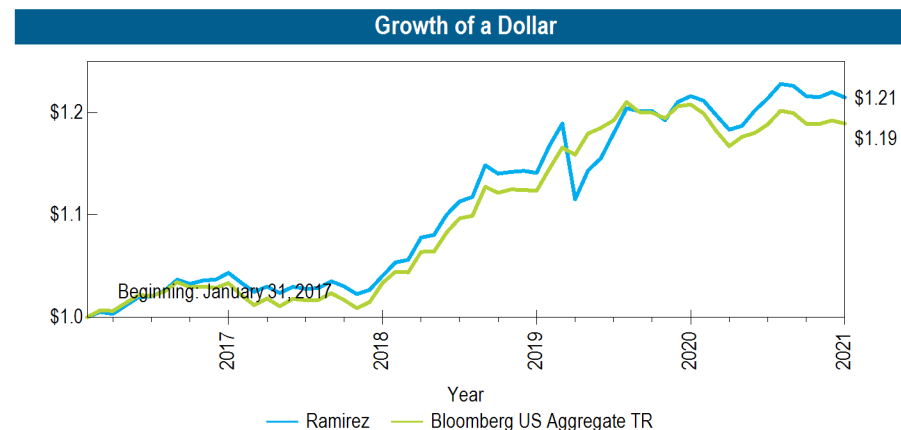
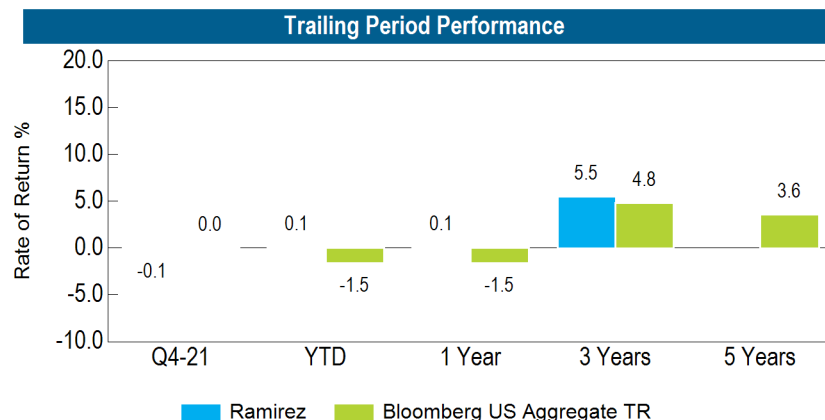


Fixed Income Fixed Income Characteristics vs. Bloomberg US Universal TR

	Portfolio Q4-21	Index Q4-21
Fixed Income Characteristics		
Yield to Maturity	2.09	2.07
Average Duration	6.01	6.65
Average Quality	AA	AA
Weighted Average Maturity	8.81	12.84

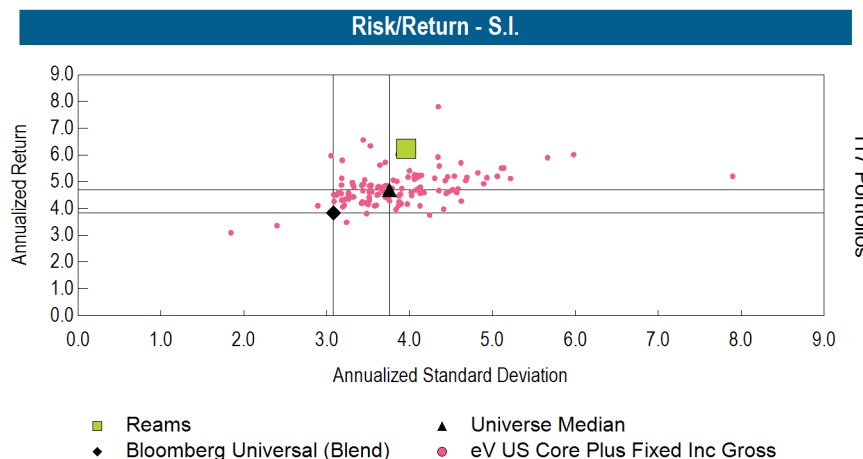
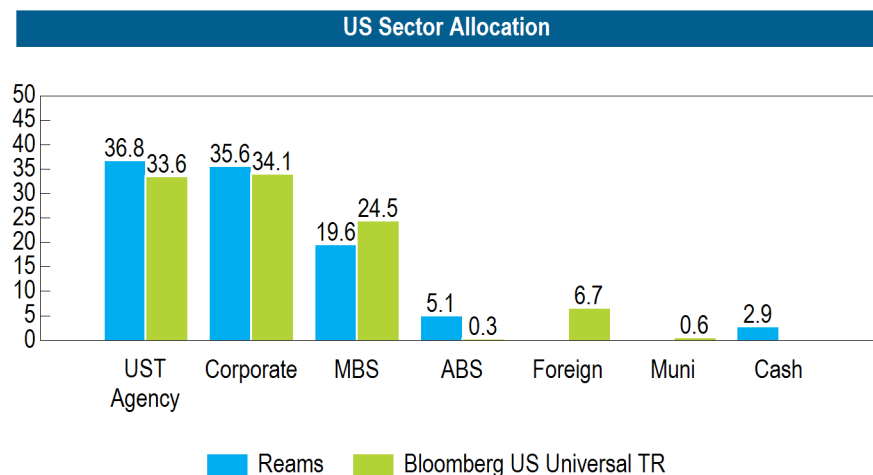
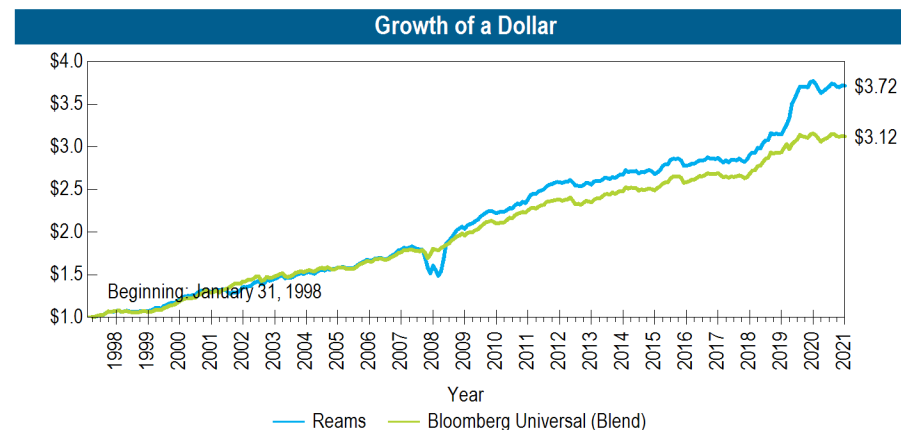
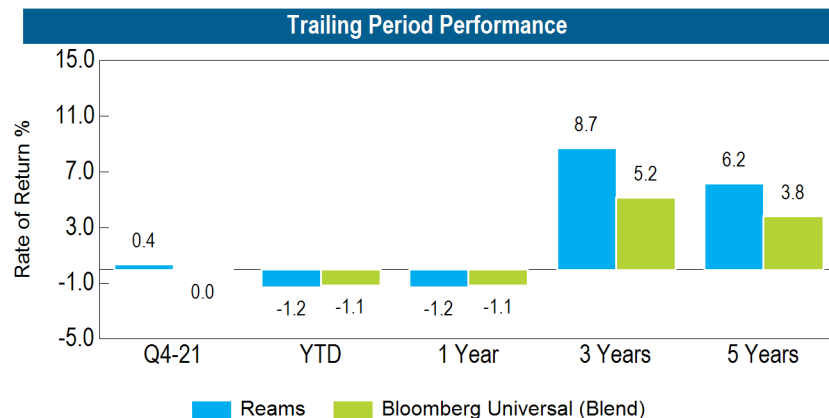
Ramirez | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Ramirez	4.04%	4.47%	0.00%	1.13	0.16	2.83%	123.67%	127.93%
Bloomberg US Aggregate TR	3.59%	3.09%	0.00%	1.00	--	0.00%	100.00%	100.00%



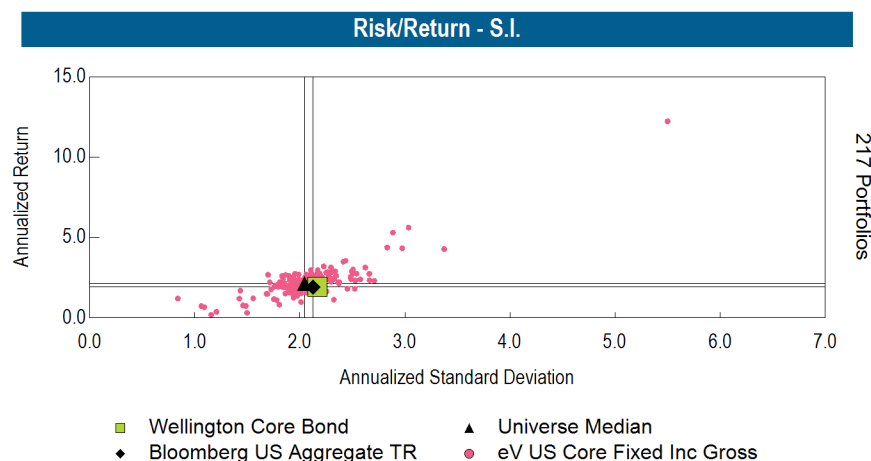
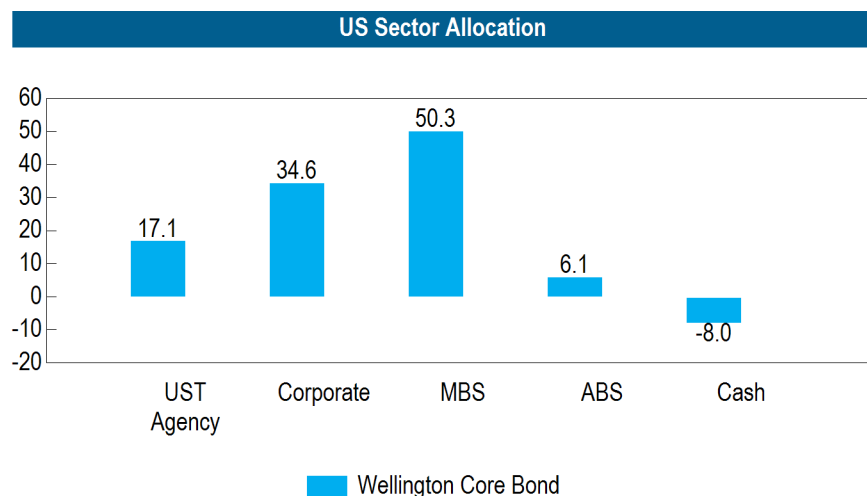
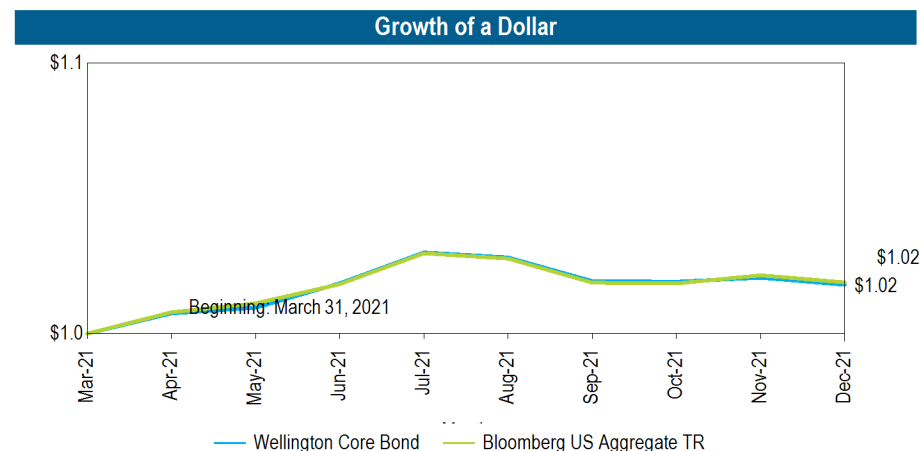
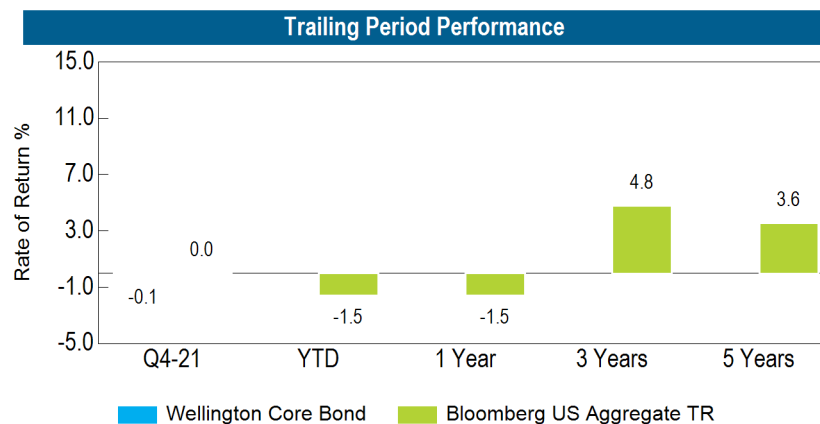
Reams | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Reams	5.64%	5.27%	0.05%	1.05	0.20	3.91%	122.26%	99.36%
Bloomberg Universal (Blend)	4.87%	3.37%	0.00%	1.00	--	0.00%	100.00%	100.00%



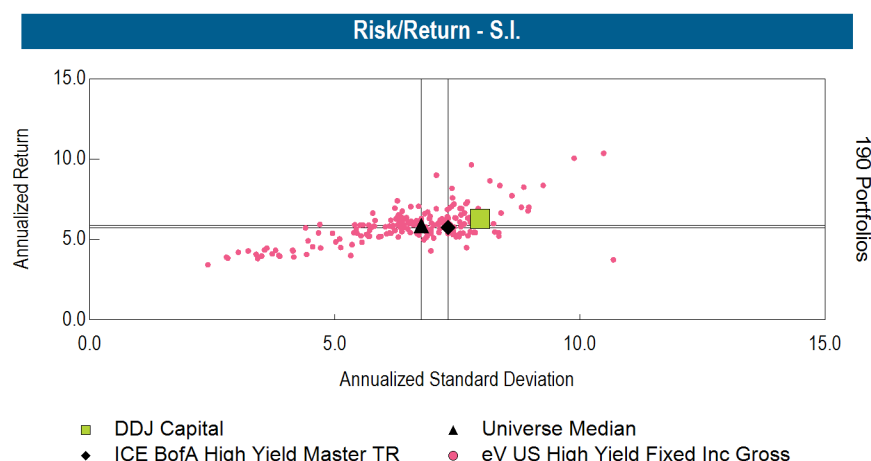
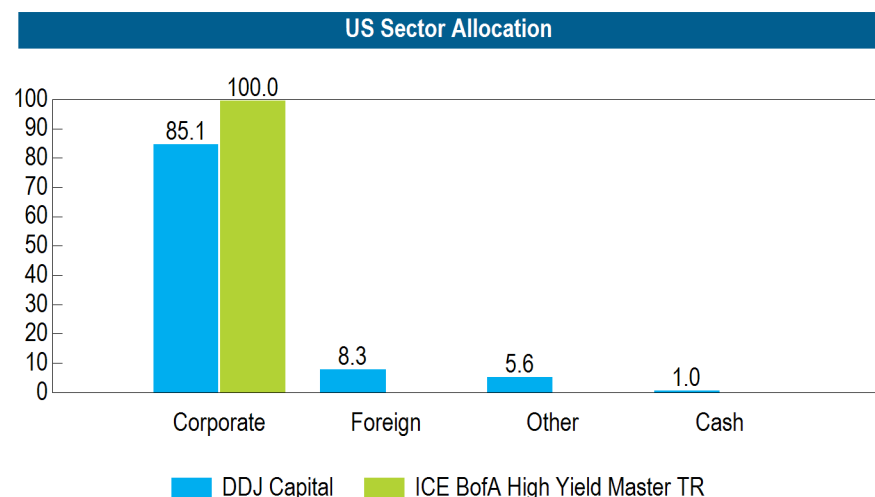
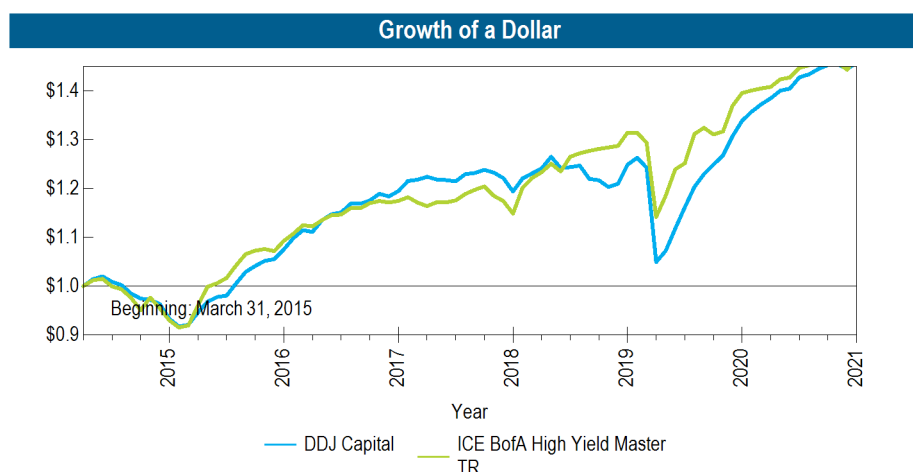
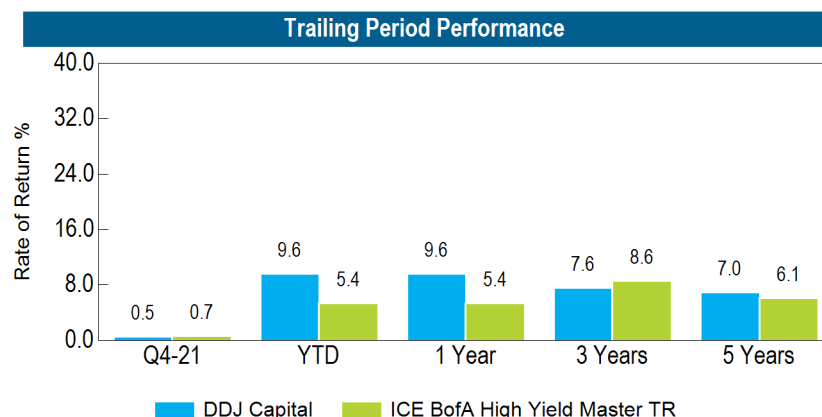
Wellington Core Bond | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wellington Core Bond	1.81%	2.17%	-0.01%	1.01	-0.26	0.34%	96.21%	97.44%
Bloomberg US Aggregate TR	1.89%	2.13%	0.00%	1.00	--	0.00%	100.00%	100.00%



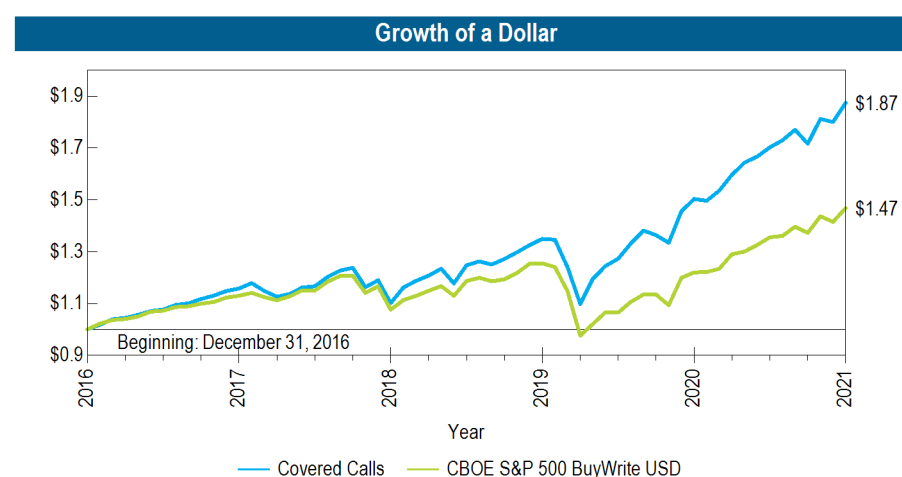
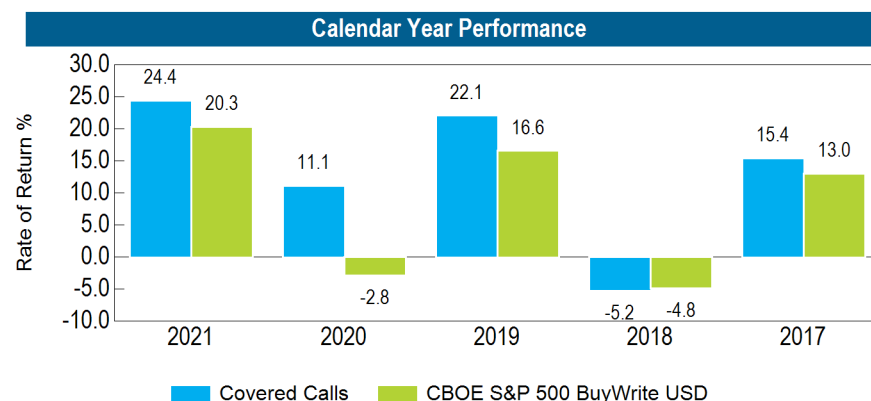
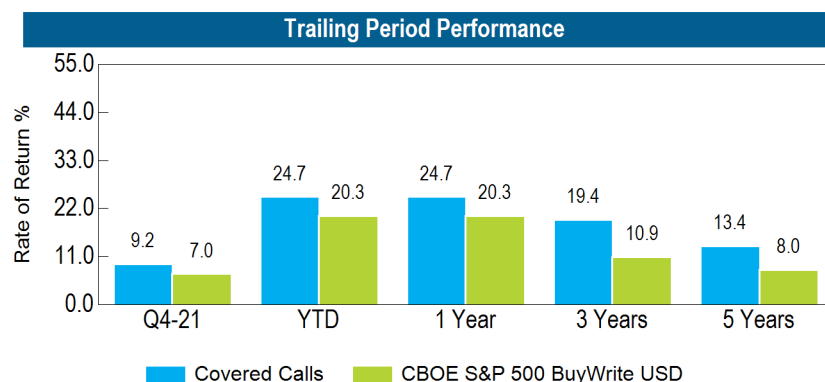
DDJ Capital | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
DDJ Capital	5.86%	7.94%	0.01%	0.96	-0.04	3.76%	90.03%	89.82%
ICE BofA High Yield Master TR	6.01%	7.30%	0.00%	1.00	--	0.00%	100.00%	100.00%



Covered Calls | As of December 31, 2021

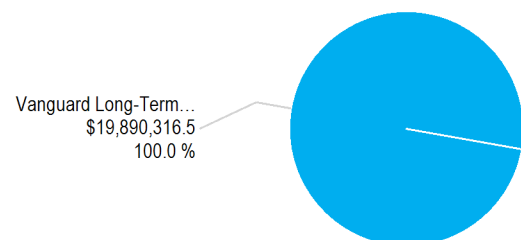
	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Covered Calls	10.84%	10.66%	0.30%	0.98	1.12	3.32%	138.13%	97.39%
CBOE S&P 500 BuyWrite USD	7.13%	10.33%	0.00%	1.00	--	0.00%	100.00%	100.00%
Parametric BXM	8.41%	8.90%	0.19%	0.83	0.44	2.88%	96.41%	87.43%
CBOE S&P 500 BuyWrite USD	7.13%	10.33%	0.00%	1.00	--	0.00%	100.00%	100.00%
Parametric DeltaShift	13.39%	12.66%	0.42%	1.12	1.18	5.32%	188.70%	104.54%



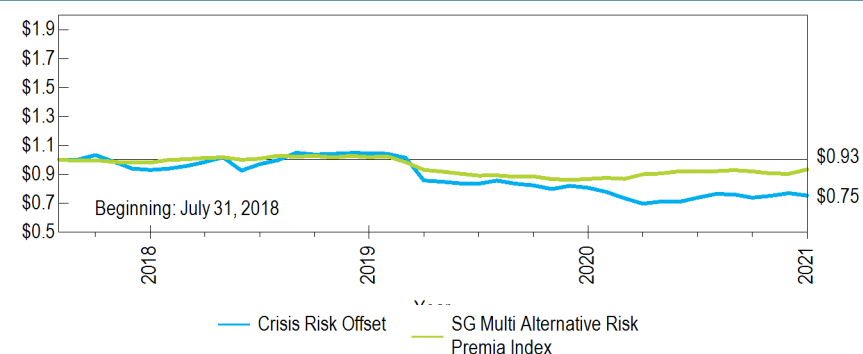
Crisis Risk Offset | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Sortino Ratio	Sharpe Ratio	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Crisis Risk Offset	-8.28%	13.56%	-0.48%	1.02	-0.51	12.25%	-0.69	-0.69	0.18	45.06%	133.07%
SG Multi Alternative Risk Premia Index	-2.01%	5.69%	0.00%	1.00	--	0.00%	-0.47	-0.53	1.00	100.00%	100.00%
Vanguard Long-Term Treasury ETF	--	--	--	--	--	--	--	--	--	--	--

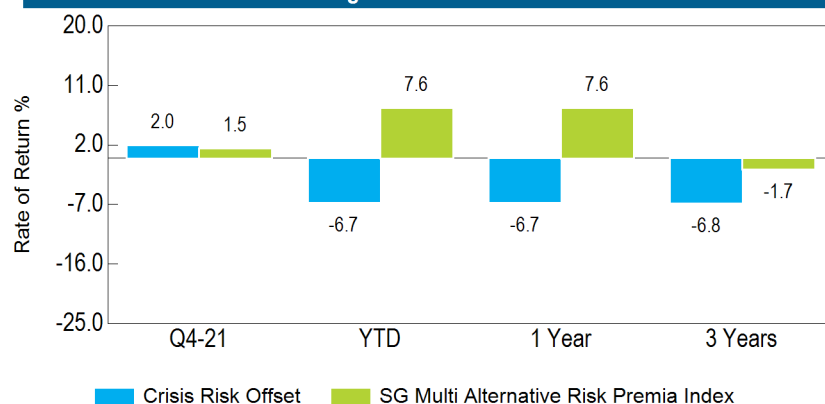
Current Allocation



Growth of a Dollar



Trailing Period Performance



Correlation Matrix

1 Year Ending December 31, 2021

	Crisis Risk Offset	MSCI ACWI	S&P 500	Bloomberg Global Aggregate TR
Crisis Risk Offset	1.00	--	--	--
MSCI ACWI	0.06	1.00	--	--
S&P 500	0.18	0.96	1.00	--
Bloomberg Global Aggregate TR	0.68	0.30	0.29	1.00

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} \times (\text{market return} - \text{Risk Free Rate})]$.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon, Jason Leong Campbell – Meketa Inv. Group
DATE: February 23, 2022
RE: Diversity Representation Survey of Managers as of December 31, 2021

The purpose of this memo is to provide the System with data collected by surveying asset managers regarding their diversity representation as of December 31, 2021. The System requested that Meketa Investment Group collect this information at the December 2020 Board meeting as part of the discussion on minority representation at a specific manager, and as a recurring annual exercise.

Minority representation data for 10 managers¹ are displayed in the tables that follow.

Percentage of Board of Directors/ Managing Members

Race and Ethnicity	Northern							Rice		
	Brown	DDJ ³	Earnest ⁴	Trust ⁴	Parametric ⁵	Ramirez	Reams	Hall James	SGA	Wellington
African American /Black	14%	0%	18%	33%	N/A	33%	0%	0%	20%	7%
Asian/Hawaiian/ Pacific Islander	0%	0%	27%	17%	N/A	0%	20%	8%	0%	13%
Latino/Hispanic	0%	0%	0%	0%	N/A	33%	0%	0%		0%
White	86%	100%	55%	0%	N/A	33%	80%	92%	80%	80%
American Indian/ Alaska Native	0%	0%	0%	50%	N/A	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	N/A	0%	0%	0%	0%	0%
Gender										
Male	79%	78%	63%	67%	N/A	100%	80%	83%	60%	67%
Female	21%	22%	37%	33%	N/A	0%	20%	17%	40%	33%
Non-Identified/ Other	0%	0%	0%	0%	N/A	0%	0%	0%	0%	0%

¹ Excluding the mutual fund and exchanged traded fund (ETF) managers BlackRock and Vanguard.

² Race and ethnicity categories throughout this document are as defined by EEOC guidance.

³ DDJ does not maintain a Board of Directors. DDJ has included (1) the members of DDJ's four-person management operating committee, and (2) the members of DDJ's five-person investment review committee.

⁴ Earnest Partners and Northern Trust statistics are as of 2021 mid-year.

⁵ As a subsidiary of Morgan Stanley Investment Management, Parametric does not maintain a Board of Directors.



Percentage of Firm (Entire Staff)

Race and Ethnicity	Brown	DDJ	Earnest	Northern Trust	Parametric	Ramirez	Reams	Rice Hall James	SGA	Wellington
African American /Black	9%	2%	23%	9%	4%	9%	0%	0%	3%	5%
Asian/Hawaiian/ Pacific Islander	5%	4%	20%	9%	17%	17%	6%	10%	21%	26%
Latino/Hispanic	2%	2%	0%	7%	3%	17%	0%	3%	3%	4%
White	80%	90%	58%	72%	69%	53%	94%	87%	72%	59%
American Indian/ Alaska Native	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	3%	2%	0%	3%	6%	4%	0%	0%	0%	6%
Gender										
Male	55%	62%	73%	61%	65%	69%	56%	68%	66%	55%
Female	45%	38%	27%	39%	35%	30%	44%	32%	34%	45%
Non-Identified/ Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Percentage of Firm (Investment Professionals)

Race and Ethnicity	Brown	DDJ	Earnest	Northern Trust	Parametric	Ramirez	Reams	Rice Hall James	SGA	Wellington
African American /Black	3%	0%	20%	8%	1%	11%	0%	0%	0%	4%
Asian/Hawaiian/ Pacific Islander	11%	6%	20%	11%	17%	33%	8%	6%	36%	23%
Latino/Hispanic	0%	0%	0%	6%	1%	11%	0%	0%	7%	4%
White	84%	94%	60%	73%	75%	33%	92%	94%	57%	65%
American Indian/ Alaska Native	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Other	3%	0%	0%	2%	5%	11%	0%	0%	0%	5%
Gender										
Male	72%	88%	70%	69%	79%	67%	100%	78%	79%	69%
Female	28%	13%	30%	31%	21%	33%	0%	22%	21%	31%
Non-Identified/ Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

DS/PN/JLC/ ep

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon – Meketa Inv. Group
DATE: February 23, 2022
RE: 2022 Ongoing Strategic Investment Agenda

On an ongoing (monthly) basis, Meketa develops a list of projects that we expect to work closely with OPFRS to complete over throughout the calendar year (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. Meketa welcomes any suggestions and/or modifications to the proposed timeline.

2022 Preliminary Investment Project Agenda

Expected Completion Date	Task
March 2022	<ul style="list-style-type: none">Cash Flow Report (2Q 2022)2022 Capital Market AssumptionsManager Update: Rice Hall James
April 2022	<ul style="list-style-type: none">Flash Performance (1Q2022)Manager Update: VersorEducational: TBD
May 2022	<ul style="list-style-type: none">Quarterly Performance Report (1Q 2022)
June 2022	<ul style="list-style-type: none">Cash Flow Report (3Q 2022)Educational Item: TBDWatch Update Memo: Rice Hall & JamesManager Update: Wellington
July 2022	<ul style="list-style-type: none">Flash Performance (2Q2022)Manager Update: Kepos
August 2022	<ul style="list-style-type: none">Quarterly Performance Report (2Q 2022)
September 2022	<ul style="list-style-type: none">Cash Flow Report (4Q 2022)Educational Item: TBDThermal Coal List Update: 2022

Expected Completion Date	Task
October 2022	<ul style="list-style-type: none">Flash Performance (3Q2022)
November 2022	<ul style="list-style-type: none">Quarterly Performance Report (3Q 2022)
December 2022	<ul style="list-style-type: none">Cash Flow Report (1Q 2023)

Bold are priority strategic items.

This agenda includes only major strategic items. Meketa also expects to work with the Staff and Board to complete more routine tasks and projects, as expected.

Pursuant to California Government Code section 54953(e), the Oakland Police & Fire Retirement System Board and Committee Members, as well as City staff, will participate via phone/video conference, and no physical teleconference locations are required.

Please see the agenda to participate in the meeting. For additional information, contact the Retirement Unit by calling (510) 238-7295.



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

AGENDA

RETIREMENT BOARD MEMBERS

Walter L. Johnson, Sr.
President

Jaime T. Godfrey
Vice President

Robert W. Nichelini
Member

Kevin R. Traylor
Member

John C. Speakman
Member

R. Steven Wilkinson
Member

Erin Roseman
Member

REGULAR MEETING of the BOARD OF ADMINISTRATION of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS")

WEDNESDAY, FEBRUARY 23, 2022
11:30 AM
TELE-CONFERENCE BOARD MEETING
VIA ZOOM WEBINAR

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noticed meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are three ways to submit public comments.

- eComment. To send your comment directly to staff BEFORE the meeting starts, please email to mvisaya@oaklandca.gov with "PFRS Board Meeting" in the subject line for the corresponding meeting. Please note that eComment submission **closes two (2) hours before posted meeting time.**

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
FEBRUARY 23, 2022**

- To comment by Zoom video conference, click the “Raise Your Hand” button to request to speak when Public Comment is being taken on an eligible agenda item at the beginning of the meeting. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Instructions on how to “Raise Your Hand” is available at: [https://support.zoom.us/hc/en-us/articles/205566129 - Raise-Hand-In-Webinar](https://support.zoom.us/hc/en-us/articles/205566129-Raise-Hand-In-Webinar).
- To comment by phone, please call on one of the above listed phone numbers. You will be prompted to “Raise Your Hand” by pressing “*9” to speak when Public Comment is taken. You will be permitted to speak during your turn, allowed to comment, and after the allotted time, re-muted. Please unmute yourself by pressing “*6.”

If you have any questions, please email Maxine Visaya, Administrative Assistant II at mvisaya@oaklandca.gov.

ORDER OF BUSINESS

- A. Subject: Police and Fire Retirement System (“PFRS”) Board of Administration Meeting Minutes**
From: Staff of the PFRS Board
-
- Recommendation:** **APPROVE** the January 26, 2022 PFRS Board of Administration Meeting Minutes
- B. AUDIT & OPERATIONS COMMITTEE AGENDA – FEBRUARY 23, 2022**
- B1. Subject: Administrative Expenses Report**
From: Staff of the PFRS Board
-
- Recommendation:** **ACCEPT** informational report regarding PFRS administrative expenses as of December 31, 2021
- B2. Subject: PFRS Annual Report for Year Ended June 30, 2021**
From: Staff of the PFRS Board
-
- Recommendation:** **APPROVE** printing and publication of the Annual Report of the Oakland Police & Fire Retirement System Year Ended June 30, 2021

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
FEBRUARY 23, 2022

C. **INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA – FEBRUARY 23, 2022**

- C1. **Subject:** Investment Manager Performance Update – Earnest Partners
From: Earnest Partners

Recommendation: **ACCEPT** informational report regarding managerial assessment, diversity and inclusion policy and practices, and investment performance of Earnest Partners, a PFRS Domestic Equity Mid-Cap Core Asset Class Investment Manager
- C2. **Subject:** Investment Manager Performance Review – Earnest Partners
From: Meketa Investment Group

Recommendation: **ACCEPT** Meketa Investment Group's review and evaluation of Earnest Partners, a PFRS Domestic Equity Mid-Cap Core Asset Class Investment Manager regarding managerial assessment, diversity and inclusion policy and practices, and investment performance
- C3. **Subject:** Resolution 8038 – Resolution authorizing one-year extension of professional services agreement with Earnest Partners for the provision of Domestic Equity Mid-Cap Core Asset Class Investment Manager Services
From: Staff of the PFRS Board

Recommendation: **APPROVE** Resolution 8038 – Resolution authorizing one-year extension of professional services agreement with Earnest Partners for the provision of Domestic Equity Mid-Cap Core Asset Class Investment Manager Services
- C4. **Subject:** Investment Market Overview as of January 31, 2022
From: Meketa Investment Group

Recommendation: **ACCEPT** informational report regarding the Global Investment Markets as of January 31, 2022
- C5. **Subject:** Preliminary Investment Fund Performance Update as of January 31, 2022
From: Meketa Investment Group

Recommendation: **ACCEPT** informational report regarding the Preliminary Investment Fund Performance Update as of January 31, 2022

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
FEBRUARY 23, 2022

- C6. **Subject:** Investment Fund Quarterly Performance Update as of December 31, 2021
From: Meketa Investment Group
Recommendation: **ACCEPT** the Investment Fund Quarterly Performance Update as of December 31, 2021
- C7. **Subject:** Annual Diversity Report of Current PFRS Investment Managers
From: Meketa Investment Group
Recommendation: **ACCEPT** an informational report regarding the diversity representation of current PFRS Investment Managers as of December 31, 2021
- D. **Subject:** Member Resolutions 8039 - 8040
From: Staff of the PFRS Board
Recommendation: **APPROVE** Member Resolution No. 8039 – 8040
- D1. **Resolution No. 8034** | Resolution fixing the monthly allowance of surviving spouse of the following retired member of the Oakland Police and Fire Retirement System in the amount indicated:
- | <u>Deceased Member</u> | <u>Surviving Spouse</u> | <u>Monthly Allowance</u> |
|------------------------|-------------------------|--------------------------|
| ▪ Jeffrey Davis | Heidi J. Davis | \$ 5,358.76 |
| ▪ David L. Whiteman | Lee A. Whiteman | \$ 4,758.75 |
- D2. **Resolution No. 8035** | Resolution approving death benefit payments and directing warrants thereunder in the total sum of \$1,000.00 payable to the beneficiary of the following deceased members of the Oakland Police and Fire Retirement System:
- Robert L. Thorp
- E. **Subject:** Resolution No. 8041 – Resolution Electing to Continue to Conduct Police and Fire Retirement System Board and Committee Meetings Using Teleconferencing in Accordance with California Government Code Section 54953(E).
From: Staff of the PFRS Board
Recommendation: **APPROVE** Resolution No. 8041 – Resolution Electing to Continue to Conduct Police and Fire Retirement System Board and Committee Meetings Using Teleconferencing in Accordance with California Government Code Section 54953(E).

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
REGULAR BOARD MEETING
FEBRUARY 23, 2022

- F. **Subject:** **Resolution 8042 – Expressing Appreciation for Jennifer Logue,
Legal Counsel to the PFRS Board**
 From: Staff of the PFRS Board
-
- Recommendation:** **APPROVE** Resolution No. 8042 – Resolution of Appreciation to Jennifer
Logue for three years of service as Legal Counsel to the Oakland Police
& Fire Retirement System Board

- G. **PENDING ITEMS**
H. **NEW BUSINESS**
I. **OPEN FORUM**
J. **FUTURE SCHEDULING**
K. **ADJOURNMENT**

A REGULAR BOARD MEETING of the Oakland Police and Fire Retirement System (“PFRS”) was held on Wednesday, January 26, 2022 via Zoom Webinar.

Board Members: ▪ Walter L. Johnson President (Excused)

 ▪ Jaime T. Godfrey Vice President

 ▪ Robert W. Nichelini Member

 ▪ Erin Roseman Member

 ▪ John C. Speakman Member

 ▪ Kevin R. Traylor Member

 ▪ R. Steven Wilkinson Member

Additional Attendees: ▪ David F. Jones PFRS Secretary & Plan Administrator (Excused)

 ▪ Jennifer Logue PFRS Legal Counsel

 ▪ Téir Jenkins PFRS Staff Member

 ▪ Maxine Visaya PFRS Staff Member

 ▪ David Sancewich Meketa Investment Group

 ▪ Paola Nealon Meketa Investment Group

 ▪ Jason Leong Campbell Meketa Investment Group

The meeting was called to order at 11:32 a.m. PST

PRESIDENT JOHNSON WAS EXCUSED; VICE PRESIDENT GODFREY CHAIRED THE MEETING

MEMBER NICHELINI WAS EXCUSED FROM THE MEETING AT NOON. THEREFORE, AGENDA ITEM D6 WAS HEARD FIRST TO COMPLY WITH ARTICLE 5, SECTION 5.1 OF THE PFRS RULES AND REGULATIONS REQUIRING AFFIRMATIVE VOTES OF FIVE (5) MEMBERS OF THE BOARD FOR ALL INVESTMENT DECISIONS EXCLUDING BOARD APPROVED DRAWDOWNS FOR BENEFITS PAYMENTS OR ADMINISTRATIVE EXPENSES.

- D6. \$13.9 Million Drawdown for Member Retirement Allowances Fiscal Year 2021/2022 (Quarter Ending March 2022)** – David Sancewich of Meketa presented an informational report regarding the \$13.9 million drawdown, which includes a \$10.9 Million contribution from the City of Oakland and a \$3.0 Million contribution from the PFRS Investment Fund, to be used to pay for the January 1, 2022 through March 31, 2022 Member Retirement Allowances.

MOTION: Member Nichelini made a motion to approve Meketa’s recommendation of a \$13.9 million drawdown, which includes a \$10.9 Million contribution from the City of Oakland and a \$3.0 Million contribution from the PFRS Investment Fund, to be used to pay for the January 1, 2022 through March 31, 2022 Member Retirement Allowances, second by Member Roseman. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – Y / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / EXCUSED: 1)

- A. PFRS Board Meeting Minutes** – Member Speakman made a motion to approve the November 17, 2021 Regular Board Meeting Minutes, second by Member Nichelini. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – Y / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / ABSTAIN: 0 / EXCUSED: 1)

- B. PFRS Actuary Valuation Report as of July 1, 2021** – Graham Schmidt and Tim Doyle of Cheiron Inc., PFRS Plan Actuary, presented the results of the Actuarial Valuation report as of July 1, 2021. G. Schmidt highlighted the key findings which included total membership; liabilities, assets and funded status and the projected contributions required to fund the system; trends over time; identification and assessment of risks and noted there were no changes to the benefits payment projections.

MOTION: Member Speakman made a motion to approve the Actuarial Valuation Report as of July 1, 2021 presented by Cheiron, Inc, second by Member Traylor. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – Y / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 6 / NOES: 0 / EXCUSED: 1)

MEMBER NICHELINI WAS EXCUSED FOR THE REMAINDER OF THE MEETING

C. AUDIT AND OPERATIONS COMMITTEE AGENDA – JANUARY 26, 2021

- C2. Administrative Expenses Report** – Staff Member Jenkins presented an informational report on PFRS's administrative expenditures as of November 30, 2021. PFRS has an approved annual budget of approximately \$3.5 million and have expensed approximately \$957,000 fiscal year-to-date. Membership consisted of 714 retired members, which included 436 Police Members and 278 Fire Members.

MOTION: Member Traylor made a motion to accept the administrative expenses report as of November 30, 2021, second by Member Nichelini. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- C1. Report of the Audit of PFRS Financial Statements for the Year Ending June 30, 2021** – Staff Member Jenkins provided a summary of the informational report presented by Annie Louie from Macias, Gini, & O'Connell, LLP regarding the Audit of PFRS Financial Statements for the Year Ending June 30, 2021. Staff Member Jenkins noted it was reported as a successful audit with no findings, again conducted entirely remotely and MGO issued an unmodified opinion on the financial statements, which is the highest-level assurance that can be received.

MOTION: Member Speakman made a motion to approve the informational report regarding the Audit of PFRS Financial Statements for the Year Ending June 30, 2021, second by Member Traylor. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- C3. Resolution No. 8036 – R. Steven Wilkinson Travel** – Resolution approving request of Oakland Police and Fire Retirement System Trustee R. Steven Wilkinson to attend the 2022 CALAPRS General Assembly from March 5, 2022 through March 8, 2022 in San Diego, California and for reimbursement of registration fees and travel-related expenses in an amount not to exceed One Thousand Seven Hundred Dollars (\$1,700.00). Vice-President Godfrey requested members who travel for educational purposes provide an update to the board to share what learned information can be an advantage to the management and oversight of the Fund

MOTION: Member Nichelini made a motion to approve Resolution No. 8036, second by Vice President Godfrey. Motion passed

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – ABSTAIN]
(AYES: 4 / NOES: 0 / ABSTAIN:1 / EXCUSED: 2)

D. INVESTMENT & FINANCIAL MATTERS COMMITTEE AGENDA – JANUARY 26, 2021

- D1. Investment Manager Performance Update – DDJ Capital Management, LLC** – David Sancewich of Meketa provided a brief summary of the presentation by DDJ Capital Management, LLC (“DDJ”), a PFRS Fixed Income Asset Class Investment Manager and Polen Capital Management, LLC (“Polen”) regarding firm overviews; the acquisition of DDJ by Polen; their Diversity & Inclusion Policy. It was noted for the record DDJ provided an updated presentation to staff and the Board with a footnote added for clarification and an edit to address a typographical error and the revised report is available on the PFRS website.

MOTION: Vice President Godfrey made a motion to accept the informational report regarding the Investment Manager Performance Update regarding DDJ, a PFRS Fixed Income Asset Class Investment Manager, second by Member Speakman. Motion Passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- D2. Consent Form Regarding Acquisition of DDJ Capital Management, LLC by Polen Capital Management, LLC** – David Sancewich of Meketa Investment Group provided an informational report regarding the consent form regarding the acquisition of DDJ by Polen and recommended the Board approves consent. It was noted that the acquisition is positive and of great benefit and confirmed no changes will be made regarding the current agreed management of PFRS funds.

MOTION: Vice President Godfrey made a motion to approve the informational report and assignment of PFRS’s investment advisory agreement resulting from the change of control of DDJ Capital Management, LLC, second by Member Speakman. Motion Passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- D3. **Investment Manager Performance Review – DDJ Capital Management, LLC** – David Sancewich of Meketa provided an informational report regarding DDJ, a PFRS Fixed Income Asset Class Investment Manager. D. Sancewich noted, as with any organizational changes to investment managers, it is customary to keep a closer eye to ensure the team stays in place, the organization's investment process stays in place, and portfolio managers stay the course and recommended DDJ remain on watch status and to continue to monitor over the next 6 – 9 months.

MOTION: Chairperson Godfrey made a motion to accept Meketa's evaluation of DDJ and recommendation to continue to move forward and maintain watch status for 6 – 9 months, second by Member Speakman. Motion Passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- D4. **Investment Market Overview as of December 31, 2021** – David Sancewich of Meketa Investment Group provided a brief report regarding the Investment Market Overview as of December 31, 2021 and highlighted market returns, recent volatility, and current factors impacting outcomes.

MOTION: Vice President Godfrey made a motion to accept the informational report provided by Meketa Investment Group regarding the Investment Market Overview as of December 31, 2021, second by Member Traylor. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- D5. **Preliminary Investment Fund Performance Update as of December 31, 2021** – David Sancewich of Meketa Investment Group provided a summary of the Preliminary Investment Fund Performance Update as of December 31, 2021 and highlighted the Asset Class Performance Summary.

MOTION: Vice President Godfrey made a motion to accept the informational report provided by Meketa Investment Group regarding the Preliminary Investment Fund Performance Update as of December 31, 2021, second by Member Speakman. Motion Passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- D7. **Asset Allocation Review and Update of the PFRS Fund** – David Sancewich held a continued discussion regarding asset allocation and updates to the PFRS Fund and responded to Committee members request for additional information regarding the impact of gold in the portfolio. Meketa recommended PFRS maintain their current long-term policy and do not add an inflation component. D. Sancewich reminded the board this is an annual review and the asset allocation will be revisited in 12 months.

MOTION: Member Speakman made a motion to approve Meketa's recommendation to maintain PFRS current long-term policy and do not add an inflation component, second by Member Wilkinson. The motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- D8. **Informational Overview Regarding Developments in Environmental, Social, and Governance (“ESG”) Investing** – David Sancewich of Meketa provided an informational report regarding developments in ESG investing within the SEC and Department of Labor and noted the work is ongoing; Meketa is monitoring the activity and will provide updates to the Board as information becomes available and the impacts to the PFRS Fund.

MOTION: Vice President Godfrey made a motion to accept the informational report from Meketa regarding developments in ESG investing, second by Member Traylor. Motion Passed

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- E. **Resolution No. 8037** – Resolution determining that conducting in-person meetings of the Police and Fire Retirement System (PFRS) Board and its Committees would present imminent risk to health or safety of attendees and electing to continue to conduct PFRS Board and Committee meetings using teleconferencing in accordance with California Government Code Section 54953(E) as amended by California Assembly Bill No. 361 (September 16, 2021).

MOTION: Member Traylor made a motion to approve Resolution No. 8037, second by Member Speakman. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

- F. **Pending Items** – PFRS Staff Member Jenkins reported there is no pending items at this time.

- G. **New Business** – No Report

- H. **Open Forum** – Pete Peterson expressed appreciation to staff, the Board, Meketa, and Cheiron for keeping the 2026 Actuarial Funding Date in their focus. While the City had also formed a committee concerning the same, it appears their activity has waned and encouraged the staff and Board to renew the City's attention to the matter and be prepared to act logistically to bring us beyond January 2026.
- I. **Future Scheduling** – The next regular Board meeting is tentatively scheduled to occur February 23, 2022
- J. **Adjournment** – Member Speakman made a motion to adjourn, second by Member Wilkinson. Motion passed.

[JOHNSON – EXCUSED / GODFREY – Y / NICHELINI – EXCUSED / ROSEMAN – Y / SPEAKMAN – Y / TRAYLOR – Y / WILKINSON – Y]
(AYES: 5 / NOES: 0 / EXCUSED: 2)

The meeting adjourned at 12:29 p.m. PST

DAVID F. JONES
PLAN ADMINISTRATOR & SECRETARY

DATE

Table 1

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Administrative Budget Spent to Date (Preliminary)

As of December 31, 2021

	Approved Budget	December 2021		FYTD		Remaining		Percent Remaining	
Internal Administrative Costs									
PFRS Staff Salaries	\$ 1,212,000	\$ 86,996	\$ 533,191	\$ 678,809	56.0%				
Board Travel Expenditures	52,500	-	-	52,500	100.0%				
Staff Training	20,000	-	-	20,000	100.0%				
Staff Training - Tuition Reimbursement	7,500	-	-	7,500	100.0%				
Board Hospitality	3,600	-	-	3,600	100.0%				
Payroll Processing Fees	40,000	-	-	40,000	100.0%				
Miscellaneous Expenditures	40,000	655	4,575	35,425	88.6%				
Internal Service Fees (ISF)	88,000	-	49,501	38,499	43.7%				
Contract Services Contingency	50,000	-	-	50,000	100.0%				
Internal Administrative Costs Subtotal :	\$ 1,513,600	\$ 87,650	\$ 587,267	\$ 926,333	61.2%				
Actuary and Accounting Services									
Audit	\$ 49,000	\$ 14,004	\$ 42,504	\$ 6,496	13.3%				
Actuary	46,500	-	-	46,500	100.0%				
Actuary and Accounting Subtotal:	\$ 95,500	\$ 14,004	\$ 42,504	\$ 52,996	55.5%				
Legal Services									
City Attorney Salaries	\$ 188,000	\$ 15,080	\$ 59,004	\$ 128,996	68.6%				
Legal Contingency	150,000	-	-	150,000	100.0%				
Legal Services Subtotal:	\$ 338,000	\$ 15,080	\$ 59,004	\$ 278,996	82.5%				
Investment Services									
Money Manager Fees	\$ 1,353,000	\$ -	\$ 330,913	\$ 1,022,087	75.5%				
Custodial Fee	124,000	-	29,125	94,875	76.5%				
Investment Consultant	100,000	25,000	50,000	50,000	50.0%				
Investment Subtotal:	\$ 1,577,000	\$ 25,000	\$ 410,038	\$ 1,166,962	74.0%				
Total Operating Budget	\$ 3,524,100	\$ 141,735	\$ 1,098,812	\$ 2,425,288	68.82%				

Table 2

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Cash in Treasury (Fund 7100) - Preliminary

As of December 31, 2021

	December 2021
Beginning Cash as of 11/30/2021	\$ 6,478,735
Additions:	
City Pension Contribution - December	\$ 3,651,667
Investment Draw	\$ 1,000,000
Misc. Receipts	5,076
Total Additions:	<u>\$ 4,656,743</u>
Deductions:	
Pension Payment (November Pension Paid on 12/1/2021)	(4,327,395)
Expenditures Paid	(181,569)
Total Deductions	<u>\$ (4,508,964)</u>
 Ending Cash Balance as of 12/31/2021*	 <u><u>\$ 6,626,514</u></u>

* On 1/3/2022, December pension payment of appx \$4,299,800 will be made leaving a cash balance of \$2,327,000.

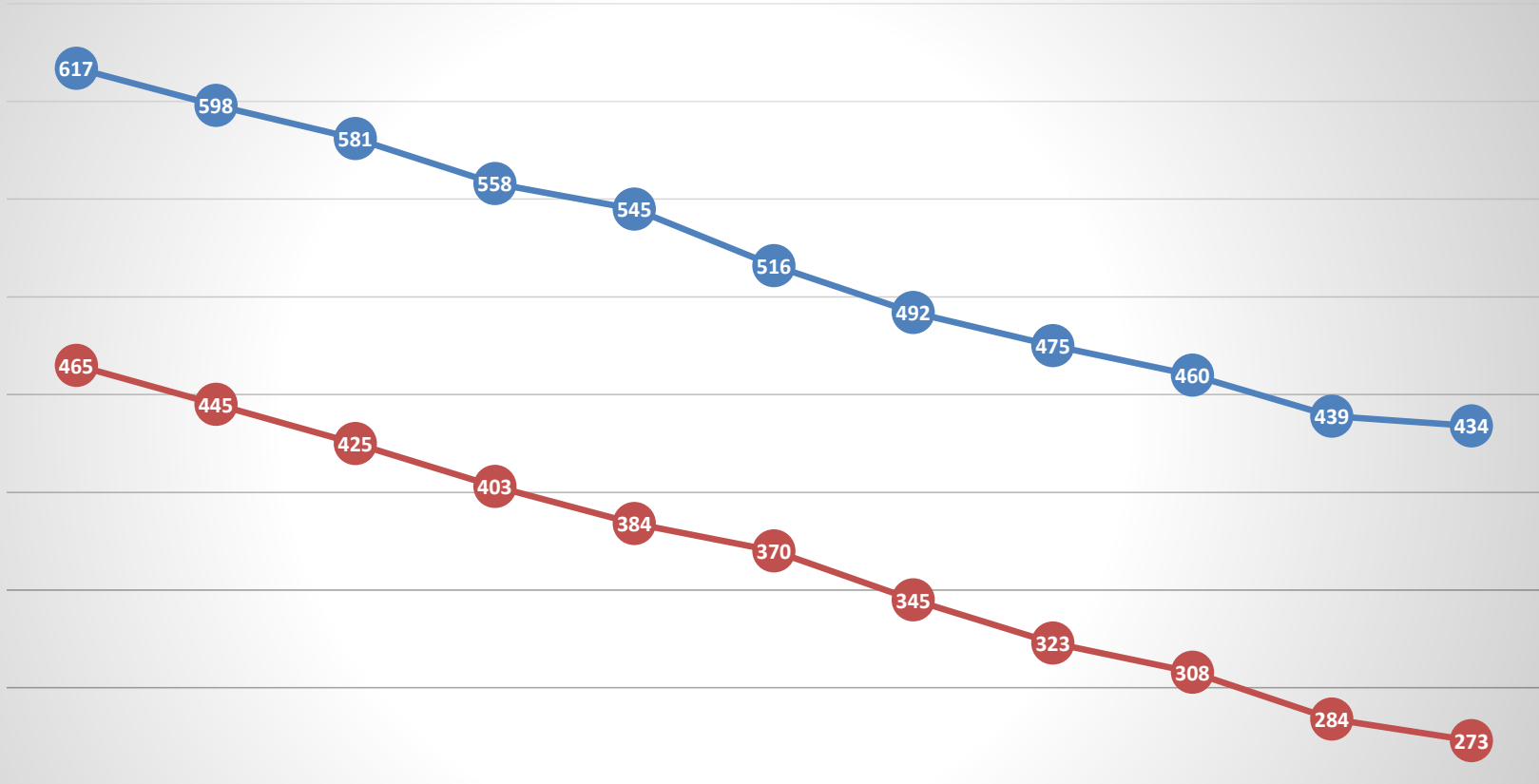
Table 3
CITY OF OAKLAND POLICE AND FIRE RETIREMENT SYSTEM

Census
As of December 31, 2021

COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Retiree	306	176	482
Beneficiary	128	97	225
<i>Total Retired Members</i>	434	273	707
<i>Total Membership:</i>	434	273	707

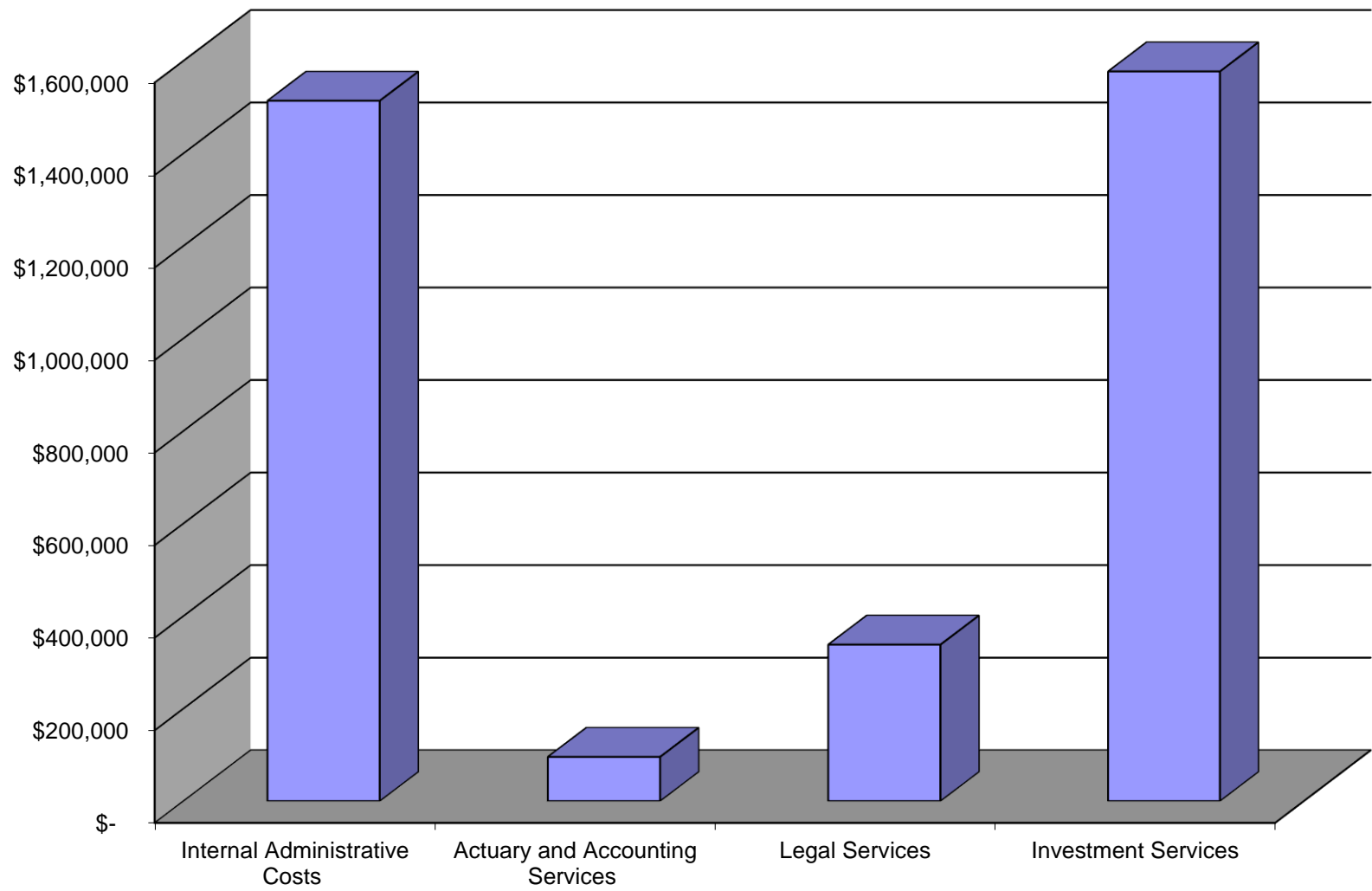
COMPOSITION	POLICE	FIRE	TOTAL
Retired Member:			
Service Retirement	290	137	427
Disability Retirement	133	124	257
Death Allowance	11	12	23
<i>Total Retired Members:</i>	434	273	707
<i>Total Membership as of December 31, 2021:</i>	434	273	707
<i>Total Membership as of June 30, 2021:</i>	439	284	723
<i>Annual Difference:</i>	-5	-11	-16

Oakland Police and Fire Retirement System Pension Plan Membership Count As of December 31, 2021 (FY 2012 - FY 2022)

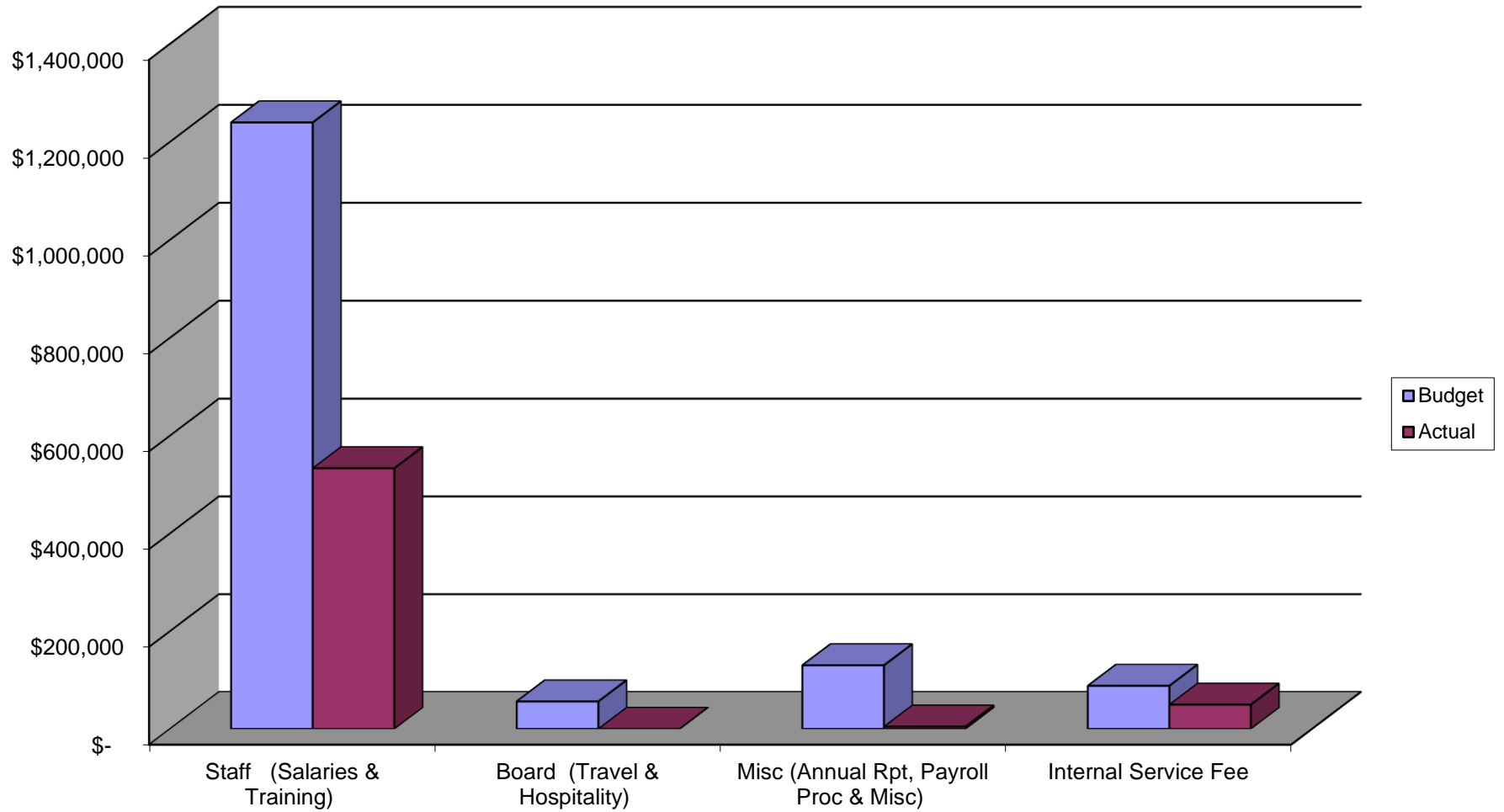


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 FYTD
Police	617	598	581	558	545	516	492	475	460	439	434
Fire	465	445	425	403	384	370	345	323	308	284	273
Total	1082	1043	1006	961	929	886	837	798	768	723	707

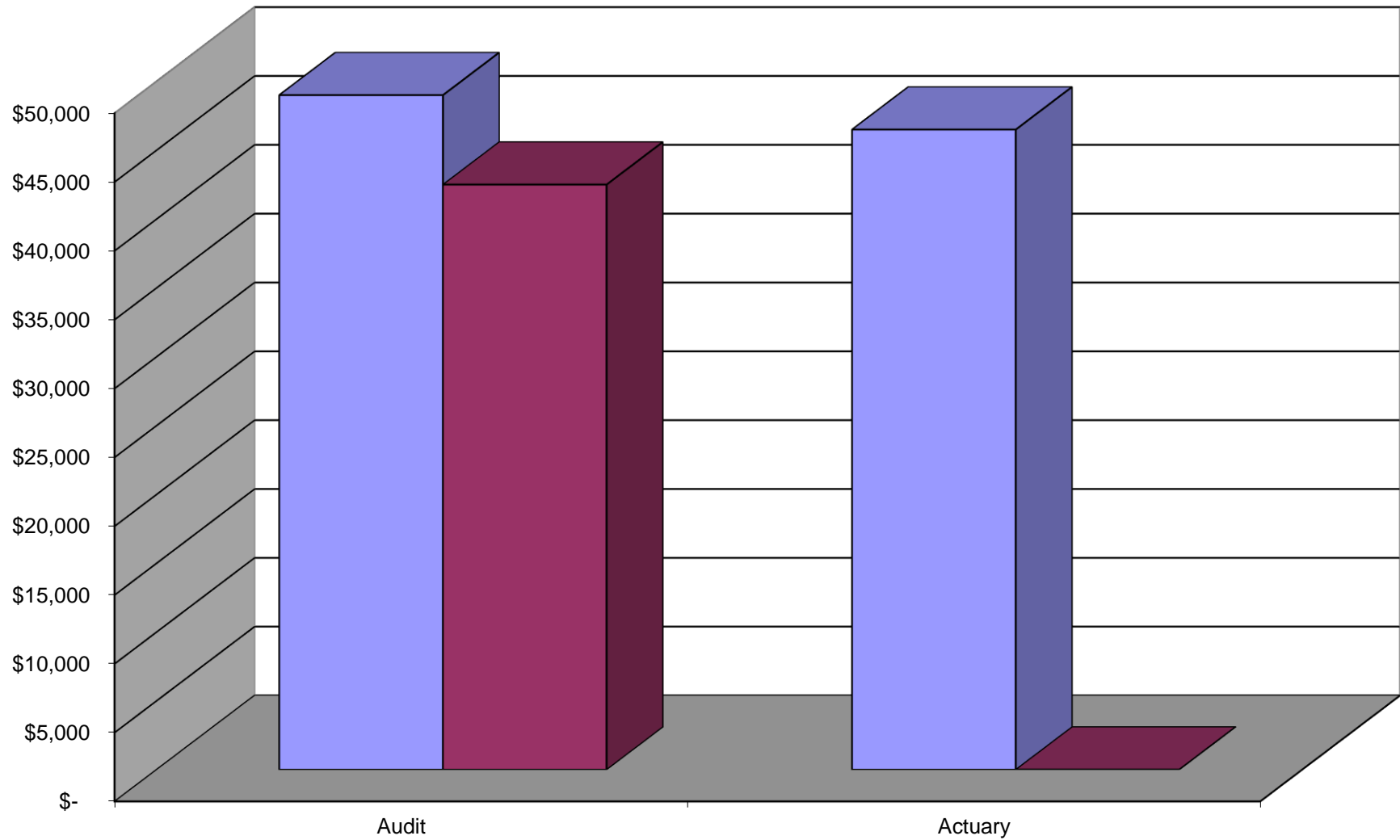
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Approved Budget
FY 2021-2022



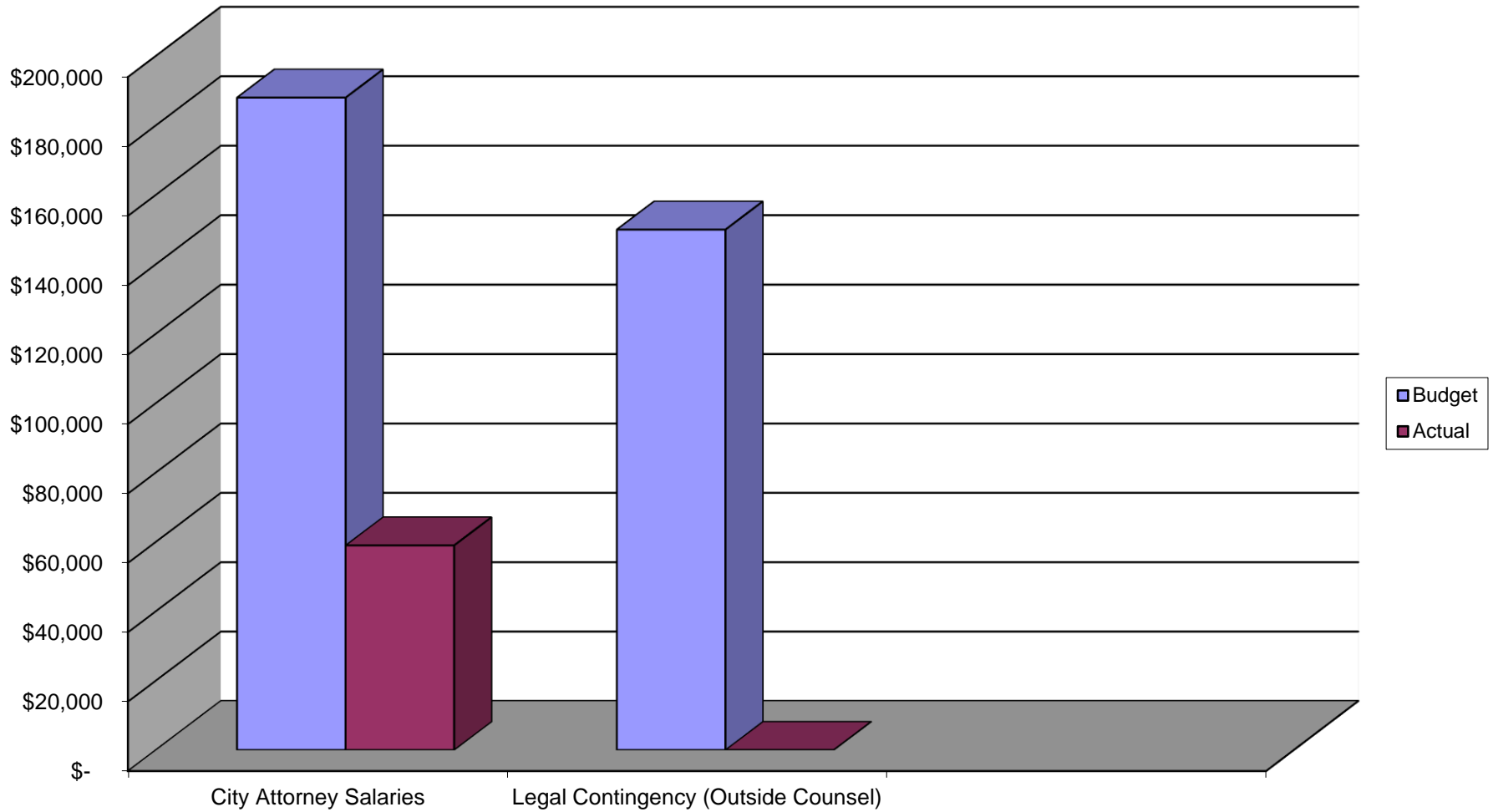
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs Actual as of December 31, 2021
Internal Administrative Costs



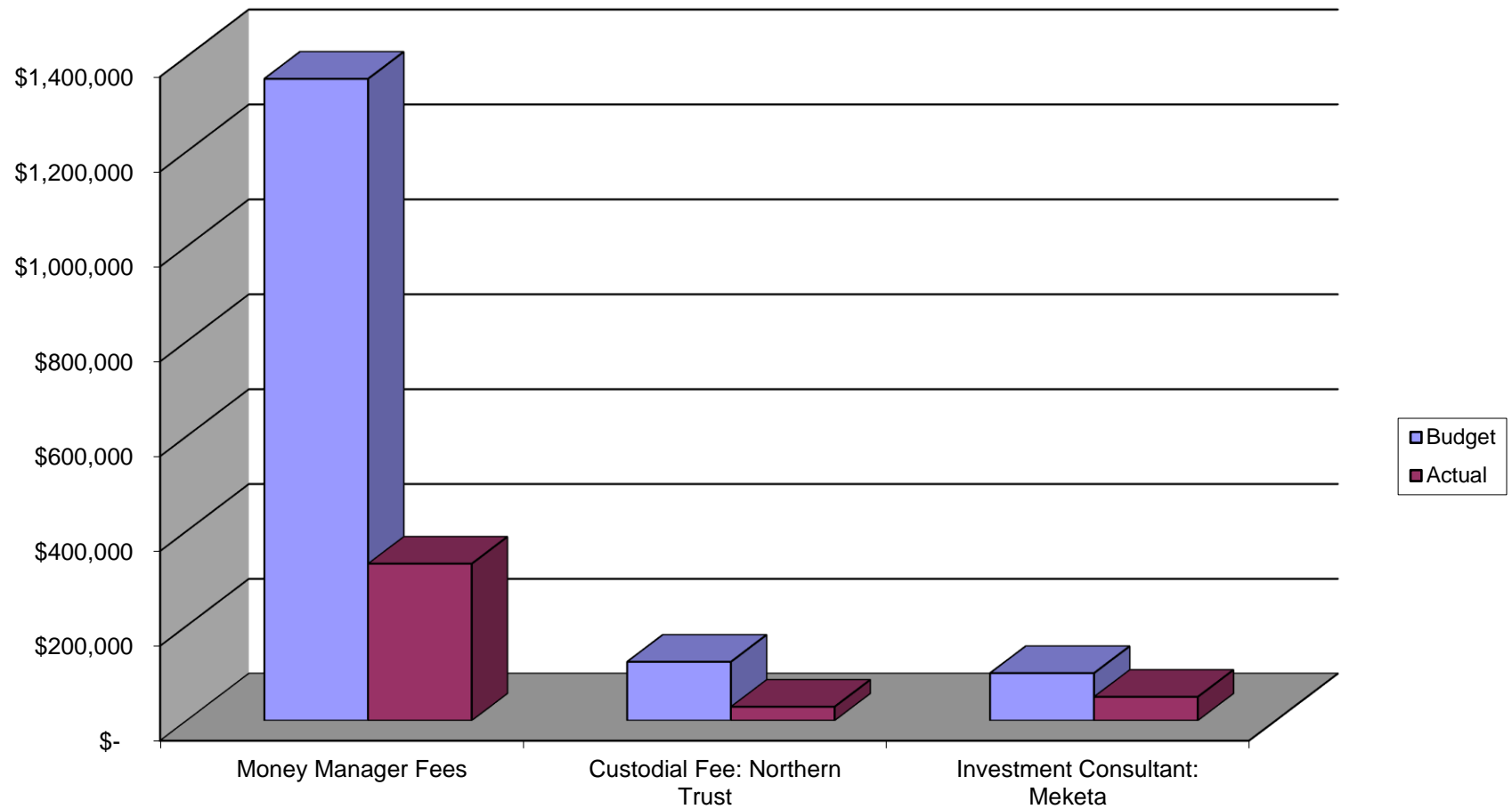
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of December 31, 2021
Actuary and Accounting Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of December 31, 2021
Legal Services



OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
Budget vs. Actual as of December 31, 2021
Investment Services





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

TO: Oakland Police and Fire Retirement System Board (PFRS) **FROM:** David F. Jones
Plan Administrator & Secretary

SUBJECT: Approve Printing & Distribution of PFRS Annual Report for the Fiscal Year Ended June 30, 2021 **DATE:** February 23, 2022

RECOMMENDATION

The PFRS Annual Report for the Fiscal Year ended June 30, 2021 has been completed and is submitted here for the Board approval for Printing and Distribution.

Respectfully submitted,

David F. Jones
Plan Administrator & Secretary
Oakland Police & Fire Retirement Systems

CITY OF OAKLAND

POLICE & FIRE RETIREMENT SYSTEM



Photo: Greg Linhares, City of Oakland

ANNUAL REPORT
Fiscal Year Ended June 30, 2021



City of Oakland

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IN MEMORIAM

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-Print Production: City of Oakland Copy Services

SECTION 1

INTRODUCTION



Manny Aquino
Police Officer
Served with Oakland
Police Department
1971 to 1993

LETTERS OF TRANSMITTAL

CITY OF OAKLAND



150 FRANK H. OGAWA PLAZA, SUITE 3349 · OAKLAND, CALIFORNIA 94612-2021

Finance Department
Treasury Bureau
Retirement Unit

(510) 238-3307
FAX (510) 238-7129
CA RELAY 711

February 23, 2022

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

Honorable Mayor Schaaf and Members of the City Council:

I am pleased to present the annual report of the Oakland Police and Fire Retirement System for the fiscal year ended June 30, 2021. Provided in this report are the Plan's Financial Information, Investment Performance, and Actuarial Valuation and Statistical Information for the corresponding year.

The members of the Board express their appreciation to the Mayor and City Council, City Administrator, 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." with a stylized flourish at the end.

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

LETTERS OF TRANSMITTAL

CITY OF OAKLAND



150 FRANK H. OGAWA PLAZA, SUITE 3349 · OAKLAND, CALIFORNIA 94612-2021

Finance Department
Treasury Bureau
Retirement Unit

(510) 238-3307
FAX (510) 238-7129
CA RELAY 711

February 23, 2022

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 ended June 30, 2021.

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) and the reporting requirements prescribed by the Government Finance Officers' Association of the United States and Canada (GFOA).

The method for recording additions and deductions is on an accrual basis. Additions are taken into account when earned, regardless of the date of the collection, and deductions 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 include 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, 2021 were \$133,840,217.

LETTERS OF TRANSMITTAL

This amount includes a net investment income of \$90,191,309. Net investment income includes appreciation or depreciation in fair value of investments, interest income and dividend income less investment expenses during the fiscal year. In addition, the City contributed \$43,648,000 during the fiscal year. As of June 30, 2021, all the System's members are retired.

DEDUCTIONS

Total deductions from the plan in the fiscal year ended June 30, 2021 were \$54,282,032. This amount includes deductions of \$52,697,378 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 June 30, 2020. Details regarding this actuarial study can be found in Section 4 of this annual report.

As of the most recent actuary study dated June 30, 2020, the System's Unfunded Actuarial Liability is approximately \$225,547,000, and the System had a Funded Ratio of 63.5 percent on a Market Value of Assets (MVA) basis. During fiscal year 2021, the City of Oakland contributed \$43,648,000 to the System. The next required City contribution is projected to be approximately \$43,820,000 in fiscal year 2021.

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 Equity, International Equity, Fixed Income Instruments, Credit, Covered Calls, and Crisis Risk Offset (CRO). In addition, the Policy also allocates among the different investment management styles.

Total investment income resulted in a net gain of \$90,191,309 in fiscal year 2021. The actual money-weighted annual investment return for fiscal year 2021 was 24.4%. 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.

LETTERS OF TRANSMITTAL

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

Total Returns %			
	1 Year	3 Year	5 Year
Total Fund	24.4%	10.2%	11.4%

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 F. 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
Jennifer Logue
Supervising Attorney



Kevin R. Traylor
Alternating Fire/Police Department Representative



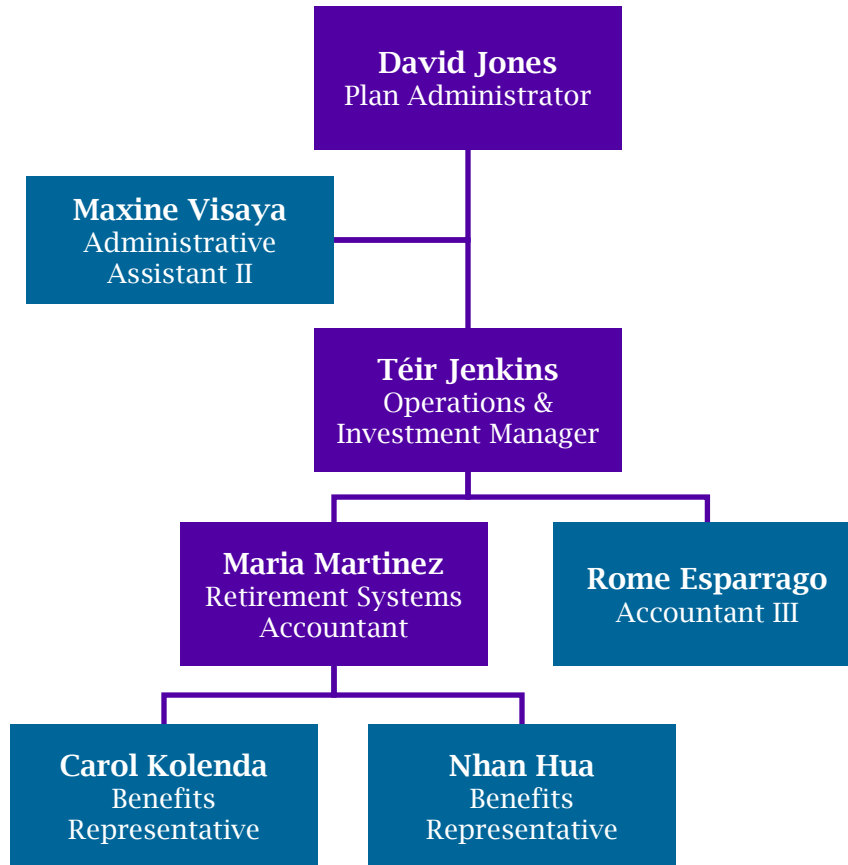
Robert Nichelini
Police Representative



Erin Roseman
Mayoral Designate

ADMINISTRATIVE STAFF

Retirement Unit



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	Meketa Investment Group

A complete list of Investment Professionals is included on page 53 of this Annual Report.

BOARD MEETING INFORMATION

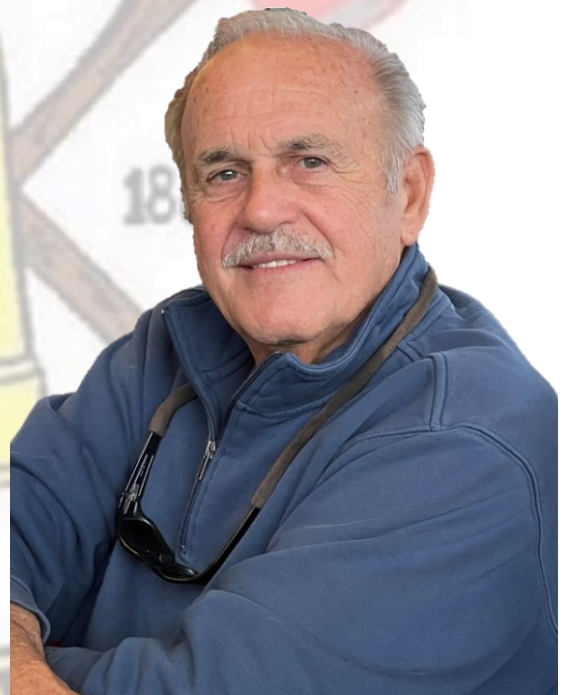
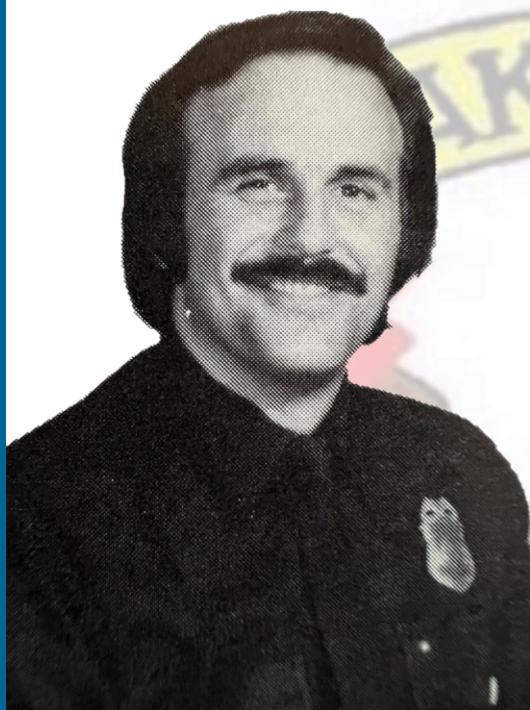
On-Site Meeting Location	1 Frank H. Ogawa Plaza, Oakland, CA 94612
Virtual Meeting	Zoom Webinar
Date	Last Wednesday of each month

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

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SECTION 2

FINANCIAL



Robert Bramante
Lieutenant of Fire
Served with Oakland Fire Department
1968 to 1997

Independent Auditor's Report

For Years Ended June 30, 2021 and 2020



Certified
Public
Accountants

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, 2021 and 2020, and the related notes to the financial statements, which collectively comprise the System's basic 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 fiduciary net position of the System as of June 30, 2021 and 2020, and the changes in its fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

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

www.mgocpa.com

Independent Auditor's Report

For Years Ended June 30, 2021 and 2020

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 audits 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 basic 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 basic financial statements. These sections have not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.



Walnut Creek, California
December 8, 2021

Management's Discussion & Analysis

(Unaudited)

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 years ended June 30, 2021 and 2020. We encourage readers to consider the information presented here in conjunction with the System's financial statements that follow this section. These discussions and analyses are presented in the following sections:

- Organizational Overview and Highlights
- Financial Statement Overview
- Financial Analysis: 2021 vs. 2020
- Financial Analysis: 2020 vs. 2019
- 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, 2021 and 2020, the employee contribution rate was 0% for both years. There are no active participants in the Plan as of June 30, 2021 and 2020.

Management's Discussion & Analysis

(Unaudited)

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, 2021, the total pension liability of \$578.6 million less the fiduciary net position of \$458.5 million results in a net pension liability of approximately \$120.0 million. The fiduciary net position as a percentage of the total pension liability is 79.3 %.

As of June 30, 2020, the total pension liability of \$604.0 million less the fiduciary net position of \$379.0 million results in a net pension liability of approximately \$225.0 million. The fiduciary net position as a percentage of the total pension liability is 62.7%.

The System membership at June 30, 2021 is 723, which includes 490 retirees and 233 beneficiaries. The System membership at June 30, 2020 is 768. The following are the significant assumptions used to compute contribution requirements in the July 1, 2020 Actuarial Valuation Report:

- Select and ultimate rates, equal to 5.29% single equivalent investment rate of return
- 2.75% inflation rate, U.S.
- 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 years 2021 and 2020, the City contributions were \$43.6 million and \$43.4 million to the System. The next required City contribution is projected to be approximately \$43.8 million in fiscal year 2022.

FINANCIAL STATEMENT OVERVIEW

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

Management's Discussion & Analysis

(Unaudited)

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 the Basic Financial Statements* and *Required Supplementary Information* are found starting on page 24 and page 47, respectively.

Management's Discussion & Analysis

(Unaudited)

FINANCIAL ANALYSIS 2021 vs. 2020

Table 1 summarizes net position restricted for pensions as of June 30, 2021 and 2020:

Table 1 Statements of Fiduciary Net Position As of June 30, 2021 and 2020				
	June 30		Change	
	2021	2020	Amount	Percentage
Assets				
Cash and cash equivalents	\$ 6,323,835	\$ 6,345,777	\$ (21,942)	-0.3%
Receivables	2,469,425	8,099,428	(5,630,003)	-69.5%
Investments	<u>503,773,621</u>	<u>404,700,887</u>	<u>99,072,734</u>	24.5%
Total Assets	<u>512,566,881</u>	<u>419,146,092</u>	<u>93,420,789</u>	22.3%
Liabilities				
Accounts payable	1,110	8,161	(7,051)	-86.4%
Benefits payable	4,294,620	4,431,728	(137,108)	-3.1%
Investments payable	422,993	13,548,872	(13,125,879)	-96.9%
Investment management fees payable	361,228	278,835	82,393	29.5%
Securities lending liabilities	<u>48,954,055</u>	<u>21,903,806</u>	<u>27,050,249</u>	123.5%
Total liabilities	<u>54,034,006</u>	<u>40,171,402</u>	<u>13,862,604</u>	34.5%
Net Position				
Restricted for pensions	<u>\$ 458,532,875</u>	<u>\$ 378,974,690</u>	<u>\$ 79,558,185</u>	21.0%

Net position restricted for pensions increased \$79.6 million from June 30, 2020 to June 30, 2021. The main sources of this increase were City contribution of \$43.6 million and net investment income of \$90.2 million were more than offset by benefit payments of \$52.7 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.

Management's Discussion & Analysis

(Unaudited)

Table 2 summarizes changes in net position restricted for pensions for the years ended June 30, 2021 and 2020.

Table 2 Statements of Changes in Fiduciary Net Position For the Years Ended June 30, 2021 and 2020				
	June 30		Change	
	2021	2020	Amount	Percentage
Additions				
Contributions	\$ 43,648,000	\$ 43,409,000	\$ 239,000	0.6%
Net investment income	90,191,309	6,996,833	83,194,476	1189.0%
Other additions	908	132	776	587.9%
Total additions	<u>133,840,217</u>	<u>50,405,965</u>	<u>83,434,252</u>	165.5%
Deductions				
Benefits to members and beneficiaries	52,697,378	54,619,079	(1,921,701)	-3.5%
Administrative expenses	<u>1,584,654</u>	<u>1,522,910</u>	<u>61,744</u>	4.1%
Total deductions	<u>54,282,032</u>	<u>56,141,989</u>	<u>(1,859,957)</u>	-3.3%
Changes in net position	79,558,185	(5,736,024)	85,294,209	1487.0%
Net position restricted for pensions				
Beginning of year	<u>378,974,690</u>	<u>384,710,714</u>	<u>(5,736,024)</u>	-1.5%
End of year	<u>\$ 458,532,875</u>	<u>\$ 378,974,690</u>	<u>\$ 79,558,185</u>	21.0%

During fiscal year 2021, the City of Oakland contributed \$43.6 million to the System. In addition, the System's net investment income for the year ended June 30, 2021 was \$90.1 million, mainly due to net appreciation in fair value of the investment portfolio. The time-weighted annual return for the year ended June 30, 2021 was 24.2%, compared to a benchmark return of 22.3% and an actuarial expected rate of return of 5.29 %.

Management's Discussion & Analysis

(Unaudited)

FINANCIAL ANALYSIS 2020 vs. 2019

Table 3 summarizes net position restricted for pensions as of June 30, 2020 and 2019.

Table 3 Statements of Fiduciary Net Position As of June 30, 2020 and 2019				
	June 30		Change	
	2020	2019	Amount	Percentage
Assets				
Cash and cash equivalents	\$ 6,345,777	\$ 6,484,343	\$ (138,566)	-2.1%
Receivables	8,099,428	4,427,785	3,671,643	82.9%
Investments	404,700,887	420,244,755	(15,543,868)	-3.7%
Total Assets	<u>419,146,092</u>	<u>431,156,883</u>	<u>(12,010,791)</u>	-2.8%
Liabilities				
Accounts payable	8,161	15,871	(7,710)	-48.6%
Benefits payable	4,431,728	4,596,563	(164,835)	-3.6%
Investments payable	13,548,872	7,464,071	6,084,801	81.5%
Investment management fees payable	278,835	351,847	(73,012)	-20.8%
Securities lending liabilities	<u>21,903,806</u>	<u>34,017,817</u>	<u>(12,114,011)</u>	-35.6%
Total liabilities	<u>40,171,402</u>	<u>46,446,169</u>	<u>(6,274,767)</u>	-13.5%
Net Position				
Restricted for pensions	<u>\$ 378,974,690</u>	<u>\$ 384,710,714</u>	<u>\$ (5,736,024)</u>	-1.5%

Net position restricted for pensions decreased \$5.7 million from June 30, 2019 to June 30, 2020. The main sources of this decrease were from benefit payments of \$54.6 million offset by contribution of \$43.4 million and net investment income of \$7.0 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.

Management's Discussion & Analysis

(Unaudited)

Table 4 summarizes changes in net position restricted for pensions for the years ended June 30, 2020 and 2019.

Table 4 Statements of Changes in Fiduciary Net Position For the Years Ended June 30, 2020 and 2019				
	June 30		Change	
	2020	2019	Amount	Percentage
Additions				
Contributions	\$ 43,409,000	\$ 44,821,000	\$ (1,412,000)	-3.2%
Net investment income	6,996,833	21,551,868	(14,555,035)	-67.5%
Other additions	132	19,949	(19,817)	-99.3%
Total additions	<u>50,405,965</u>	<u>66,392,817</u>	<u>(15,986,852)</u>	-24.1%
Deductions				
Benefits to members and beneficiaries	54,619,079	56,212,013	(1,592,934)	-2.8%
Administrative expenses	<u>1,522,910</u>	<u>1,446,361</u>	<u>76,549</u>	5.3%
Total deductions	<u>56,141,989</u>	<u>57,658,374</u>	<u>(1,516,385)</u>	-2.6%
Changes in net position	(5,736,024)	8,734,443	(14,470,467)	-165.7%
Net position restricted for pensions				
Beginning of year	<u>384,710,714</u>	<u>375,976,271</u>	<u>8,734,443</u>	2.3%
End of year	<u>\$ 378,974,690</u>	<u>\$ 384,710,714</u>	<u>\$ (5,736,024)</u>	-1.5%

During fiscal year 2020, the City of Oakland contributed \$43.4 million to the System. In addition, the System's net investment income for the year ended June 30, 2020 was \$7.0 million, mainly due to net appreciation in fair value of the investment portfolio as a result of robust returns on investments. The time-weighted annual return for the year ended June 30, 2020 was 2.3%, compared to a benchmark return of 4.6% and an actuarial expected rate of return of 5.37%.

Management's Discussion & Analysis

(Unaudited)

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 System
City of Oakland
150 Frank H Ogawa Plaza, Suite 3349
Oakland, CA 94612**

Financial Statements

Oakland Police and Fire Retirement System Statements of Fiduciary Net Position June 30, 2021 and 2020

	2021	2020
Assets		
Cash and Cash Equivalents	\$ 6,323,835	\$ 6,345,777
Receivables:		
Interest Receivable	758,877	720,730
Dividends Receivable	271,634	122,028
Investments Receivable	1,228,684	7,005,167
Retired Members and Beneficiaries	103,688	137,530
Miscellaneous	106,542	113,973
Total Receivables	2,469,425	8,099,428
Investments, at Fair Value:		
Short-Term Investments	7,786,908	14,097,351
Bonds	134,380,629	123,135,071
Domestic Equities and Mutual Funds	210,506,356	157,386,763
International Equities and Mutual Funds	58,539,803	44,599,350
Alternative Investments	44,016,067	43,589,826
Foreign Currency Contracts, Net	(7,612)	(20,041)
Securities Lending Collateral	48,551,470	21,912,567
Total Investments	503,773,621	404,700,887
Total Assets	512,566,881	419,146,092
Liabilities		
Accounts Payable	1,110	8,161
Benefits Payable	4,294,620	4,431,728
Investments Payable	422,993	13,548,872
Investment Management Fees Payable	361,228	278,835
Securities Lending Liabilities	48,954,055	21,903,806
Total Liabilities	54,034,006	40,171,402
Net Position Restricted for Pensions	\$ 458,532,875	\$ 378,974,690

See accompanying notes to the basic financial statements.

Financial Statements

Oakland Police and Fire Retirement System Statements of Changes in Fiduciary Net Position Years Ended June 30, 2021 and 2020		
	2021	2020
Additions		
Contributions from the City	\$ 43,648,000	\$ 43,409,000
Investment Income:		
Net Appreciation in Fair Value of Investments	84,719,944	677,414
Interest	3,965,167	4,598,569
Dividends	2,735,230	2,775,312
Less: Investment Expenses	(1,354,640)	(1,173,450)
Securities Lending Income:		
Securities Lending Earnings	105,651	521,009
Securities Lending Expenses, Net of Rebates	19,957	(402,021)
Net Securities Lending Income	125,608	118,988
Net Investment Income	90,191,309	6,996,833
Claims and Settlements	26	132
Other Income	882	-
Total Additions	133,840,217	50,405,965
Deductions		
Benefits to Members and Beneficiaries:		
Retirement	32,157,272	33,125,069
Disability	18,803,904	19,696,369
Death	1,736,202	1,797,641
Total Benefits to Members and Beneficiaries	52,697,378	54,619,079
Administrative Expenses	1,584,654	1,522,910
Total Deductions	54,282,032	56,141,989
Change in Net Position	79,558,185	(5,736,024)
Net Position Restricted for Pensions		
Beginning of Year	378,974,690	384,710,714
End of Year	\$458,532,875	\$ 378,974,690

See accompanying notes to the basic financial statements.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020, 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 the Finance Department, Controller's Bureau, City of Oakland, 150 Frank H. Ogawa Plaza, Suite 6353; Oakland, California 94612.

a) System Membership

At June 30, 2021 and 2020, the System membership consisted of only retirees and beneficiaries. The System's membership is as follows:

Retirees and Beneficiaries Currently Receiving Benefits		
	2021	2020
Police	439	460
Fire	284	308
Total	723	768

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

2. Summary of Significant Accounting Policies

a) Basis of Presentation

The financial statements are prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. The System adheres to the reporting requirements established by the Governmental Accounting Standards Board (GASB).

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. Purchases and sales of investments are recorded on a trade date basis.

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, contributed a percentage of their earned salaries based upon entry age as determined by consulting actuaries. Since fiscal year 2015, there were no remaining active members in the System.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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 \$43.65 million and \$43.41 million in the years ended June 30, 2021 and 2020, respectively. The next required contribution for fiscal year 2022 is \$43.82 million.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020, the number of external investment managers was twelve and twelve, respectively.

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 fixed income instruments and some exposure to investments below an investment grade rating, 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020:

Target Allocation		
Asset Class	June 30, 2021	June 30, 2020
Fixed Income	21%	21%
Credit	2	2
Covered Calls	5	5
Domestic Equity	40	40
International Equity	12	12
Crisis Risk Offset	20	20
Total	100%	100%

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, 2021, the System's investments in the Northern Trust Russell 1000 Growth Index Fund represented 24.23% of its fiduciary net position. As of June 30, 2020, the System's investment in the Northern Trust Russell 1000 Growth Index Fund and the Parametric Research Affiliates Systematic U.S. Fund represented 22.5% and 6.3% respectively, of its fiduciary net position.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020, the annual money-weighted rates of return on pension plan investments, net of pension plan investment expenses, were 24.43% and 2.04%, respectively.

d) Cash and Cash Equivalents

As of June 30, 2021 and 2020, 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, 2021 and 2020 basic financial statements. As of June 30, 2021 and 2020, the System's share of the City's investment pool totaled \$6,318,773 and \$6,340,768, respectively. The System also had cash not included in the City's investment pool. As of June 30, 2021 and 2020, the System's cash and cash deposits not held in the City's investment pool totaled \$5,062 and \$5,009, respectively.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021:

Recurring Fair Value Measurements As of June 30, 2021			
	2021		
	Level One	Level Two	Total
Investments by fair value level:			
Bonds	\$ 12,635,465	\$ 104,543,460	\$ 117,178,925
Domestic Equities and Mutual Funds	93,555,401	707,364	94,262,765
International Equities and Mutual Funds	58,539,803	-	58,539,803
Alternative Investments	43,940,518	75,549	44,016,067
Total investments by fair value level	<u>\$ 208,671,187</u>	<u>\$ 105,326,373</u>	<u>\$ 313,997,560</u>
Investments measured at net asset value (NAV):			
Short-Term Investment Funds			7,786,908
Fixed Income Funds			17,201,704
Domestic Equities and Mutual Funds			116,243,591
Foreign Currency Contracts, Net			(7,612)
Securities Lending Collateral - Short-Term Investment Fund			48,551,470
Total investments measured at NAV			<u>189,776,061</u>
Total investments measured at fair value			<u>\$ 503,773,621</u>

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

The System has the following recurring fair value measurements as of June 30, 2020:

Recurring Fair Value Measurements As of June 30, 2020			
	2020		
	Level One	Level Two	Total
Investments by fair value level:			
Short-Term Investment Funds	\$ -	\$ 6,023,223	\$ 6,023,223
Bonds	14,422,008	100,740,951	115,162,959
Domestic Equities and Mutual Funds	66,325,124	-	66,325,124
International Equities and Mutual Funds	44,599,350	-	44,599,350
Alternative Investments	27,764,888	-	27,764,888
Total investments by fair value level	<u>\$ 153,111,370</u>	<u>\$ 106,764,174</u>	<u>\$ 259,875,544</u>
Investments measured at net asset value (NAV):			
Short-Term Investment Funds			8,074,128
Fixed Income Funds			7,972,112
Domestic Equities and Mutual Funds			91,061,639
Hedge Fund			15,824,938
Foreign Currency Contracts, Net			(20,041)
Securities Lending Collateral - Short-Term Investment Fund			21,912,567
Total investments measured at NAV			<u>144,825,343</u>
Total investments measured at fair value			<u>\$ 404,700,887</u>

Investments measured at NAV represent commingled funds where fair value is measured based on the System's pro rata share of the total NAV. As of June 30, 2020, the System's hedge fund investment has monthly liquidity with a notice period of 5 days.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, foreign currency contracts, and securities lending investments was 7.37 years as of June 30, 2021, and 7.69 years as of June 30, 2020.

The following summarizes the System's fixed income investments by category as of June 30, 2021 and 2020:

Short-Term Investment Duration				
Investment Type	2021		2020	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Short-Term Investment Funds	\$7,786,908	n/a	\$8,074,128	n/a
U.S. Treasury Bills	-	n/a	6,023,223	0.21
Foreign Currency Exchange Contracts, Net	(7,612)	n/a	(20,041)	n/a

Long-Term Investment Duration				
Investment Type	2021		2020	
	Fair Value	Modified Duration (Years)	Fair Value	Modified Duration (Years)
Fixed Income Investments				
U.S. Government Bonds				
U.S. Treasuries	\$ 18,816,292	5.79	\$ 8,153,603	8.03
Government Agencies	32,516,334	8.26	39,171,830	7.23
Total U.S. Government Bonds	51,332,626		47,325,433	
Corporate and Other Bonds				
Corporate Bonds	82,957,273	7.38	75,809,638	7.89
Other Government Bonds	90,730	7.90	-	n/a
Total Corporate and Other Bonds	83,048,003		75,809,638	
Total Fixed Income Investments	\$ 134,380,629	7.37	\$123,135,071	7.69
Securities Lending Collateral	\$ 48,551,470		\$ 21,912,567	

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021:

Investments in CMOs at June 30, 2021				
Investment Type	Weighted Average Coupon Rate	Weighted Average Maturity (Years)	Fair Value	Percent of Total Investments Fair Value
Mortgage-backed securities	2.72%	23.28	\$20,789,617	4.13%

The following are the System's investments in CMOs at June 30, 2020:

Investments in CMOs at June 30, 2020				
Investment Type	Weighted Average Coupon Rate	Weighted Average Maturity (Years)	Fair Value	Percent of Total Investments Fair Value
Mortgage-backed securities	3.07%	23.76	\$27,010,178	6.67%

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020:

Short-Term Investment Ratings				
Investment Type	2021		2020	
	S&P / Moody's Rating	Fair Value	S&P / Moody's Rating	Fair Value
Short-Term Investment Funds	Not Rated	\$7,786,908	Not Rated	\$8,074,128
U.S. Treasury Bills	n/a	-	AA/Aaa	6,023,223
Foreign Currency Exchange Contracts, Net	Not Rated	(7,612)	Not Rated	(20,041)

Long-Term Investment Ratings				
S&P / Moody's Rating	2021		2020	
	Fair Value	Percentage of Total Fair Value	Fair Value	Percentage of Total Fair Value
AAA/Aaa	\$ 53,058,908	39.4%	\$ 48,352,450	39.3%
AA/Aa	34,226,943	25.5%	26,839,048	21.8%
A/A	14,322,857	10.7%	16,270,507	13.2%
BBB/Baa	19,359,029	14.4%	22,504,035	18.3%
BB/Ba	1,831,903	1.4%	1,388,389	1.1%
B/B	9,550,906	7.1%	313,940	0.3%
CCC/CCC	-	-	7,466,702	6.0%
Unrated	2,030,083	1.5%	-	-
	<u>\$ 134,380,629</u>	<u>100.00%</u>	<u>\$123,135,071</u>	<u>100.00%</u>

i) Custodial Credit Risk

Securities Lending Ratings		
S&P / Moody's Rating	2021 Fair Value	2020 Fair Value
Not Rated	\$ 48,551,470	\$ 21,912,567

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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 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 exchange 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

The following summarizes the System's investments denominated in foreign currencies as of June 30, 2021 and 2020:

Investments Denominated in Foreign Currencies As of June 30, 2021 and 2020		
Foreign Currency	Fair Value	
	June 30, 2021	June 30, 2020
Australian Dollar	\$ 1,456,518	\$ 1,165,827
Brazilian Real	901,768	684,785
British Pound	3,406,619	2,900,002
Canadian Dollar	3,395,211	2,916,358
Danish Krone	1,386,946	108,321
Euro	8,778,172	5,257,480
Hong Kong Dollar	3,664,544	2,540,943
Indonesian Rupiah	221,352	179,056
Japanese Yen	5,888,554	5,606,895
Mexican Peso	108,650	652,060
New Israeli Shekel	-	270,619
Norwegian Krone	-	158,176
Singapore Dollar	839,140	506,973
South African Rand	575,339	254,493
South Korean Won	212,370	-
Swedish Krona	1,488,233	837,087
Swiss Franc	2,344,951	2,093,668
Turkish Lira	524,786	612,927
Total	<u>\$ 35,193,153</u>	<u>\$ 26,745,670</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, debentures, corporate debt securities, notes, and mortgages or other obligations held in U.S. Dollar. The minimum collateral level is 105% of market value of loaned securities for any securities held in currencies other than the U.S. Dollar. 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

As of June 30, 2021 and 2020, 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, 2021 and 2020:

Securities Lending as of June 30, 2021			
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	\$ 9,621,902	\$ 5,095,643	\$ 14,717,545
U.S. Corporate Bonds	8,852,719	-	8,852,719
U.S. Equities	29,098,075	97,296	29,195,371
Non-U.S. Equities	182,194	514,214	696,408
Total investments in securities lending transactions	<u>\$ 47,754,890</u>	<u>\$ 5,707,153</u>	<u>\$ 53,462,043</u>
Collateral Received	<u>\$ 48,954,055</u>	<u>\$ 5,840,751</u>	<u>\$ 54,794,806</u>

Securities Lending as of June 30, 2020			
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	\$ 4,674,146	\$ 5,349,244	\$ 10,023,390
U.S. Corporate Bonds	7,480,228	-	7,480,228
U.S. Equities	9,388,017	470,835	9,858,852
Total investments in securities lending transactions	<u>\$ 21,542,391</u>	<u>\$ 5,820,079</u>	<u>\$ 27,362,470</u>
Collateral Received	<u>\$ 21,903,806</u>	<u>\$ 5,913,897</u>	<u>\$ 27,817,703</u>

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

l) 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, 2021 and 2020, 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 2.c). 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020:

As of and for the Year Ended June 30, 2021			
Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Forwards			
Foreign Currency Exchange Contracts	\$ -	\$ (7,612)	\$ -
Options			
Equity Contracts	72	(351,506)	(58,431)
Swaps			
Credit Contracts	1,990,000	50,816	7,768
Total	<u>\$ 1,990,072</u>	<u>\$ (308,302)</u>	<u>\$ (50,663)</u>

As of and for the Year Ended June 30, 2020			
Derivative Type / Contract	Notional Amount	Fair Value	Net Appreciation (Depreciation) in Fair Value
Forwards			
Foreign Currency Exchange Contracts	\$ -	\$ (20,041)	\$ -
Options			
Equity Contracts	69	(378,167)	108,759
Rights/Warrants			
Rights/Warrants	5,630	-	-
Swaps			
Credit Contracts	1,920,000	(11,645)	32,754
Total	<u>\$ 1,925,699</u>	<u>\$ (409,853)</u>	<u>\$ 141,513</u>

Counterparty Credit Risk

The System is not exposed to credit risk on non-exchange traded derivative instruments that are in liability positions. As of June 30, 2021 and 2020, the System held forward currency contracts in liability positions of \$7,612 and \$20,041, respectively. The System's counterparties to these contracts held credit ratings of A or better, as assigned by one or more of the major credit rating organizations (S&P, Moody's 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, 2021 and 2020, 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

Interest Rate Risk

The tables below describe the maturity periods of the derivative instruments exposed to interest rate risk at June 30, 2021 and 2020.

Derivative Interest Rate Risk as of June 30, 2021			
Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Forwards			
Forward Foreign Currency Exchange Contracts	\$ (7,612)	\$ (7,612)	\$ -
Options			
Equity Contracts	(351,506)	(351,506)	-
Swaps			
Credit Contracts	50,816	-	50,816
Total	<u>\$ (308,302)</u>	<u>\$ (359,118)</u>	<u>\$ 50,816</u>

Derivative Interest Rate Risk as of June 30, 2020			
Derivative Type / Contract	Fair Value	Maturities	
		Less than 1 Year	1-5 years
Forwards			
Forward Foreign Currency Exchange Contracts	\$ (20,041)	\$ (20,041)	\$ -
Options			
Equity Contracts	(378,167)	(378,167)	-
Swaps			
Credit Contracts	(11,645)	-	(11,645)
Total	<u>\$ (389,812)</u>	<u>\$ (378,167)</u>	<u>\$ (11,645)</u>

Foreign Currency Risk

At June 30, 2021 and 2020, the System is exposed to foreign currency risk on \$7,612 and \$20,041, respectively, of its investments in forwards denominated in the Mexican peso.

Contingent Features

At June 30, 2021 and 2020, the System held no positions in derivatives containing contingent features.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

5. Net Pension Liability

The components of the net pension liability of the City at June 30, 2021 and 2020, are as follows:

Net Pension Liability of the City At June 30, 2021 and 2020		
	June 30, 2021	June 30, 2020
Total pension liability	\$ 578,579,190	\$ 603,971,861
Less: Plan fiduciary net position	(458,532,875)	(378,974,690)
City's net pension liability	<u>\$ 120,046,315</u>	<u>\$ 224,997,171</u>
Plan fiduciary net position as a percentage of the total pension liability	79.3%	62.7%

a) Actuarial Method and Assumptions

The total pension liability as of June 30, 2021 was determined based on an actuarial valuation as of June 30, 2020, using the entry age normal actuarial cost method and the following actuarial assumptions, applied to all periods included in the measurement.

Actuarial Assumptions	
Investment Rate of Return	5.29%
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, 2021 are based on the fair value of assets as of June 30, 2021 and the total pension liability as of the valuation date, June 30, 2020, updated to June 30, 2021. There were no significant events between the valuation date and the measurement date. The update only included 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2020 was determined based on an actuarial valuation as of June 30, 2019, updated to June 30, 2020, using the entry age normal actuarial cost method and the actuarial assumptions as described above for the June 30, 2020 valuation, except for the assumed investment rate of return was 5.37%. Measurements as of June 30, 2020 are based on the fair value of assets as of June 30, 2020 and the total pension liability as of the valuation date, June 30, 2019, updated to June 30, 2020.

The actuarial assumptions used in the June 30, 2020 and 2019 valuations were based on the results of actuarial experience studies for the period of July 1, 2014 through June 30, 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.

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020 are summarized in the following table:

Long-Term Expected Real Rate of Return		
Asset Class	June 30, 2021	June 30, 2020
Fixed Income	(0.30)%	2.29%
Domestic Equity	4.70	5.55
International Equity	5.00	7.69
Covered Calls	2.60	4.64
Crisis Risk Offset	1.95	3.78
Credit	2.10	4.08
Cash	(1.00)	1.92

b) Discount Rate

The discount rates used to measure the total pension liability were 5.29% and 5.37% as of June 30, 2021 and 2020, 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 suspended City contributions until the fiscal year beginning July 1, 2017, after which they would 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 the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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.

City's Net Pension Liability June 30, 2021			
	1% Decrease (4.29%)	Current Discount Rate (5.29%)	1% increase (6.29%)
City's net pension liability	\$ 171,086,474	\$120,046,315	\$76,004,962

City's Net Pension Liability June 30, 2020			
	1% Decrease (4.37%)	Current Discount Rate (5.37%)	1% increase (6.37%)
City's net pension liability	\$279,560,331	\$224,997,171	\$178,053,408

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, 2021 and 2020 equals net position restricted for pensions and comprises the following:

Aggregate Total of the System's Major Reserves		
	2021	2020
Retired member contribution reserve	\$ 26,828,201	\$ 29,205,764
Employer reserve	431,704,674	249,768,926
Total	<u>\$ 458,532,875</u>	<u>\$ 378,974,690</u>

Notes to the Basic Financial Statements

For Years Ended June 30, 2021 and 2020

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, 2021 and 2020 were \$1,388,825 and \$1,257,550, respectively. Other administrative expenses including accounting and audit services, legal fees, annual report and miscellaneous expense for the years ended June 30, 2021 and 2020 were \$195,829 and \$265,360, respectively.

Required Supplementary Information

For Years Ended June 30, 2021 and 2020

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

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Interest	\$ 34,680,418	\$ 36,078,037	\$ 37,621,301	\$ 44,320,094	\$ 44,931,829	\$ 42,480,394	\$ 41,262,826	\$ 42,333,496
Differences between expected and actual experience	(7,375,711)	(5,699,459)	(7,915,210)	(10,656,139)	3,027,944	6,977,470	(21,208,627)	-
Changes of assumptions	-	-	(1,475,030)	17,858,013	-	43,480,232	34,219,433	-
Benefit payments, including refunds of member contributions	(51,697,378)	(54,619,079)	(56,212,013)	(55,998,595)	(57,375,815)	(58,441,353)	(59,007,536)	(57,409,113)
Net change in total pension liability	(24,392,671)	(24,240,501)	(27,980,952)	(4,476,627)	(9,416,042)	34,496,743	(4,733,904)	(15,075,617)
Total pension liability – beginning	603,971,861	628,212,362	656,193,314	660,669,941	670,085,983	635,589,240	640,323,144	655,398,761
Total pension liability – ending (a)	\$579,579,190	\$603,971,861	\$628,212,362	\$656,193,314	\$660,669,941	\$670,085,983	\$635,589,240	\$640,323,144
Plan Fiduciary Net Position								
Contributions - member	\$ 43,448,000	\$ 43,409,000	\$ 44,821,000	\$ 44,860,000	\$ -	\$ -	\$ -	\$ 4,441
Net investment income	90,191,309	6,996,833	21,557,961	35,446,275	50,158,795	(1,418,645)	5,438,586	66,392,409
Benefit payments, including refunds of member contributions	(52,697,378)	(54,619,079)	(56,212,013)	(55,998,595)	(57,375,815)	(58,441,353)	(59,007,536)	(57,409,113)
Administrative expense	(1,584,654)	(1,522,910)	(1,446,361)	(1,543,412)	(1,261,641)	(1,375,749)	(985,227)	(776,112)
Claims and settlements	908	132	13,856	9,145	70,282	3,593,096	-	-
Net change in plan fiduciary net position	79,358,185	(5,736,024)	8,734,443	22,773,413	(8,408,379)	(57,642,651)	(44,554,177)	8,211,625
Plan fiduciary net position – beginning	378,974,690	384,710,714	375,976,271	353,202,858	361,611,237	419,253,888	463,808,065	455,596,440
Plan fiduciary net position – ending (b)	\$458,332,875	\$378,974,690	\$384,710,714	\$375,976,271	\$353,202,858	\$361,611,237	\$419,253,888	\$463,808,065
City's net pension liability – ending (a) – (b)	\$120,046,315	\$224,997,171	\$243,501,648	\$280,217,043	\$307,467,083	\$308,474,746	\$216,335,352	\$176,515,079
Plan fiduciary net position as a percentage of the total pension liability	79%	63%	61%	57%	53%	54%	66%	72%
Covered payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net pension liability as a percentage of covered payroll	N/A	N/A	N/A	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, 2020 and 2019

Schedule of Employer Contributions (Unaudited) (dollars in millions)										
	2021	2020	2019	2018	2017*	2016*	2015*	2014*	2013**	2012
Actuarially determined contribution	\$ 43.6	\$ 43.4	\$ 44.8	\$ 44.9	N/A	N/A	N/A	\$ 20.3	\$ 34.2	\$ 45.1
Contributions in relation to the actuarially determined contribution	\$ 43.6	\$ 43.4	\$ 44.8	\$ 44.9	\$ -	\$ -	\$ -	\$ -	\$ 210.0	\$ 45.5
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -	N/A	N/A	N/A	\$ 20.3	\$ (175.8)	\$ (0.4)
Covered payroll	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.1
Contributions as a percentage of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	210000%	45500%

* Actuarially determined contributions are calculated based on the actuarial valuation one year prior to the beginning of the fiscal year. Although actuarial valuations were performed as of June 30, 2014, June 30, 2015, and June 30, 2016, the System did not determine an actuarially determined contribution for FY 2015-2017, 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)										
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Annual money-weighted rate of return net of investment expense	24.43%	2.04%	6.10%	10.57%	15.57%	-0.75%	3.90%	16.40%	9.70%	1.40%

Note to Required Supplementary Information

For Years Ended June 30, 2021 and 2020

Note to Schedule of Employer Contributions

Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the fiscal year in which contributions are reported. Methods and assumptions used to determine contribution rates are:

Methods and Assumptions Used to Determine Contribution Rates					
Fiscal Year	Valuation Date	Discount Rate	Cost-of-Living Adjustments	Mortality	Other Significant Assumption Changes from Prior Year
2021	6/30/2019	5.50%	3.25%	CalPERS Mortality Table from the 2012-2015 experience study, excluding the 15-year projection using 90% of Scale MP-2016	None
2020	6/30/2018	5.50%	3.25%		Longevity Pay assumption for Fire Members was added
2019	6/30/2017	5.50%	3.25%		None
2018	6/30/2016	6.44%	3.25%		None
2017	6/30/2015	6.50%	3.25%	CalPERS Mortality Table from the 2006-2011 experience study, excluding the 20-year projection using Scale BB	None
2016	6/30/2014	6.54%	3.25%		None
2015	6/30/2013	6.75%	3.975%	RP-2000 Mortality Table from the 1997-2007 experience study, projected with Scale AA	None
2014	6/30/2012	6.75%	3.975%		None
2013	6/30/2011	6.75%	3.975%		None
2012	6/30/2010	7.00%	4.50%	RP-2000 Mortality Table from the 1997-2007 experience study	None

A complete description of the methods and assumptions used to determine contribution rates can be found in the corresponding actuarial valuation reports.

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SECTION 3

INVESTMENT



*Lana Andrews
Widow of
William "Bill" Andrews
Sergeant of Police*

*Served with Oakland Police Department
1972 to 1997*

Investment Consultant's Report



INVESTMENT GROUP

2175 NW Raleigh Street
Suite 300A
Portland, OR 97210

503.226.1050
Meketa.com

December 31, 2021

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, 2021. During this 12-month period, the OPFRS total investment portfolio increased 24.4% 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.

Meketa serves as OPFRS' independent investment consultant. Performance data is provided by the System's custodian, Northern Trust, and is independently calculated by Meketa's performance measurement team.

A major factor influencing overall investment performance is the allocation of the OPFRS portfolio across major asset classes. As of June 30, 2021, the Covered Calls, Cash and Domestic Equity classes were overweight, while Fixed Income and Crisis Risk Offset were underweight relative to policy.

Over the latest 3-year period, the OPFRS portfolio produced an annualized money-weighted, net of fee return of 10.2%, underperforming its benchmark's time-weighted return of 10.5% by (30) basis points. Over the latest 5-year period, OPFRS' average annual money-weighted net return of 11.4% outperformed the Policy Benchmark by 40 basis points.

OPFRS Annualized Money-Weighted Returns As of 6/30/2021

	1 Year	3 Year	5 Year
Total Portfolio ¹	24.4	10.2	11.4
Policy Benchmark ²	22.3	10.5	11.0
Excess Return	2.1	(0.3)	0.4

Sincerely,

David Sancewich, Managing Principal, Meketa Investment Group

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

² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, and 3.3% BB Long Treasury.

BOSTON CHICAGO LONDON MIAMI NEW YORK PORTLAND SAN DIEGO

List of Investment Professionals

Domestic Equity Managers

Brown Advisory
Earnest Partners
Northern Trust Investments
Rice Hall James and Associates

Fixed Income Managers

DDJ Capital Management
Ramirez Asset Management
Reams Asset Management
Wellington Management

International Equity Managers

Strategic Global Advisors

Investment Consultant

Meketa Investment Group

Covered Calls

Parametric Portfolio Associates, LLC.

Custodian

Northern Trust

Security Lending

Northern Trust

Investment Manager Fees and Other Investment Expenses

Years Ended June 30, 2021 and June 30, 2020

	2021	2020
<u>Investment Manager Fees</u>		
Domestic Equity Managers	\$ 508,064	\$ 446,280
International Equity Managers	251,072	175,856
Domestic Fixed Income Managers	259,176	231,887
Covered Calls	119,828	102,928
Total Investment Manager Fees	<u>\$ 1,138,140</u>	<u>\$ 56,950</u>
<u>Other Investment Fees</u>		
Custodian Fees	\$ 116,500	\$ 116,500
Investment Consulting	100,000	100,000
Total Other Investment Fees	<u>\$ 216,500</u>	<u>\$ 216,500</u>
Total Investment Fees	<u>\$ 1,354,640</u>	<u>\$ 1,173,450</u>

Largest Stock Holdings (by Fair Value)
As of June 30, 2021

Stock	Fair Value
1. Apple	\$2,219,711
2. Microsoft	2,107,331
3. Amazon	1,523,991
4. Synopsys	1,509,399
5. Skyworks Solutions	1,435,824
6. D. R. Horton	1,342,717
7. CBRE Group	1,215,566
8. CMC Materials	1,206,523
9. Keysight Technologies	1,199,920
10. Intercontinental Exchange	1,174,062

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

Largest Bond Holdings (by Fair Value)
As of June 30, 2021

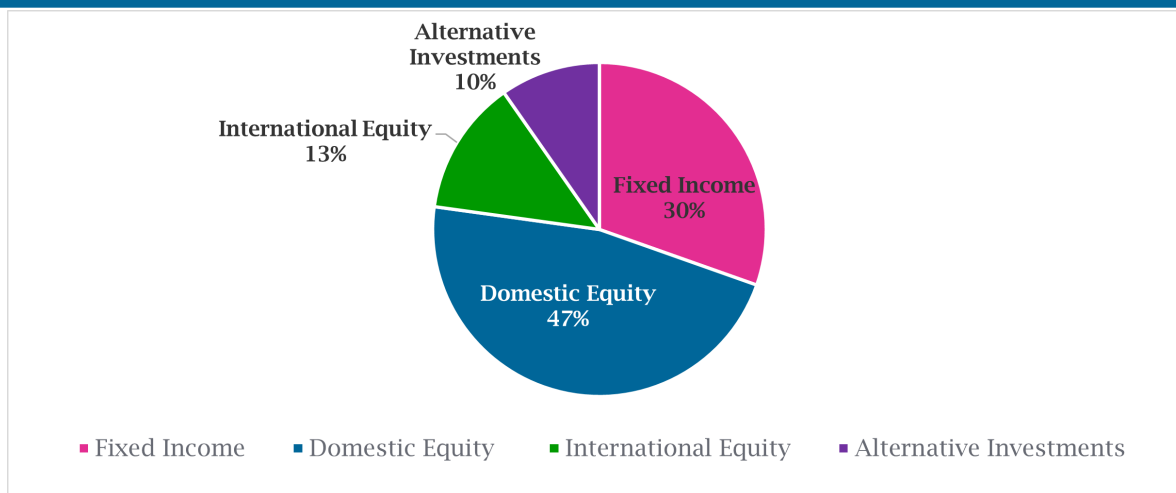
Description	Interest Rate	Maturity Date	Fair Value
1. U.S. Treasury	0.75%	03/31/2026	\$3,588,806
2. U.S. Treasury	2.75%	02/15/2024	3,483,334
3. U.S. Treasury	1.13%	02/15/2031	2,305,605
4. U.S. Treasury	2.00%	02/15/2023	2,109,898
5. U.S. Treasury	2.25%	11/15/2027	1,936,134
6. U.S. Treasury	1.13%	07/31/2021	1,821,629
7. North Shore Long Island Jewish Health Care	6.15%	11/01/2043	1,582,405
8. Metropolitan Transportation Authority New York	7.34%	11/15/2039	1,308,426
9. U.S. Treasury	1.13%	05/15/2040	1,122,266
10. U.S. Treasury	1.38%	08/15/2050	1,083,265

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

**Investments by Manager/Exchange-Traded Funds (ETF)
As of June 30, 2021**

Investment Firm	Portfolio Type	Amount
<u>Fixed Income Managers</u>		
Reams Asset Management	Core Plus	\$ 29,354,805
Ramirez Asset Management	Core	78,984,777
Vanguard Long-Term Treasury Index Fund ETF	Long Duration	13,240,128
Wellington Management	Core	7,639,617
DDJ Capital Management	High Yield/ Bank Loans	9,177,195
Total Fixed Income		\$ 138,369,522
<u>Domestic Equity Managers</u>		
Northern Trust Investments	Large Cap Core	\$ 116,334,895
Earnest Partners	Mid Cap Core	46,718,093
MSCI USA Minimum Volatility (USD) Index Fund ETF	Crisis Risk Offset	21,455,561
Brown Advisory	Small Cap Value	21,455,561
Rice Hall James and Associates	Small Cap Growth	17,079,808
Transition Account	Short-Term	304,029
Total Domestic Equity		\$ 212,962,149
<u>International Equity Managers</u>		
Strategic Global Advisors	International	\$ 41,614,290
Vanguard Developed Markets Index Fund ETF	International	18,033,573
Total International Equity		\$ 59,647,863
<u>Alternative Managers</u>		
Parametric Portfolio Associates, LLC	Covered Calls	\$ 44,220,679
Total Alternative Investments		44,220,679
Total Investments		\$ 455,227,213

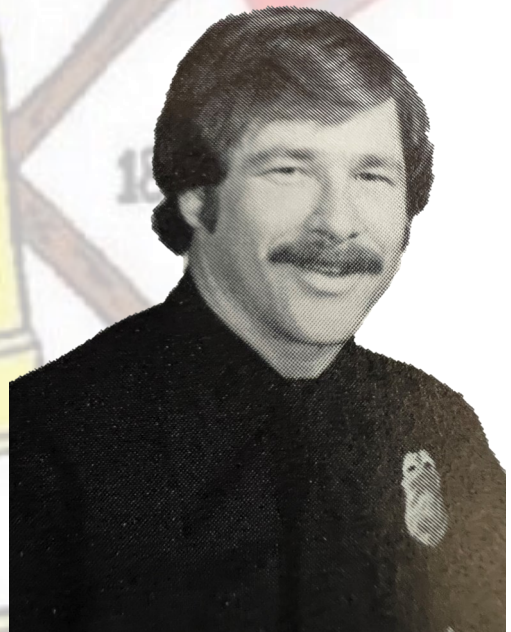
**Asset Allocation
As of June 30, 2021**



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SECTION 4

ACTUARIAL



*Al Valcour
Engineer of Fire
Served with Oakland Fire Department
1974 to 1990*

Actuary's Certification Letter



Classic Values, Innovative Advice

Via Electronic Mail

February 7, 2022

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, 2021. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation report as of June 30, 2020 (transmitted January 14, 2021) and the GASB 67/68 report as of June 30, 2021 (transmitted November 18, 2021).

Actuarial Valuation Report as of June 30, 2020

The purpose of the annual actuarial valuation report as of June 30, 2020 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, 2019.

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 2021 PFRS Annual Report, based on the June 30, 2020 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

February 7, 2022

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 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, 2021

The purpose of the GASB 67/68 report as of June 30, 2021 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 (TPL) is based on the June 30, 2020 actuarial valuation updated to the measurement date of June 30, 2021. The update included the addition of interest cost offset by actual benefit payments.

Beginning of year measurements are based on the actuarial valuation as of June 30, 2019, updated to the measurement date of June 30, 2020. The June 30, 2021 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, 2020.

Please refer to our GASB 67 report as of June 30, 2021 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the 2021 PFRS Annual Report based on the June 30, 2021 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

February 7, 2022

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.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect our reports.

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. Other users of these reports are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

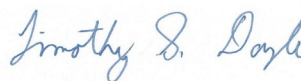
We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted,

Cheiron



Graham A. Schmidt, ASA, EA, FCA, MAAA
Consulting Actuary
703-893-1456, x1137
gschmidt@cheiron.us



Timothy S. Doyle, ASA, EA, MAAA
Consulting Actuary
703-893-1456, x1140
tdoyle@cheiron.us



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 June 30, 2020, there are no active members. 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 June 30, 2020. The key results of the actuarial valuation are as follows:

- The actuarially determined employer contribution amount for Fiscal Year 2021-2022 is \$43.8 million, based on projecting the Actuarial Liabilities and the Actuarial Value of Assets to the end of the 2020-2021 Fiscal Year. This represents a decrease of \$0.3 million from the estimated amount in the prior valuation for the same Fiscal Year. The contribution is assumed to be paid in equal installments throughout the year, or on average at approximately January 1, 2022.
- During the year ended June 30, 2020, the return on Plan assets was 1.85% on a market value basis net of investment expenses, as compared to the 6.00% assumption for the 2019-2020 Plan year. This resulted in a market value loss on investments of \$15.7 million. The Actuarial Value of Assets (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 6.53%, for an actuarial asset gain of \$1.9 million.

- The Plan experienced a gain on the Actuarial Liability of \$0.4 million, the net result of changes in the population and changes in benefits. Combining the liability and asset gains, the Plan experienced a total gain of \$2.3 million.
- A new Memorandum of Understanding (MOU) went into effect for Fire members since the previous valuation, changing Fire retirees' Cost-of-Living Adjustments (COLAs). This change in COLAs decreased the Actuarial Liability by \$6.5 million since the scheduled increases under the new MOUs were lower than the amounts originally assumed, in aggregate.
- The Plan's smoothed funded ratio, the ratio of Actuarial Value of Assets over Actuarial Liability, increased from 58.0% last year to 62.2% on an AVA basis as of June 30, 2020.
- The Plan's funded ratio increased from 61.8% to 63.5% on a Market Value of Assets (MVA) basis.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan experienced a decrease in the UAL from \$261.8 million to \$225.5 million as of July 1, 2020.
- Overall participant membership decreased compared to last year. 28 members died, 15 of whom had their benefits continue to a surviving spouse. In addition, 17 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 2021-2022 would be \$42.4 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 2021-2022.

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)			
	July 1, 2019	July 1, 2020	% Change
Participant Counts			
Active Participants	0	0	
Participants Receiving a Benefit	798	768	-3.8%
Total	798	768	-3.8%
Annual Pay of Active Members	\$ 0	\$ 0	
Assets and Liabilities			
Actuarial Liability (AL)	\$ 622,836	\$ 597,014	-4.1%
Actuarial Value of Assets (AVA)	\$ 361,037	\$ 371,467	2.9%
Unfunded Actuarial Liability (UAL)	\$ 261,798	\$ 225,547	-13.8%
Funded Ratio (AVA)	58.0%	62.2%	4.3%
Funded Ratio (MVA)	61.8%	63.5%	1.7%
Contributions			
Employer Contribution (FY2020-21)	\$ 43,648	N/A	
Employer Contribution (FY2021-22)	\$ 44,091	\$ 43,820	-0.6%

ACTUARIAL DEFINITIONS

The **Present Value of Future Benefits** (PVFB) is used for measuring all future Plan obligations, the obligations of the Plan earned as of the valuation date and those to be earned in the future by current plan participants under the current Plan provisions, if all assumptions are met.

The **Actuarial Liability** (AL) is calculated taking the Present Value of Future Benefits and subtracting the Present Value of Future Normal Costs under an acceptable actuarial funding method. Because the Plan has no active members, the Actuarial Liability is equal to the Present Value of Future Benefits (i.e., all benefits are fully accrued).

The **Unfunded Actuarial Liability** (UAL) is the excess of the Actuarial Liability over the Actuarial Value of Assets.

The **Actuarial Value of Assets** (AVA) is the value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

ACTUARIAL METHODS AND ASSUMPTIONS

ACTUARIAL METHODS

The actuarial funding method used to determine the 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 Plan's Actuarial Liability (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 2021-2022 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 below. The equivalent single discount rate for these returns using the Plan's expected projected benefit payments is 5.37%.

Benefit Payment Year	Expected Return
2020 - 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 %

Cost of Living Adjustments and Long-Term Salary Increases

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 shows salary increases based on the current Police contract which expires on June 30, 2023, and the Fire contract which expires on December 31, 2023. All increases shown after those dates are assumptions.

Inflation

Post-Retirement Benefit Increases (Based on Salary Increases for Rank at Retirement)		
Date of Increase	Police	Fire
July 1, 2020	2.50%	N/A
January 1, 2021	N/A	2.50% / 4.50% ¹
July 1, 2021	3.00%	1.50%
January 1, 2022	N/A	2.00%
July 1, 2022	3.50%	1.00%
July 1, 2023	3.50%	0.00%
December 1, 2023	N/A	2.00%
Annual Increases Starting July 1, 2024	3.25%	3.25%

¹ 4.50% For Fire Engineers, 2.50% for all other Fire

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).

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.

Rates of Mortality for Disabled 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 assumed to be related to injuries arising out of the performance of duty, entitling the surviving spouse to a 100% continuance.

Changes in Assumptions since the Last Valuation

A new Memorandum of Understanding (MOU) went into effect for Fire members after the previous valuation, changing Fire retirees' Cost-of-Living Adjustments (COLAs). No other changes were made to the actuarial assumptions.

Administrative Expenses

Administrative expenses for the Fiscal Year Ending June 30, 2021 are assumed to be \$1,645,600, growing at 2.85% per year.

Membership Information

Service Retired Participants

Age	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	0	\$0	0	\$0	0	\$0
65-69	23	\$1,777,267	0	\$0	23	\$1,777,267
70-74	78	\$6,276,173	21	\$1,474,645	99	\$7,750,818
75-79	80	\$5,984,336	31	\$2,606,491	111	\$8,590,827
80-84	27	\$2,080,540	13	\$1,034,257	40	\$3,114,796
85-89	11	\$1,057,010	13	\$1,153,340	24	\$2,210,350
90-94	8	\$712,274	12	\$1,159,797	20	\$1,872,071
95-99	2	\$169,124	5	\$349,694	7	\$518,818
100+	0	\$0	0	\$0	0	\$0
Total	229	\$18,056,724	100	\$7,778,223	324	\$25,834,947

Disability Retired Participants

Age	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	0	\$0	0	\$0	0	\$0
65-69	3	\$216,288	8	\$564,708	11	\$780,996
70-74	50	\$3,801,265	29	\$2,011,326	79	\$5,812,591
75-79	30	\$2,137,626	34	\$2,617,554	64	\$4,755,180
80-84	11	\$831,149	16	\$1,370,309	27	\$2,201,458
85-89	5	\$425,200	4	\$304,430	9	\$729,630
90-94	0	\$111,785	4	\$355,113	4	\$355,113
95-99	0	\$0	1	\$65,195	1	\$65,195
100+	0	\$0	0	\$0	0	\$0
Total	99	\$7,411,529	96	\$7,288,635	195	\$14,700,164

Membership Information

Beneficiaries

Age	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	\$50,602	1	\$85,277	2	\$135,879
60-64	3	\$170,562	4	\$212,960	7	\$383,522
65-69	14	\$816,499	5	\$320,391	19	\$1,136,890
70-74	27	\$1,364,399	16	\$897,233	43	\$2,261,632
75-79	29	\$1,520,104	17	\$1,013,126	46	\$2,533,230
80-84	12	\$658,412	17	\$1,016,633	29	\$1,675,045
85-89	16	\$1,086,277	22	\$1,114,420	38	\$2,200,697
90-94	24	\$1,356,037	27	\$1,479,502	51	\$2,835,539
95-99	4	\$194,177	8	\$435,205	12	\$629,382
100+	2	\$138,651	0	0	2	\$138,651
Total	127	\$7,355,720	117	\$6,574,747	249	\$13,930,466

Membership Information

Participant Data Summary

	July 1, 2018			July 1, 2019		
	Police	Fire	Total	Police	Fire	Total
Active Participants						
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	\$0	\$0	\$0	\$0	\$0
Service Retirees						
Number	250	110	360	241	100	341
Average Age	75.0	80.8	76.8	75.7	80.9	77.2
Average Annual Benefit	\$77,420	\$77,216	\$77,358	\$76,879	\$80,605	\$77,972
Disabled Retirees						
Number	109	101	210	107	99	206
Average Age	74.2	75.6	74.9	75.2	76.4	75.8
Average Annual Benefit	\$73,959	\$72,635	\$73,322	\$73,598	\$74,879	\$74,214
Beneficiaries						
Number	133	134	267	127	124	251
Average Age	80.5	83.4	82.0	80.6	83.2	81.8
Average Annual Benefit	\$55,952	\$54,306	\$55,126	\$54,889	\$55,549	\$55,215
All Inactive						
Number	492	345	837	475	323	798
Average Age	76.3	80.3	77.9	76.9	80.4	78.3
Average Annual Benefit	\$70,850	\$66,976	\$69,253	\$70,261	\$69,231	\$69,844

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In Memoriam



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Oakland Police and Fire Department

Retiree & Beneficiary Deaths

Fiscal Year

2020—2021

Fire Members

Robert Allan	Retiree
Randal Bernard	Retiree
Dorothy Bovyer	Beneficiary
Alda M. Conner	Beneficiary
Mary Rose De Marco	Beneficiary
Barbette L. Graves	Beneficiary
Diane Green	Beneficiary
Roberta Heath	Beneficiary
Shirley Hill	Beneficiary
Robert Kenney	Retiree
Margaret King	Beneficiary
Ines Klingler	Beneficiary
Agnes D. Morrison	Beneficiary
Elaine Odell-Maier	Beneficiary
Patricia Opsahl	Beneficiary
Gino Pacini	Retiree
Lawrence Pinto	Retiree
James Powers	Retiree
Rose Prola	Beneficiary
Jeanne F. Ray	Beneficiary
Lawrence Ross	Retiree
Phyllis Spencer	Beneficiary
Robert Thorsen	Retiree
Lois Wilkinson	Beneficiary
Melvin Woolcock	Retiree

Police Members

Mary Alves	Beneficiary
John Beauchamp	Retiree
Richard Cademartori	Retiree
Delores Campbell	Beneficiary
William Carlson	Retiree
Cesar Celada	Retiree
Vaune Dillman	Retiree
Dennis Downum	Retiree
Lamar Dunster	Retiree
Donald Edwards	Retiree
Jacqueline Freitas-Hoeppner	Beneficiary
Victor Grant	Retiree
Robert Heritage	Retiree
Gloria Ann Kearns	Beneficiary
James Kennemore	Retiree
Jerry Kramer	Retiree
Evangeline Loey	Beneficiary
Raul Martin	Retiree
Patricia McCormac	Beneficiary
James McCuen	Retiree
Paddy McGrew	Retiree
Walter McIntyre	Retiree
Florine Mullins	Beneficiary
Elmer Pruitt	Retiree
Tillie E. Roehl	Beneficiary
Barbara Smith	Beneficiary
Valerie S. Smith	Beneficiary
Henry Tarabochia	Retiree
Steven Todar	Retiree
Winifred Walden	Beneficiary
Grace Wilson	Beneficiary
Artris Wiseman	Retiree

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EARNEST
PARTNERS

1180 PEACHTREE STREET + SUITE 2300
ATLANTA + GA + 30309

INVEST@EARNESTPARTNERS.COM
WWW.EARNESTPARTNERS.COM

***Oakland Police and Fire Retirement Board
December 31, 2021***

Patmon Malcom, CFA
Partner

Mr. Malcom is responsible for product management at EARNEST Partners. Prior to joining EARNEST Partners, he worked for JPMorgan Chase in New York. He was a member of the Global Investment Bank providing corporate finance coverage to natural resource companies. He is a graduate of the United States Military Academy at West Point and holds an MBA from Emory University, where he was a Donald Keough Scholar. Mr. Malcom led the Varsity Football team at West Point in scoring for three consecutive years. In his senior year, he was named the "Chevrolet Player of the Game" in the annual Army-Navy game. He also served as a helicopter pilot in the United States Army for more than seven years, an experience that included commanding a Blackhawk Helicopter Company along the demilitarized zone between North and South Korea. Mr. Malcom is a member of the CFA Institute and the CFA Society Atlanta.

Jeffrey Jackson
Director

Mr. Jackson is a member of the product management team at EARNEST Partners. Prior to joining EARNEST Partners, he worked for the global investment bank, Evercore, in New York where he helped lead their Real Estate advisory practice as a Managing Director. His extensive background also includes experience in acquisitions, development and debt restructuring within Real Estate. He is a graduate of the Tuck School of Business at Dartmouth where he holds an MBA and was a Consortium Fellow and he holds a BS in Finance from Hampton University where he was a Presidential Scholar. Mr. Jackson was a member of the SEO Career Program and later served as a member of the SEO Junior Leadership Board. Mr. Jackson is a former collegiate basketball player and maintains an active lifestyle with his passion for cycling.



Guidelines and Investment Policy Audit

Oakland Police and Fire Retirement Board
December 31, 2021

	Yes	No
• Benchmark: Exceed Russell Midcap® Index over a full market cycle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Cash position is less than 10% of total portfolio value*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• No industry sector weight greater than 25% of total portfolio	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• No security held is greater than 5% of total portfolio value* or 8% at market	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Proxies voted in accordance with guidelines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• No prohibited securities held	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EARNEST Partners believes that the attached information, along with other submissions, represents all the required reporting information. Please notify us immediately if any required information is missing.

**Threshold may be temporarily exceeded due to market conditions.*



Global equity markets were generally positive in the fourth quarter of 2021 as investors continued to gain confidence in the global economy. The S&P 500® rose 11.0% during the quarter and finished the year up 28.7% to hit a new record. The U.S. large cap market, as represented by the Russell 1000® Index, gained 9.8%. The U.S. midcap market, as represented by the Russell Midcap® index, rose by 6.4%. Small cap equities, as represented by the Russell 2000®, rose by 2.1%. International equity markets, as represented by the MSCI ACWI ex-U.S.® Index, rose by 1.9%. Emerging markets was the only segment to post a negative return as investors continued to incorporate uncertainty surrounding government regulations into their future price expectations. The MSCI Emerging Markets Index declined by 1.2%, while the MSCI EAFE rose by 2.7% during the quarter.

Domestic equities continued their march into record-setting territory as investors embraced economic growth, falling unemployment, and strengthening consumer demand. Despite marginally higher interest rate expectations and heightened inflation reports, investors continued to have faith in the ability of American businesses to expand their margins. American employers added a record number of jobs in 2021 and layoffs fell to the lowest level since 1969 as employment stayed near a 50-year low. As in the previous quarter, large-cap U.S. equities continued to be the biggest winners as investors embraced continued economic expansion and businesses' ability to adapt to the restrictions put on by the coronavirus pandemic. Larger businesses typically get better financing terms, which enabled them to refinance and/or raise funding at historically low rates as corporate debt hit record levels. Value stocks generally outperformed growth stocks as higher future rate expectations and prospects for more expensive future financing drove investors to favor consistent cash flow over potential future earnings growth. Despite concerns about the pandemic surrounding the emergence of a new variant, retail sales grew, and overall GDP grew at an annualized rate of 2.3% in the third quarter of the year. Vaccination distribution continued as the majority of Americans received shots, and new measures such as pills and booster shots were developed and approved to combat the ongoing pandemic.

Fed Chair Jerome Powell was nominated for a second four-year term, and the Fed began reducing asset purchases by \$15 billion a month, affirming that an improved economy and strengthening labor market reduced the need for continued stimulus. In December, the Fed acknowledged that the recent increases in CPI (6.2% annualized in October followed by 6.8% in November) warranted accelerated tapering of its \$120 billion a month stimulus program and it will reduce asset repurchases by \$30 billion a month (\$20B in treasuries and \$10B in mortgage-backed securities) beginning in January, meaning that new asset repurchase will end in March, although they did not shed any color on whether they would reduce the size of the balance sheet as a whole. The Fed's latest projections indicate that it expects to incorporate three hikes to the Federal Funds rate next year as it is forecasting a rate of 0.9% by the end of next year, 1.6% at the end of 2023 and 2.5% over the longer-run. The central bank forecast a 5.5% growth in GDP for 2021, slightly below its September estimate of 5.9%, but raised its forecast for 2022 growth to 4.0% from its earlier 3.8% estimate in September. After hitting a record high of 14.8% in April of last year, unemployment steadily declined to 4.2% in November.

Congress passed a \$1.2 Trillion infrastructure bill which provided for \$550 billion in new spending on transportation, roads/bridges, and utilities, but did not pass any stimulus measures directly linked to coronavirus. Since the pandemic began, Congress approved approximately \$5.3 Trillion in stimulus that included forgivable small business loans, direct payments to households, expanded unemployment benefits and vaccine funding.

Fixed income markets experienced their first negative year since 2013 as the Bloomberg Barclays Aggregate fell by about 1.5% during the year. The yield curve shifted up as demand for safe-haven fixed income instruments decreased and the Fed began to wind down stimulus measures. The yield on the 30-year finished the year at about 1.9%, well off of last year's lows, indicating that investors expect low to moderate long-term growth and inflation despite recent CPI readings. Within fixed income, only high yield securities posted a positive return during the year as their spread continued to tighten following weakening demand for treasuries and investors' confidence that these borrowers will meet their obligations.



EARNEST Partners

Mid Cap Core Portfolio Review

**Oakland Police and Fire Retirement
Board
December 31, 2021**

The U.S. mid cap equity market, as represented by the Russell Midcap® Index, generated strong performance in the fourth quarter expanding by more than 6% for the three-month period ended December 31, 2021. All but one sector generated positive returns with economic indicators continuing to improve as the market recovers from the impact of Covid and the numerous variants that have emerged. Real Estate, Utilities, and Materials were the top performing sectors while Communication Services, Health Care, and Consumer Discretionary were the worst performing sectors. The EARNEST Partners Mid Cap Core strategy meaningfully outperformed the Index, net of fees, in the quarter generating an absolute return in excess of 10% as a result of favorable stock selection notably in the Consumer Discretionary and Information Technology sectors. EARNEST Partners' focus on high-quality companies well-positioned to benefit over the long term resulted in an absolute return in excess of 20% for the year and relative benchmark outperformance over the trailing 1, 3, 5, 7, and 10-year periods, net of fees.

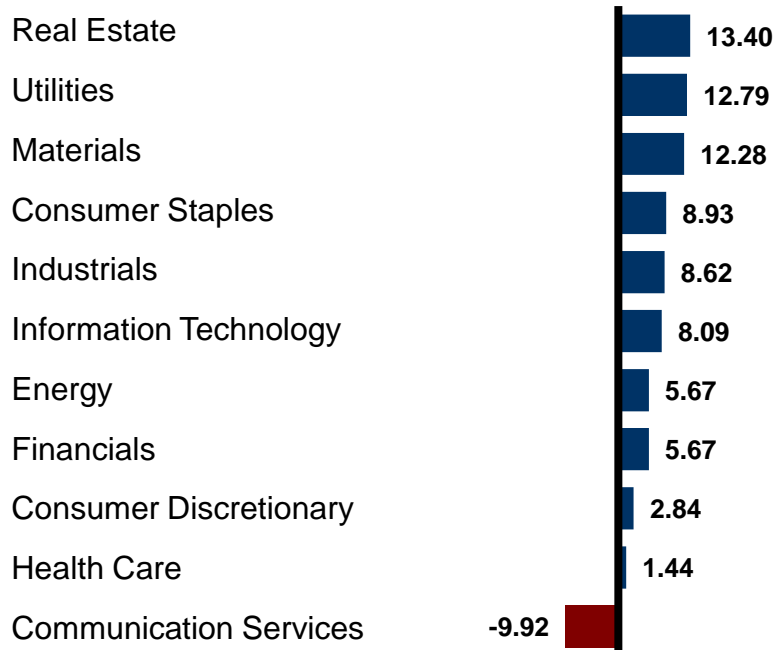
Contributing to performance was GATX Corporation. Based in Chicago, IL, GATX is a leader in leasing transportation assets and controls a large railcar fleet. The company leases, operates and manages long-lasting, widely used assets in rail, marine and industrial equipment markets across North America, Europe and Asia. The stock outperformed the index gaining 16% for the quarter as the company beat consensus EPS estimates by nearly 4%. Strong performance reflected increased demand for freight assets with GATX reporting a 99% and 98% utilization rate on the company's fleet domestically and internationally, respectively. GATX continues to be well positioned to benefit from shippers decreasing the size of their owned railcar fleets and increasingly moving to outsourced models. Earnings should continue to trend favorably as demand for railcars recovers driven by improvement in broader trade activity and the trend toward outsourcing continues with GATX benefiting disproportionately given its presence as a leading railcar lessor with long-standing relationships with shippers.

Eastman Chemical Company is a specialty chemical company that produces a variety of advanced materials and specialty additives found in every-day items ranging from tires to crop protection to animal nutrition. Eastman maintains four business segments: Additives & Functional Products, Advanced Materials, Chemical Intermediaries, and Fibers. The stock outperformed the Index gaining over 20% in the quarter as the company announced the sale of its adhesive resins business, the second divestiture in as many quarters. The deal was executed on an earnings neutral basis for a division that was underperforming, further reducing the complexity of Eastman's overall business and facilitating growth in core businesses. Eastman is well positioned given its favorable valuation metrics when compared to industry peers. The company displays considerable room for multiple expansion given recent divestitures, a strategic decision that should fund growth and facilitate margin improvement for the remaining business lines. The divestitures also provide the requisite cash needed to execute the share repurchase program which is expected to reduce shares outstanding by ~15%.

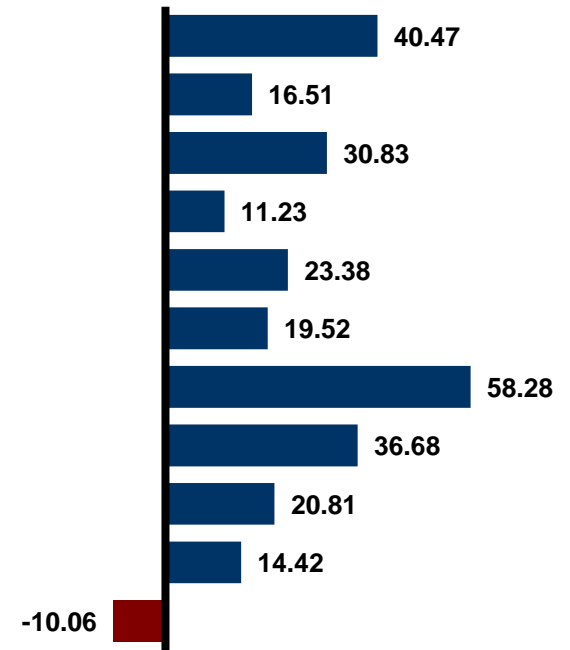
Detracting from performance, Darden Restaurants, Inc. is the world's largest full-service restaurant operator and holds a portfolio of some of the most recognizable concepts in full-service dining including Olive Garden, LongHorn Steakhouse, Bahama Breeze, The Capital Grille, and Seasons 52. Darden operates more than 1,700 restaurant locations and employs over 150,000 staff members. Darden shares underperformed for the quarter losing nearly 2% as labor shortages and inflationary pressures weighed on the stock. Despite these headwinds, the company reported better than expected earnings as the company continued to focus on its brands while optimizing operations and expenses. Darden is uniquely positioned to outperform its peers given its scale and operational expertise. Management has consistently demonstrated an ability to offset cost inflation through moderate price increases, reduced customer incentives, and productivity gains through process and menu simplification. Cost savings have enabled management to improve the quality of its food and size of its portions which is driving increased market share within the casual dining segment and growing earnings.

Equity Market Performance By Sector

Russell Midcap® Index
4th Quarter 2021 Returns
Percent



Russell Midcap® Index
YTD Returns
Percent

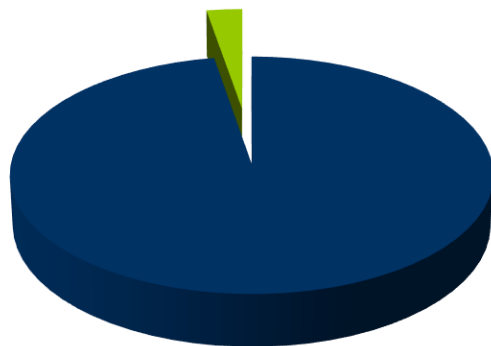




Fund Totals

Ending Portfolio Value	\$51,504,585
Estimated Annual Income	\$464,526
Yield on Equities	0.9%

Asset Distribution



Equities

Portfolio %

97.3%

Short-term Investments

2.7%

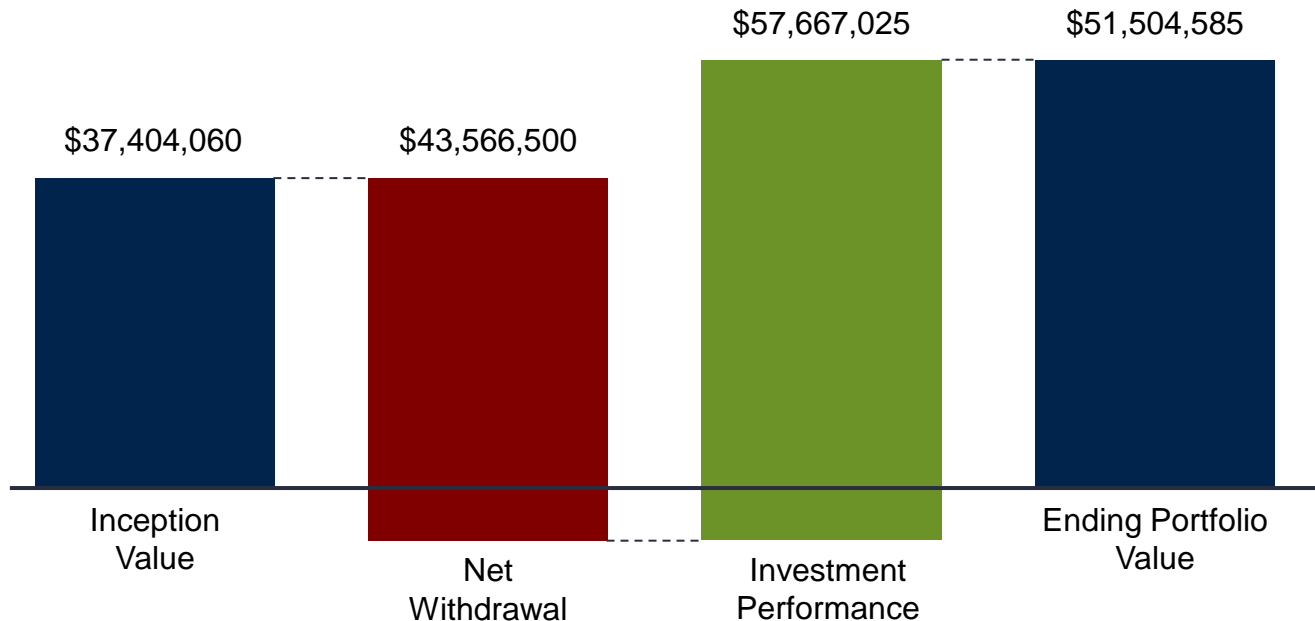


Performance

	<u>Total Portfolio</u>	<u>Russell Midcap® Index</u>	<u>Excess Return (Basis Points)</u>
1 Year	25.74%	22.58%	316
3 Years	28.20	23.26	494
5 Years	19.17	15.09	408
7 Years	16.08	12.22	386



Asset Growth Since Inception



GATX Corporation



- Based in Chicago, IL, GATX Corporation is a leader in leasing transportation assets and controls a large railcar fleet. The company leases, operates and manages long-lasting, widely used assets in rail, marine and industrial equipment markets across North America, Europe and Asia.
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- GATX continues to be well positioned to benefit from shippers decreasing the size of their owned railcar fleets and increasingly moving to outsourced models. Earnings should continue to trend favorably as demand for railcars recovers driven by improvement in broader trade activity and the trend toward outsourcing continues with GATX benefiting disproportionately given its presence as a leading railcar lessor with long-standing relationships with shippers.

Eastman Chemical



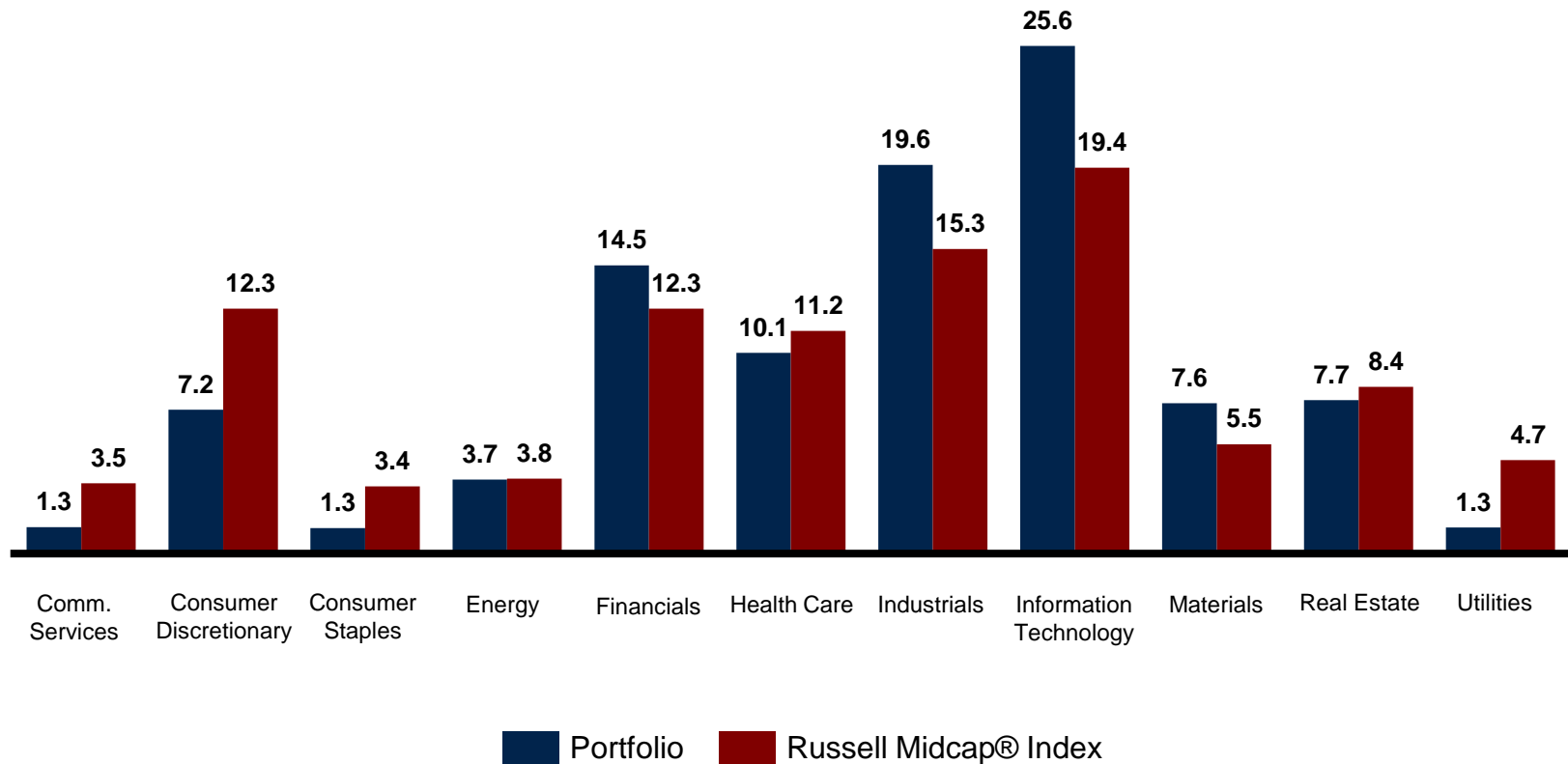
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Darden Restaurants, Inc.



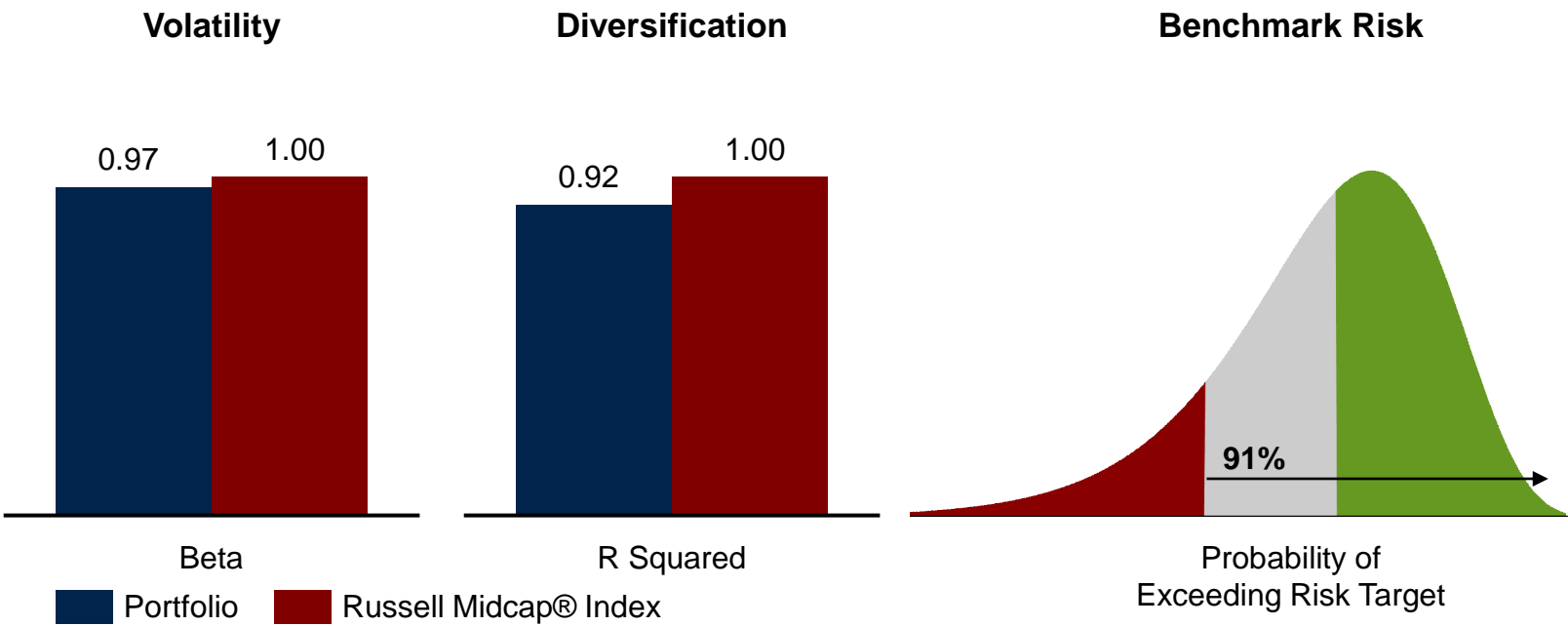
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Percentage Held





Risk Profile

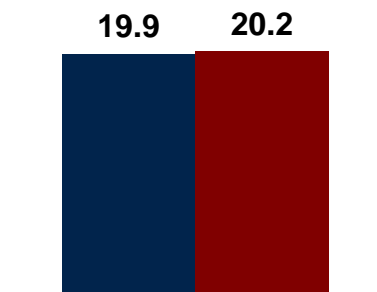




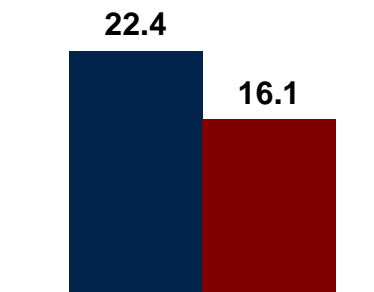
Equity Portfolio Characteristics

Oakland Police and Fire Retirement
Board
December 31, 2021

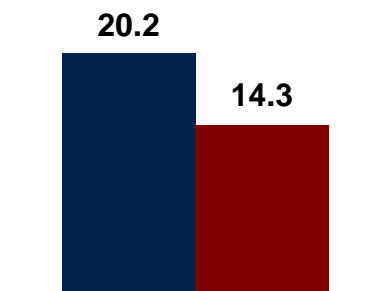
Price to Earnings



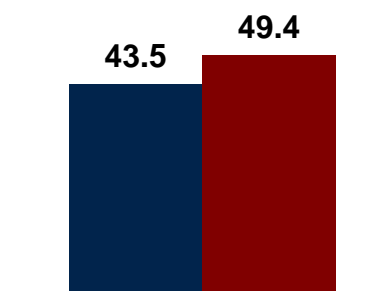
Earnings Growth



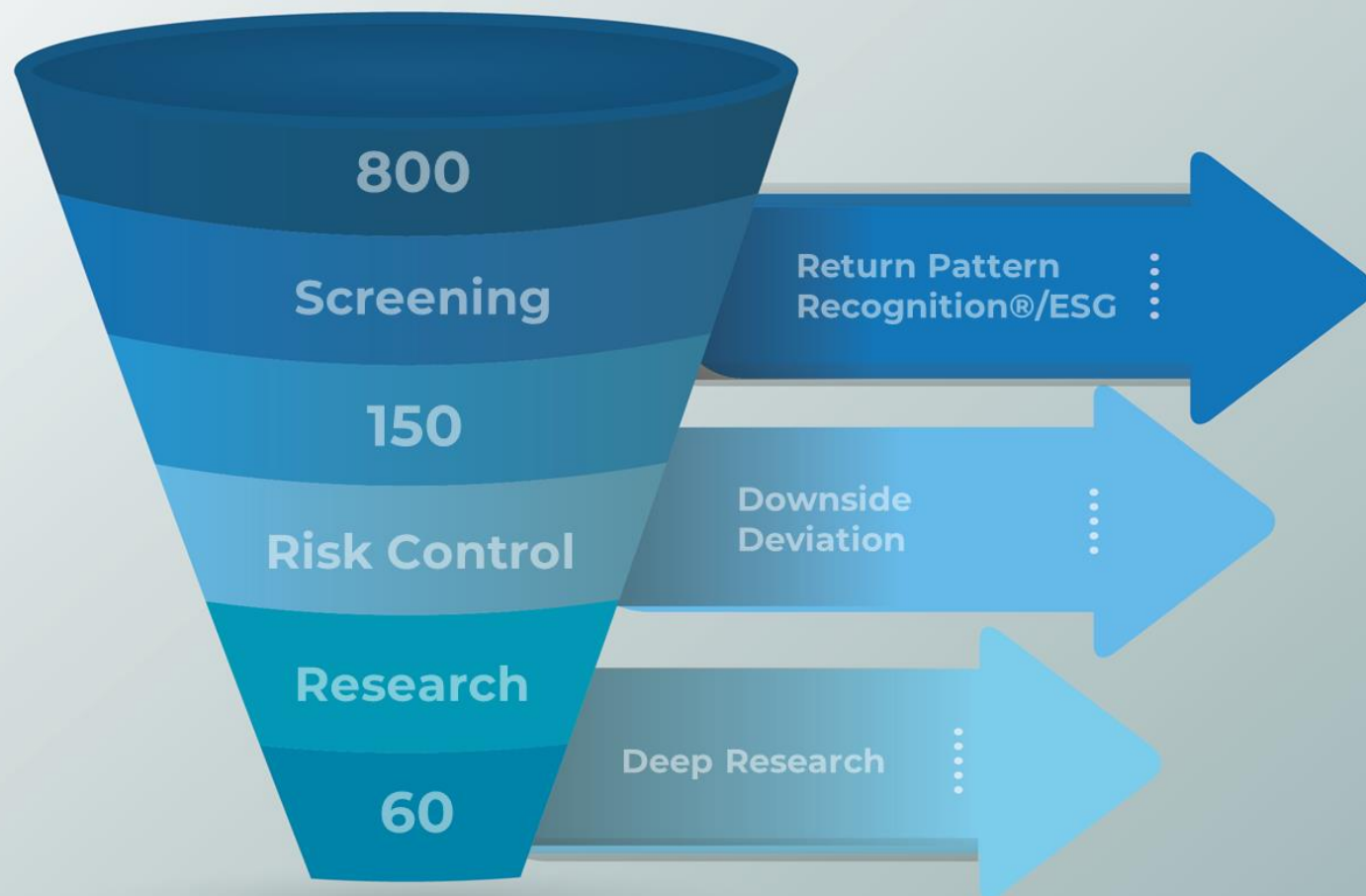
Return on Equity



Debt to Capitalization



■ Portfolio ■ Russell Midcap® Index



For those clients on whose behalf the Firm votes proxies, clients can elect to have the Firm utilize (a) the client's own proxy voting policies and procedures ("P&P") or (b) the Firm's P&P.

Proxy Policy-Overview

- As a general rule, the Firm will seek to vote the proxies received timely and in good order, in accordance with its then current proxy voting policies and procedures. A partial list of issues that may require special attention are as follows: classified boards, change of state of incorporation, poison pills, unequal voting rights plans, provisions requiring supermajority approval of a merger, executive severance agreements, and provisions limiting shareholder rights.
- In addition, the following will generally be adhered to:
 - The Firm will not (1) actively engage in conduct that involves an attempt to change or influence the control of a portfolio company, (2) announce its voting intentions or the reasons for a particular vote, (3) participate in a proxy solicitation or otherwise seek proxy voting authority from any other portfolio company shareholder, or (4) act in concert with any other portfolio company shareholders in connection with any proxy issue or other activity involving the control or management of a portfolio company.
 - All communications with portfolio companies or fellow shareholders will be for the sole purpose of expressing and discussing the Firm's concerns for its Clients' interests and not in an attempt to influence the control of management.

Proxy Procedures-Overview

The Firm has designated a Proxy Director. The Proxy Director, in consultation with the Firm's Investment Team, will consider each issue presented on each portfolio company proxy. The Proxy Director will also use available resources, including proxy evaluation services, to assist in the analysis of proxy issues. Absent any written direction from the Client, proxy issues presented to the Proxy Director will be voted in accordance with the judgment of the Proxy Director, taking into account the general policies outlined above and the Firm's Proxy Voting Guidelines. Therefore, it is possible that actual votes may differ from the general policies and the Firm's Proxy Voting Guidelines. In the case where the Firm believes it has a material conflict of interest with a Client, the Proxy Director will utilize the services of outside third party professionals (currently ISS) to assist in its analysis of voting issues and the actual voting of proxies to ensure that a decision to vote the proxies was based on the Client's best interest and was not the product of a conflict of interest. In the event the services of an outside third party professional are not available in connection with a conflict of interest, the Firm will seek the advice of the Client.

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
Common Stock						
Communication Services						
10,010.00	ACTIVISION BLIZZ	66.53	665,965.30	1.29	2,978.93	0.45
			665,965.30	1.29	2,978.93	0.45
Consumer Discretionary						
14,514.00	DR HORTON INC	108.45	1,574,043.30	3.06	19,451.85	1.24
7,886.00	DARDEN RESTAURAN	150.64	1,187,947.04	2.31	32,998.53	2.78
11,404.00	TJX COS INC	75.92	865,791.68	1.68	14,167.99	1.64
			3,627,782.02	7.04	66,618.37	1.84
Consumer Staples						
8,169.00	SYSCO CORP	78.55	641,674.95	1.25	13,518.83	2.11
			641,674.95	1.25	13,518.83	2.11
Energy						
20,722.00	CONTL RES INC/OK	44.76	927,516.72	1.80	0.00	
49,323.00	CABOT OIL & GAS	19.00	937,137.00	1.82	9,506.04	1.01
			1,864,653.72	3.62	9,506.04	0.51
Financials						
8,420.00	HOULIHAN LOKEY I	103.52	871,638.40	1.69	18,303.90	2.10
8,407.00	INTERCONTINENTAL	136.77	1,149,825.39	2.23	14,948.98	1.30
36,150.00	KEYCORP	23.13	836,149.50	1.62	20,477.13	2.45
9,269.00	PROGRESSIVE CORP	102.65	951,462.85	1.85	0.00	

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
7,608.00	REINSURANCE GROU	109.49	832,999.92	1.62	12,490.63	1.50
10,275.00	RAYMOND JAMES RENAISSANCERE HOLDINGS	100.40	1,031,610.00	2.00	0.00	
4,212.00	LTD	169.33	713,217.96	1.38	7,848.67	1.10
12,639.00	STIFEL FINANCIAL	70.42	890,038.38	1.73	0.00	
			7,276,942.40	14.13	74,069.30	1.02
Health Care						
7,071.00	AGILENT TECH INC	159.65	1,128,885.15	2.19	10,977.58	0.97
4,245.00	AMERISOURCEBERGE	132.89	564,118.05	1.10	9,958.88	1.77
1,547.00	BIO-RAD LABS-A	755.57	1,168,866.79	2.27	0.00	
2,443.00	LABORATORY CP	314.21	767,615.03	1.49	0.00	
8,106.00	SYNEOS HEALTH IN	102.68	832,324.08	1.62	0.00	
10,901.00	DENTSPLY SIRONA	55.79	608,166.79	1.18	4,877.60	0.80
			5,069,975.89	9.84	25,814.05	0.51
Industrials						
16,343.00	AIR LEASE C	44.23	722,850.89	1.40	6,973.96	0.96
2,943.00	CUMMINS INC	218.14	641,986.02	1.25	20,814.92	3.24
22,050.00	CSX CORP	37.60	829,080.00	1.61	0.00	
4,408.00	DOVER CORP	181.60	800,492.80	1.55	20,680.59	2.58
5,652.00	GATX CORP	104.19	588,881.88	1.14	15,003.36	2.55
3,389.00	GENERAL DYNAMICS	208.47	706,504.83	1.37	14,021.54	1.98
13,595.00	MASCO CORP	70.22	954,640.90	1.85	0.00	

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
10,130.00	REPUBLIC SVCS	139.45	1,412,628.50	2.74	28,314.12	2.00
3,350.00	SNAP-ON INC	215.38	721,523.00	1.40	14,608.61	2.02
10,283.00	STERICYCLE INC	59.64	613,278.12	1.19	0.00	0.00
16,142.00	SENSATA TECHNOLO	61.69	995,799.98	1.93	0.00	0.00
7,584.00	WOODWARD INC	109.46	830,144.64	1.61	0.00	
			9,817,811.56	19.06	120,417.10	1.23
Information Technology						
6,209.00	AKAMAI TECHNOLOG	117.04	726,701.36	1.41	0.00	
5,129.00	APPLIED MATERIAL	157.36	807,099.44	1.57	14,256.56	1.77
3,257.00	ANSYS INC	401.12	1,306,447.84	2.54	0.00	
6,656.00	ARROW ELECTRONIC	134.27	893,701.12	1.74	0.00	
8,653.00	BLACK KNIGHT	82.89	717,247.17	1.39	0.00	
4,257.00	BROADRIDGE FINL	182.82	778,264.74	1.51	9,921.13	1.27
5,349.00	CMC MATERIALS INC	191.69	1,025,349.81	1.99	15,506.23	1.51
20,859.00	CDK GLOBAL INC	41.74	870,654.66	1.69	7,970.59	0.92
5,381.00	GLOBAL PAYMENTS	135.18	727,403.58	1.41	264.53	0.04
7,584.00	KEYSIGHT TEC	206.51	1,566,171.84	3.04	0.00	
2,093.00	LUMENTUM HOL	105.77	221,376.61	0.43	0.00	
2,863.00	SYNOPSYS INC	368.50	1,055,015.50	2.05	0.00	
7,325.00	SKYWORKS Solutio	155.14	1,136,400.50	2.21	0.00	
4,694.00	XILINX INC	212.03	995,268.82	1.93	22,005.03	2.21

Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
			12,827,102.99	24.90	69,924.07	0.55
Materials						
4,652.00	ALBEMARLE CORP	233.77	1,087,498.04	2.11	15,562.23	1.43
5,141.00	EASTMAN CHEMICAL	120.91	621,598.31	1.21	13,965.70	2.25
3,978.00	PACKAGING CORP	136.15	541,604.70	1.05	15,270.08	2.82
14,180.00	SEALED AIR CORP	67.47	956,724.60	1.86	14,430.92	1.51
3,652.00	SCOTTS MIRACLE	161.00	587,972.00	1.14	0.00	
			3,795,397.65	7.37	59,228.93	1.56
Real Estate						
13,851.00	CBRE GROUP INC	108.51	1,502,972.01	2.92	0.00	
			1,502,972.01	2.92	0.00	0.00
Utilities						
6,746.00	WEC ENERGY GROUP	97.07	654,834.22	1.27	22,450.88	3.43
			654,834.22	1.27	22,450.88	3.43
			47,745,112.71	92.70	464,526.51	0.97
Real Estate Investment Trust						
Real Estate						
6,383.00	BOSTON PROPERTIE	115.18	735,193.94	1.43	0.00	
24,307.00	AMERICOLD REALTY	32.79	797,026.53	1.55	0.00	
2,151.00	SBA COMM CORP	389.02	836,782.02	1.62	0.00	
			2,369,002.49	4.60	0.00	0.00



Statement of Assets

Quantity	Security	Price	Market Value	Pct. Asset	Annual Income	Yield
			2,369,002.49	4.60	0.00	0.00
Cash and Equivalents						
1,354,610.69	U.S. DOLLARS	1.00	1,354,610.69	2.63	0.00	
35,859.15	USD - DIVIDENDSRECEIVABLE	1.00	35,859.15	0.07	0.00	
			1,390,469.84	2.70	0.00	0.00
			1,390,469.84	2.70	0.00	0.00
Total Portfolio			51,504,585.04	100.00	464,526.51	0.90

Statement Of Transactions

From 10/1/2021 to 12/31/2021

<u>Quantity</u>	<u>Security</u>	<u>Sec Symbol</u>	<u>Unit Price</u>	<u>Total Amount</u>
PURCHASES				
3,517.00	CDK GLOBAL INC	CDK	41.27	145,145.59
2,093.00	LUMENTUM HOL	LITE	105.83	221,497.46
2,106.00	TJX COS INC	TJX	74.21	156,295.32
1,583.00	WOODWARD INC	WWD	106.95	169,305.32
3,168.00	REINSURANCE GROU	RGA	102.40	324,396.91
6,404.00	AMERICOLD REALTY	COLD	29.77	190,645.08
				<u>1,207,285.68</u>
SALES				
1,064.00	CMC Materials Inc	CCMP	185.23	197,087.84
8,090.00	DOLLAR TREE INC	DLTR	136.65	1,105,464.50
1,198.00	APPLIED MATERIAL	AMAT	143.56	171,982.80
913.00	INTERCONTINENTAL	ICE	129.36	118,101.78
2,050.00	TJX COS INC	TJX	69.27	141,997.85
				<u>1,734,634.77</u>



Historical Performance Measurement

Oakland Police and Fire Retirement
Board
December 31, 2021

Performance

	Total Portfolio	Russell Midcap® Index
<i>Inception 3/28/2006</i>		
2006	3.56%	7.92%
2007	8.78	5.60
2008	-37.51	-41.46
2009	37.48	40.48
2010	27.22	25.47
2011	-0.79	-1.56
2012	16.36	17.29
2013	31.25	34.78
2014	10.32	13.22
2015	1.40	-2.44
2016	16.55	13.80
2017	26.22	18.52
2018	-9.63	-9.05



Historical Performance Measurement

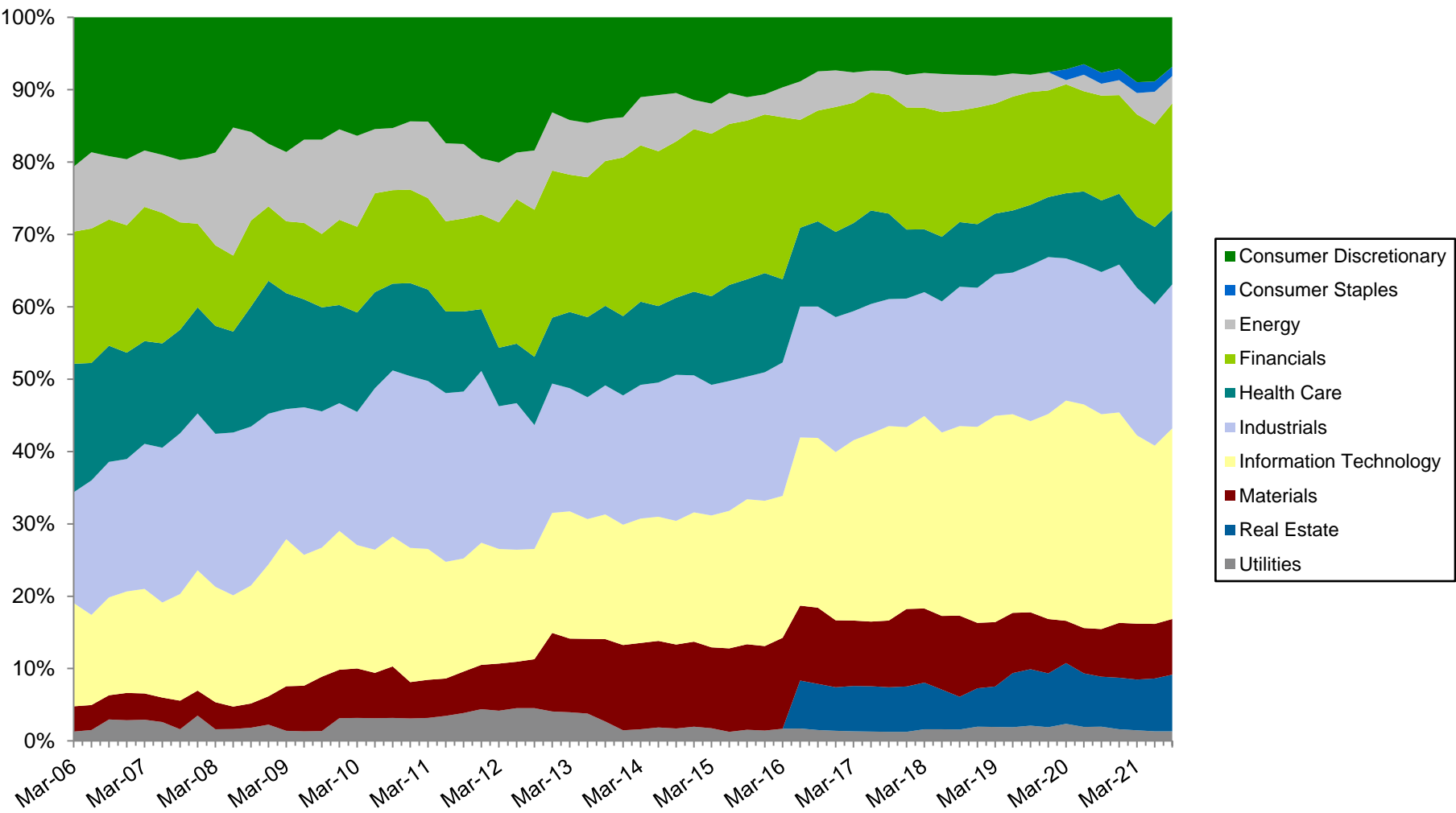
Oakland Police and Fire Retirement Board
December 31, 2021

Performance

	Total Portfolio	Russell Midcap® Index
2019	38.36	30.54
2020	21.20	17.10
3/31/2021	9.62	8.14
6/30/2021	4.11	7.50
9/30/2021	-1.02	-0.93
12/31/2021	11.30	6.44
Year-to-Date	25.74	22.58
Since Inception		
-Annualized	11.85	10.22
-Cumulative	484.95	364.55



EARNEST Partners' Model Portfolio





Asset Growth

Period Ending	Ending Portfolio Value	Withdrawals	Contributions	Investment Change	
				Period	Since Inception
3/28/2006	\$37,404,060				
2006	\$38,599,735	\$0	\$0	\$1,195,675	\$1,195,675
2007	51,982,630	3,500,000	14,238,849	2,644,046	3,839,721
2008	26,001,788	10,000,000	0	-15,980,842	-12,141,121
2009	32,406,299	3,000,000	0	9,404,511	-2,736,610
2010	31,053,473	8,500,000	0	7,147,174	4,410,564
2011	23,758,477	7,500,000	0	205,004	4,615,568
2012	27,646,027	0	0	3,887,550	8,503,118
2013	40,899,931	0	3,802,146	9,451,898	17,955,016
2014	31,527,407	13,001,627	0	3,629,103	21,584,119
2015	29,934,966	2,000,704	0	408,263	21,992,382

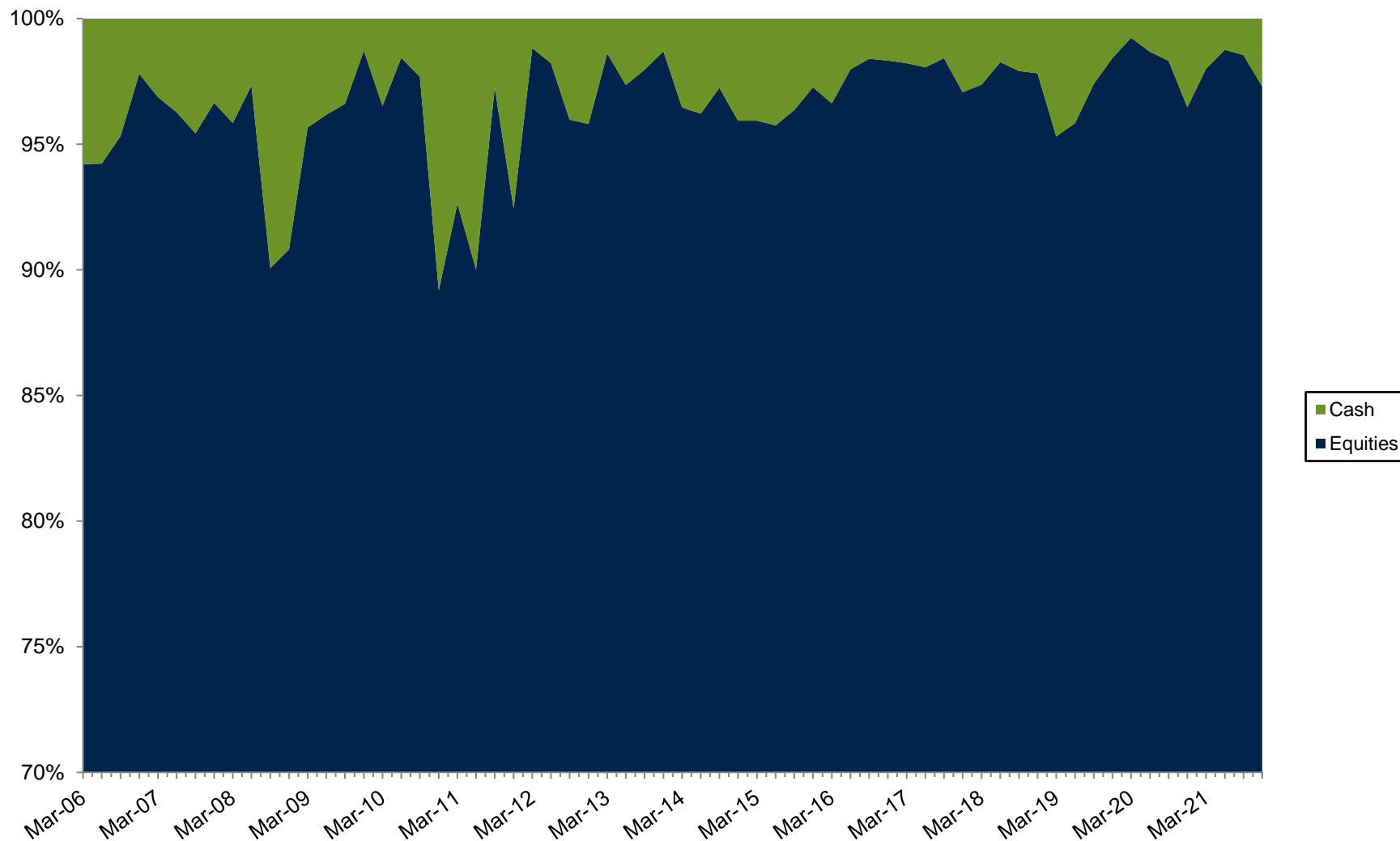
Asset Growth

Period Ending	Ending Portfolio Value	Withdrawals	Contributions	Investment Change	
				Period	Since Inception
2016	\$27,890,394	\$6,500,289	\$0	\$4,455,717	\$26,448,099
2017	29,426,736	5,000,733	0	6,537,075	32,985,174
2018	25,674,345	1,000,929	0	-2,751,462	30,233,712
2019	33,800,363	1,601,235	0	9,727,253	39,960,965
2020	40,963,482	0	0	7,163,875	47,124,840
3/31/2021	44,905,670	0	0	3,942,679	51,067,519
6/30/2021	46,751,367	0	0	1,846,015	52,913,534
9/30/2021	46,275,569	0	0	-475,589	52,437,945
12/31/2021	\$51,504,585	0	0	5,229,080	57,667,025



Asset Allocation

Oakland Police and Fire Retirement Board
December 31, 2021





Broker Commission Report
Oakland Police and Fire Retirement Board

Broker	Quantity	Commission Per Share	Commission Paid	% of Total Commission	Total Value of Trades	BP Cost Comm
BLAYLOCK BEAL VAN LLC (0443)	15,526	0.020	310.52	35.14	1,430,102.85	0.0002



Diversity Representation Survey for Oakland Police and Fire

DATA AS OF 01/31/2022

Firm Name	EARNEST Partners
Product Name	EARNEST Partners Mid Cap Core
Total Number of Employees	42

	Percentage (%) of Board of Directors / Managing Members	Percentage(%) of Firm (Entire Staff)	Percentage (%) of Firm (Investment Professionals)
Race and Ethnicity*			
African American/Black		21%	13%
Asian/Hawaiian/Pacific Islander		24%	33%
Latino/Hispanic			
White		55%	53%
American Indian/Alaska Native			
Other			
Gender			
Male		60%	73%
Female		40%	27%
Non-Identified/Other			

* Racial/ethnic categories appear as defined by EEOC guidance.

Russell Midcap® Index

The Russell Midcap® Index offers investors access to the mid-cap segment of the U.S. equity universe. It is constructed to provide a comprehensive and unbiased barometer for the mid-cap segment and is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true mid-cap opportunity set. The Russell Midcap® Index includes the smallest 800 securities in the Russell 1000® Index. The index is unmanaged and it is not possible to invest directly in an index.



Nothing presented herein is intended to constitute investment advice and no investment decision should be made based on any information provided herein. Investments cited may not represent current or future holdings of EARNEST Partners, LLC (“EP”) investment products and nothing presented should be construed as a recommendation to purchase or sell a particular type of security or follow any investment technique or strategy. Information provided reflects EP's views as of a particular time. Such views are subject to change at any point and EP shall not be obligated to provide any notice of such change. Any forward-looking statements or forecasts are based on assumptions and actual results are expected to vary from any such statements or forecasts. No reliance should be placed on any such statements or forecasts when making any investment decision. While EP has used reasonable efforts to obtain information from reliable sources, we make no representations or warranties as to the accuracy, reliability or completeness of third-party information presented herein. Performance assumes the reinvestment of dividends and capital gains. No guarantee of investment performance is being provided and no inference to the contrary should be made.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon, Jason Campbell
Meketa Investment Group
DATE: February 23, 2022
RE: EARNEST Partners – Manager Update

Manager: EARNEST Partners

Inception Date: 04/2006 **OPFRS AUM (12/31/21):** \$51.50 Million (10.5%)

Management Fee: 79 bps (\$406,866)¹

Investment Strategy: Domestic Mid-Cap Equity

Benchmark: Russell Midcap Index **Firm-wide AUM (12/31/21):** \$28.6 billion²

Summary & Recommendation

EARNEST Partners has managed the Midcap Core portfolio since the first quarter of 2006. Since inception, EARNEST has outperformed its benchmark. *Meketa does not have any major concerns with Earnest Partners and recommends renewal of its contract with OPFRS.*

Discussion

In reviewing EARNEST, Meketa considered investment performance and recent organizational / personnel issues.

Annualized Investment Performance (as of 12/31/2021)

	MKT Value (\$000)	Quarter	1 YR	3 YR	5 YR	Since Inception	Inception Date ³
Earnest Partners (Gross of Fees)	51,502	11.3	25.7	28.2	19.2	11.8	3/2006
Earnest Partners (Net of Fees)	51,502	11.1	24.9	27.4	18.4	11.0	--
<i>Russell Midcap Index</i>	--	6.4	22.6	23.3	15.1	10.2	--
Excess Return (Net of Fees)	--	+3.7	+2.3	+4.1	+3.3	+0.8	--

EARNEST has outperformed the Russell Midcap Index by 80 basis points since inception in 2006. EARNEST has been a part of the portfolio for over a decade and continues to deliver outperformance, even in recent years.

¹ Estimate based on AUM as of 12/31/21.

² Source: Manager

³ Inception date reflects the first full month after portfolio received initial funding.

Organizational Issues

EARNEST Partners		Areas of Potential Impact			
	Level of Concern^	Investment process (client portfolio)	Investment Team	Performance Track Record	Team/ Firm Culture
Product					
Key people changes	None				
Changes to team structure/individuals' roles	None				
Product client gain/losses	None				
Changes to the investment process	None				
Personnel turnover	None				
Organization					
Ownership changes	None				
Key people changes	None				
Firm wide client gain/losses	None				
Recommended Action	None - X		Watch Status	Termination	

Investment Philosophy & Process, per manager

EARNEST Partners is a fundamental, bottom-up investment manager. The investment objective is to outperform the assigned benchmark while seeking to control volatility and risk. EARNEST implements this philosophy using an internally developed screen called Return Pattern Recognition® that seeks to identify the specific drivers of each stock rather than attempting to apply the same dogma to each stock. They believe that companies are unique and consider the specific characteristics of each company when selecting companies. They continue to search for mispriced and misunderstood opportunities within the market.

EARNEST Partners does not target sector or industry weights. Instead, the weightings are an outgrowth of the bottom-up, fundamental stock selection process. The process is designed to put the client in the individual securities that the firm believes have the most attractive expected returns; relative overweights and underweights are an outgrowth of where the team is finding those individual opportunities. The risk management process also influences the weights taken in any one sector. As a general rule, larger sectors will not represent more than 2x the benchmark weight. No individual holding generally exceeds 5.0% of the portfolio's value.

DS/PN/JC/ep

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8038

*Approved to Form
and Legality*



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION AUTHORIZING ONE-YEAR EXTENSION OF
PROFESSIONAL SERVICES AGREEMENT WITH EARNEST PARTNERS,
LLC FOR THE PROVISION OF DOMESTIC EQUITY MID-CAP CORE
ASSET CLASS INVESTMENT MANAGER SERVICES FOR THE CITY OF
OAKLAND POLICE AND FIRE RETIREMENT SYSTEM**

WHEREAS, Oakland City Charter section 2601(e) states that the Board of the Oakland Police and Fire Retirement System (“PFRS Board”) shall possess power to make all necessary rules and regulation for its guidance and shall have exclusive control of the administration and investment of the funds established for the maintenance and operation of the system; and

WHEREAS, Oakland City Charter section 2601(e) also states that the PFRS Board may secure from competent investment counsel such counsel and advice as to investing the funds of the Retirement System as it deems necessary and that discretionary powers granted such investment counsel will be at the option of the Board; and

WHEREAS, at the November 30, 2005 Board meeting, the PFRS Board awarded a professional service agreement (“the Agreement”) to Earnest Partners, LLC (“Investment Counsel”) to provide advice and counsel regarding investments of the assets of the Police and Fire Retirement Fund (“Fund”) for a five-year term commencing March 24, 2006 and ending March 24, 2011; and

WHEREAS, Section XXVII of the Agreement allows for modification of the Agreement by written agreement of all parties; and

WHEREAS, Section IV(B) of the Agreement gave the PRFRS Board the option to extend the initial term of the Agreement for three additional one-year terms; and

WHEREAS, on January 26, 2011, the Agreement with Investment Counsel was extended by Board motion for an additional five-year term, commencing March 24, 2011, and

WHEREAS, on March 30, 2016, the Agreement with Investment Counsel was

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8038

extended by Board motion for an addition one-year term, effective March 24, 2016, and

WHEREAS, on March 29, 2017, the PFRS Board passed Resolution No. 6957 which authorized amendment of Section IV(B) of the Agreement to provide the PFRS Board with unlimited one-year extension options, and

WHEREAS, on January 31, 2018, the PFRS Board passed Resolution No. 6993 which authorized a one-year extension of the Agreement with Investment Counsel commencing March 24, 2018, and

WHEREAS, on January 30, 2019, the PFRS Board passed Resolution No. 7036 which authorized a one-year extension of the Agreement with Investment Counsel, commencing March 24, 2019, and

WHEREAS, on January 29, 2020, the PFRS Board passed Resolution No. 7080 which authorized a one-year extension of the Agreement with Investment Counsel, commencing March 24, 2020, and

WHEREAS, on February 24, 2021, the PFRS Board passed Resolution No. 8011 which authorized a one-year extension of the Agreement with Investment Counsel, commencing March 24, 2021, and

WHEREAS, the Board now wishes to exercise its option to renew the Agreement with Investment Council for an additional one-year term, commencing March 24, 2022; now, therefore, be it

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8038

RESOLVED: That the Board hereby authorizes a one-year extension of the professional service agreement between the City of Oakland Police and Fire Retirement System and Earnest Partners, LLC for the provision of Domestic Equity Mid-Cap Core Asset Class Investment Manager Services, commencing March 24, 2022 and ending March 24, 2023.

IN BOARD MEETING, VIA ZOOM TELE-CONFERENCE **FEBRUARY 23, 2022**

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

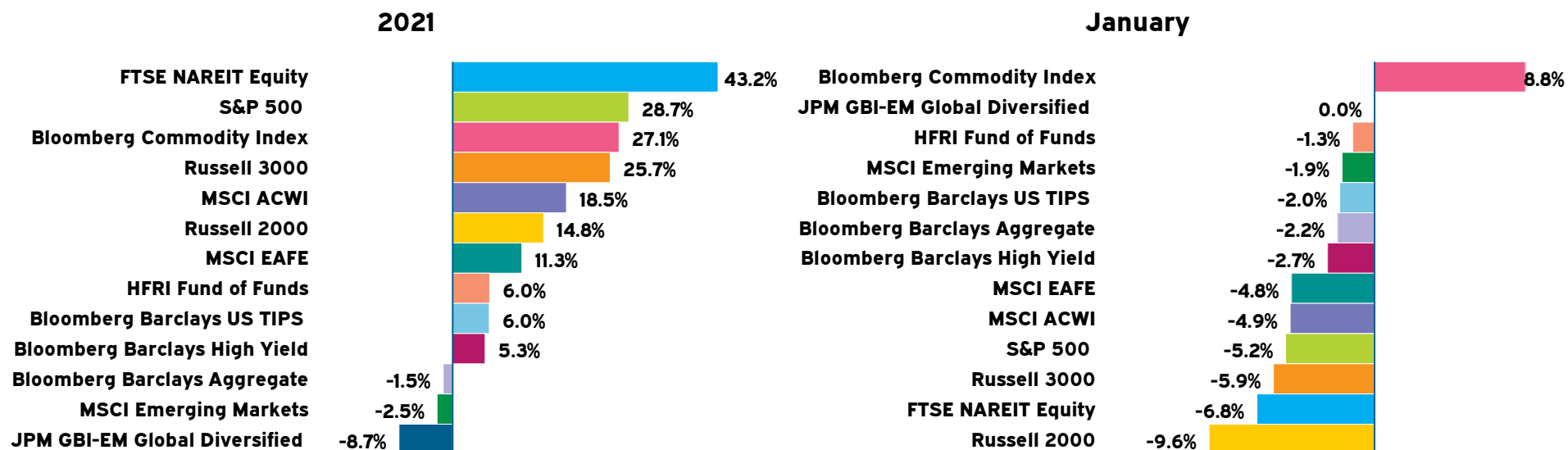
Economic and Market Update

January 2022 Report

January Commentary

- Expectations for policy tightening to happen faster than previously expected given persistent inflation led to significant volatility to start the year.
 - With a few exceptions most asset classes were down in January.
 - Volatility in equities, as represented by the VIX, spiked.
 - Equity markets led declines with the US down the most.
 - Rates increased across the US yield curve, with flattening continuing.
 - Value once again outpaced growth in the US given higher rates.
 - The dollar strengthened against a broad basket of peers with a few commodity-sensitive currencies outperforming.
 - Inflation expectations fell but remain elevated.
- Looking ahead, the pace of policy tightening, the track of inflation, geopolitical issues, and the path of the virus will all be key.

Index Returns¹



- Outside of emerging markets and the broad US investment grade bond market (Barclays Aggregate), most asset classes increased in 2021.
- In comparison, 2022 is off to a weak start with all major asset classes declining given expectations for policy tightening.

¹ Data Source: Bloomberg and FactSet. Data is as of January 31, 2022.

Domestic Equity Returns¹

Domestic Equity	January (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	-5.2	23.3	20.7	16.8	15.4
Russell 3000	-5.9	18.8	19.9	16.1	15.0
Russell 1000	-5.6	20.3	20.5	16.6	15.3
Russell 1000 Growth	-8.6	17.5	26.4	22.3	18.0
Russell 1000 Value	-2.3	23.4	13.8	10.5	12.3
Russell MidCap	-7.4	13.9	16.1	12.8	13.4
Russell MidCap Growth	-12.9	-1.5	17.4	15.8	14.2
Russell MidCap Value	-4.3	23.1	14.1	9.9	12.4
Russell 2000	-9.6	-1.2	12.0	9.7	11.3
Russell 2000 Growth	-13.4	-15.0	11.4	10.9	11.7
Russell 2000 Value	-5.8	14.8	11.7	7.9	10.6

US Equities: Russell 3000 Index -5.9%, and value indices outperformed growth in January.

- All US stock indices posted negative returns in January 2022 as the prospect of a faster tightening of monetary policy was priced in.
- As the economic impact of the virus continued to recede and rates rose, value stocks continued to outpace growth stocks partly driven by strong double-digit results in the energy sector given rising prices and weak results in technology (large cap space) and health care (small cap space).
- Large company stocks (Russell 1000) declined less than small company stocks (Russell 2000).

¹ Source: Bloomberg. Data is as of January 31, 2022.

Foreign Equity Returns¹

Foreign Equity	January (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI	-4.9	13.2	15.4	12.6	10.7
MSCI ACWI Ex US	-3.7	3.6	9.1	8.0	6.2
MSCI EAFE	-4.8	7.0	9.3	7.9	6.9
MSCI EAFE (Local Currency)	-3.6	14.8	10.0	7.5	9.3
MSCI EAFE Small Cap	-7.3	2.4	9.9	8.6	9.1
MSCI Emerging Markets	-1.9	-7.2	7.2	8.3	4.2
MSCI Emerging Markets (Local Currency)	-1.8	-5.6	8.8	9.3	7.1

International Developed Market Equities: MSCI EAFE -4.8% and MSCI ACWI ex US -3.7%.

- Non-US stocks also posted negative returns in January given the outlook for global interest rates but declined less than US equities.
- Developed markets trailed emerging markets with tensions between Russia and the Ukraine and higher inflation weighing on Europe. The dynamic of value outpacing growth also persisted in Europe and Japan.
- A strong US dollar weighed on developed foreign markets for US investors.

Emerging Markets: MSCI EM -1.9% in January.

- Emerging markets declined the least during the month of January partly due to some oil exporters benefiting from higher energy prices.
- Currency dynamics had less of an impact on results compared to developed markets.

¹ Source: Bloomberg. Data is as of January 31, 2022.

Fixed Income Returns¹

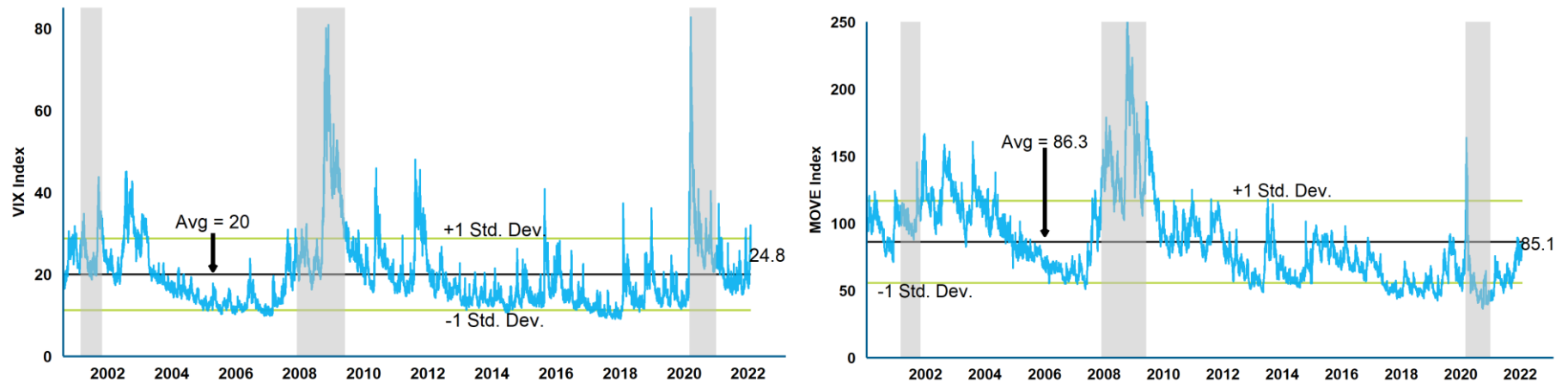
Fixed Income	January (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-2.2	-2.7	3.9	3.3	3.0	2.5	6.5
Bloomberg Aggregate	-2.2	-3.0	3.7	3.1	2.6	2.1	6.7
Bloomberg US TIPS	-2.0	3.5	7.2	4.7	2.7	1.7	7.6
Bloomberg High Yield	-2.7	2.1	6.3	5.4	6.2	5.3	4.5
JPM GBI-EM Global Diversified	0.0	-7.8	0.3	2.4	0.0	5.7	5.2

Fixed Income: Barclays Universal -2.2% in January.

- Given expectations for a faster than previously expected pace of rate increases and balance sheet reduction by the Federal Reserve to combat persistent inflation, the broad US bond market (Barclays Aggregate) declined in January. The nominal 10-year Treasury yield rose to nearly 2%.
- Yields for TIPS rose given expectations for tighter policy from the Federal Reserve.
- Credit spreads widened but continued to trade at historically tight levels given relatively strong corporate health and high investor demand in the low-rate environment.
- Outside of the US, global sovereign debt yields across developed and emerging economies also generally rose on inflation concerns and expectations for higher policy rates.

¹ Source: Bloomberg. JPM GBI-EM is from InvestorForce, data is as of January 31, 2022.

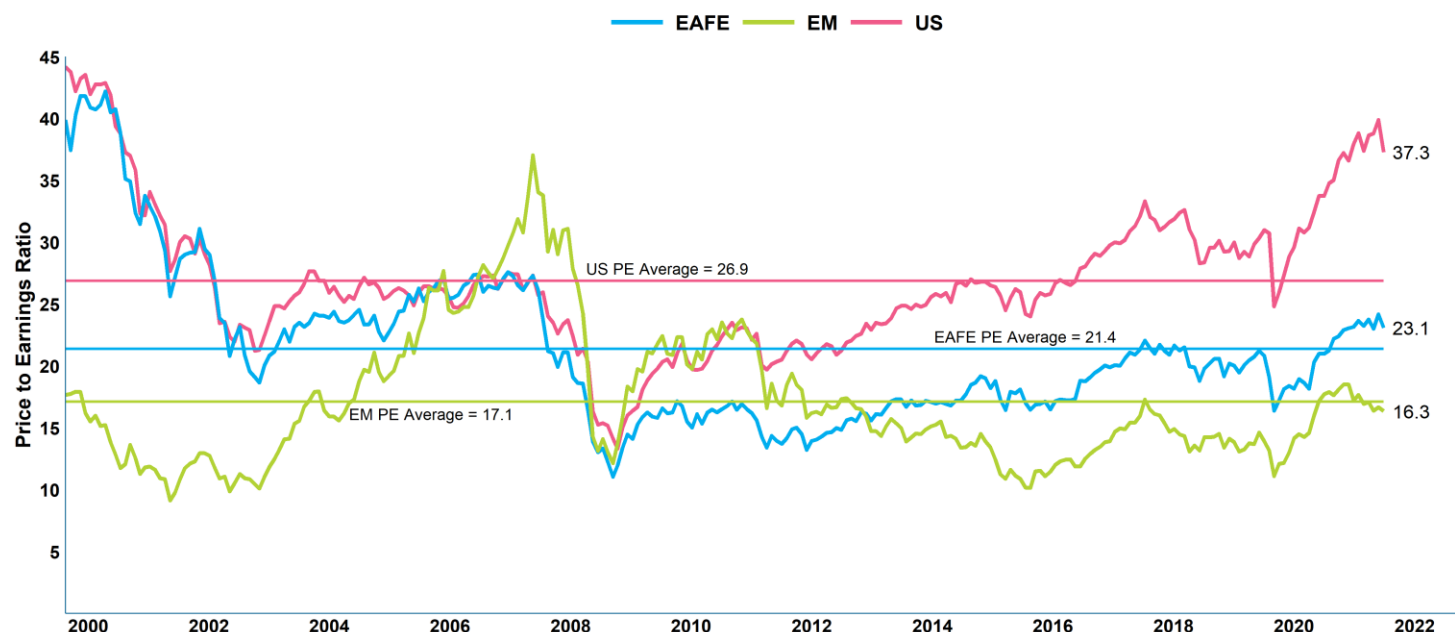
Equity and Fixed Income Volatility¹



- Volatility in equity (VIX) and fixed income (MOVE) increased at the start of the year, driven largely by expectations that the Federal Reserve would tighten monetary policy faster than previously expected.

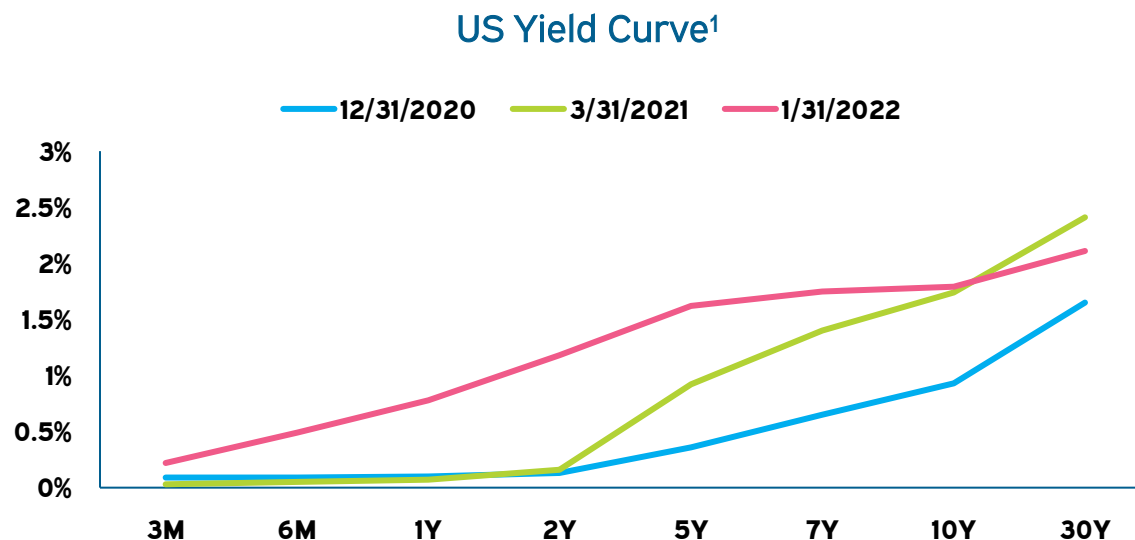
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of January 31, 2022. The average line indicated is the average of the VIX and MOVE values between January 2000 and the present month-end respectively.

Equity Cyclically Adjusted P/E Ratios¹



- Valuations in the US equity market declined in January with the market pullback, but they remain well above long-term averages (near +2 standard deviations).
- International developed market valuations remain below the US with emerging markets under the long-term average.

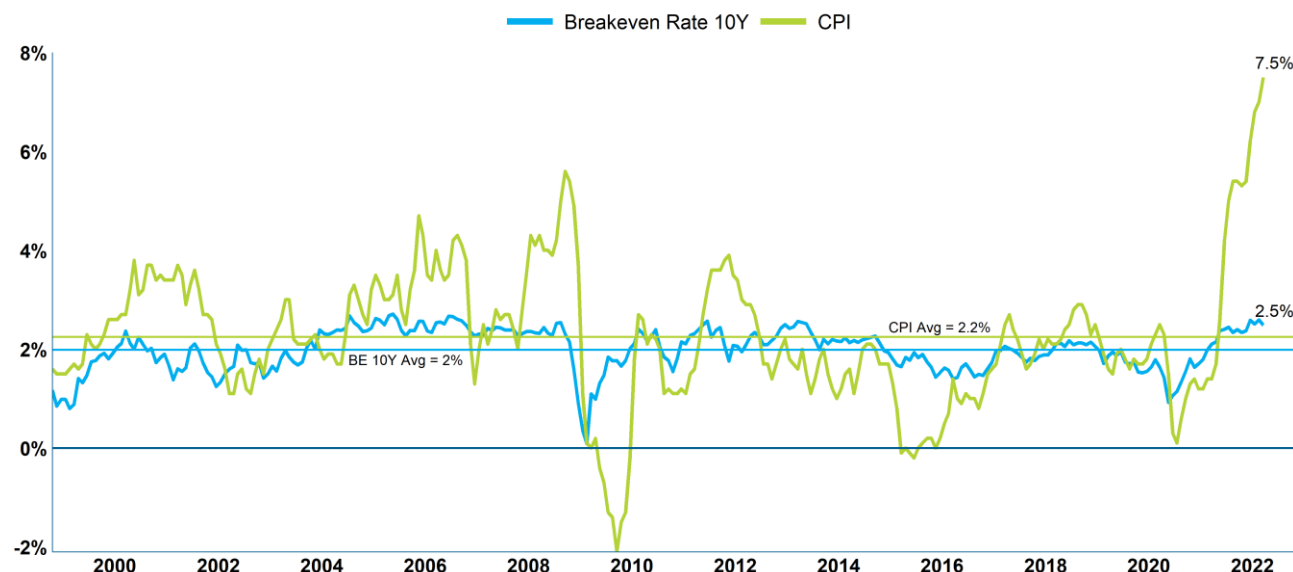
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of January 31, 2022. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to month-end respectively.



- To start the year, interest rates rose across the yield curve with the trend of the curve flattening continuing. The spread between a two-year and ten-year Treasury declined by about 0.18% for the month, ending at 0.60%.
- The main driver of these dynamics was the expectation that the Federal Reserve would accelerate the pace of their policy withdrawal given persistently high inflation and improvements in the labor market.
- After month-end, the release of above expectation January CPI (see next page) furthered the trend of rising rates and curve flattening.

¹ Source: Bloomberg. Data is as of January 31, 2022.

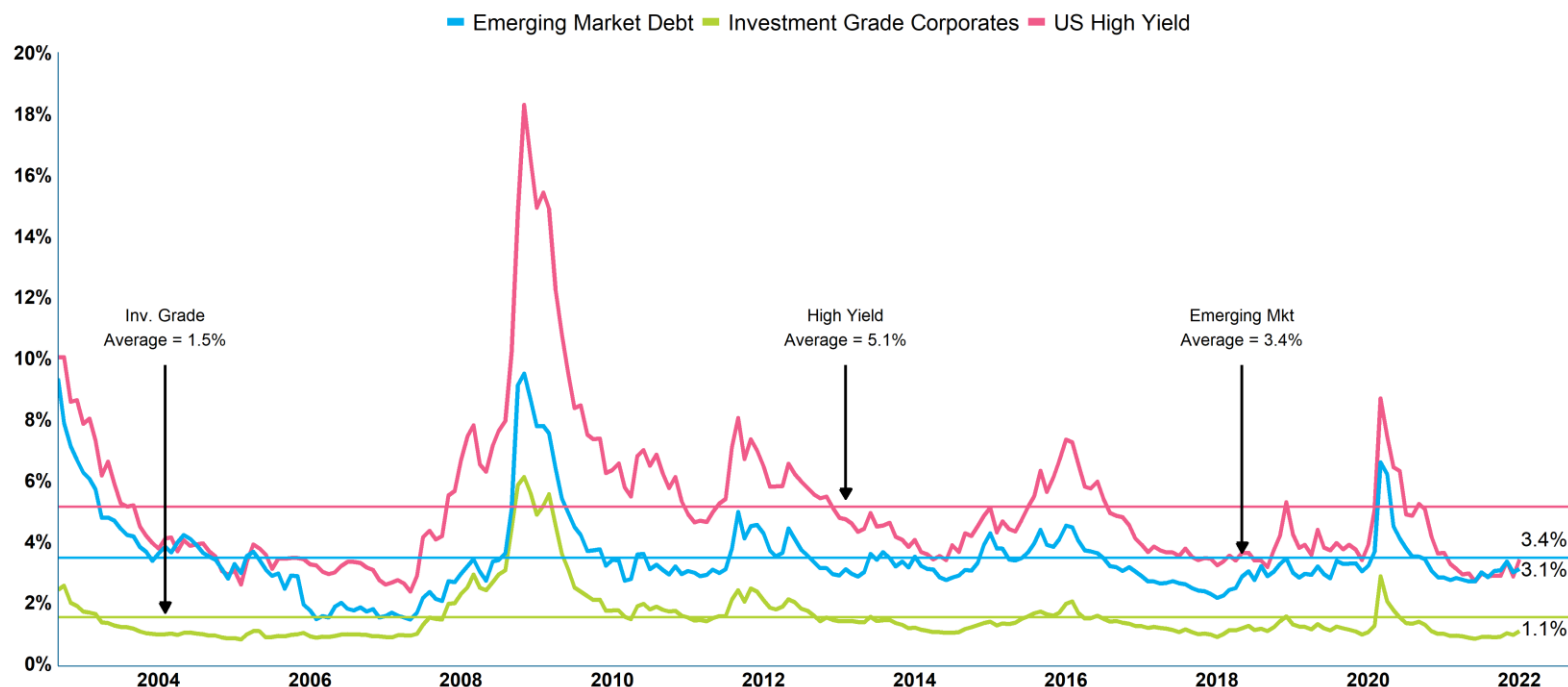
Ten-Year Breakeven Inflation and CPI¹



- Inflation expectations (breakevens) remain well above long-term averages with the economy reopening and supply chain issues persisting as key drivers.
- In January, trailing twelve-month CPI hit 7.5% for the first time since the early 1980s, a level more than triple the long-term average of 2.2%.
- Rising prices for energy and food, as well as for new and used cars, have been key drivers of higher inflation.
- Real weekly average wages declined 2.7% year over year, as price inflation outpaced rising wages over the past year.

¹ Source: Bloomberg. Data is as of January 31, 2022. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end.

Credit Spreads vs. US Treasury Bonds¹



- Credit spreads (the spread above a comparable maturity Treasury) for emerging market debt, investment-grade corporates, and high yield corporate debt remain historically narrow despite widening in January.
- The search for yield in a low-rate environment and still strong corporate fundamentals with low default risk have been key drivers in the decline in credit spreads to below long-term averages here in the US.

¹ Sources: Barclays Live and Bloomberg. Data is as of January 31, 2022. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the present month-end.

Global Economic Outlook

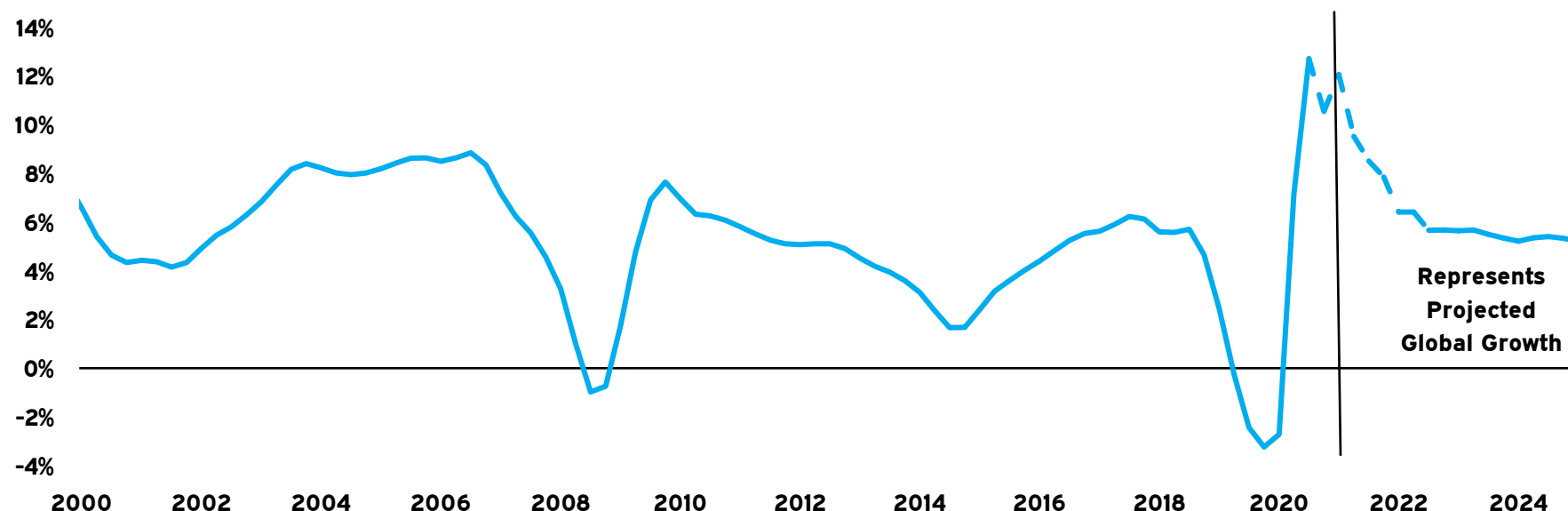
The IMF is forecasting strong growth again this year but continues to downgrade expectations given the lingering pandemic and persistent inflation.

- The IMF forecasts final global GDP to come in at 5.9% in 2021 and 4.4% in 2022 (0.5% below the prior estimate); still well above the past ten-year average of 3.1%.
- In advanced economies, GDP is projected to increase 3.9% in 2022 and 2.6% in 2023. These levels are still above potential as economies re-open and vaccination progress is made. The US forecast experienced a significant reduction in 2022 (4.0% versus 5.2%) given earlier policy reduction than previously expected, high inflation, and struggles in passing fiscal programs. The euro area economy is expected to grow 3.9% in 2022 and 2.5% in 2023, while the Japanese economy is expected to grow 3.3% in 2022 and 1.8% in 2023.
- Growth projections for emerging markets are higher compared to developed markets at 4.8% in 2022 and 4.7% in 2023. China's growth was notably downgraded 0.8% to 4.8% in 2022 given tight COVID-19 restrictions and continued issues in the property sector.
- Globally, inflation is projected to be above long-term averages in 2022 but decline from current levels.

	Real GDP (%) ¹			Inflation (%) ¹		
	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average
World	4.4	3.8	3.1	3.8	3.3	3.4
Advanced Economies	3.9	2.6	1.6	2.3	1.9	1.4
US	4.0	2.6	2.0	3.5	2.7	1.8
Euro Area	3.9	2.5	1.0	1.7	1.4	1.2
Japan	3.3	1.8	0.5	0.5	0.7	0.5
Emerging Economies	4.8	4.7	4.3	4.9	4.3	5.0
China	4.8	5.2	7.0	1.8	1.9	2.1

¹ Source: IMF World Economic Outlook. Real GDP forecasts from January WEO Update. Inflation as of the October 2021 Update. "Actual 10 Year Average" represents data from 2012 to 2021.

Global Nominal Gross Domestic Product (GDP) Growth¹

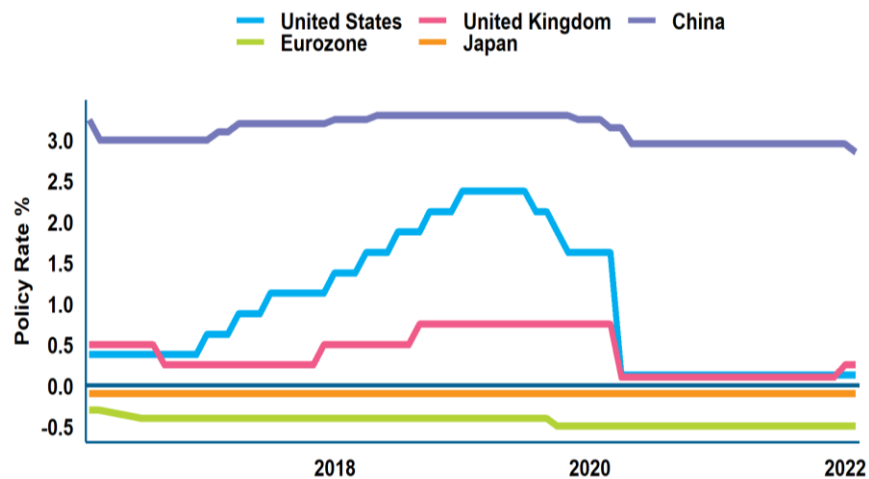


- Global economies are expected to slow in 2022 compared to last year but are forecasted to have another year of largely above-trend growth as economies continue to emerge from the pandemic.
- Looking forward, continued supply chain issues, on-going inflationary pressures, tighter monetary policy, and lingering pandemic problems remain key.

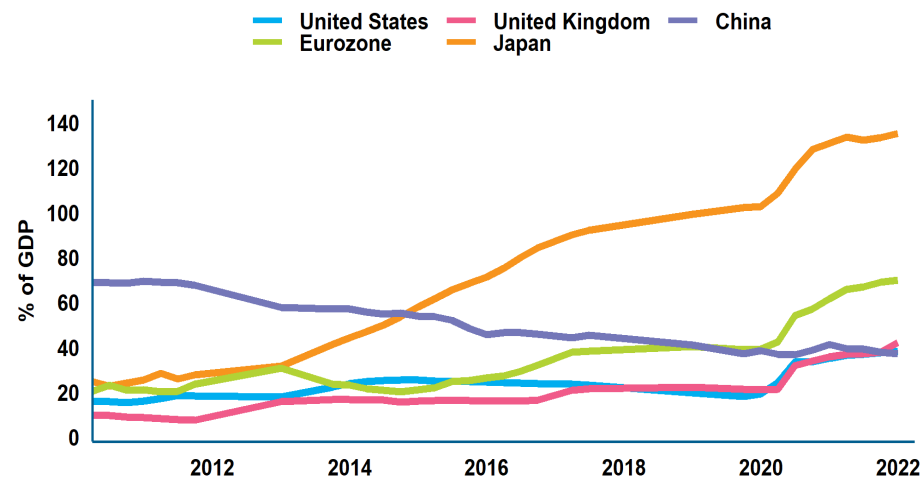
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, nominal, % change YoY). Updated January 2022.

Central Bank Response¹

Policy Rates

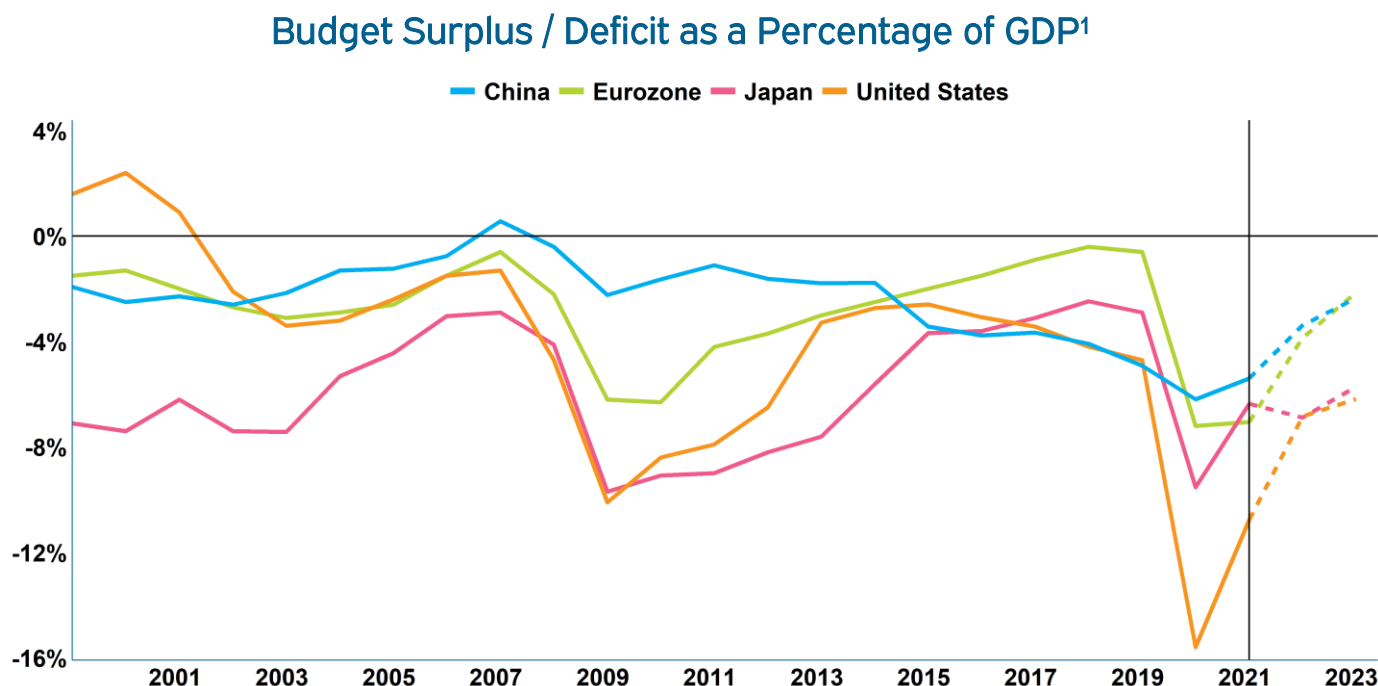


Balance Sheet as % of GDP



- After global central banks took significant action to support the economy during the pandemic including policy rate cuts and emergency stimulus through quantitative easing (QE), many are now considering reducing support given inflation levels.
- The pace of withdrawing support will likely vary across central banks with the US expected to take one of the more aggressive approaches.
- The one notable exception is China, where they have recently lowered rates and reserve requirements in response to slowing growth.

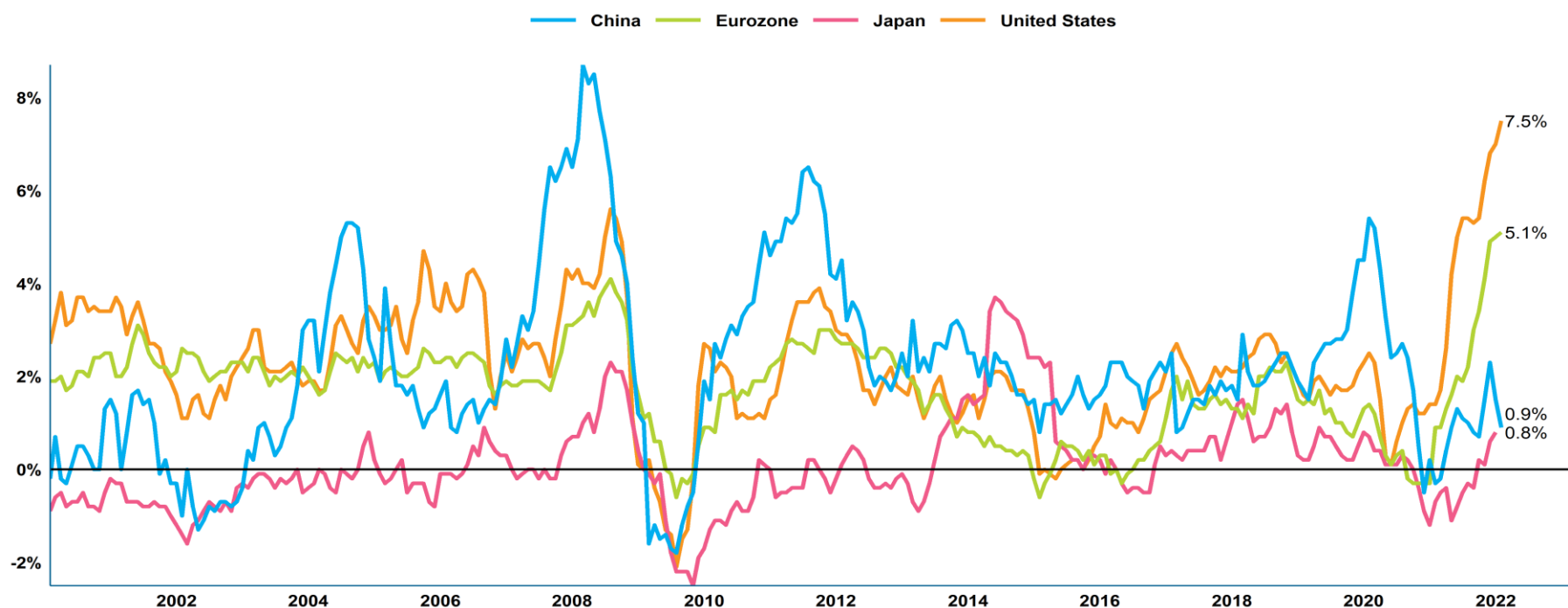
¹ Source: Bloomberg. Data is as of January 31, 2022. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data.



- Budget deficits as a percentage of GDP drastically increased for major world economies, particularly the US, due to massive fiscal support and the severe economic contraction's effect on tax revenue in 2020 and 2021.
- As fiscal stimulus programs end, and economic recoveries continue deficits should improve in the coming years.

¹ Source: Bloomberg. Data is as of January 31, 2022. Projections via IMF Forecasts from October 2021 Report. Dotted lines represent 2022 and 2023 forecasts.

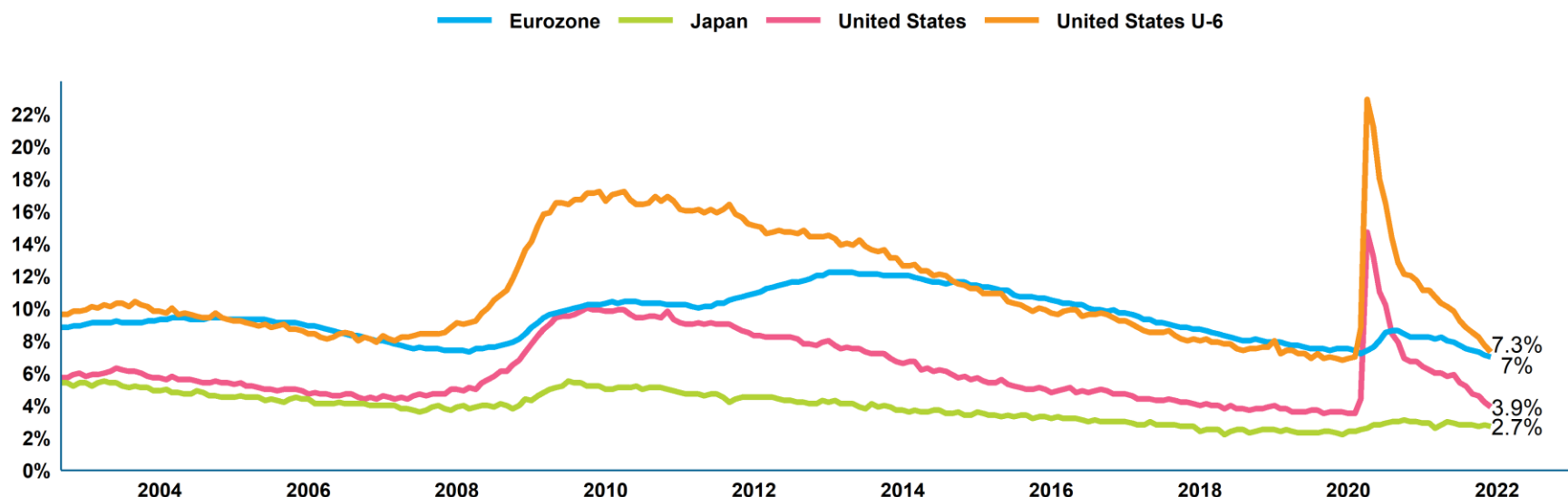
Inflation (CPI Trailing Twelve Months)¹



- Inflation has increased dramatically from the lows of the pandemic, particularly in the US and Eurozone.

¹ Source: Bloomberg. Data is as of January 31, 2022, except for Japan, where the most recent data available is as of December 31, 2021.

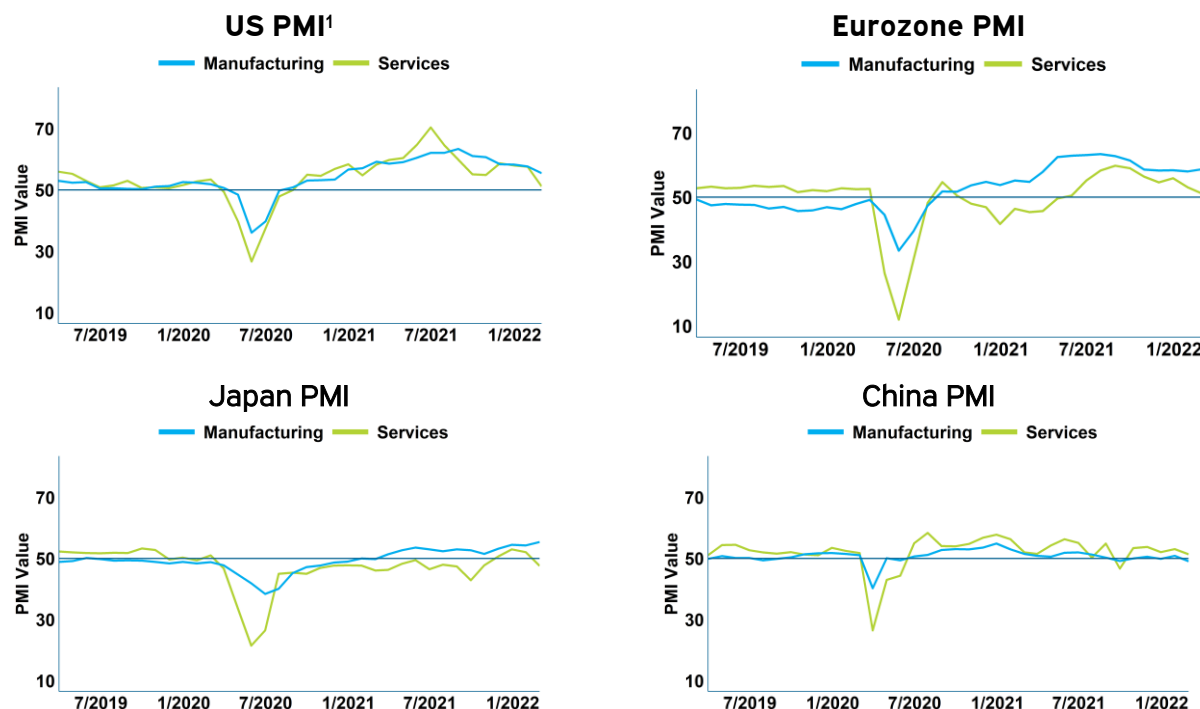
Unemployment¹



- As economies have largely reopened due to vaccines for the virus, improvements have been seen in the labor market.
- US unemployment, which experienced the steepest rise from the pandemic, declined to under 4% as the economy reopens. The broader measure (U-6) that includes discouraged and underemployed workers has declined but is much higher at 7.0%.

¹ Source: Bloomberg. Data is as of January 31, 2022.

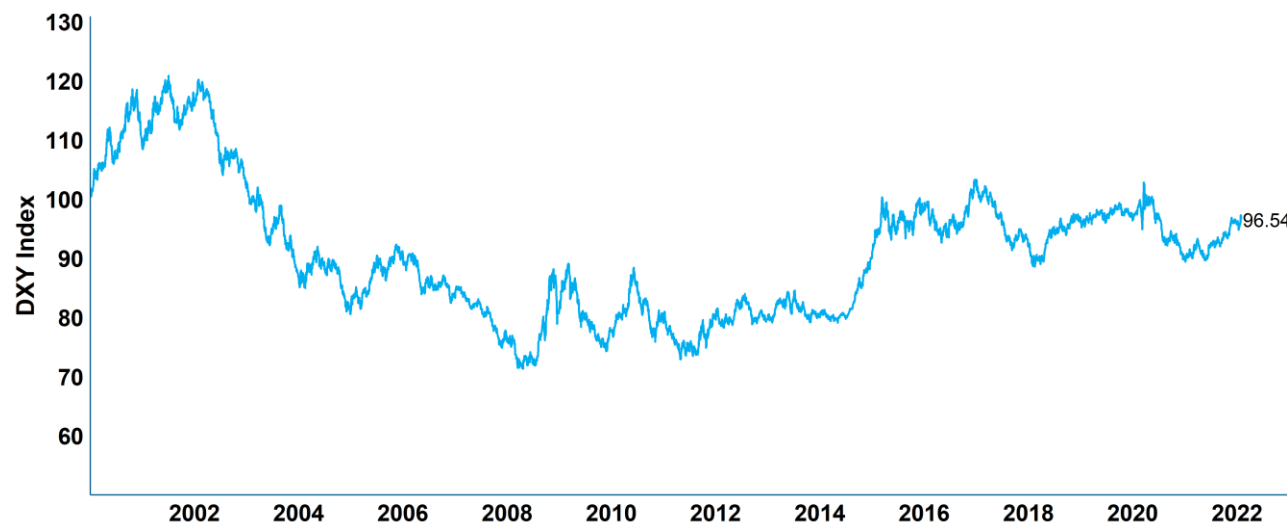
Global PMIs



- After improvements from the lows of the pandemic, Purchasing Managers Indices (PMI), based on surveys of private sector companies, have experienced pressures recently.
- PMIs in the services sector across developed economies have declined to neutral, or in the case of Japan contraction, levels largely due to the impact of the Omicron variant. Notably, China's manufacturing PMI dipped into contraction territory in January given on-going strict COVID-19 related restrictions.

¹ Source: Bloomberg. US Markit Services and Manufacturing PMI, Caixin Services and Manufacturing PMI, Eurozone Markit Services and Manufacturing PMI, Jibun Bank Services and Manufacturing PMI. Data is as of January 2022. Readings below 50 represent economic contractions.

US Dollar versus Broad Currencies¹



- The US dollar continued its 2021 trend of strengthening against a broad basket of peers in January given expectations for rising rates.
- A few commodity-sensitive currencies like the Brazilian real and South African rand have recently outpaced the dollar though given persistently high commodity prices.

¹ Source: Bloomberg Data as of January 31, 2022.

Summary

Key Trends in 2022:

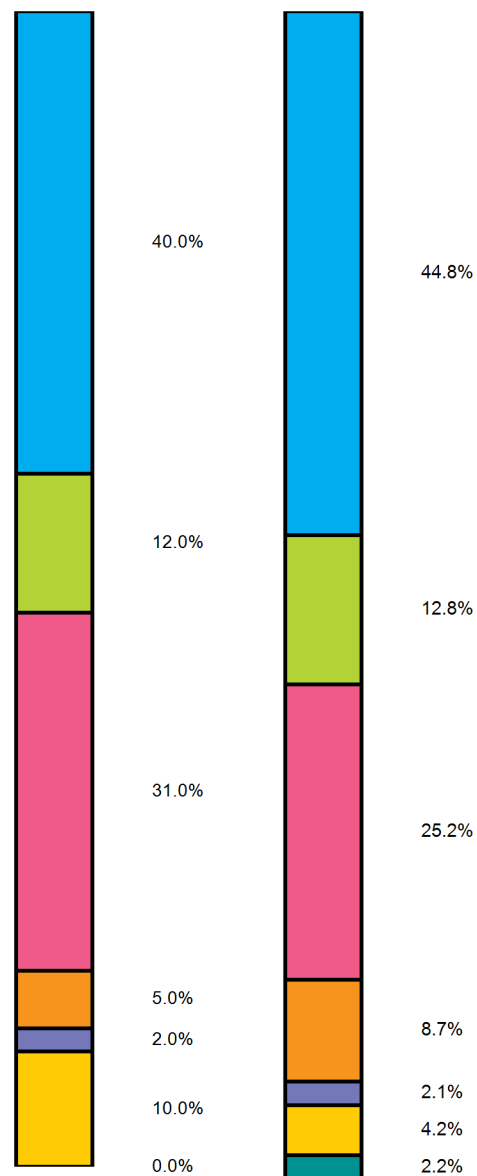
- Expect growth to slow globally in 2022 but remain above trend. The track of the pandemic will be key.
- Inflationary pressures could linger, particularly if COVID-19 related restrictions persist.
- The end of many fiscal programs will put the burden of continued growth on consumers.
- Monetary policy will likely tighten globally but will remain relatively low.
- Valuations remain high in the US, but low rates and strong margins should be supportive.
- Outside the US, valuations remain lower in both emerging and developed markets, but risks remain.
- Questions remain about the future path of the US yield curve.
- Geopolitical risk in Asia and Eastern Europe could create volatility.

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Oakland Police and Fire Retirement System

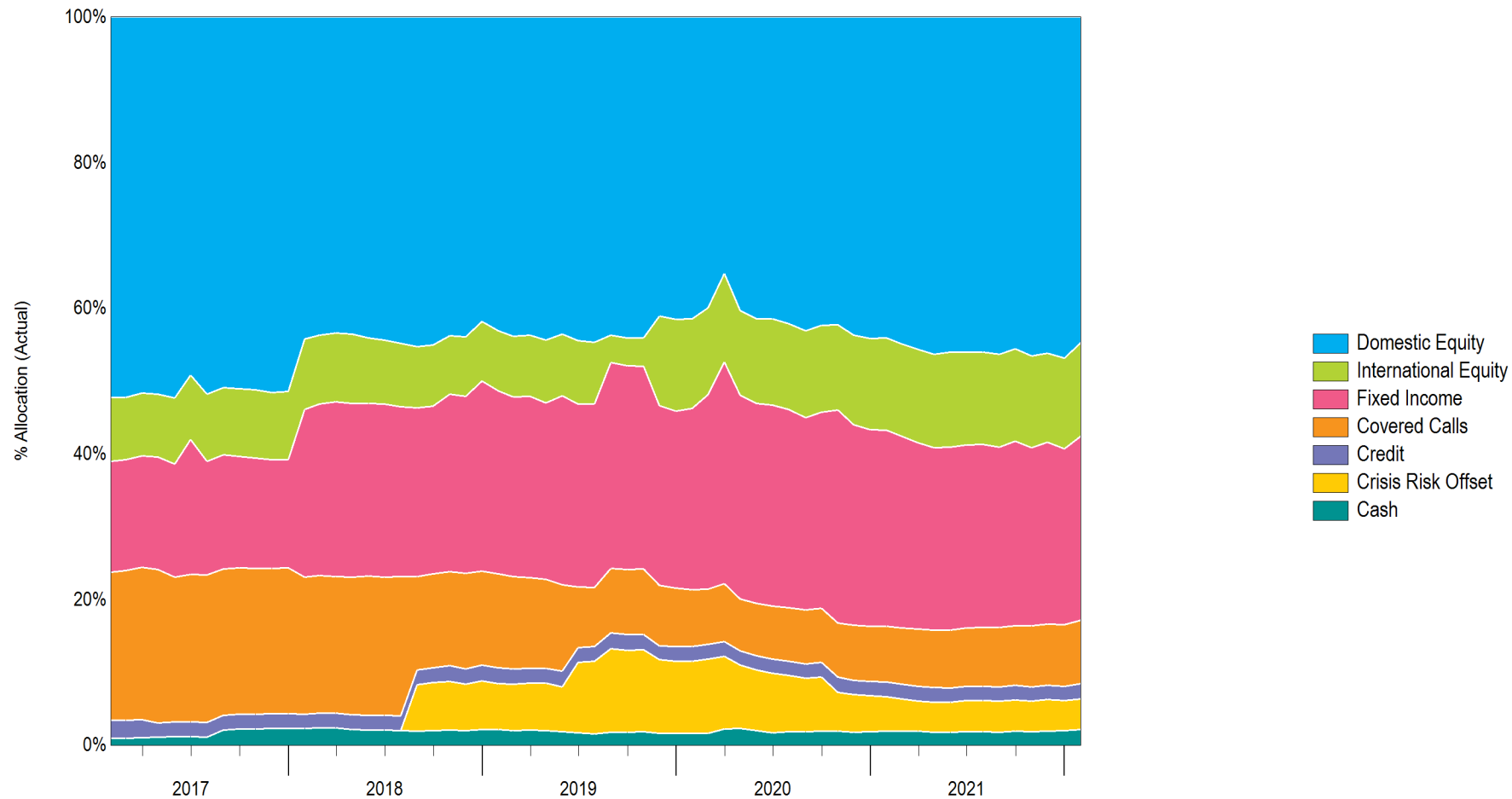
January Flash Report

OPFRS Total Plan As of January 31, 2022



Allocation vs. Targets and Policy					
	Current Balance	Current Allocation	Policy	Difference	Within IPS Range?
<div></div> Domestic Equity	\$202,672,105	44.8%	40.0%	4.8%	Yes
<div></div> International Equity	\$58,026,618	12.8%	12.0%	0.8%	Yes
<div></div> Fixed Income	\$114,275,259	25.2%	31.0%	-5.8%	Yes
<div></div> Covered Calls	\$39,473,776	8.7%	5.0%	3.7%	Yes
<div></div> Credit	\$9,317,744	2.1%	2.0%	0.1%	Yes
<div></div> Crisis Risk Offset	\$19,154,050	4.2%	10.0%	-5.8%	No
<div></div> Cash	\$9,831,782	2.2%	0.0%	2.2%	Yes
Total	\$452,751,334	100.0%	100.0%		

Asset Allocation History 5 Years Ending January 31, 2022



Asset Class Performance Summary

	Market Value (\$)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
OPFRS Total Plan	452,751,334	100.0	-4.1	1.2	9.7	11.2	9.9	8.9	7.0	Dec-88
<i>OPFRS Policy Benchmark</i>			<i>-3.7</i>	<i>0.4</i>	<i>8.1</i>	<i>11.2</i>	<i>9.4</i>	<i>8.4</i>	<i>8.3</i>	<i>Dec-88</i>
Domestic Equity	202,672,105	44.8	-5.7	3.1	18.2	18.5	15.3	14.6	9.5	Jun-97
<i>Russell 3000 (Blend)</i>			<i>-5.9</i>	<i>2.7</i>	<i>18.8</i>	<i>19.9</i>	<i>16.1</i>	<i>15.0</i>	<i>9.7</i>	<i>Jun-97</i>
International Equity	58,026,618	12.8	-3.4	-2.1	6.7	10.7	9.2	7.5	5.7	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>-3.7</i>	<i>-4.7</i>	<i>4.1</i>	<i>9.6</i>	<i>8.5</i>	<i>6.7</i>	<i>5.9</i>	<i>Jan-98</i>
Fixed Income	114,275,259	25.2	-2.0	-1.7	-1.8	4.4	3.9	3.3	5.3	Dec-93
<i>Bloomberg Universal (Blend)</i>			<i>-2.2</i>	<i>-2.1</i>	<i>-2.7</i>	<i>3.9</i>	<i>3.3</i>	<i>3.0</i>	<i>5.1</i>	<i>Dec-93</i>
Credit	9,317,744	2.1	-0.5	1.9	7.5	6.6	6.4	--	6.4	Feb-15
<i>Bloomberg US High Yield TR</i>			<i>-2.7</i>	<i>-1.2</i>	<i>2.1</i>	<i>6.3</i>	<i>5.4</i>	<i>6.2</i>	<i>5.6</i>	<i>Feb-15</i>
Covered Calls	39,473,776	8.7	-3.9	5.7	20.3	15.7	12.1	--	10.4	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>-2.5</i>	<i>5.6</i>	<i>17.2</i>	<i>8.7</i>	<i>7.0</i>	<i>7.2</i>	<i>6.7</i>	<i>Apr-14</i>
Crisis Risk Offset	19,154,050	4.2	-3.7	-1.8	-6.9	-8.3	--	--	-8.8	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>1.2</i>	<i>2.8</i>	<i>7.9</i>	<i>-1.9</i>	<i>--</i>	<i>--</i>	<i>-1.6</i>	<i>Aug-18</i>

Fiscal year begins on July 1.

Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

Trailing Net Performance											
	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
OPFRS Total Plan	452,751,334	100.0	--	-4.1	1.2	9.7	11.2	9.9	8.9	7.0	Dec-88
<i>OPFRS Policy Benchmark</i>				<i>-3.7</i>	<i>0.4</i>	<i>8.1</i>	<i>11.2</i>	<i>9.4</i>	<i>8.4</i>	<i>8.3</i>	<i>Dec-88</i>
Domestic Equity	202,672,105	44.8	44.8	-5.7	3.1	18.2	18.5	15.3	14.6	9.5	Jun-97
<i>Russell 3000 (Blend)</i>				<i>-5.9</i>	<i>2.7</i>	<i>18.8</i>	<i>19.9</i>	<i>16.1</i>	<i>15.0</i>	<i>9.7</i>	<i>Jun-97</i>
Northern Trust Russell 1000	104,626,124	23.1	51.6	-5.8	3.6	20.1	20.4	16.5	15.3	15.1	Jun-10
<i>Russell 1000</i>				<i>-5.6</i>	<i>3.8</i>	<i>20.3</i>	<i>20.5</i>	<i>16.6</i>	<i>15.3</i>	<i>15.2</i>	<i>Jun-10</i>
EARNEST Partners	49,054,976	10.8	24.2	-4.8	4.9	20.3	21.3	17.1	15.6	11.4	Apr-06
<i>Russell MidCap</i>				<i>-7.4</i>	<i>-2.3</i>	<i>13.9</i>	<i>16.1</i>	<i>12.8</i>	<i>13.4</i>	<i>9.6</i>	<i>Apr-06</i>
iShares Edge MSCI Min Vol ETF	21,646,600	4.8	10.7	-6.0	4.0	16.8	--	--	--	22.4	Apr-20
<i>MSCI USA Minimum Volatility GR USD</i>				<i>-5.9</i>	<i>4.2</i>	<i>17.0</i>	<i>13.4</i>	<i>13.0</i>	<i>13.3</i>	<i>22.6</i>	<i>Apr-20</i>
Rice Hall James	16,028,150	3.5	7.9	-8.1	-6.1	2.7	13.2	--	--	11.8	Jul-17
<i>Russell 2000 Growth</i>				<i>-13.4</i>	<i>-18.3</i>	<i>-15.0</i>	<i>11.4</i>	<i>10.9</i>	<i>11.7</i>	<i>10.1</i>	<i>Jul-17</i>
Brown Fundamental Small Cap Value	11,316,255	2.5	5.6	-4.3	2.6	--	--	--	--	6.0	Apr-21
<i>Russell 2000 Value</i>				<i>-5.8</i>	<i>-4.7</i>	<i>14.8</i>	<i>11.7</i>	<i>7.9</i>	<i>10.6</i>	<i>-0.3</i>	<i>Apr-21</i>
International Equity	58,026,618	12.8	12.8	-3.4	-2.1	6.7	10.7	9.2	7.5	5.7	Jan-98
<i>MSCI ACWI ex US (Blend)</i>				<i>-3.7</i>	<i>-4.7</i>	<i>4.1</i>	<i>9.6</i>	<i>8.5</i>	<i>6.7</i>	<i>5.9</i>	<i>Jan-98</i>
SGA ACWI ex-U.S. Equity	41,171,910	9.1	71.0	-2.9	-0.8	7.0	--	--	--	7.3	Dec-19
<i>MSCI ACWI ex USA Gross</i>				<i>-3.7</i>	<i>-4.7</i>	<i>4.1</i>	<i>9.6</i>	<i>8.5</i>	<i>6.7</i>	<i>9.2</i>	<i>Dec-19</i>
Vanguard Developed Markets ETF	16,438,523	3.6	28.3	-3.9	-4.7	4.8	--	--	--	10.0	Sep-19
<i>FTSE Developed All Cap Ex US TR USD</i>				<i>-5.0</i>	<i>-3.5</i>	<i>7.2</i>	<i>10.2</i>	<i>8.4</i>	<i>5.7</i>	<i>11.9</i>	<i>Sep-19</i>

Fiscal year begins July 1.

Throughout the report performance for new funds will be shown after one full month of investment.

International equity performance inclusive of residual cash in Hansberger transition.

OPFRS Total Plan As of January 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Fixed Income	114,275,259	25.2	25.2	-2.0	-1.7	-1.8	4.4	3.9	3.3	5.3	Dec-93
<i>Bloomberg Universal (Blend)</i>				<i>-2.2</i>	<i>-2.1</i>	<i>-2.7</i>	<i>3.9</i>	<i>3.3</i>	<i>3.0</i>	<i>5.1</i>	<i>Dec-93</i>
Ramirez	77,805,831	17.2	68.1	-2.0	-1.8	-1.5	4.4	3.8	--	3.8	Jan-17
<i>Bloomberg US Aggregate TR</i>				<i>-2.2</i>	<i>-2.1</i>	<i>-3.0</i>	<i>3.7</i>	<i>3.1</i>	<i>2.6</i>	<i>3.1</i>	<i>Jan-17</i>
Reams	29,004,549	6.4	25.4	-1.9	-1.5	-2.2	7.7	5.7	4.3	5.8	Feb-98
<i>Bloomberg Universal (Blend)</i>				<i>-2.2</i>	<i>-2.1</i>	<i>-2.7</i>	<i>3.9</i>	<i>3.3</i>	<i>3.0</i>	<i>4.8</i>	<i>Feb-98</i>
Wellington Core Bond	7,464,835	1.6	6.5	-2.2	-2.2	--	--	--	--	-0.4	Apr-21
<i>Bloomberg US Aggregate TR</i>				<i>-2.2</i>	<i>-2.1</i>	<i>-3.0</i>	<i>3.7</i>	<i>3.1</i>	<i>2.6</i>	<i>-0.3</i>	<i>Apr-21</i>
Credit	9,317,744	2.1	2.1	-0.5	1.9	7.5	6.6	6.4	--	6.4	Feb-15
<i>Bloomberg US High Yield TR</i>				<i>-2.7</i>	<i>-1.2</i>	<i>2.1</i>	<i>6.3</i>	<i>5.4</i>	<i>6.2</i>	<i>5.6</i>	<i>Feb-15</i>
DDJ Capital	9,317,744	2.1	100.0	-0.5	1.9	7.5	6.6	6.4	--	6.4	Feb-15
<i>ICE BofA High Yield Master TR</i>				<i>-2.7</i>	<i>-1.2</i>	<i>2.1</i>	<i>6.0</i>	<i>5.2</i>	<i>6.1</i>	<i>5.5</i>	<i>Feb-15</i>
Covered Calls	39,473,776	8.7	8.7	-3.9	5.7	20.3	15.7	12.1	--	10.4	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				<i>-2.5</i>	<i>5.6</i>	<i>17.2</i>	<i>8.7</i>	<i>7.0</i>	<i>7.2</i>	<i>6.7</i>	<i>Apr-14</i>
Parametric DeltaShift	22,358,240	4.9	56.6	-4.7	6.8	23.8	19.8	14.9	--	12.9	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				<i>-2.5</i>	<i>5.6</i>	<i>17.2</i>	<i>8.7</i>	<i>7.0</i>	<i>7.2</i>	<i>6.7</i>	<i>Apr-14</i>
Parametric BXM	17,115,536	3.8	43.4	-3.0	4.4	16.0	11.3	8.9	--	8.2	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>				<i>-2.5</i>	<i>5.6</i>	<i>17.2</i>	<i>8.7</i>	<i>7.0</i>	<i>7.2</i>	<i>6.7</i>	<i>Apr-14</i>
Crisis Risk Offset	19,154,050	4.2	4.2	-3.7	-1.8	-6.9	-8.3	--	--	-8.8	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>				<i>1.2</i>	<i>2.8</i>	<i>7.9</i>	<i>-1.9</i>	<i>--</i>	<i>--</i>	<i>-1.6</i>	<i>Aug-18</i>
Vanguard Long-Term Treasury ETF	19,154,050	4.2	100.0	-3.7	-1.8	-6.9	--	--	--	3.6	Jul-19
<i>Bloomberg US Govt Long TR</i>				<i>-4.1</i>	<i>-0.7</i>	<i>-5.1</i>	<i>7.0</i>	<i>5.6</i>	<i>4.1</i>	<i>4.2</i>	<i>Jul-19</i>

Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

OPFRS Total Plan As of January 31, 2022

Cash Flow Summary

Month to Date

	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Brown Fundamental Small Cap Value	\$11,838,425	\$0	-\$522,170	\$11,316,255
Cash	\$3,022,983	\$11,480	\$9,219	\$3,043,682
Cash - Treasury	\$6,676,000	\$112,100	\$0	\$6,788,100
DDJ Capital	\$9,372,205	\$0	-\$54,461	\$9,317,744
EARNEST Partners	\$51,502,726	\$0	-\$2,447,750	\$49,054,976
Hansberger Transition	\$600,651	\$0	-\$184,467	\$416,185
iShares Edge MSCI Min Vol ETF	\$23,024,059	\$0	-\$1,377,459	\$21,646,600
Northern Trust Russell 1000	\$122,696,981	-\$11,000,000	-\$7,070,857	\$104,626,124
Parametric BXM	\$17,636,781	\$0	-\$521,245	\$17,115,536
Parametric DeltaShift	\$23,455,117	\$0	-\$1,096,878	\$22,358,240
Ramirez	\$79,372,600	\$0	-\$1,566,769	\$77,805,831
Reams	\$29,560,445	\$0	-\$555,896	\$29,004,549
Reams Low Duration	\$44	\$0	\$0	\$44
Rice Hall James	\$17,436,537	\$0	-\$1,408,387	\$16,028,150
Securities Lending Northern Trust	\$0	-\$11,480	\$11,480	\$0
SGA ACWI ex-U.S. Equity	\$42,401,389	\$0	-\$1,229,479	\$41,171,910
Vanguard Developed Markets ETF	\$17,098,207	\$0	-\$659,684	\$16,438,523
Vanguard Long-Term Treasury ETF	\$19,890,317	\$0	-\$736,266	\$19,154,050
Wellington Core Bond	\$7,635,510	\$0	-\$170,675	\$7,464,835
Total	\$483,220,978	-\$10,887,900	-\$19,581,743	\$452,751,334

Benchmark History

As of January 31, 2022

Total Plan x Securities Lending x Reams LD Exception Comp

1/1/2019	Present	40% Russell 3000 / 12% MSCI ACWI ex USA Gross / 33% Bloomberg US Universal TR / 5% CBOE BXM / 6.7% SG Multi Alternative Risk Premia Index / 3.3% Bloomberg US Treasury Long TR
5/1/2016	12/31/2018	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% Bloomberg US Universal TR / 20% CBOE BXM
10/1/2015	4/30/2016	43% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% Bloomberg US Universal TR / 15% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
1/1/2014	9/30/2015	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% Bloomberg US Universal TR / 10% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
3/1/2013	12/31/2013	40% Russell 3000 / 10% MSCI ACWI ex USA Gross / 17% Bloomberg US Universal TR / 33% ICE BofA 3M US Treasury TR USD
8/1/2012	2/28/2013	20% Russell 3000 / 7% MSCI ACWI ex USA Gross / 18% Bloomberg US Universal TR / 55% ICE BofA 3M US Treasury TR USD
10/1/2007	7/31/2012	53% Russell 3000 / 17% MSCI ACWI ex USA Gross / 30% Bloomberg US Universal TR
4/1/2006	9/30/2007	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% Bloomberg US Universal TR
1/1/2005	3/31/2006	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% Bloomberg US Aggregate TR
4/1/1998	12/31/2004	50% Bloomberg US Aggregate TR / 10% Russell 1000 / 20% Russell 1000 Value / 5% Russell MidCap / 15% MSCI EAFE
9/1/1988	3/31/1998	40% S&P 500 / 55% Bloomberg US Aggregate TR / 5% FTSE T-Bill 3 Months TR

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Oakland Police and Fire Retirement System

Q4 2021 Performance Report

Agenda

1. Total Portfolio Summary
2. Economic and Market Update
3. Asset Class and Manager Commentary
4. 4Q 2021 Performance as of December 31, 2021
5. Manager Monitoring / Probation List
6. Disclaimer, Glossary, and Notes

Total Portfolio Summary

Total Portfolio Summary

As of December 31, 2021, the City of Oakland Police and Fire Retirement System (OPFRS) portfolio had an aggregate value of \$483.2M. This represents a \$26.7M increase in investment value after (\$3.2M) in benefit payments over the quarter. Over the one-year period (calendar year 2021), the OPFRS Total Portfolio value is higher by \$61.2M, after withdrawals totaling (\$12.7M) for benefit payments.

Asset Allocation Trends

- The asset allocation targets throughout this report reflect those as of December 31, 2021. Target weightings reflect the interim phase (CRO = 10%) of the Plan's previously approved asset allocation (effective 5/31/2017).
- Relative to policy targets, the portfolio ended the latest quarter overweight Equities, Covered Calls and Cash, while underweight Crisis Risk Offset and Fixed Income. The Crisis Risk Offset asset class was below its acceptable ranges from the policy target.

Recent Investment Performance

- During the most recent quarter, the OPFRS portfolio generated an absolute return of 5.7%, gross of fees, outperforming its policy benchmark by 1.2%. The portfolio also outperformed its benchmark over the 1-, 3-, and 5-year periods, by 2.1%, 0.4%, and 0.6% respectively.

- In comparison to its peers, the OPFRS portfolio outperformed the Median fund's return over the quarter and 1-year trailing period by 1.6% and 0.3% respectively. Over the intermediate 3-year trailing period, the OPFRS portfolio trailed the Median fund by (0.7%); however, over the long-term 5-year trailing period, the portfolio is on par with its peers.

	Quarter	CYTD	1 Year	3 Year	5 Year
Total Portfolio ¹	5.7%	13.9%	13.9%	14.8%	11.3%
Policy Benchmark ²	4.5%	11.8%	11.8%	14.4%	10.7%
Excess Return	1.2%	2.1%	2.1%	0.4%	0.6%
Reference: Median Fund ³	4.1%	13.6%	13.6%	15.5%	11.3%
Reference: Total Net of Fees ⁴	5.6%	13.6%	13.6%	14.5%	10.9%

- Over the quarter, positive absolute return was driven by the domestic equity segment following a strong earnings season and general optimism around the reopening of the US economy. Reflecting the broad fixed income market's ups and downs during the quarter, OPFRS's fixed income segment stayed flat over the quarter.

¹ Gross of Fees. Performance since 2005 includes securities lending.

² Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI ACWI ex U.S., 33% Bloomberg Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bloomberg Long Treasury.

³ Investment Metrics < \$1 Billion Public Plan Universe.

⁴ Longer-term (>1 year) Net of fee returns include estimates based on OPFRS manager fee schedule (approximately 34 bps).

Economic and Market Update

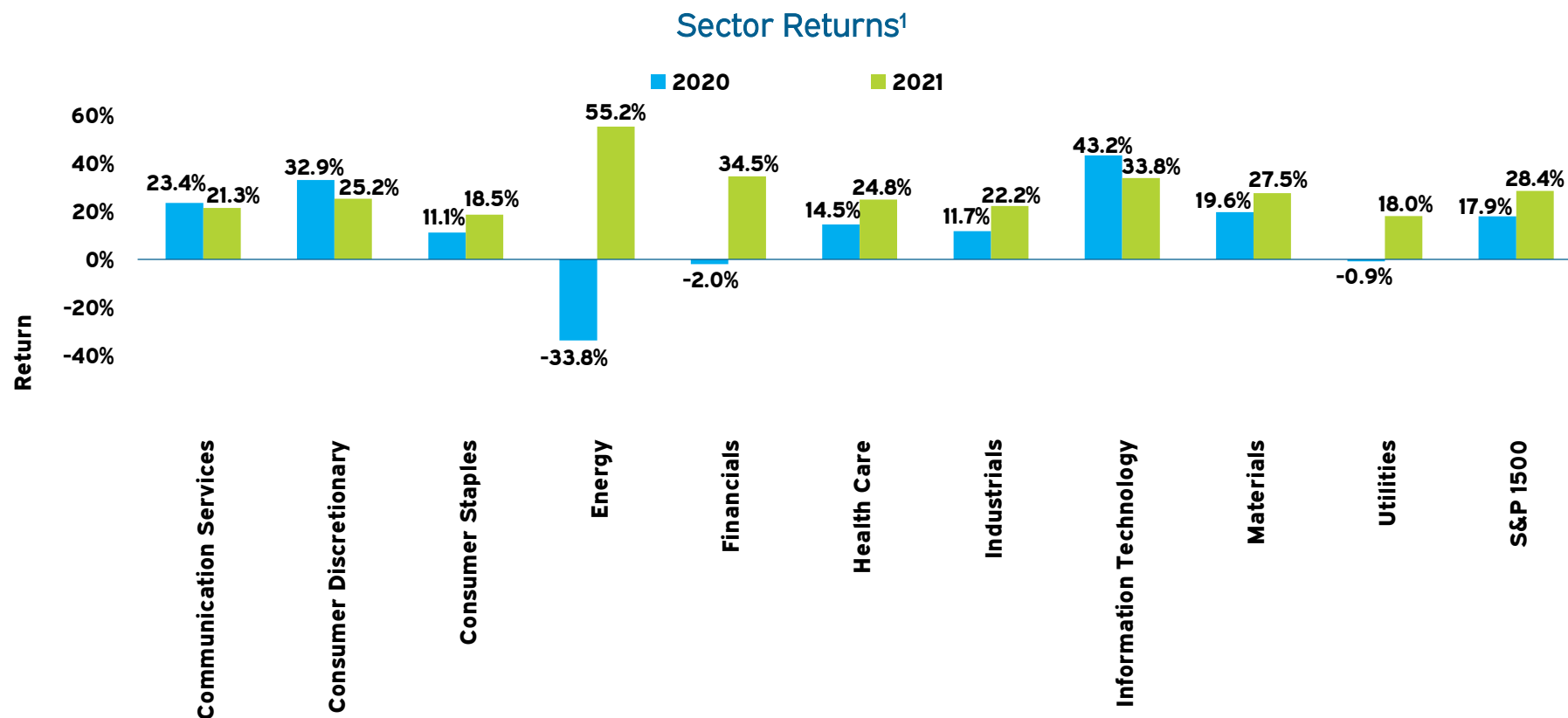
Data as of December 31, 2021

Market Returns¹

Indices	December	1 Year	3 Year	5 Year	10 Year
S&P 500	4.5%	28.7%	26.1%	18.5%	16.6%
MSCI EAFE	5.1%	11.3%	13.5%	9.6%	8.0%
MSCI Emerging Markets	1.9%	-2.5%	10.9%	9.9%	5.5%
MSCI China	-3.2%	-21.7%	7.8%	9.4%	7.2%
Bloomberg Barclays Aggregate	-0.3%	-1.5%	4.8%	3.6%	2.9%
Bloomberg Barclays TIPS	0.3%	6.0%	8.4%	5.3%	3.1%
Bloomberg Barclays High Yield	1.9%	5.3%	8.8%	6.3%	6.8%
10-year US Treasury	-0.4%	-3.6%	5.1%	3.5%	2.4%
30-year US Treasury	-2.1%	-4.6%	9.7%	7.0%	4.4%

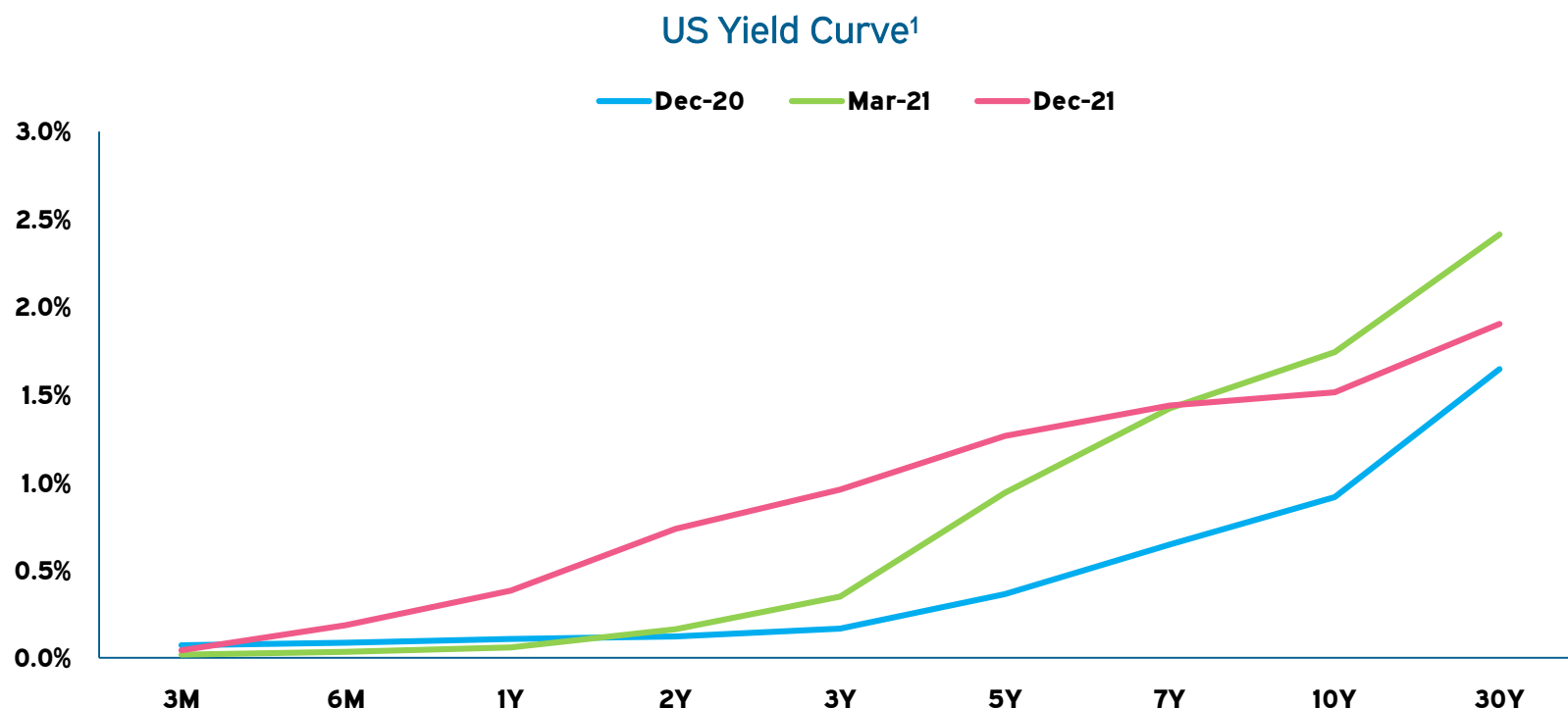
- Declining fears over the Omicron variant and expectations for continued corporate strength contributed to global equity markets posting positive returns for December. Developed markets led the way with international equities (MSCI EAFE) outpacing US equities (S&P 500). Emerging markets lagged mainly due to continued concerns related to China. Overall in 2021, US equities had the best results given continued policy support, relative success in reopening the economy, and strong corporate fundamentals.
- In December, rising inflation and expectations for less accommodative policy led to the US bond market (Bloomberg Barclays Aggregate) declining slightly, while high yield bonds increased in the risk-on environment. For the year, TIPS led the way in bonds, up 6%, followed by high yield with the broad bond market index declining by 1.5%.

¹ Source: Investment Metrics and Bloomberg. Data is as of December 31, 2021.



- All sectors advanced in 2021 with energy leading the way followed by financials, a reversal of the 2020 trend.
- The technology sector also produced strong results last year building on the 40%+ returns in the prior year.

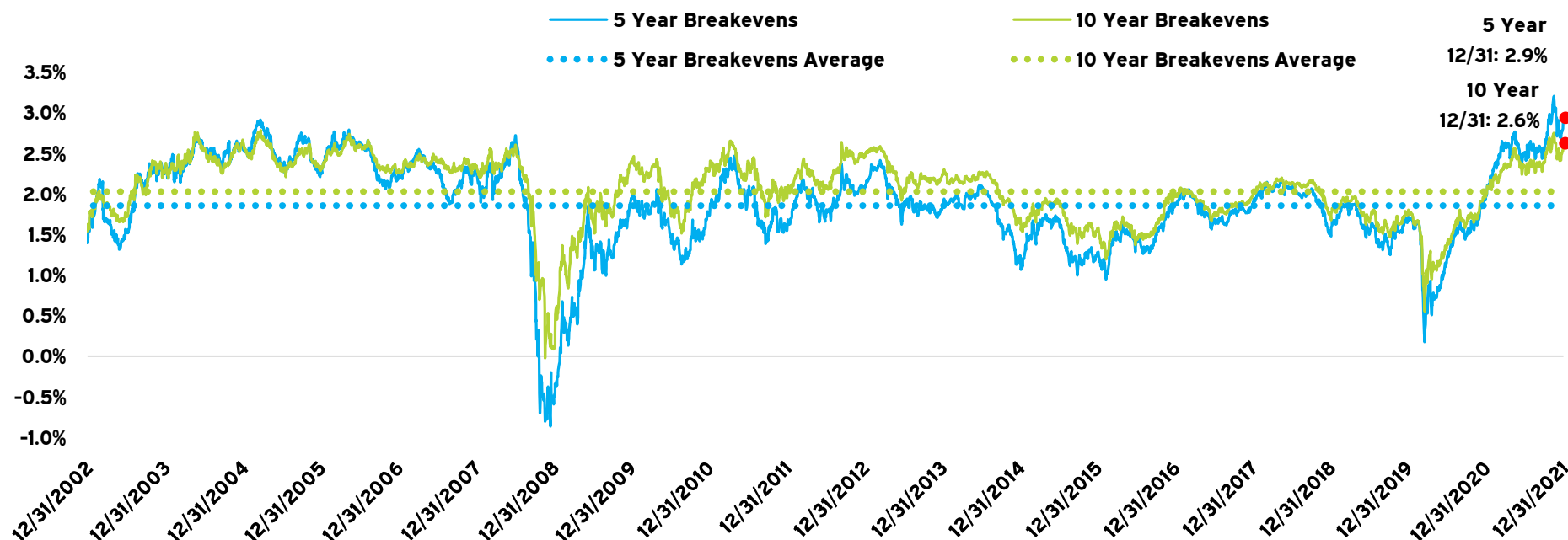
¹ Source: Bloomberg. Data is as of December 31, 2021.



- During the first half of 2021, the Treasury yield curve steepened on both higher growth and inflation expectations as vaccines were deployed and economic growth prospects improved on the opening of the economy, while monetary policy anchored short-dated rates near 0%.
- Over the latter-half of the year, however, shorter-dated yields from 1- to 5-years rose sharply as the FOMC signaled that policy rates may be tightened more aggressively than previously anticipated.

¹ Source: Bloomberg. Data is as of December 31, 2021.

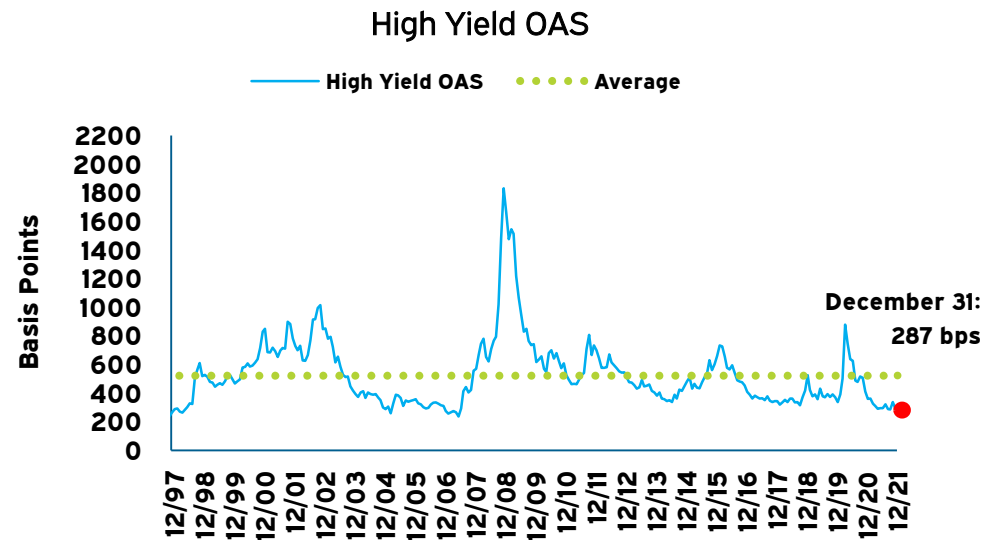
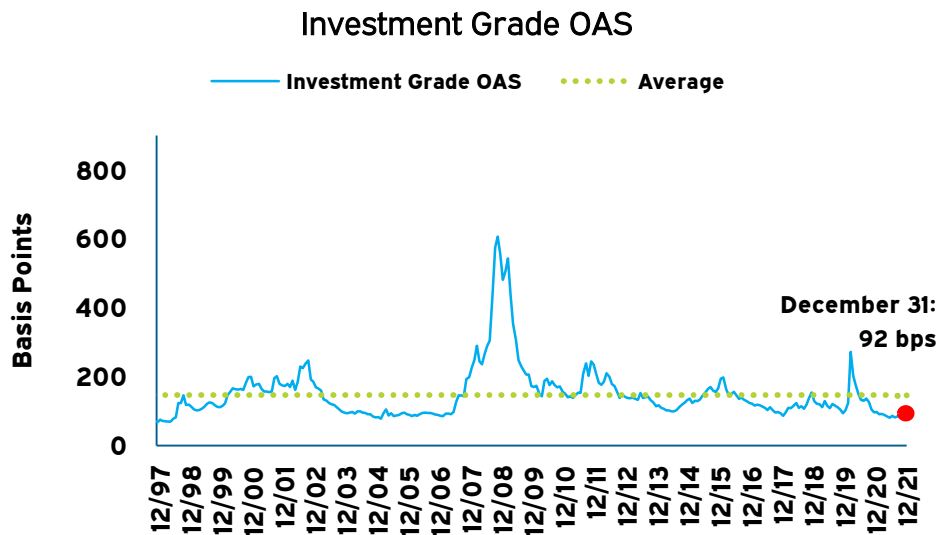
Breakeven Inflation¹



- Inflation expectations finished the year higher than they started, ending at a level well above the Fed's 2% target.
- Supply chain issues potentially persisting as new variants of the virus increase the risk of re-shuttering sectors of the global economy and wage pressures remain key drivers of inflation expectations.
- Additionally, changes to Fed policy focused on an average inflation target may play a role in inflation market dynamics and, specifically, the risk that consumer inflation expectations get entrenched at higher inflation growth rates.

¹ Source: Bloomberg. Data is as of December 31, 2021.

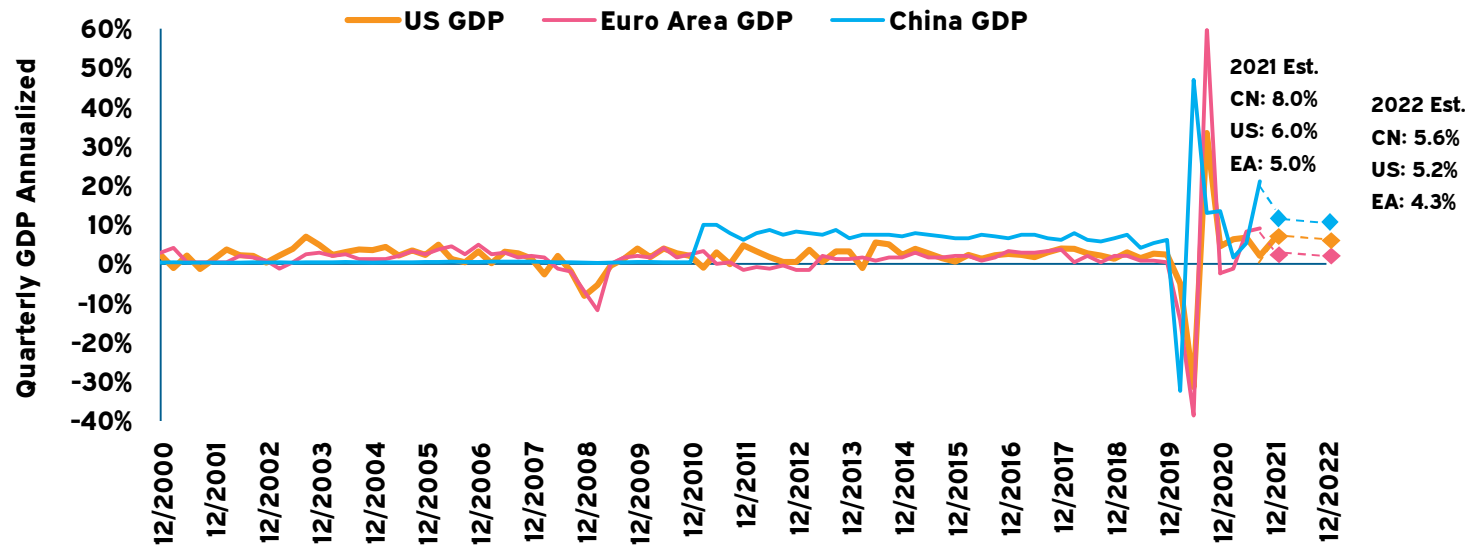
Credit Spreads (High Yield & Investment Grade)¹



- Credit spreads (the yield spread above a comparable maturity Treasury) narrowed in December after the modest widening in November on the discovery of the new virus variant (Omicron).
- Policy support, strong corporate fundamentals, and the search for yield in a low-rate environment have been key drivers in the decline in US credit spreads to well below long-term averages, particularly for high yield issuers.

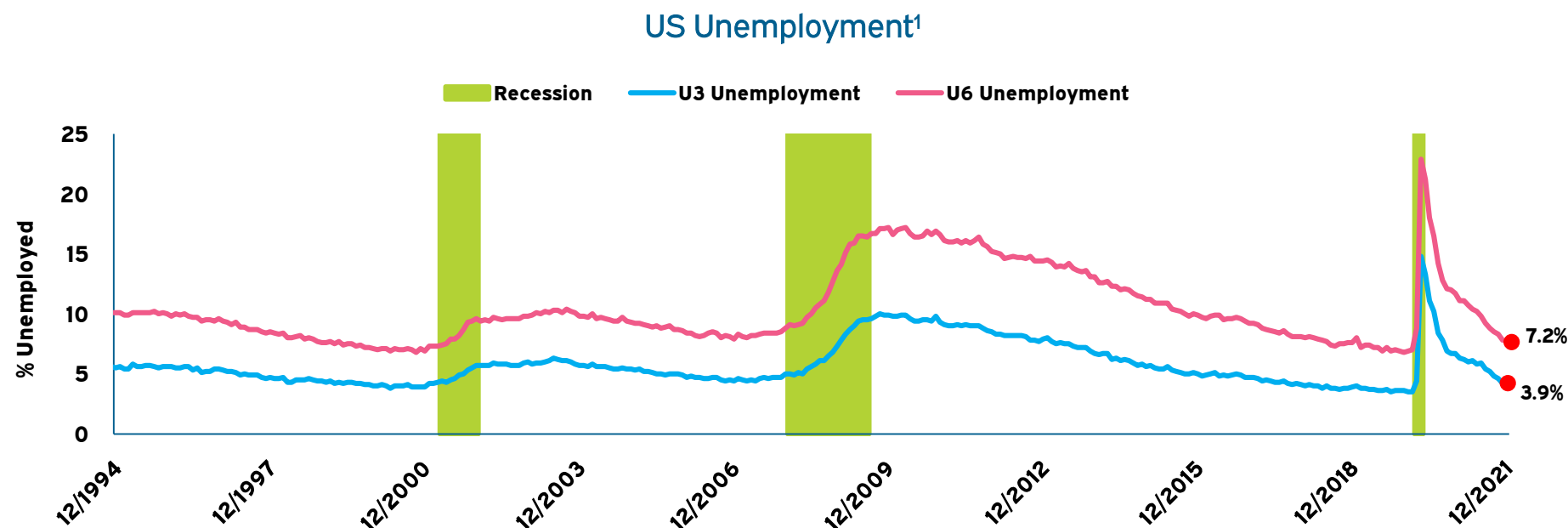
¹ Source: Barclays Live. Data represents OAS and is as of December 31, 2021.

GDP Data Shows Slowing Growth in 2022¹



- In late 2020 and early 2021, major economies grew at rates far above potential. These high rates of growth are expected to decline slightly, with projections continuing to decline due to supply disruptions, reopening trends moderating, and some countries continuing to struggle with the virus.
- The US is expected to grow faster than the euro area again in 2022, with some growth pulled forward due to the relative success in distributing the vaccine and a substantially larger fiscal stimulus response to the pandemic.
- China is projected to grow at 8.0% in 2021 and 5.6% in 2022, both above the expected US growth rate. Questions remain, though, about the highly levered property market and increased government regulations.

¹ Source: Bloomberg, and IMF; Euro Area and China figures annualized by Meketa. Projections via October 2021 IMF World Economic Outlook and represent annual numbers.



- The US labor market continues to recover, and the unemployment rate (U3) fell from 4.2% to 3.9% in December. It still remains slightly above pre-pandemic levels though, but far below the pandemic peak.
- The broader measure of unemployment (U6) that includes discouraged and underemployed workers also continued to decline but is much higher at 7.2%. Also, the labor force participation rate remains quite low at 61.9% and is below the 63.4% level of January 2020.
- Continued improvements in the labor market have contributed to recent expectations that the Federal Reserve will increase its pace of policy removal in 2022.

¹ Source: Bloomberg. Data is as of December 31, 2021. Bars represent recessions as observed by the National Bureau of Economic Research.

Asset Class and Manager Commentary

Domestic Equity

- Over the quarter ending December 31, 2021, domestic equity returned 9.8%, outperforming the Russell 3000 benchmark by 0.5%. The passive strategies, namely Northern Trust Russell 1000 and iShares Edge MSCI Minimum Volatility, performed in line with their respective benchmarks with acceptable tracking error. The active managers, namely Earnest Partners, Rice Hall James, and Brown Fundamental, all outperformed their respective benchmarks and earned above average quarterly ranking in their respective peer groups.
- **Earnest Partners**, the Plan's active mid cap core manager, returned 11.3%, outperforming the Russell Midcap benchmark by 4.9%, and placing in the 16th percentile of its peer group for the quarter. Earnest has also outperformed its benchmark over all other time periods measured as of December 31.
- **Rice Hall James**, the Plan's active small cap growth manager, returned 4.6%, outperforming the Russell 2000 Growth benchmark, which virtually stayed flat in Q4, by 4.6%, and placing in the 33rd percentile for the quarter. The manager also outperformed its benchmark over the 1-year trailing period and since inception by 13.4% and 0.4% respectively. Due to its performance in 2018, Rice Hall James trailed its benchmark by (1.4%) over the 3-year trailing period.
- **Brown Fundamental**, the Plan's active small cap value manager funded in April 2021, returned 9.9% over the quarter outperforming its Russell 2000 Value benchmark by 5.5%, placing it in the 10th percentile amongst its peers.

International Equity

- For the quarter, the international equity segment returned 2.9%, outperforming the MSCI ACWI ex US benchmark by 1.0%. Within this portfolio, the Vanguard passive international developed markets portfolio posted 1.1%. Due to Vanguard's fair-value pricing methodology, the strategy has deviated from its tracked index's return of 2.6%; however, this is expected to equalize over the longer term.
- **SGA MSCI ACWI ex US ETF**, the Plan's active core international equity manager, returned 3.2% outperforming its benchmark by 1.3% over the quarter ranking at 42nd percentile amongst its peers. It has also outperformed its benchmark over the 1-year trailing period by 2.5% even though it has trailed the benchmark by (2.5%) since inception in December 2019.

Fixed Income

- Over the quarter, the Fixed Income aggregate returned 0.1%, outperforming the Bloomberg Universal benchmark, which stayed virtually flat, by 0.1%. Reflecting the broad market trends, core fixed income managers in this portfolio posted virtually flat returns.
- **Ramirez** returned (0.1%) over the quarter, trailing the benchmark by (0.1%) placing in the 57th percentile of its peer group. However, Ramirez has outperformed its benchmark over the 1- and 3-year trailing periods by 1.6% and 0.7% respectively, and by 0.7% since inception in January 2017.

Fixed Income (continued)

- **Reams** posted modest positive returns for the quarter, trailing its benchmark by 0.4% and placing in the 9th percentile of its peer group. While it trailed the Bloomberg Universal benchmark by (0.1%) in the 1-year trailing period, it outperformed its benchmark by 3.5%, 2.4%, and 1.0% over 3- and 5-year trailing period and since inception respectively.
- **Wellington Core Bond**, the core fixed income manager funded in April 2021, returned (0.1%) over the quarter trailing the benchmark by (0.1%) ranking at the 67th percentile.

Covered Calls

- Over the quarter, the Covered Calls portfolio returned 9.2% outpacing its benchmark by 2.2%.
- **Parametric BXM**, the Plan's passive covered calls allocation returned 6.9%, trailing its benchmark, the CBOE BXM index, by (0.1%). Though the portfolio has trailed its benchmark over the most recent quarter and the trailing 1-year period, it has outperformed over the longer 3- and 5-year periods and since inception by 2.9%, 2.0%, and 1.6% respectively.
- **Parametric DeltaShift**, the Plan's active covered calls allocation returned 11.0%, outperforming its benchmark, the CBOE BXM, index by 4.0% over the quarter. Similarly, the portfolio has outperformed the benchmark over all other the time periods measured by 8.8%, 13.6%, 8.5%, and 6.7% over 1-, 3-, 5-year trailing periods and since inception respectively.

Credit

- With **DDJ Capital** as the Plan's sole High Yield & Bank Loan manager, the Credit portfolio returned 0.5% over the quarter, trailing its benchmark, Bloomberg US High Yield, by (0.2%). It outperformed the benchmark over the 1-year and 5-year periods by 4.3% and 0.7% respectively but trailed the benchmark by (1.2%) over the 3-year trailing period. Due to the recent acquisition of DDJ by Polen Capital, the manager will remain on the Watchlist to monitor its progress and organization changes.

Crisis Risk Offset

- Over the quarter, the Crisis Risk Offset portfolio posted 2.0%, modestly outperforming its benchmark by 0.5%. **Vanguard Long Duration ETF** is currently the only funded component of the Crisis Risk Offset portfolio as of December 31, 2021. The Alternative Risk Premia and Systematic Trend Following components of the Crisis Risk Offset portfolio are underway to be funded in coming quarters.

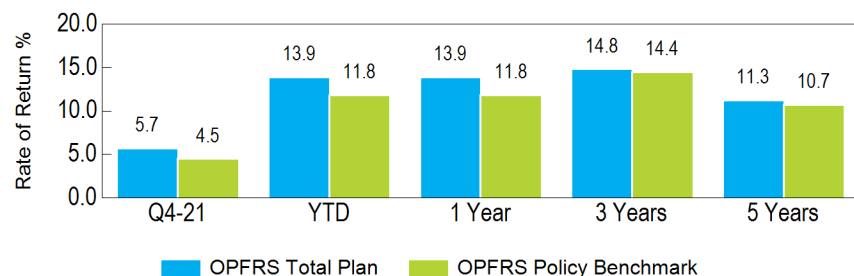
**4Q 2021 Performance
as of December 31, 2021**

OPFRS Total Plan | As of December 31, 2021

1 Year Ending December 31, 2021		
	Anlzd Return	Standard Deviation
OPFRS Total Plan	13.89%	1.86%
OPFRS Policy Benchmark	11.83%	1.68%
InvMetrics Public DB \$250mm-\$1B Gross Median	13.59%	1.68%

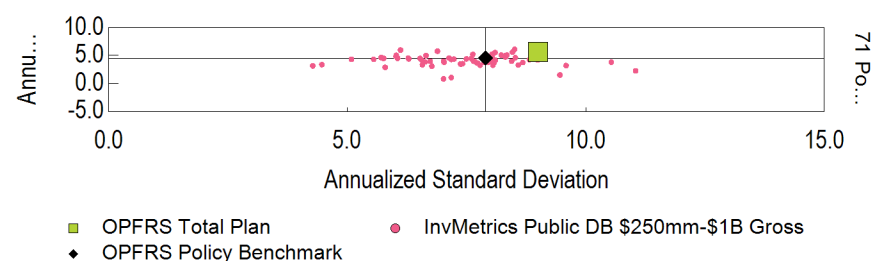
1 Year Ending December 31, 2021		
	Anlzd Return	Standard Deviation
OPFRS Total Plan	13.89%	1.86%
OPFRS Policy Benchmark	11.83%	1.68%

Return Summary Ending December 31, 2021

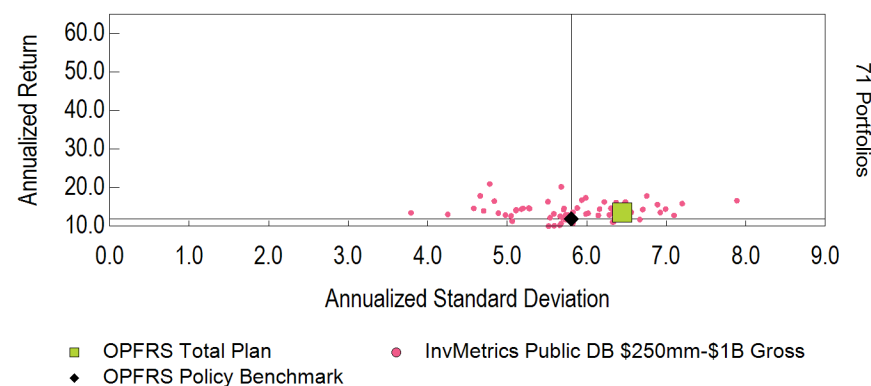


Summary of Cash Flows		
	Quarter-To-Date	One Year
Beginning Market Value	\$459,712,578	\$434,118,470
Net Cash Flow	-\$3,188,809	-\$12,749,737
Capital Appreciation	\$26,697,208	\$61,851,965
Ending Market Value	\$483,220,978	\$483,220,978

Annualized Return vs. Annualized Standard Deviation 3 Months Ending December 31, 2021



Annualized Return vs. Annualized Standard Deviation 1 Year Ending December 31, 2021



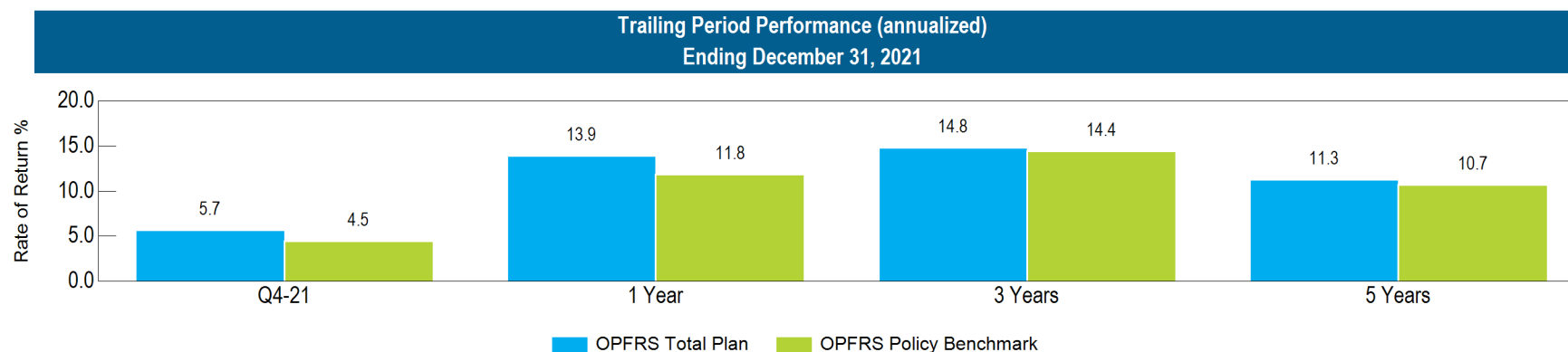
Evolving Policy Benchmark consists of 40% russell 3000, 12% MSCI ACWI ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury

Asset Class Performance (gross of fees) | As of December 31, 2021

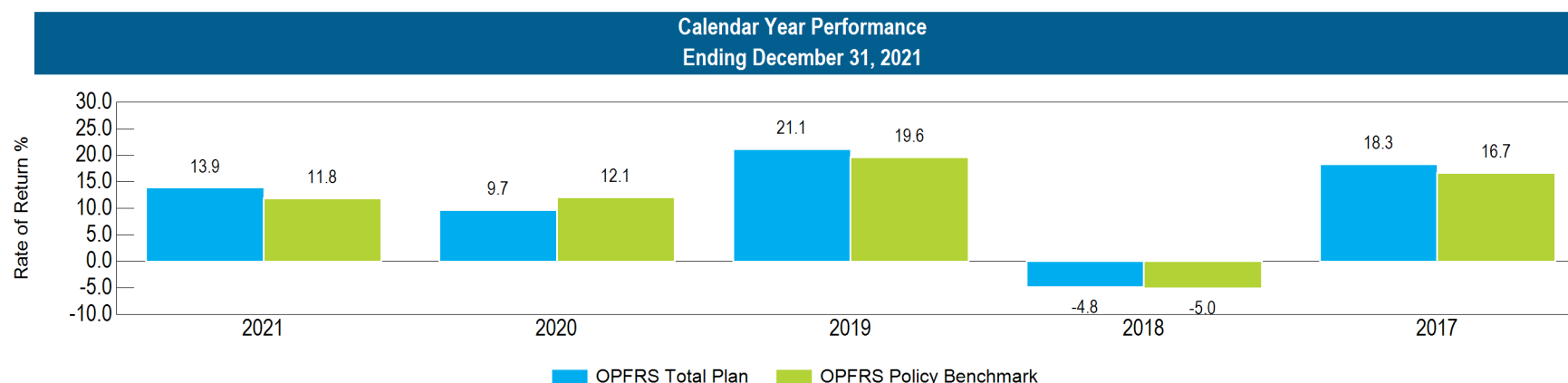
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
OPFRS Total Plan	5.7	13.9	13.9	14.8	11.3	9.3	9.8
<i>OPFRS Policy Benchmark</i>	<u>4.5</u>	<u>11.8</u>	<u>11.8</u>	<u>14.4</u>	<u>10.7</u>	<u>9.0</u>	<u>9.3</u>
Excess Return	1.2	2.1	2.1	0.4	0.6	0.3	0.5
Domestic Equity	9.8	25.0	25.0	24.5	17.2	14.0	15.8
<i>Russell 3000 (Blend)</i>	<u>9.3</u>	<u>25.7</u>	<u>25.7</u>	<u>25.8</u>	<u>18.0</u>	<u>14.5</u>	<u>16.3</u>
Excess Return	0.5	-0.7	-0.7	-1.3	-0.8	-0.5	-0.5
International Equity	2.9	10.6	10.6	14.5	10.8	7.9	8.6
<i>MSCI ACWI ex US (Blend)</i>	<u>1.9</u>	<u>8.3</u>	<u>8.3</u>	<u>13.7</u>	<u>10.1</u>	<u>7.1</u>	<u>7.8</u>
Excess Return	1.0	2.3	2.3	0.8	0.7	0.8	0.8
Fixed Income	0.1	-0.3	-0.3	5.5	4.3	3.8	3.6
<i>Bloomberg Universal (Blend)</i>	<u>0.0</u>	<u>-1.1</u>	<u>-1.1</u>	<u>5.2</u>	<u>3.8</u>	<u>3.4</u>	<u>3.3</u>
Excess Return	0.1	0.8	0.8	0.3	0.5	0.4	0.3
Credit	0.5	9.6	9.6	7.6	7.0	--	--
<i>Bloomberg US High Yield TR</i>	<u>0.7</u>	<u>5.3</u>	<u>5.3</u>	<u>8.8</u>	<u>6.3</u>	--	--
Excess Return	-0.2	4.3	4.3	-1.2	0.7	--	--
Covered Calls	9.2	24.7	24.7	19.4	13.4	11.6	--
<i>CBOE S&P 500 BuyWrite USD</i>	<u>7.0</u>	<u>20.3</u>	<u>20.3</u>	<u>10.9</u>	<u>8.0</u>	<u>7.5</u>	--
Excess Return	2.2	4.4	4.4	8.5	5.4	4.1	--
Crisis Risk Offset	2.0	-6.7	-6.7	-6.8	--	--	--
<i>SG Multi Alternative Risk Premia Index</i>	<u>1.5</u>	<u>7.6</u>	<u>7.6</u>	<u>-1.7</u>	--	--	--
Excess Return	0.5	-14.3	-14.3	-5.1	--	--	--

1. Evolving Policy Benchmark consists of 40% Russell 3000, 12% MSCI Acwi ex U.S., 33% Bbg BC Universal, 5% CBOE BXM, 6.7% SG Multi Asset Risk Premia, 3.3% Bbg BC Long Treasury,
2. Domestic Equity Benchmark consists of S&P 500 thru 3/31/98 10% Russell 1000, 20% Russell 1000 Value, 5% RMC from 4/1/98 - 12/31/04 and Russell 3000 from 1/1/05 to present.
3. International Equity Benchmark consists of MSCI EAFE thru 12/31/04 and MSCI ACWI x US thereafter.
4. Fixed Income Benchmark consists of Bbg BC Aggregate prior to 4/1/06, and Bbg BC Universal thereafter.
5. Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

Portfolio Relative Performance Results | As of December 31, 2021



	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)	2021 (%)
OPFRS Total Plan	5.7	13.9	13.9	14.8	11.3	18.3	-4.8	21.1	9.7	13.9
<i>OPFRS Policy Benchmark</i>	<i>4.5</i>	<i>11.8</i>	<i>11.8</i>	<i>14.4</i>	<i>10.7</i>	<i>16.7</i>	<i>-5.0</i>	<i>19.6</i>	<i>12.1</i>	<i>11.8</i>
<i>InvMetrics Public DB \$250mm-\$1B Gross Median</i>	<i>4.2</i>	<i>13.6</i>	<i>13.6</i>	<i>15.6</i>	<i>11.4</i>	<i>15.8</i>	<i>-4.1</i>	<i>18.6</i>	<i>13.1</i>	<i>13.6</i>

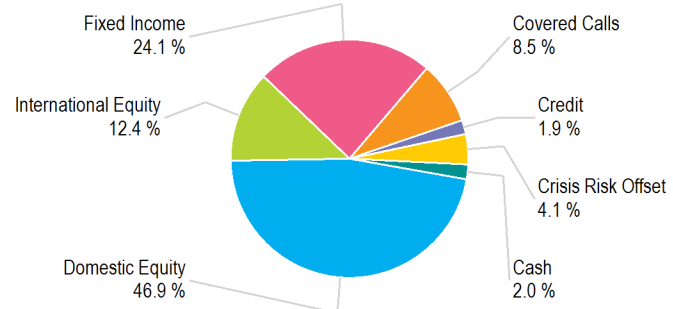


Asset Allocation | As of December 31, 2021

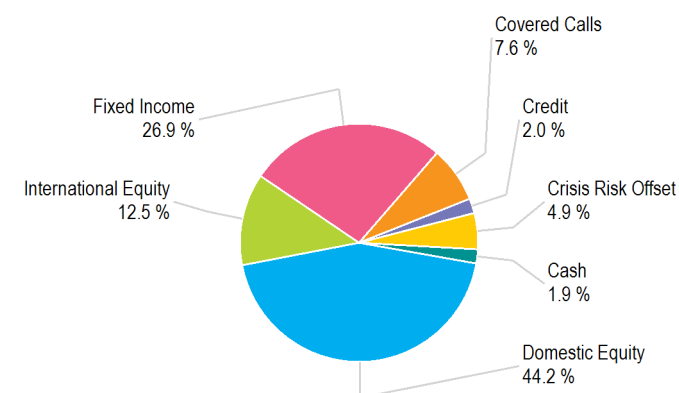
Asset Allocation vs. Target As Of December 31, 2021

	Current	%	Policy	Difference*
Domestic Equity	\$226,498,729	46.9%	40.0%	6.9%
International Equity	\$60,100,247	12.4%	12.0%	0.4%
Fixed Income	\$116,568,599	24.1%	31.0%	-6.9%
Covered Calls	\$41,091,899	8.5%	5.0%	3.5%
Credit	\$9,372,205	1.9%	2.0%	-0.1%
Crisis Risk Offset	\$19,890,317	4.1%	10.0%	-5.9%
Cash	\$9,698,983	2.0%	0.0%	2.0%

December 31, 2021: \$483,220,978



December 31, 2020: \$434,118,470



Cash balances held in ETF accounts at the Custodian are reflected in the Cash account market value.

Target weightings reflect the Plan's evolving asset allocation (effective 5/31/2017.)

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Domestic Equity	226,498,729	100.0	9.8	25.0	24.5	17.2	9.8	Jun-97
<i>Russell 3000 (Blend)</i>			<u>9.3</u>	<u>25.7</u>	<u>25.8</u>	<u>18.0</u>	<u>10.0</u>	<u>Jun-97</u>
Excess Return			0.5	-0.7	-1.3	-0.8	-0.2	
Northern Trust Russell 1000	122,696,981	54.2	9.8	26.5	26.2	18.4	15.8	Jun-10
<i>Russell 1000</i>			<u>9.8</u>	<u>26.5</u>	<u>26.2</u>	<u>18.4</u>	<u>15.8</u>	<u>Jun-10</u>
Excess Return			0.0	0.0	0.0	0.0	0.0	
eV US Large Cap Core Equity Gross Rank			64	65	37	42	41	Jun-10
EARNEST Partners	51,502,726	22.7	11.3	25.7	28.2	19.2	11.8	Apr-06
<i>Russell MidCap</i>			<u>6.4</u>	<u>22.6</u>	<u>23.3</u>	<u>15.1</u>	<u>10.2</u>	<u>Apr-06</u>
Excess Return			4.9	3.1	4.9	4.1	1.6	
eV US Mid Cap Core Equity Gross Rank			16	60	14	19	27	Apr-06
iShares Edge MSCI Min Vol ETF	23,024,059	10.2	10.4	20.8	--	--	28.0	Apr-20
<i>MSCI USA Minimum Volatility GR USD</i>			<u>10.4</u>	<u>21.0</u>	--	--	<u>28.2</u>	<u>Apr-20</u>
Excess Return			0.0	-0.2			-0.2	
eV US Low Volatility Equity Gross Rank			40	70	--	--	78	Apr-20
Rice Hall James	17,436,537	7.7	4.6	16.2	19.8	--	14.2	Jul-17
<i>Russell 2000 Growth</i>			<u>0.0</u>	<u>2.8</u>	<u>21.2</u>	--	<u>13.8</u>	<u>Jul-17</u>
Excess Return			4.6	13.4	-1.4		0.4	
eV US Small Cap Growth Equity Gross Rank			33	37	91	--	92	Jul-17

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
International Equity	60,100,247	100.0	2.9	10.6	14.5	10.8	5.9	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			<i>1.9</i>	<i>8.3</i>	<i>13.7</i>	<i>10.1</i>	<i>6.0</i>	<i>Jan-98</i>
Excess Return			1.0	2.3	0.8	0.7	-0.1	
SGA ACWI ex-U.S. Equity	42,401,389	70.6	3.2	10.8	--	--	9.1	Dec-19
<i>MSCI ACWI ex USA Gross</i>			<i>1.9</i>	<i>8.3</i>	--	--	<i>11.6</i>	<i>Dec-19</i>
Excess Return			1.3	2.5			-2.5	
<i>eV ACWI ex-US All Cap Core Eq Gross Rank</i>			42	50	--	--	93	Dec-19
Vanguard Developed Markets ETF	17,098,207	28.4	1.1	8.2	--	--	12.2	Sep-19
<i>FTSE Developed All Cap Ex US TR USD</i>			<i>2.6</i>	<i>11.9</i>	--	--	<i>14.8</i>	<i>Sep-19</i>
Excess Return			-1.5	-3.7			-2.6	
<i>eV ACWI ex-US All Cap Core Eq Gross Rank</i>			78	81	--	--	89	Sep-19

Total International Equity market value includes cash held in closed accounts Fisher and Hansberger.

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Fixed Income	116,568,599	100.0	0.1	-0.3	5.5	4.3	5.4	Dec-93
<i>Bloomberg Universal (Blend)</i>			<u>0.0</u>	<u>-1.1</u>	<u>5.2</u>	<u>3.8</u>	<u>5.2</u>	<u>Dec-93</u>
Excess Return			0.1	0.8	0.3	0.5	0.2	
Ramirez	79,372,600	68.1	-0.1	0.1	5.5	--	4.3	Jan-17
<i>Bloomberg US Aggregate TR</i>			<u>0.0</u>	<u>-1.5</u>	<u>4.8</u>	--	<u>3.6</u>	<u>Jan-17</u>
Excess Return			-0.1	1.6	0.7		0.7	
eV US Core Fixed Inc Gross Rank			57	7	50	--	30	Jan-17
Reams	29,560,445	25.4	0.4	-1.2	8.7	6.2	5.9	Feb-98
<i>Bloomberg Universal (Blend)</i>			<u>0.0</u>	<u>-1.1</u>	<u>5.2</u>	<u>3.8</u>	<u>4.9</u>	<u>Feb-98</u>
Excess Return			0.4	-0.1	3.5	2.4	1.0	
eV US Core Plus Fixed Inc Gross Rank			9	94	3	4	43	Feb-98

Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Covered Calls	41,091,899	100.0	9.2	24.7	19.4	13.4	11.1	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>7.0</i>	<i>20.3</i>	<i>10.9</i>	<i>8.0</i>	<i>7.1</i>	<i>Apr-14</i>
Excess Return			2.2	4.4	8.5	5.4	4.0	
Parametric DeltaShift	23,455,117	57.1	11.0	29.1	24.5	16.5	13.8	Apr-14
<i>CBOE S&P 500 BuyWrite USD</i>			<i>7.0</i>	<i>20.3</i>	<i>10.9</i>	<i>8.0</i>	<i>7.1</i>	<i>Apr-14</i>
Excess Return			4.0	8.8	13.6	8.5	6.7	
<i>eV US Large Cap Core Equity Gross Rank</i>			<i>39</i>	<i>37</i>	<i>57</i>	<i>71</i>	<i>68</i>	<i>Apr-14</i>

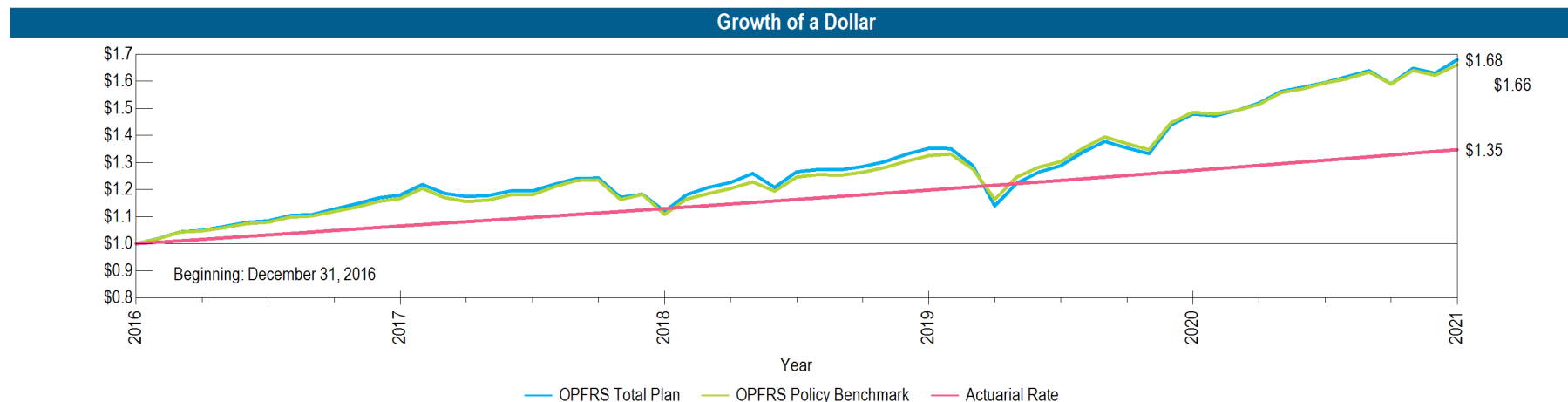
Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Credit	9,372,205	100.0	0.5	9.6	7.6	7.0	6.6	Feb-15
<i>Bloomberg US High Yield TR</i>			<i>0.7</i>	<i>5.3</i>	<i>8.8</i>	<i>6.3</i>	<i>6.1</i>	<i>Feb-15</i>
Excess Return			-0.2	4.3	-1.2	0.7	0.5	
DDJ Capital	9,372,205	100.0	0.5	9.6	7.6	7.0	6.6	Feb-15
<i>ICE BofA High Yield Master TR</i>			<i>0.7</i>	<i>5.4</i>	<i>8.6</i>	<i>6.1</i>	<i>6.0</i>	<i>Feb-15</i>
Excess Return			-0.2	4.2	-1.0	0.9	0.6	
<i>eV US High Yield Fixed Inc Gross Rank</i>			<i>84</i>	<i>6</i>	<i>80</i>	<i>21</i>	<i>27</i>	<i>Feb-15</i>

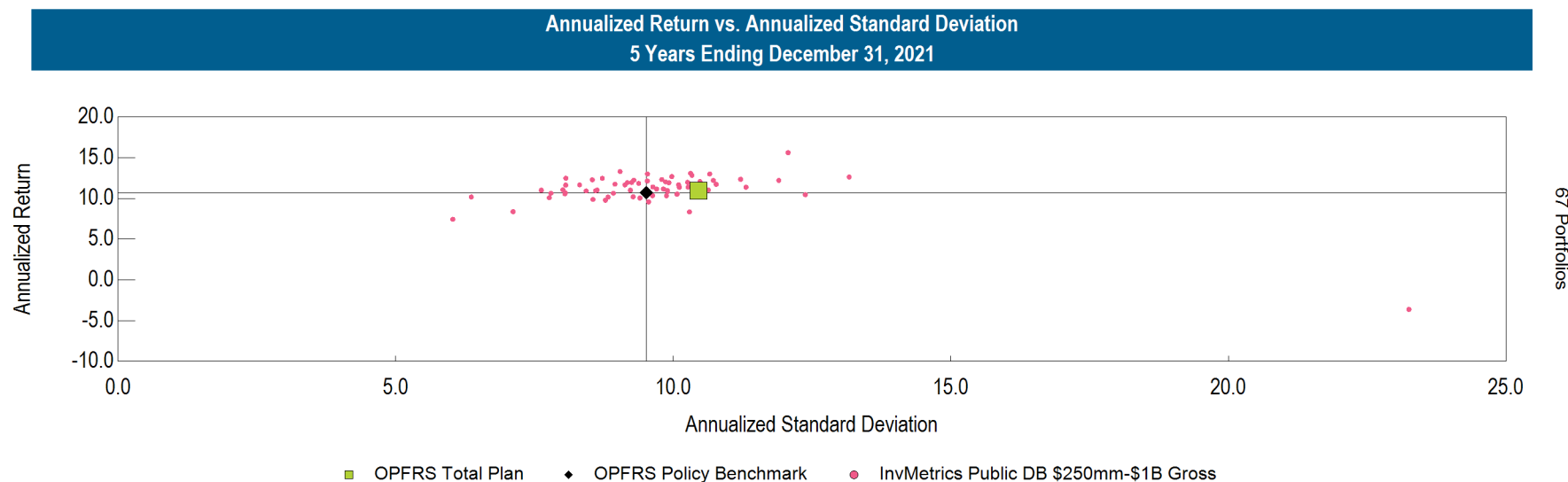
Manager Performance - Gross of Fees | As of December 31, 2021

	Market Value	% of Portfolio	QTD	1 Yr	3 Yrs	5 Yrs	S.I.	S.I. Date
Crisis Risk Offset	19,890,317	100.0	2.0	-6.7	-6.8	--	-8.0	Aug-18
<i>SG Multi Alternative Risk Premia Index</i>			<i>1.5</i>	<i>7.6</i>	<i>-1.7</i>	<i>--</i>	<i>-2.0</i>	<i>Aug-18</i>
Excess Return			0.5	-14.3	-5.1		-6.0	
Vanguard Long-Term Treasury ETF	19,890,317	100.0	2.0	-6.7	--	--	5.3	Jul-19
<i>Bloomberg US Govt Long TR</i>			<i>3.0</i>	<i>-4.6</i>	<i>--</i>	<i>--</i>	<i>6.1</i>	<i>Jul-19</i>
Excess Return			-1.0	-2.1			-0.8	
<i>eV US Long Duration - Gov/Cred Fixed Inc Net Rank</i>			<i>41</i>	<i>99</i>	<i>--</i>	<i>--</i>	<i>98</i>	<i>Jul-19</i>

Total Portfolio 5-Year Performance | As of December 31, 2021

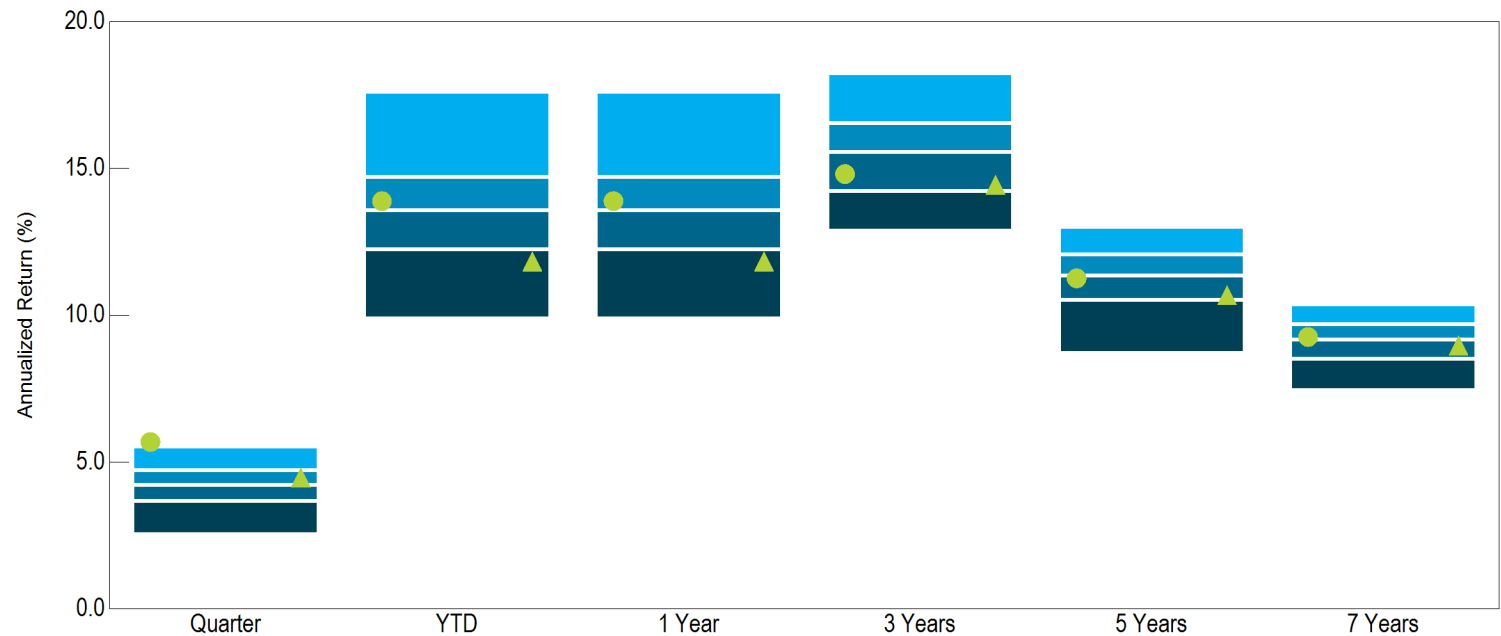


The actuarial expected rate of return was 8% through 6/30/2009, 7.5% through 6/30/2010, 7% through 6/30/2011, 6.75% through 6/30/2014, 6.5% through 2/31/2017 and 6.0% currently



Plan Sponsor Peer Group Analysis | As of December 31, 2021

InvMetrics Public DB \$250mm-\$1B Gross Return Comparison



	Return (Rank)											
5th Percentile	5.5		17.6		17.6		18.2		13.0		10.4	
25th Percentile	4.7		14.7		14.7		16.6		12.1		9.7	
Median	4.2		13.6		13.6		15.6		11.4		9.2	
75th Percentile	3.7		12.3		12.3		14.2		10.5		8.5	
95th Percentile	2.6		9.9		9.9		12.9		8.7		7.5	
# of Portfolios	71		71		71		70		67		65	
● OPFRS Total Plan	5.7	(4)	13.9	(47)	13.9	(47)	14.8	(62)	11.3	(53)	9.3	(49)
▲ OPFRS Policy Benchmark	4.5	(34)	11.8	(81)	11.8	(81)	14.4	(72)	10.7	(71)	9.0	(59)

Manager Monitoring/Probation Status

Return vs. Benchmark since Corrective Action (As of December 31, 2021)

Portfolio	Status	Concern	Months Since Corrective Action	Performance ¹ Since Corrective Action (Gross, %)	Peer Group Percentile Ranking ²	Date of Corrective Action ³
DDJ Capital	On Watch	Performance/ Org changes	30	7.1	6	5/29/2019
Ice BofAML US High Yield				7.0		
Rice Hall James	On Watch	Performance	30	20.5	37	5/29/2019
Russell 2000 Growth				19.7		
Parametric	On Watch	Org changes	12	33.8	NA	10/28/2020
CBOE S&P 500 BuyWrite USD				28.8		

Investment Performance Criteria for Manager Monitoring/Probation Status

Asset Class	Short-term (Rolling 12 months)	Medium-term (Rolling 36 months)	Long-term (60 + months)
Active Domestic Equity	Fund return < benchmark return by 3.5%	Annualized Fund return < benchmark return by 1.75% for 6 consecutive months	VRR ⁴ < 0.97 for 6 consecutive months
Active International Equity	Fund return < benchmark return by 4.5%	Annualized Fund return < benchmark return by 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	Annualized Fund return < benchmark return by 0.40% for 6 consecutive months
Fixed Income	Fund return < benchmark return by 1.5%	Annualized Fund return < benchmark return by 1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months

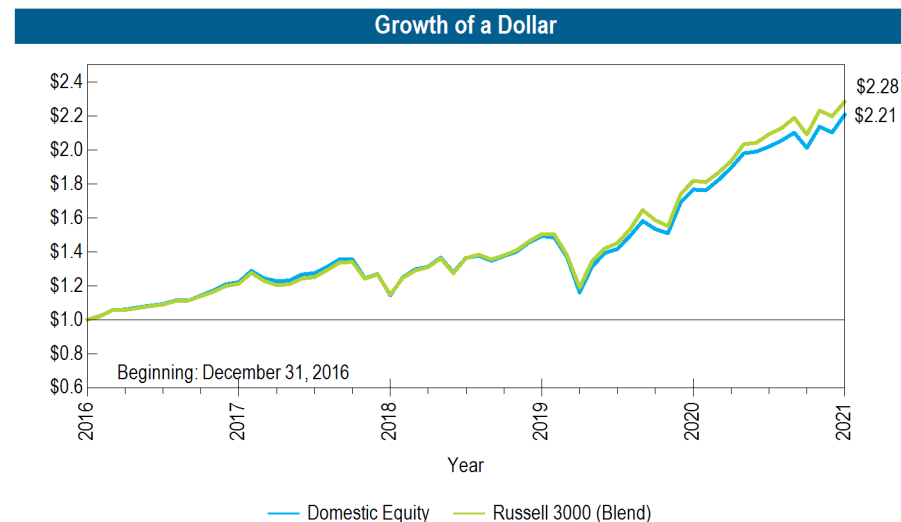
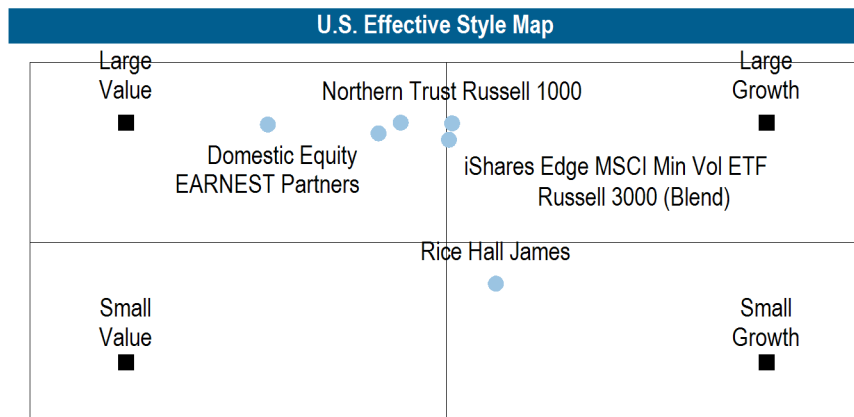
¹ Annualized performance if over one year

² Ranking over most recent quarter if on watch for less than 1 year, or over 1 year if on watch for more than a year.

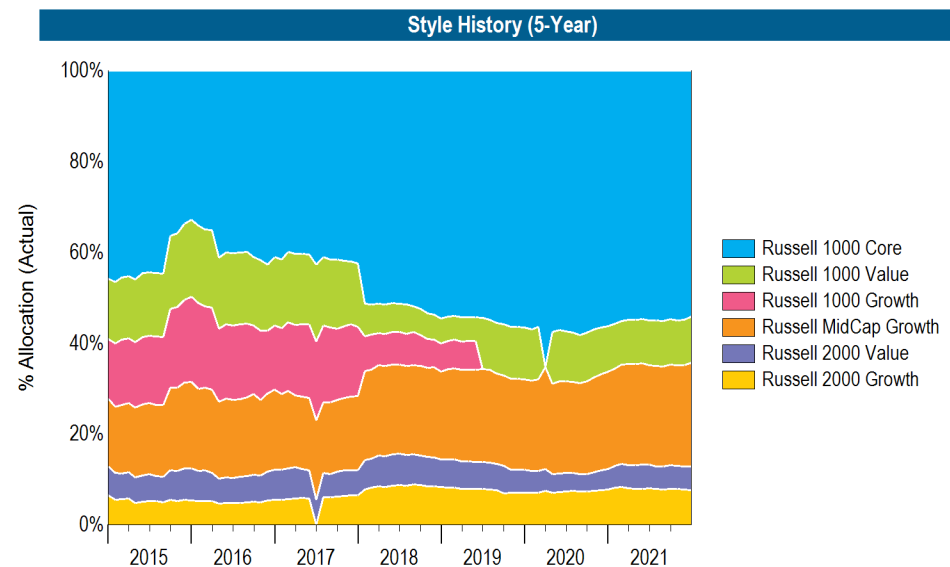
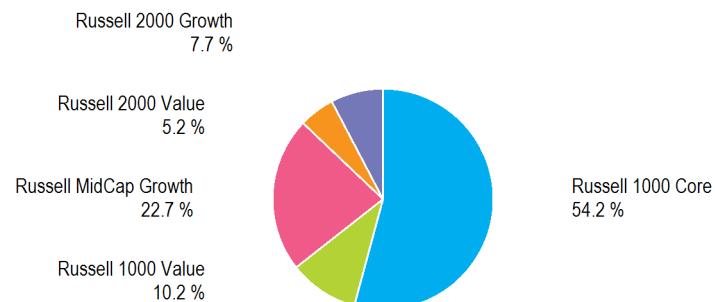
³ Approximate date based on when the Board voted to either monitor a manager at a heightened level or place it on probation.

⁴ VRR (Value Relative Ratio) is calculated as manager cumulative return/ benchmark return.

Domestic Equity | As of December 31, 2021

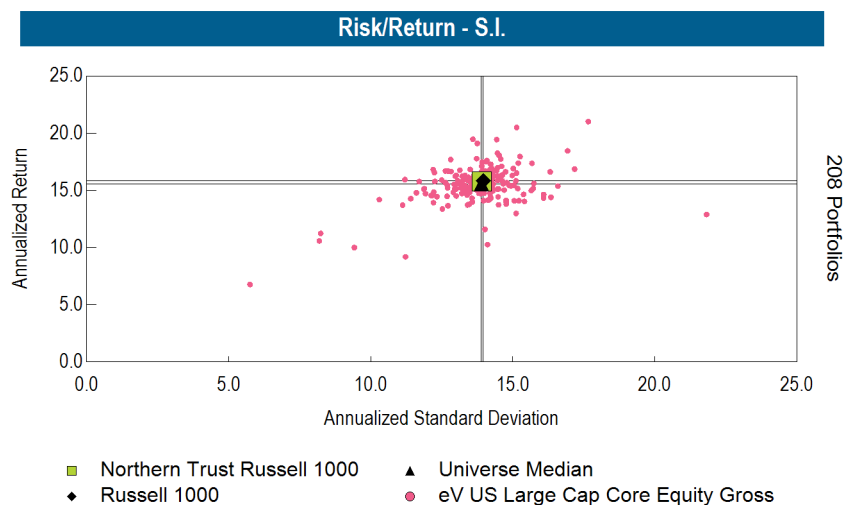
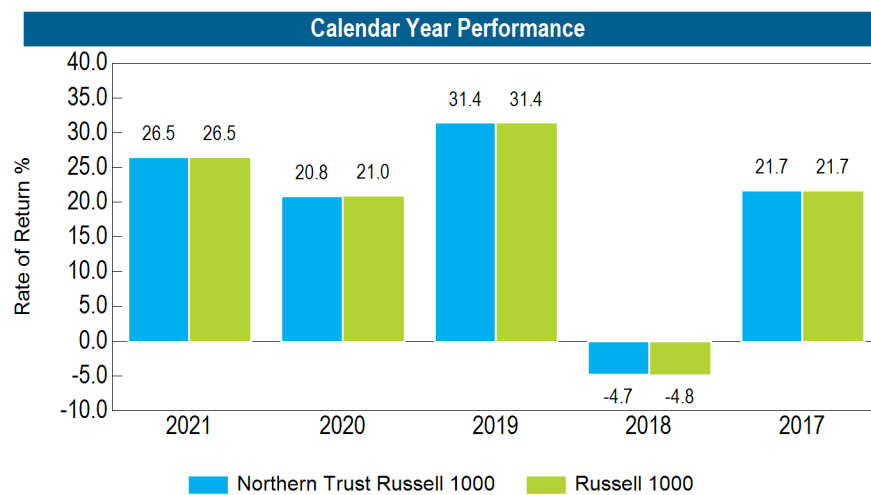
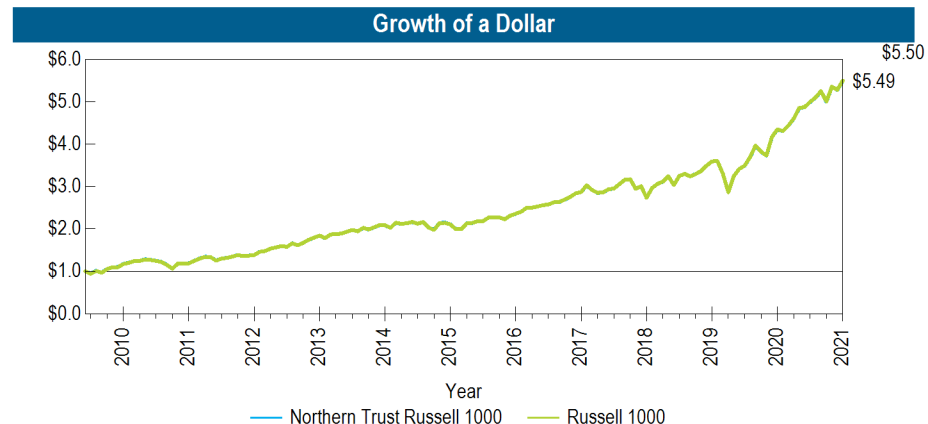
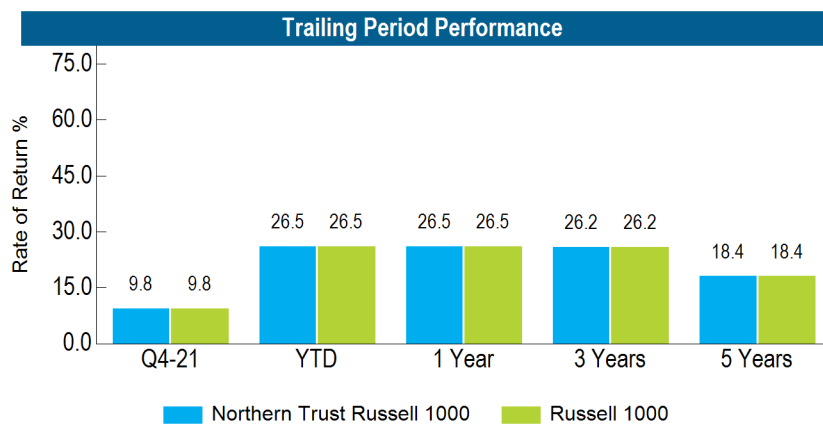


Style Exposure



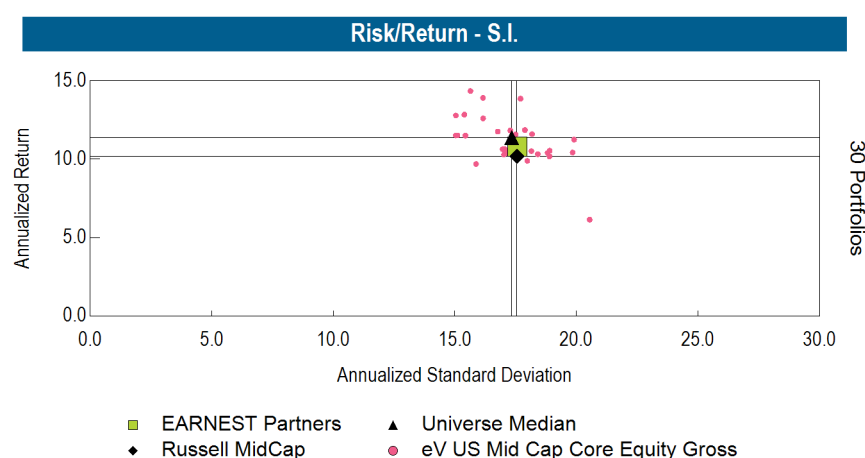
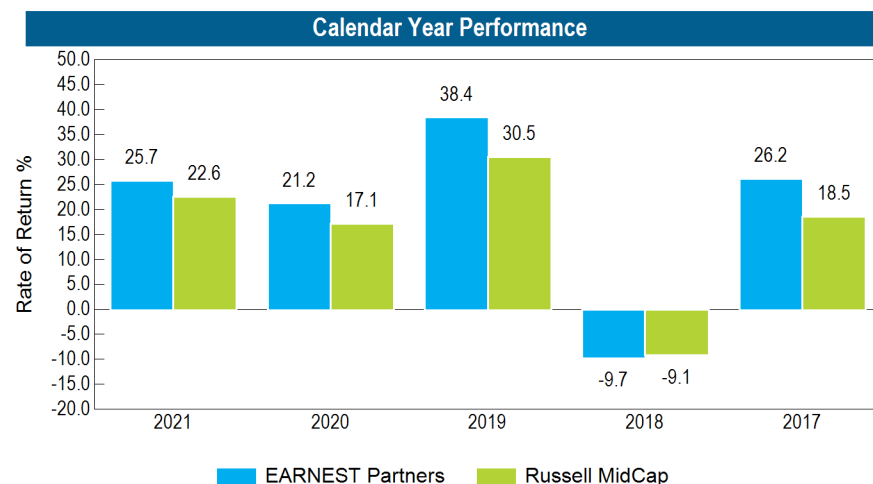
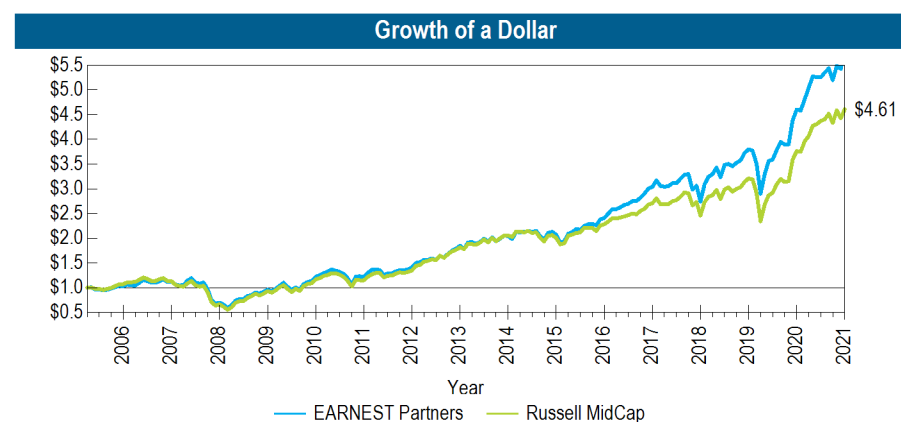
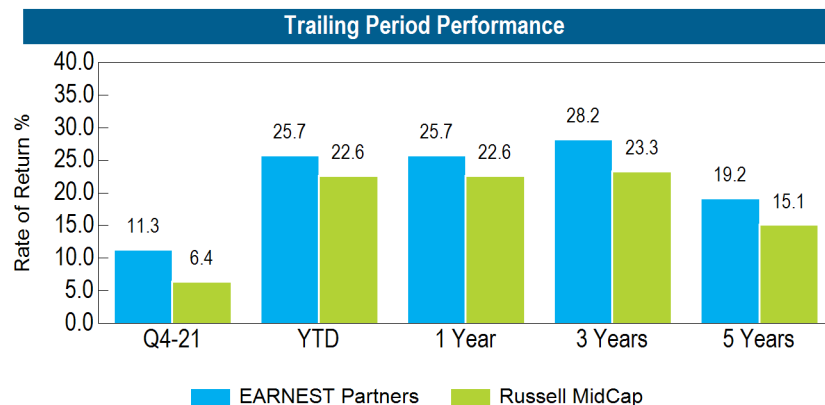
Northern Trust Russell 1000 | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Northern Trust Russell 1000	15.76%	13.91%	0.00%	1.00	0.13%	98.36%	99.77%
Russell 1000	15.85%	13.96%	0.00%	1.00	0.00%	100.00%	100.00%



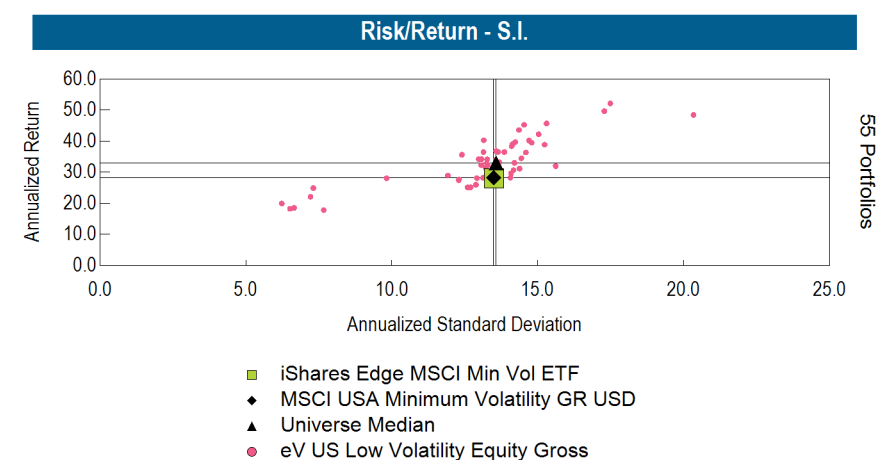
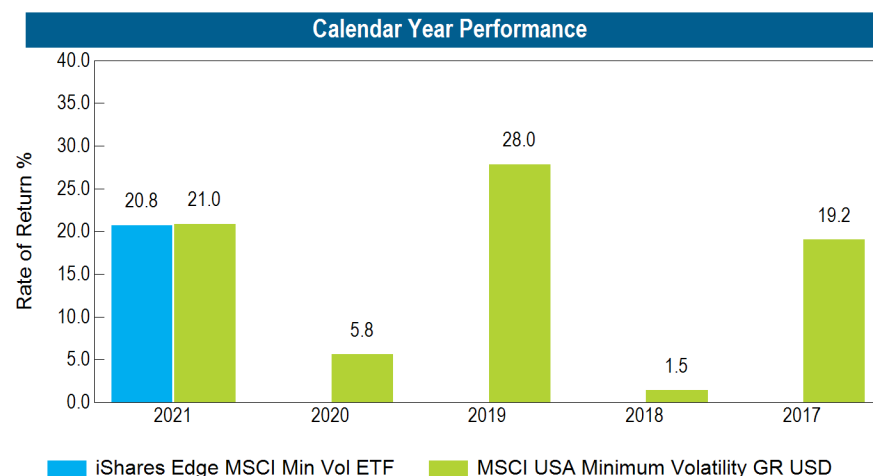
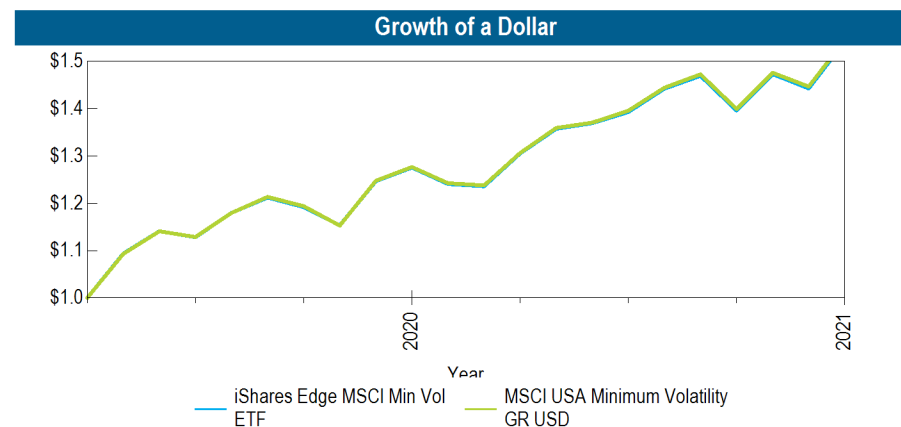
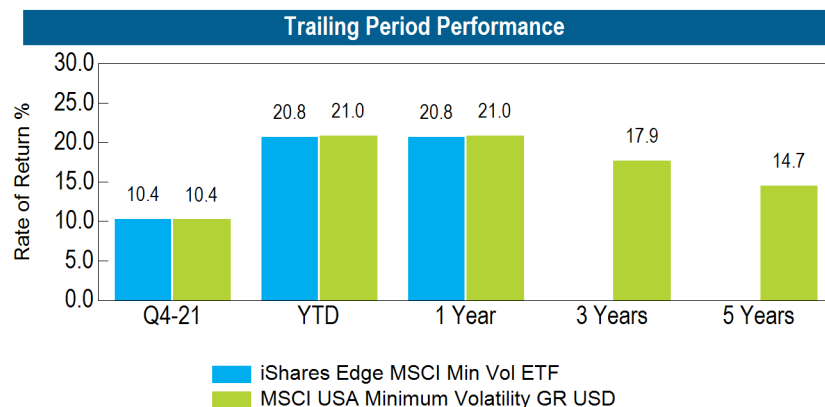
EARNEST Partners | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
EARNEST Partners	10.81%	17.58%	0.06%	0.98	0.18	3.45%	94.81%	99.03%
Russell MidCap	10.19%	17.56%	0.00%	1.00	--	0.00%	100.00%	100.00%



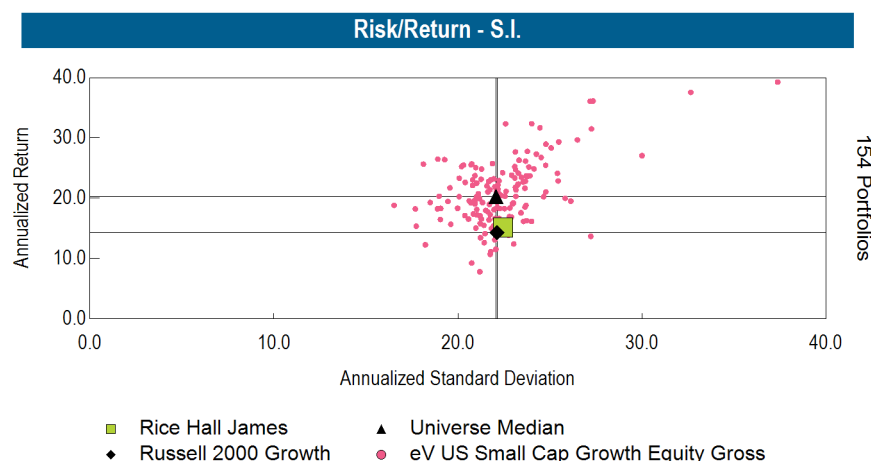
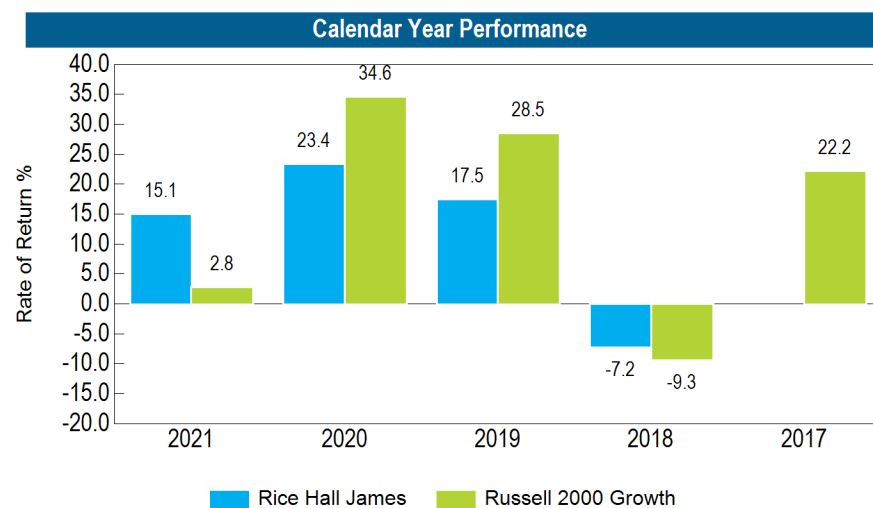
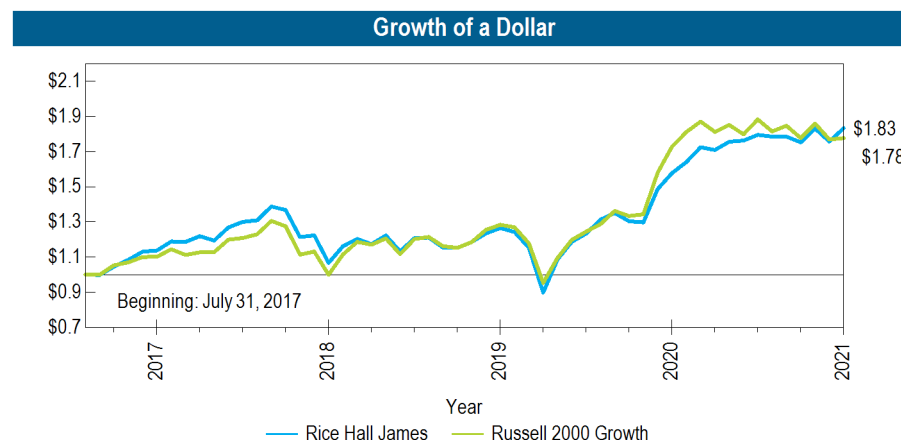
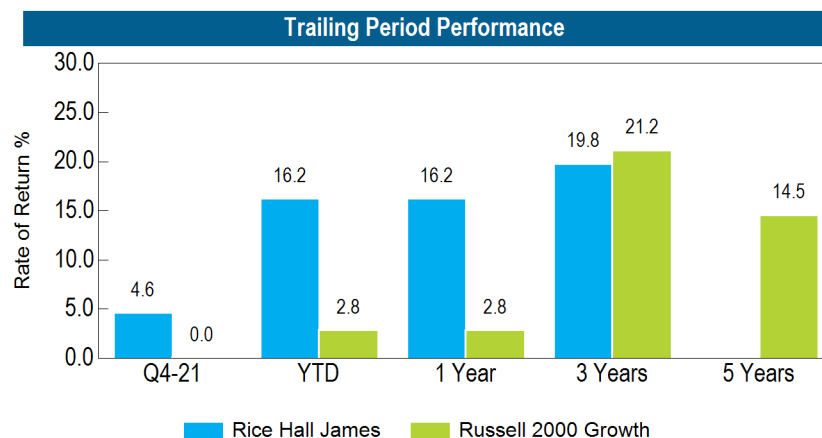
iShares Edge MSCI Min Vol ETF | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
iShares Edge MSCI Min Vol ETF	28.03%	13.50%	-0.01%	1.00	-0.59	0.28%	99.60%	100.27%
MSCI USA Minimum Volatility GR USD	28.20%	13.49%	0.00%	1.00	--	0.00%	100.00%	100.00%



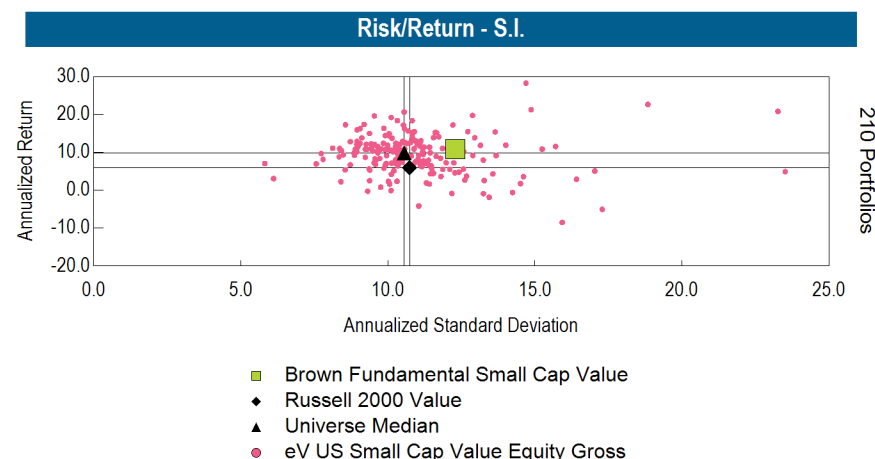
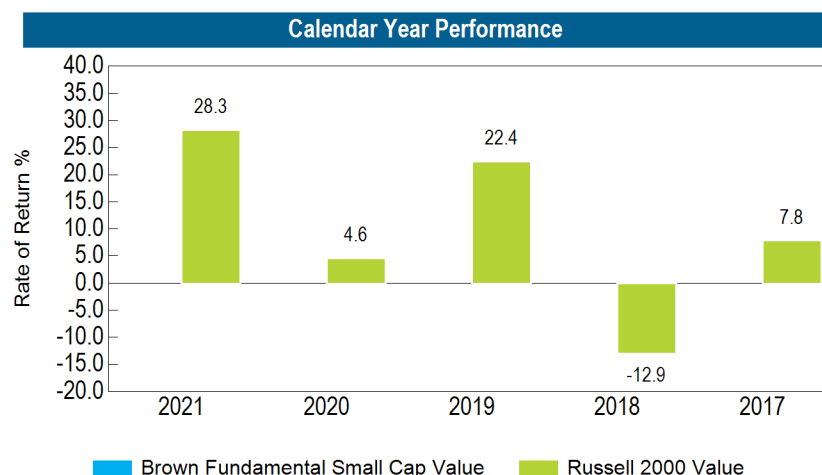
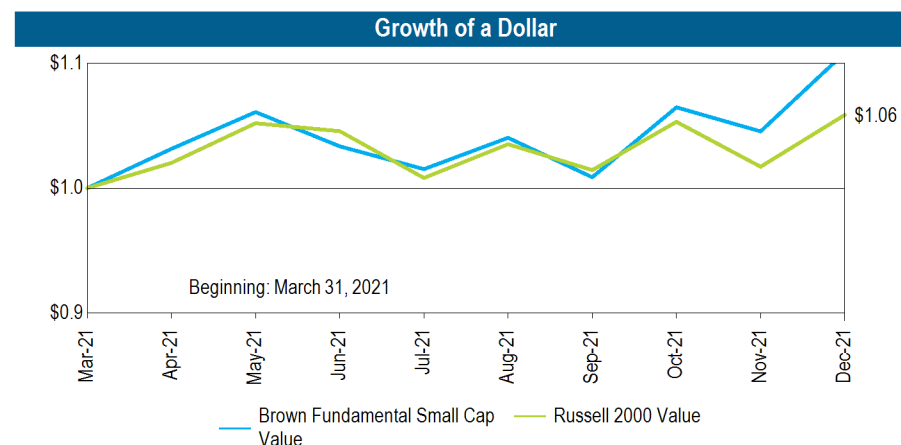
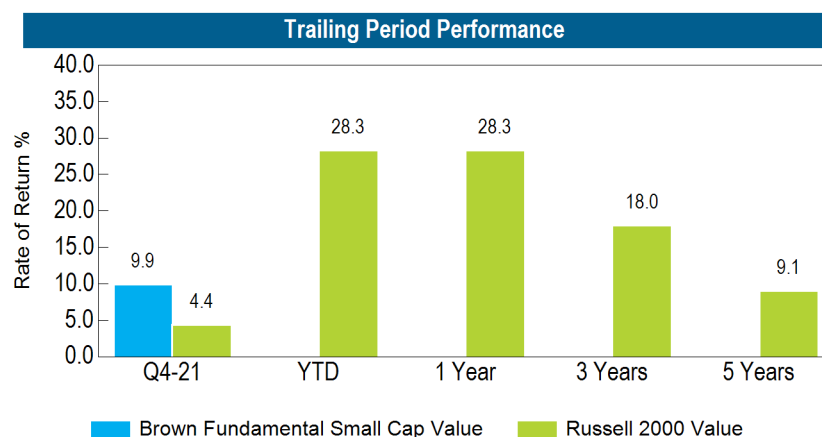
Rice Hall James | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Rice Hall James	13.56%	22.25%	0.03%	0.97	-0.05	6.82%	89.54%	95.36%
Russell 2000 Growth	13.90%	21.92%	0.00%	1.00	--	0.00%	100.00%	100.00%



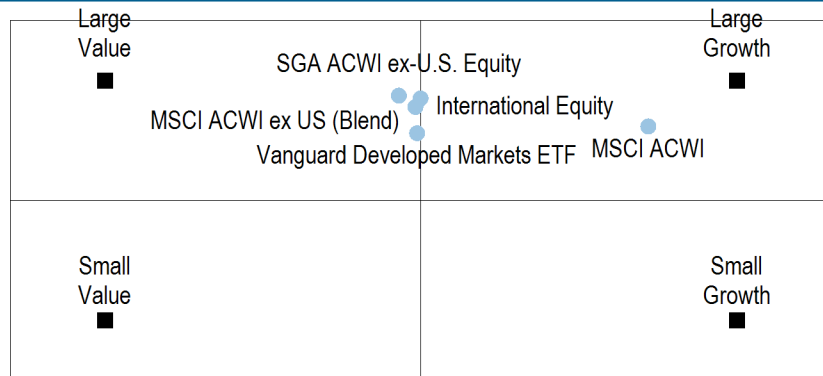
Brown Fundamental Small Cap Value | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Brown Fundamental Small Cap Value	10.14%	12.27%	0.43%	1.05	0.86	4.98%	127.14%	98.53%
Russell 2000 Value	5.86%	10.74%	0.00%	1.00	--	0.00%	100.00%	100.00%

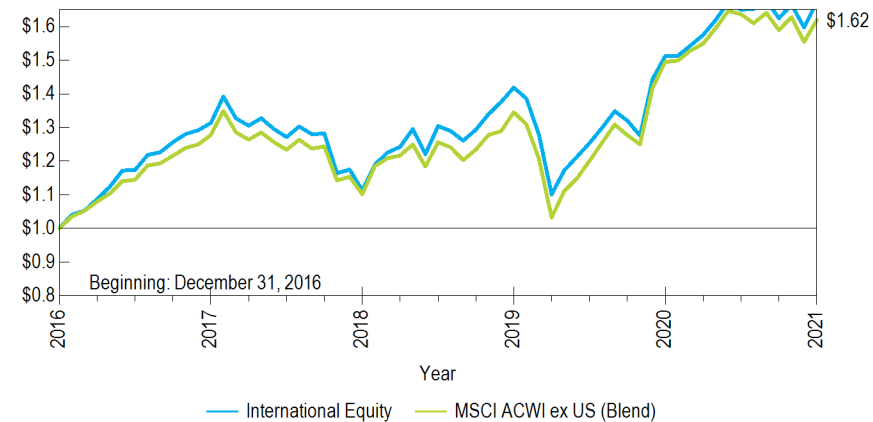


International Equity | As of December 31, 2021

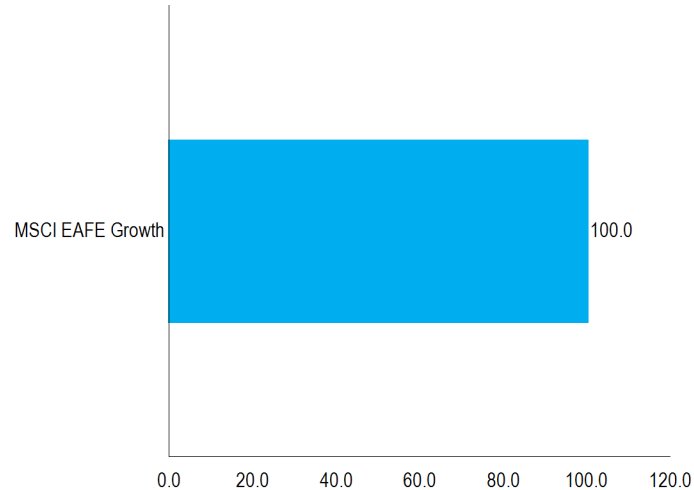
Non U.S. Effective Style Map vs. EAFE



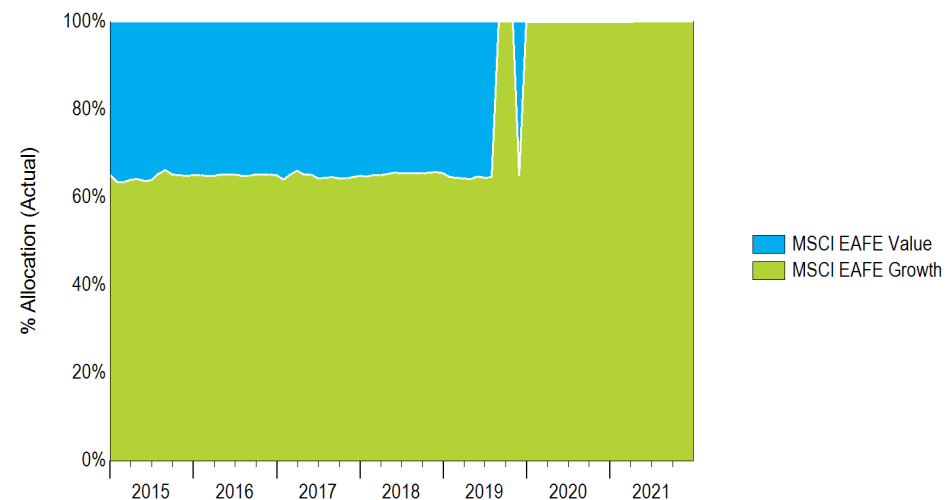
Growth of a Dollar
5 Years Ending December 31, 2021



Style Exposure

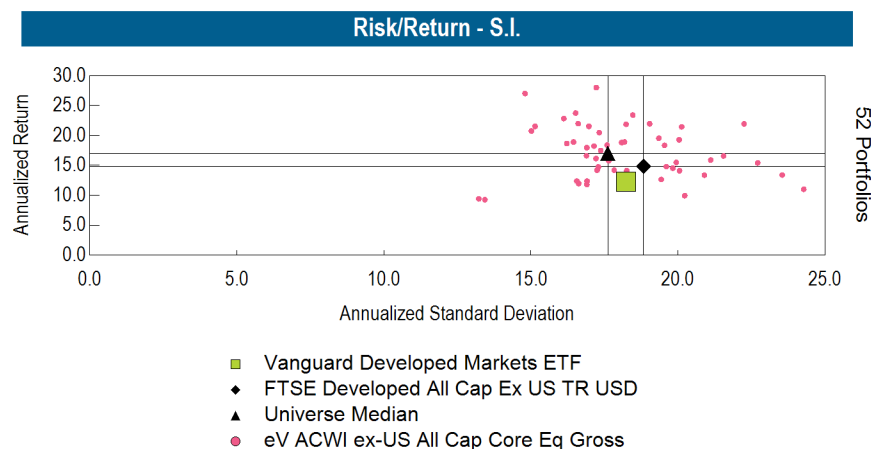
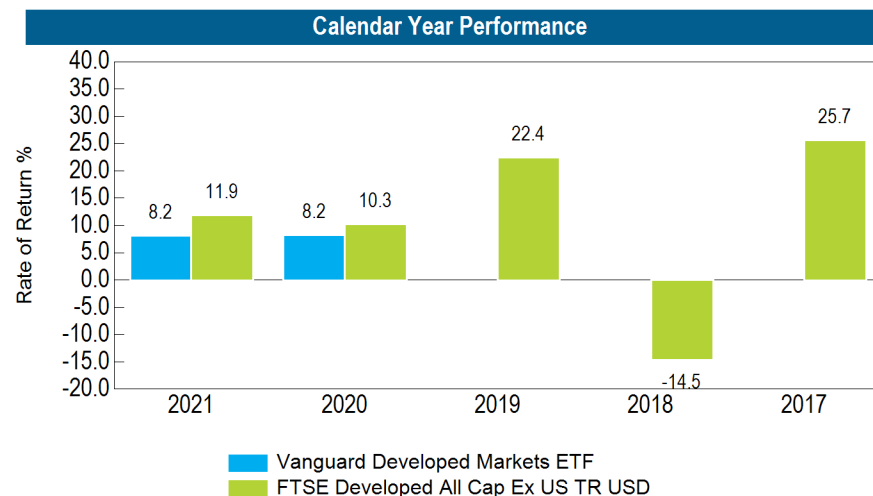
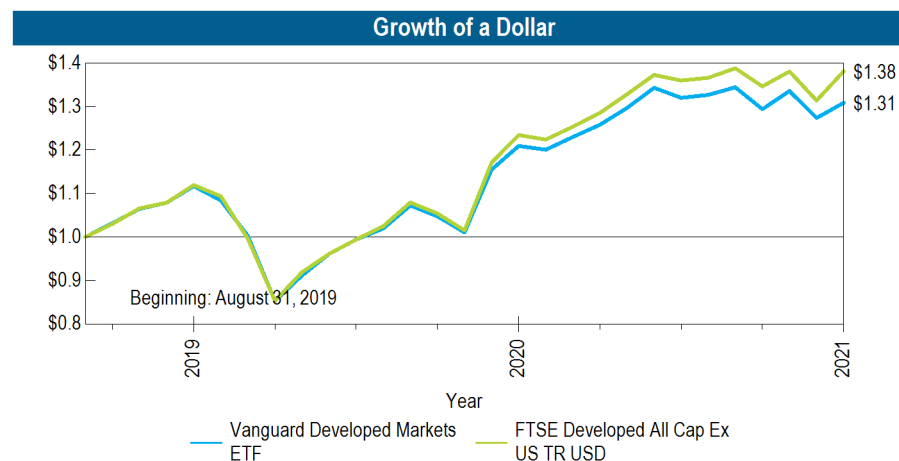
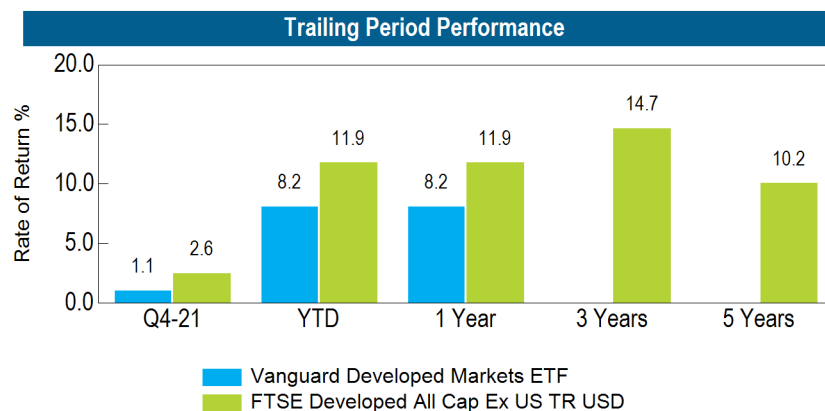


Style History (5-Year)



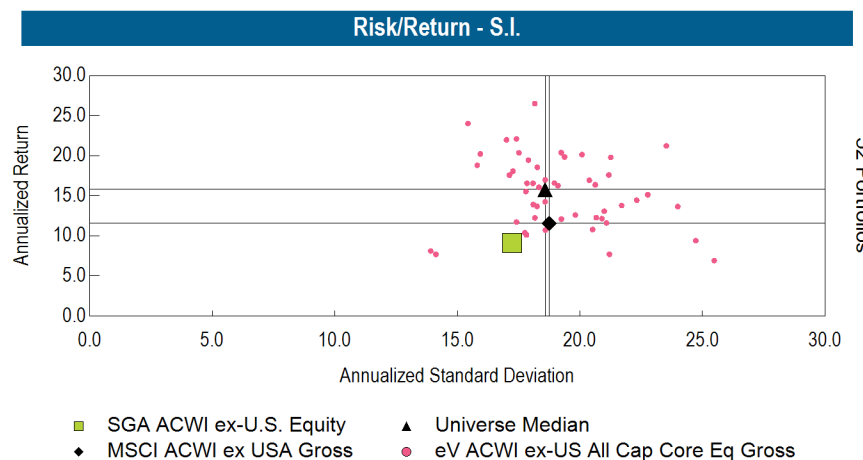
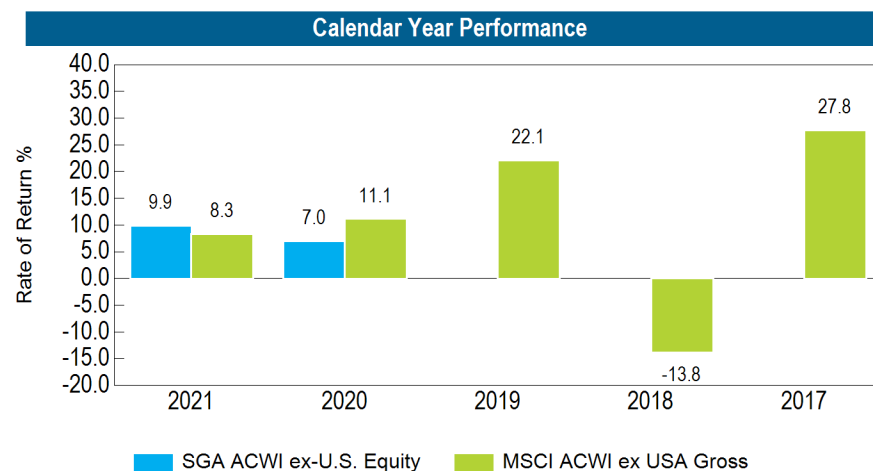
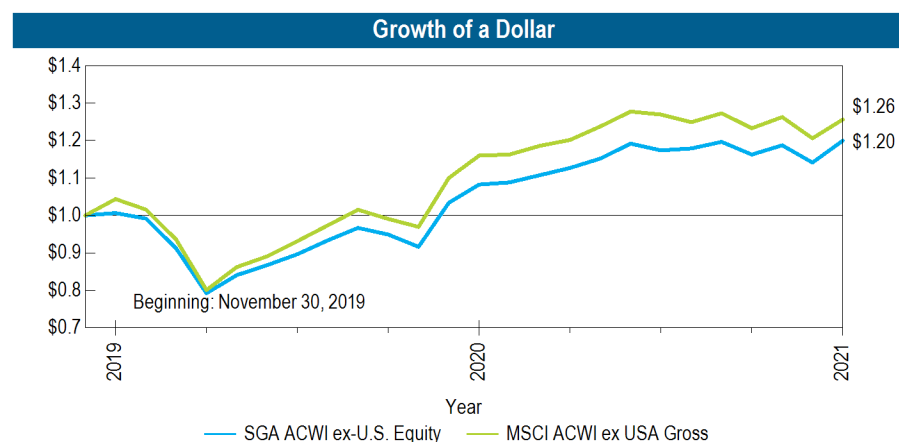
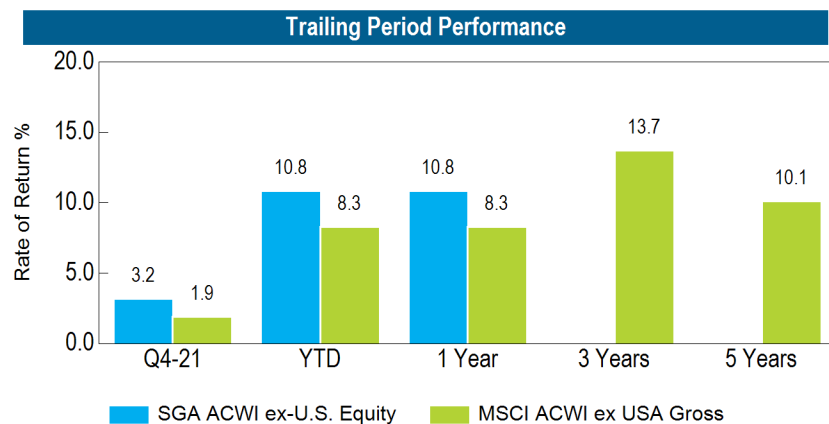
Vanguard Developed Markets ETF | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Vanguard Developed Markets ETF	12.17%	18.22%	-0.15%	0.96	-1.12	2.38%	91.50%	101.62%



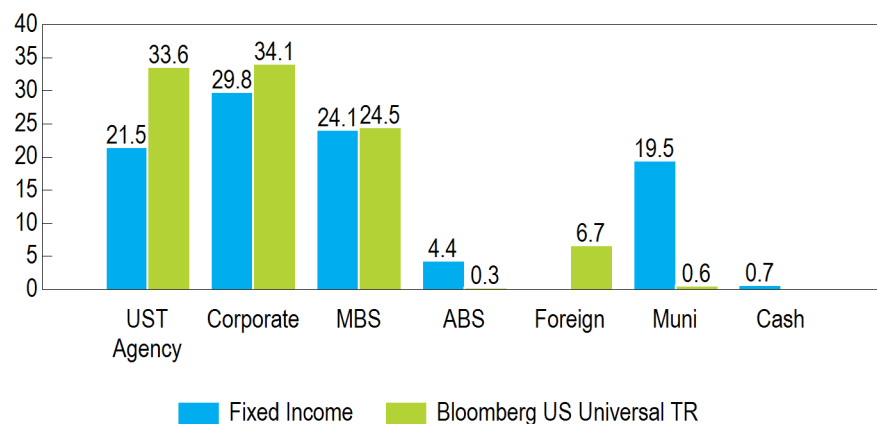
SGA ACWI ex-U.S. Equity | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
SGA ACWI ex-U.S. Equity	8.42%	17.19%	-0.15%	0.90	-0.80	3.94%	80.95%	93.03%
MSCI ACWI ex USA Gross	11.56%	18.75%	0.00%	1.00	--	0.00%	100.00%	100.00%

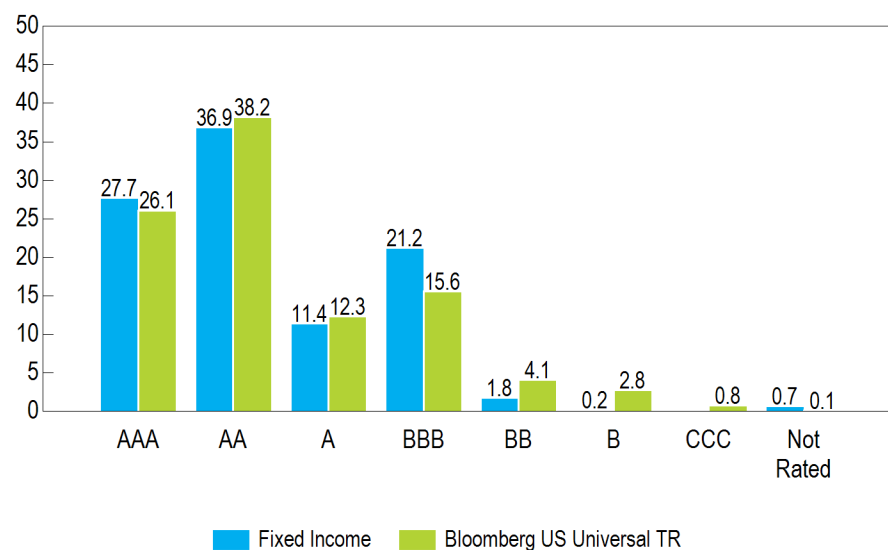


Fixed Income | As of December 31, 2021

US Sector Allocation

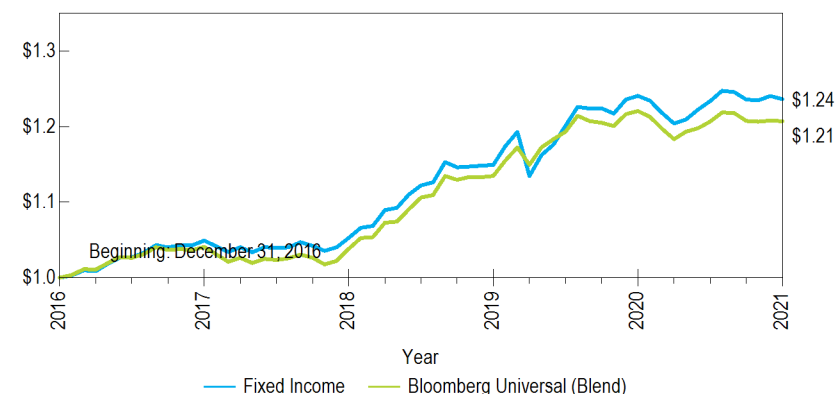


Credit Quality Allocation



Growth of a Dollar

5 Years Ending December 31, 2021

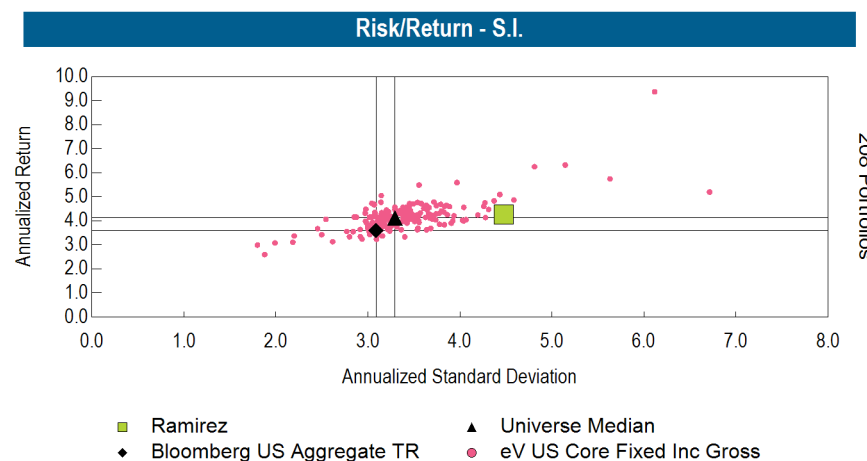
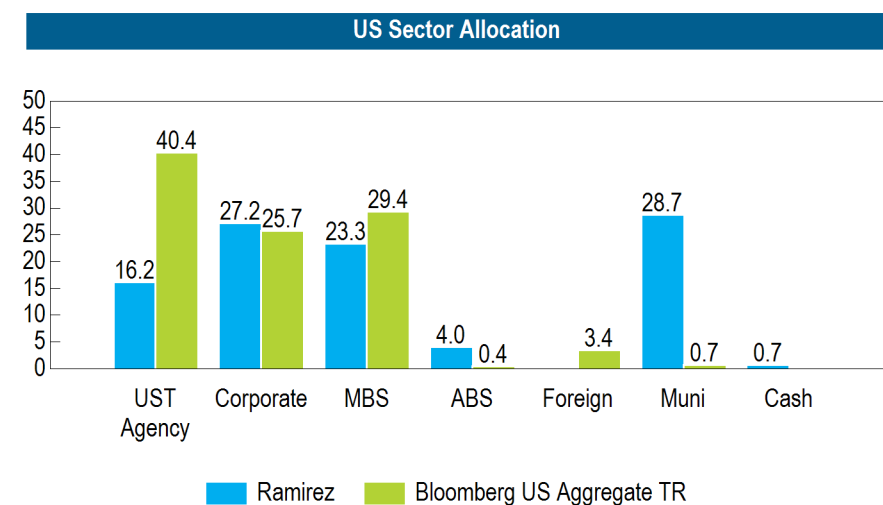
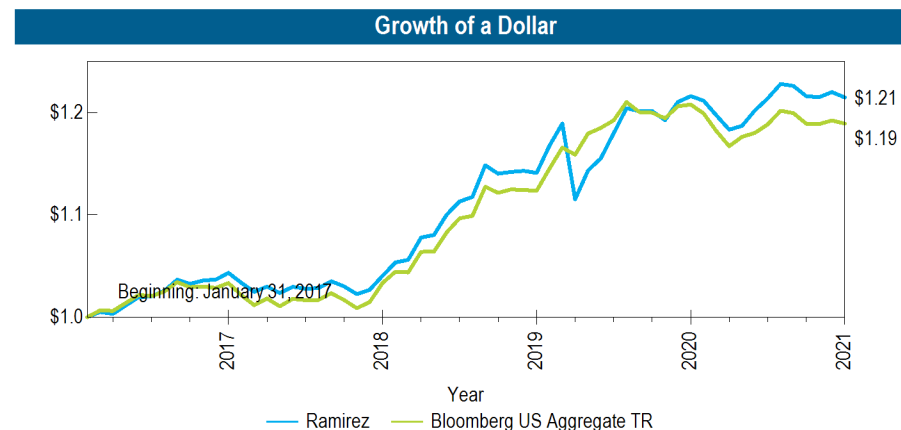
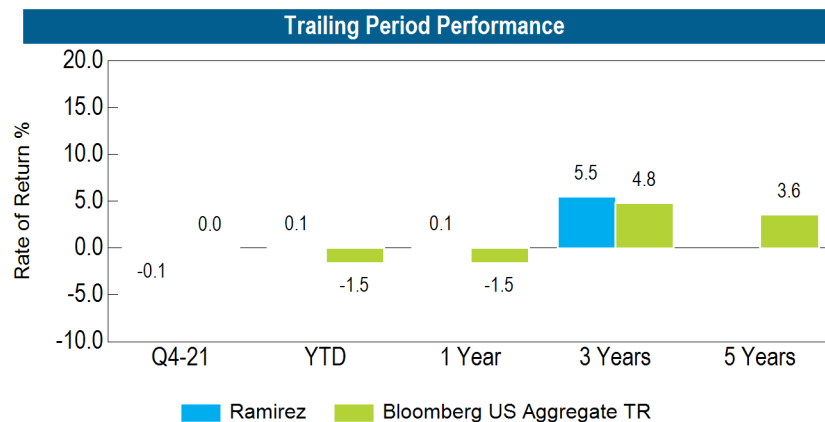


Fixed Income Fixed Income Characteristics vs. Bloomberg US Universal TR

	Portfolio Q4-21	Index Q4-21
Fixed Income Characteristics		
Yield to Maturity	2.09	2.07
Average Duration	6.01	6.65
Average Quality	AA	AA
Weighted Average Maturity	8.81	12.84

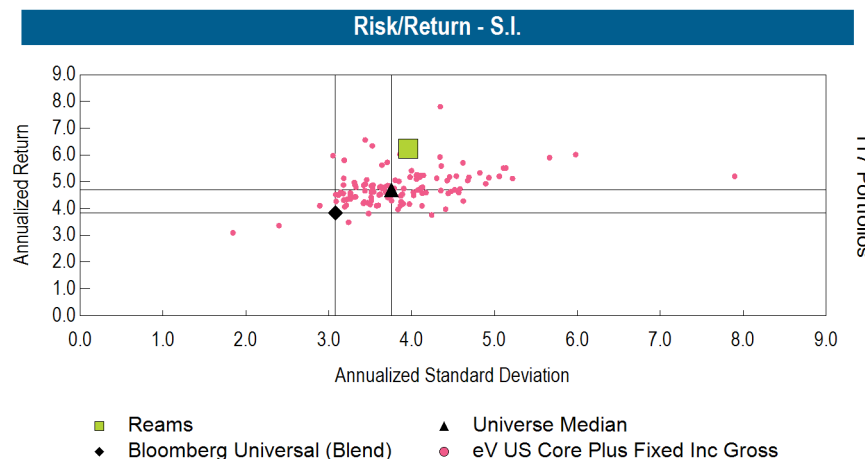
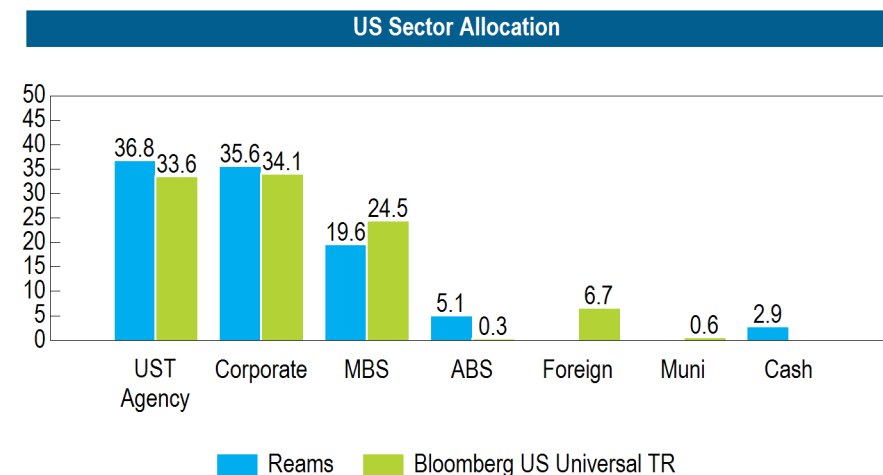
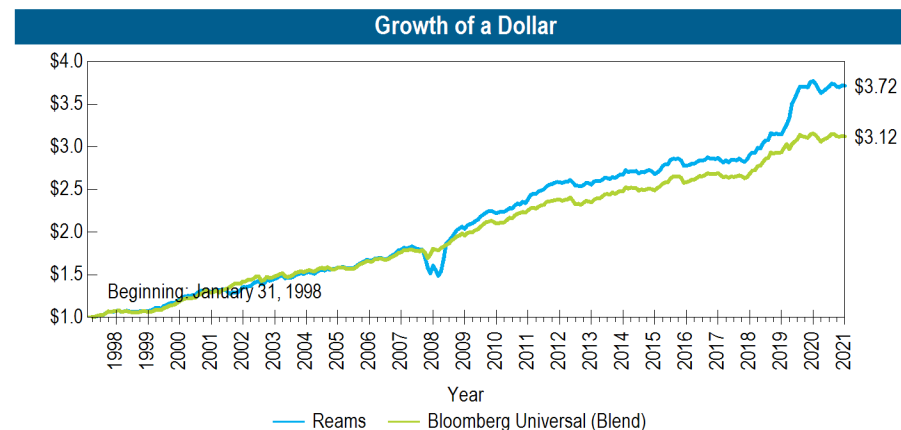
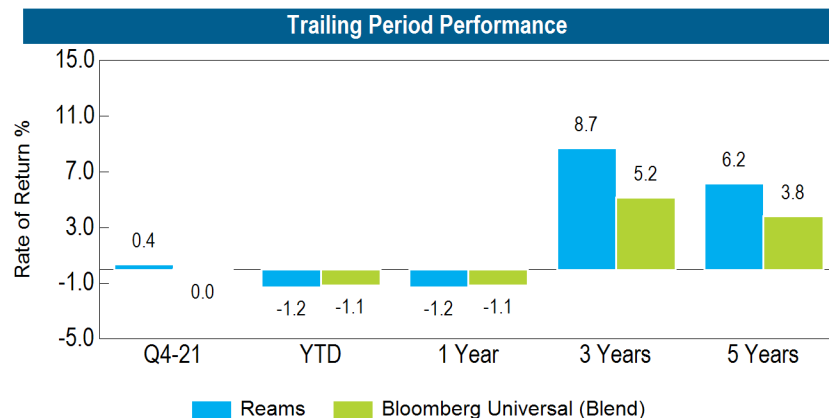
Ramirez | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Ramirez	4.04%	4.47%	0.00%	1.13	0.16	2.83%	123.67%	127.93%
Bloomberg US Aggregate TR	3.59%	3.09%	0.00%	1.00	--	0.00%	100.00%	100.00%



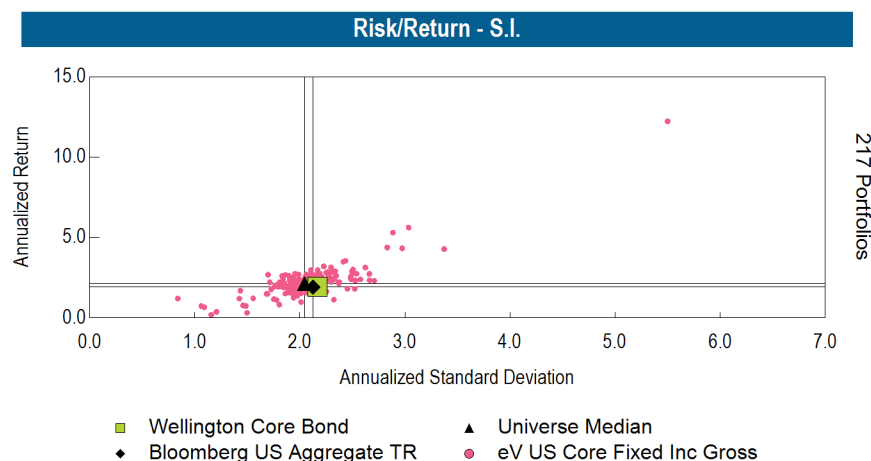
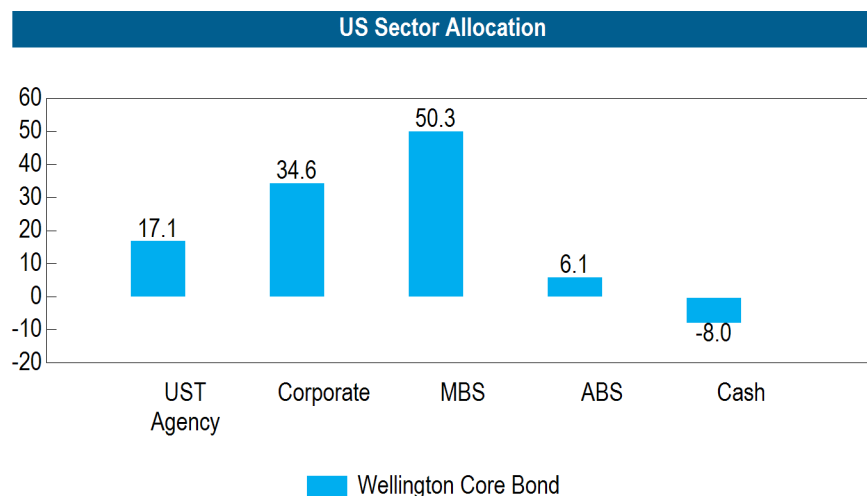
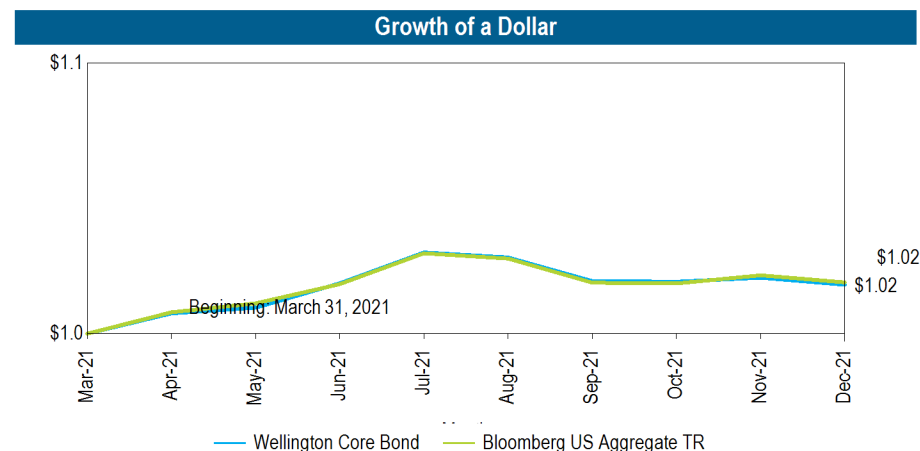
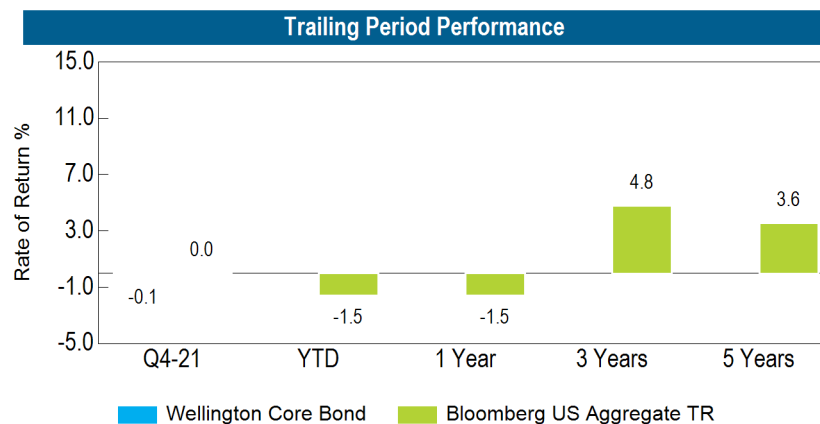
Reams | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Reams	5.64%	5.27%	0.05%	1.05	0.20	3.91%	122.26%	99.36%
Bloomberg Universal (Blend)	4.87%	3.37%	0.00%	1.00	--	0.00%	100.00%	100.00%



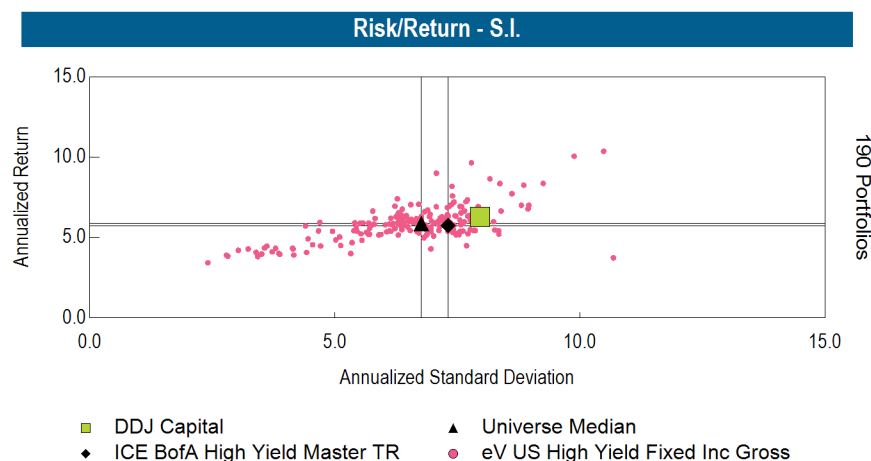
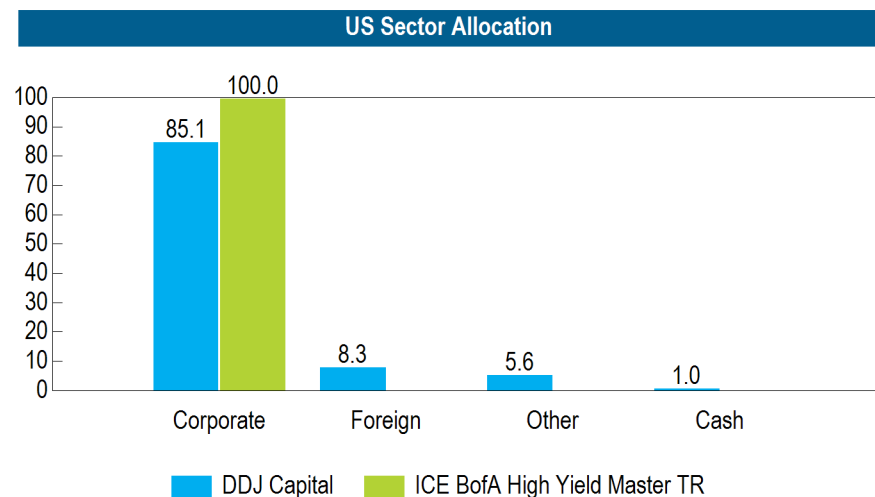
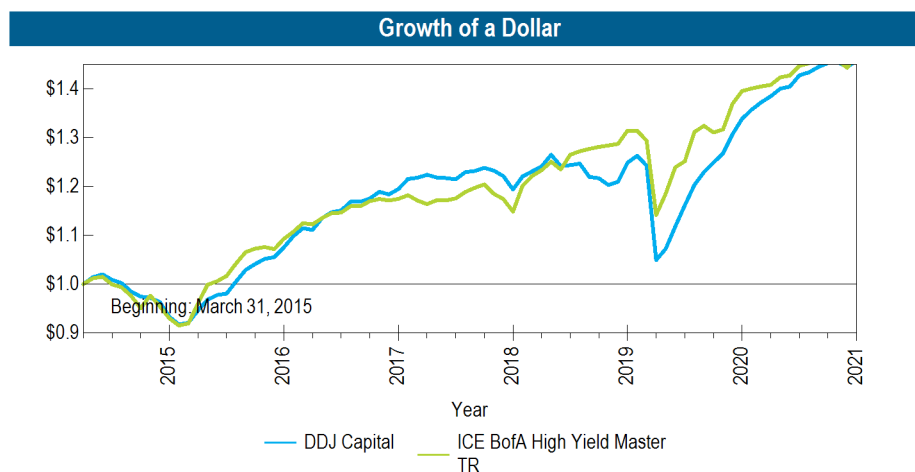
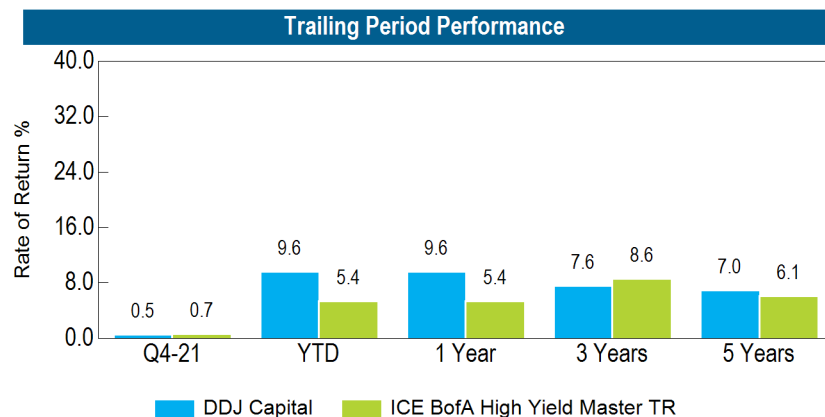
Wellington Core Bond | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Wellington Core Bond	1.81%	2.17%	-0.01%	1.01	-0.26	0.34%	96.21%	97.44%
Bloomberg US Aggregate TR	1.89%	2.13%	0.00%	1.00	--	0.00%	100.00%	100.00%



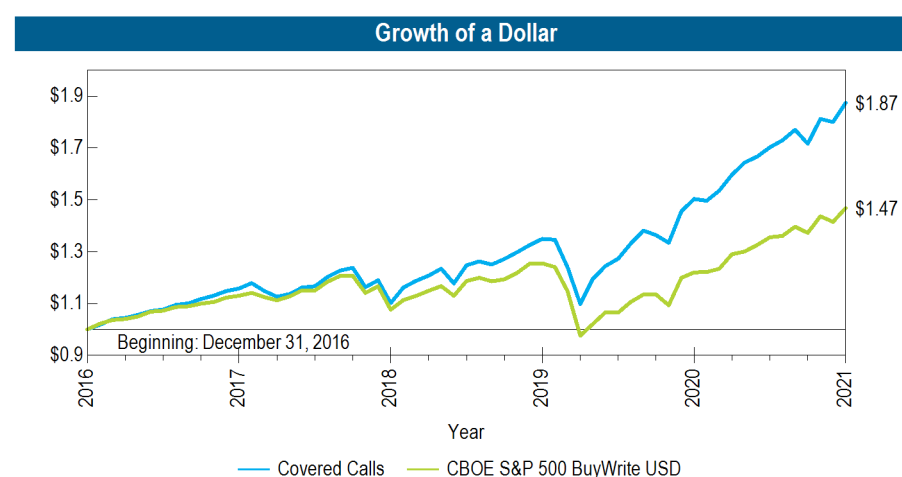
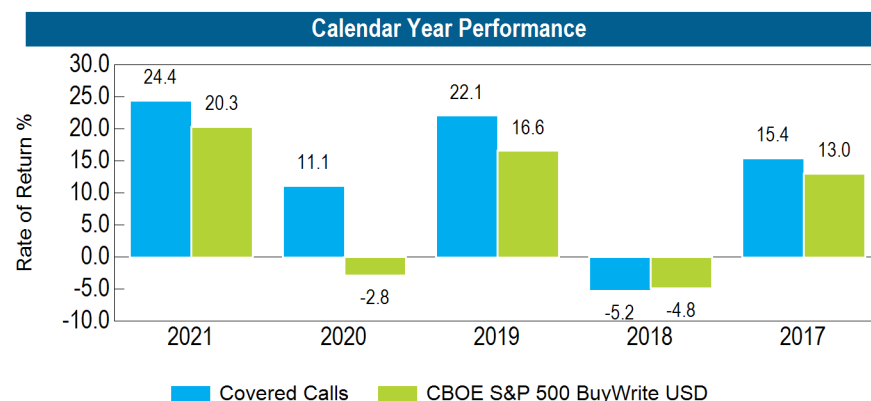
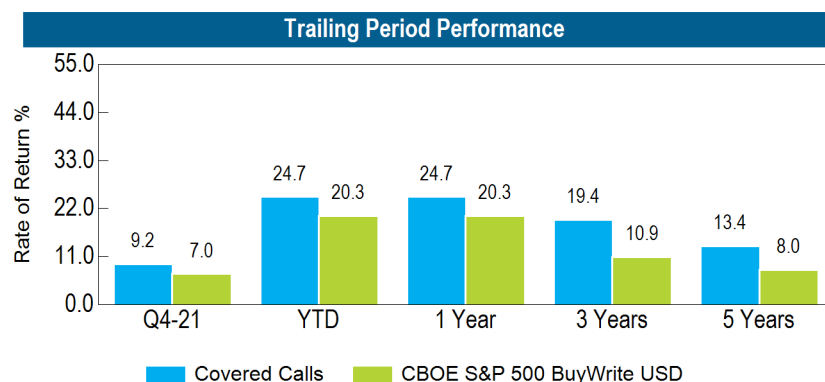
DDJ Capital | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
DDJ Capital	5.86%	7.94%	0.01%	0.96	-0.04	3.76%	90.03%	89.82%
ICE BofA High Yield Master TR	6.01%	7.30%	0.00%	1.00	--	0.00%	100.00%	100.00%



Covered Calls | As of December 31, 2021

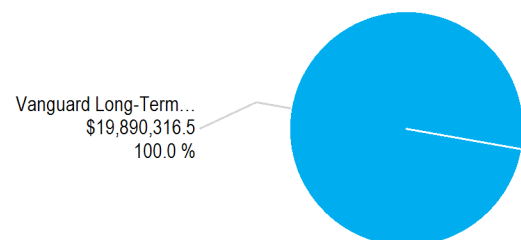
	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Covered Calls	10.84%	10.66%	0.30%	0.98	1.12	3.32%	138.13%	97.39%
CBOE S&P 500 BuyWrite USD	7.13%	10.33%	0.00%	1.00	--	0.00%	100.00%	100.00%
Parametric BXM	8.41%	8.90%	0.19%	0.83	0.44	2.88%	96.41%	87.43%
CBOE S&P 500 BuyWrite USD	7.13%	10.33%	0.00%	1.00	--	0.00%	100.00%	100.00%
Parametric DeltaShift	13.39%	12.66%	0.42%	1.12	1.18	5.32%	188.70%	104.54%



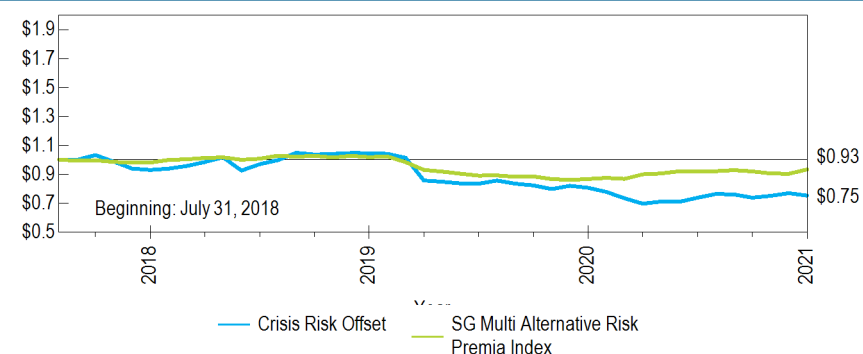
Crisis Risk Offset | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Alpha	Beta	Information Ratio	Tracking Error	Sortino Ratio	Sharpe Ratio	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Crisis Risk Offset	-8.28%	13.56%	-0.48%	1.02	-0.51	12.25%	-0.69	-0.69	0.18	45.06%	133.07%
SG Multi Alternative Risk Premia Index	-2.01%	5.69%	0.00%	1.00	--	0.00%	-0.47	-0.53	1.00	100.00%	100.00%
Vanguard Long-Term Treasury ETF	--	--	--	--	--	--	--	--	--	--	--

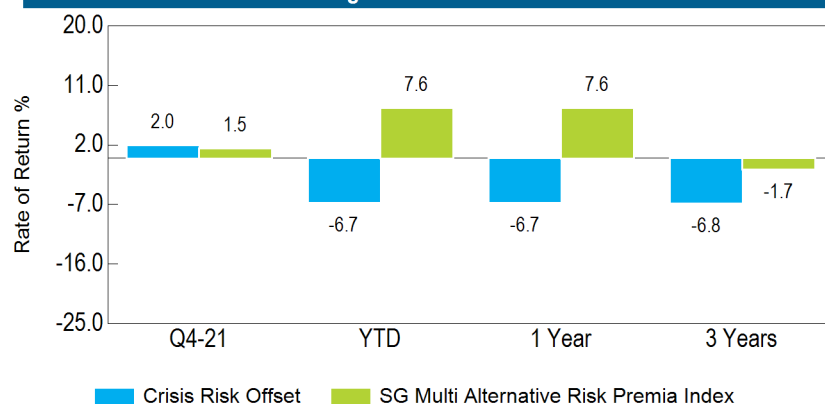
Current Allocation



Growth of a Dollar



Trailing Period Performance



Correlation Matrix

1 Year Ending December 31, 2021

	Crisis Risk Offset	MSCI ACWI	S&P 500	Bloomberg Global Aggregate TR
Crisis Risk Offset	1.00	--	--	--
MSCI ACWI	0.06	1.00	--	--
S&P 500	0.18	0.96	1.00	--
Bloomberg Global Aggregate TR	0.68	0.30	0.29	1.00

Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (OPFRS)
FROM: David Sancewich, Paola Nealon, Jason Leong Campbell – Meketa Inv. Group
DATE: February 23, 2022
RE: Diversity Representation Survey of Managers as of December 31, 2021

The purpose of this memo is to provide the System with data collected by surveying asset managers regarding their diversity representation as of December 31, 2021. The System requested that Meketa Investment Group collect this information at the December 2020 Board meeting as part of the discussion on minority representation at a specific manager, and as a recurring annual exercise.

Minority representation data for 10 managers¹ are displayed in the tables that follow.

Percentage of Board of Directors/ Managing Members

Race and Ethnicity	Northern							Rice		
	Brown	DDJ ³	Earnest ⁴	Trust ⁴	Parametric ⁵	Ramirez	Reams	Hall James	SGA	Wellington
African American /Black	14%	0%	18%	33%	N/A	33%	0%	0%	20%	7%
Asian/Hawaiian/ Pacific Islander	0%	0%	27%	17%	N/A	0%	20%	8%	0%	13%
Latino/Hispanic	0%	0%	0%	0%	N/A	33%	0%	0%		0%
White	86%	100%	55%	0%	N/A	33%	80%	92%	80%	80%
American Indian/ Alaska Native	0%	0%	0%	50%	N/A	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	N/A	0%	0%	0%	0%	0%
Gender										
Male	79%	78%	63%	67%	N/A	100%	80%	83%	60%	67%
Female	21%	22%	37%	33%	N/A	0%	20%	17%	40%	33%
Non-Identified/ Other	0%	0%	0%	0%	N/A	0%	0%	0%	0%	0%

¹ Excluding the mutual fund and exchanged traded fund (ETF) managers BlackRock and Vanguard.

² Race and ethnicity categories throughout this document are as defined by EEOC guidance.

³ DDJ does not maintain a Board of Directors. DDJ has included (1) the members of DDJ's four-person management operating committee, and (2) the members of DDJ's five-person investment review committee.

⁴ Earnest Partners and Northern Trust statistics are as of 2021 mid-year.

⁵ As a subsidiary of Morgan Stanley Investment Management, Parametric does not maintain a Board of Directors.



Percentage of Firm (Entire Staff)

Race and Ethnicity	Brown	DDJ	Earnest	Northern Trust	Parametric	Ramirez	Reams	Rice Hall James	SGA	Wellington
African American /Black	9%	2%	23%	9%	4%	9%	0%	0%	3%	5%
Asian/Hawaiian/ Pacific Islander	5%	4%	20%	9%	17%	17%	6%	10%	21%	26%
Latino/Hispanic	2%	2%	0%	7%	3%	17%	0%	3%	3%	4%
White	80%	90%	58%	72%	69%	53%	94%	87%	72%	59%
American Indian/ Alaska Native	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	3%	2%	0%	3%	6%	4%	0%	0%	0%	6%
Gender										
Male	55%	62%	73%	61%	65%	69%	56%	68%	66%	55%
Female	45%	38%	27%	39%	35%	30%	44%	32%	34%	45%
Non-Identified/ Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Percentage of Firm (Investment Professionals)

Race and Ethnicity	Brown	DDJ	Earnest	Northern Trust	Parametric	Ramirez	Reams	Rice Hall James	SGA	Wellington
African American /Black	3%	0%	20%	8%	1%	11%	0%	0%	0%	4%
Asian/Hawaiian/ Pacific Islander	11%	6%	20%	11%	17%	33%	8%	6%	36%	23%
Latino/Hispanic	0%	0%	0%	6%	1%	11%	0%	0%	7%	4%
White	84%	94%	60%	73%	75%	33%	92%	94%	57%	65%
American Indian/ Alaska Native	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Other	3%	0%	0%	2%	5%	11%	0%	0%	0%	5%
Gender										
Male	72%	88%	70%	69%	79%	67%	100%	78%	79%	69%
Female	28%	13%	30%	31%	21%	33%	0%	22%	21%	31%
Non-Identified/ Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

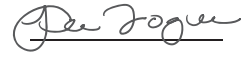
DS/PN/JLC/ ep

OAKLAND POLICE AND FIRE RETIREMENT BOARD

CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 8039

Approved to
Form
and Legality



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION FIXING THE MONTHLY ALLOWANCE OF HEIDI J. DAVIS,
SURVIVING SPOUSE OF JEFFREY DAVIS AND LEE A. WHITEMAN,
SURVIVING SPOUSE OF DAVID L. WHITEMAN; RETIRED MEMBERS OF
THE OAKLAND POLICE AND FIRE RETIREMENT SYSTEM**

WHEREAS, the retired members of the Police and Fire Retirement System, whose names appear in Column (1) below, died on the date shown in Column (2) below; and

WHEREAS, the surviving spouses, whose names appears in Column (3) below, do not claim that their spouse's death was by reason of an injury received in, or illness caused by or arising out of the performance of duty; and

WHEREAS, there is now presented to this Board, the monthly allowances shown in Column (7) below and as calculated by the Actuary in accordance with Article XXVI of the Charter of the City of Oakland; now, therefore, be it

RESOLVED: That the Police and Fire Retirement Board does hereby fix the amounts shown in Column (7) as the monthly allowances that said surviving spouses shall receive beginning on the dates shown in Column (4):

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Name of Deceased Member	Date of Death	Name of Surviving Spouse	Effective Date of Allowance	Form of Retirement	% of Compensation Attached to Avg. Rank Held	Monthly Allowance
Jeffrey Davis	12/16/2021	Heidi J. Davis	12/17/2021	SVC	38.655%	\$5,358.76
David L. Whiteman	11/13/2021	Lee A. Whiteman	11/14/2021	DIS	33.333%	\$4,758.75

IN BOARD MEETING, VIA ZOOM CONFERENCE FEBRUARY 23, 2022

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA
RESOLUTION No. 8040

*Approved to Form
and Legality*



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION APPROVING DEATH BENEFIT PAYMENT AND DIRECTING
A WARRANT THEREUNDER IN THE AMOUNT OF \$1,000.00 PAYABLE
TO THE BENEFICIARY OF DECEASED OAKLAND POLICE AND FIRE
RETIREMENT SYSTEM MEMBER ROBERT L. THORP.**

WHEREAS, due proof having been received in accordance with Article XXVI of the Charter of the City of Oakland of the death of the retired member of the Oakland Police or Fire Department identified in Column (1) below; and

WHEREAS, the beneficiary to whom the death benefit provided in Charter Section 2612 is payable, is the person whose name is stated in Column (2) opposite the name of the deceased retired member; and

WHEREAS, the amount of said death benefit is stated in Column (3) opposite the name of the beneficiary; now, therefore, be it

RESOLVED: That the Police and Fire Retirement System Board does hereby approve the Death Benefit payment to the person named in Column (2); and be it

FURTHER RESOLVED: That the Director of Finance, be and is hereby directed to draw and sign a warrant for the amount in Column (3) payable to the person whose name appears in Column (2):

(1)	(2)	(3)
Name of Deceased Member	Name of Beneficiary	Death Benefit Amount
Robert L. Thorp	Estate of Robert L. Thorp	\$1,000.00

IN BOARD MEETING, VIA ZOOM CONFERENCE _____ **FEBRUARY 23, 2022** _____

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

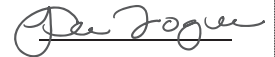
ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

OAKLAND POLICE AND FIRE RETIREMENT BOARD
CITY OF OAKLAND, CALIFORNIA
RESOLUTION No. 8041

*Approved to
Form
and Legality*



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION ELECTING TO CONTINUE TO CONDUCT POLICE
AND FIRE RETIREMENT SYSTEM BOARD AND COMMITTEE
MEETINGS USING TELECONFERENCING IN ACCORDANCE WITH
CALIFORNIA GOVERNMENT CODE SECTION 54953(E).**

WHEREAS, on March 4, 2020, Governor Gavin Newsom declared a state of emergency related to COVID-19, pursuant to California Government Code Section 8625, and said declaration has not been lifted or rescinded, see <https://www.gov.ca.gov/wp-content/uploads/2020/03/3.4.20-Coronavirus-SOE-Proclamation.pdf>; and

WHEREAS, on March 9, 2020, the City Administrator, as the Director of the Emergency Operations Center (EOC), issued a proclamation of local emergency due to the spread of COVID-19 in Oakland, and on March 12, 2020, the City Council passed Resolution No. 88075 C.M.S. ratifying the proclamation of local emergency pursuant to Oakland Municipal Code (O.M.C.) section 8.50.050(C); and

WHEREAS, City Council Resolution No. 88075 remains in full force and effect to date; and

WHEREAS, the Centers for Disease Control (CDC) recommends physical distancing of at least six (6) feet whenever possible, avoiding crowds, and avoiding spaces that do not offer fresh air from the outdoors, particularly for people who are not fully vaccinated or who are at high risk of getting very sick from COVID-19, see <https://www.cdc.gov/coronavirus/2019-ncov/preventgetting-sick/prevention.html> ; and

WHEREAS, the CDC recommends that people who live with unvaccinated people avoid activities that make physical distancing difficult, see <https://www.cdc.gov/coronavirus/2019-ncov/your-health/about-covid-19/caring-for-children/families.html> ; and

WHEREAS, the CDC recommends that older adults limit in-person interactions as much as possible, particularly when indoors, see <https://www.cdc.gov/aging/covid19/covid19-older-adults.html> ; and

OAKLAND POLICE AND FIRE RETIREMENT BOARD

CITY OF OAKLAND, CALIFORNIA

RESOLUTION NO. 8041

WHEREAS, the CDC, the California Department of Public Health, and the Alameda County Public Health Department all recommend that people experiencing COVID-19 symptoms stay home, see <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html> ; and

WHEREAS, people without symptoms may be able to spread the COVID-19 virus, see <https://www.cdc.gov/coronavirus/2019-ncov/prevent-gettingsick/prevention.html> ; and

WHEREAS, fully vaccinated people who become infected with the COVID-19 Delta variant can spread the virus to others, see <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html> ; and

WHEREAS, as of December 20, 2021, the Omicron variant has been detected in most states and territories and is rapidly increasing the proportion of COVID-19 cases it is causing, see <https://www.cdc.gov/coronavirus/2019-ncov/variants/omicron-variant.html>; and

WHEREAS, the CDC does not yet know how easily the Omicron variant spreads, the severity of illness it causes, or how well available vaccines and medications work against it, see <https://www.cdc.gov/coronavirus/2019-ncov/variants/omicron-variant.html>; and

WHEREAS, the City's public-meeting facilities are indoor facilities that are not designed to provide circulation of fresh/outdoor air, particularly during periods of cold or rainy weather; and

WHEREAS, the City's public-meeting facilities are not designed to ensure that attendees can remain six (6) feet apart; and

WHEREAS, most of the members of the Police and Fire Retirement System are at higher risk of becoming very sick from COVID-19 due their age; and

WHEREAS, holding in-person meetings will bring people from different households together in an indoor facility against CDC guidance; and

OAKLAND POLICE AND FIRE RETIREMENT BOARD

CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 8041

WHEREAS, some attendees may use public transportation to travel to an in-person meeting, which will expose them additional people outside of their household and put them at further risk of contracting COVID-19; and

WHEREAS, in light of the above, on January 26, 2022, the Police and Fire Retirement System Board (“PFRS Board”) determined that conducting in-person meetings of the PFRS Board and its committees would present imminent risk to health or safety of attendees and elected to continue to conduct PFRS Board and committee meetings using teleconferencing in accordance with California Government Code section 54953(e) (Resolution No. 8037); and

WHEREAS, pursuant to California Government Code section 54953(e)(3), the PFRS Board has reconsidered the circumstances of the state of emergency and determines that the state of emergency continues to directly impact the ability of the members of the PFRS Board to meet safely in person and that state and local officials continue to recommend measures to promote social distancing; now, therefore, be it:

RESOLVED: that the Police and Fire Retirement System Board (“PFRS Board”) finds and determines that the foregoing recitals are true and correct and hereby adopts and incorporates them into this Resolution; and be it

FURTHER RESOLVED: that, based on these findings, the PFRS Board determines that conducting in-person board and committee meetings continues to pose imminent risks to the health of attendees; and be it

FURTHER RESOLVED: that the PFRS Board firmly believes that the community’s health and safety and the community’s right to participate in local government are critically and equally important, and is committed to balancing the two by continuing to use teleconferencing to conduct public meetings, in accordance with California Government Code Section 54953(e); and be it

OAKLAND POLICE AND FIRE RETIREMENT BOARD

CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 8041

FURTHER RESOLVED: That the PFRS Board will reconsider the state of emergency and determine whether the state of emergency continues to directly impact the ability of members to meet safely in person at least every thirty (30) days in accordance with California Government Code section 54953(e) until the state of emergency related to COVID-19 has been lifted, or the PFRS Board finds that in-person meetings no longer pose imminent risks to the health of attendees, whichever is occurs first.

IN BOARD MEETING, VIA ZOOM CONFERENCE _____ **FEBRUARY 23, 2022** _____

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM BOARD
CITY OF OAKLAND, CALIFORNIA
RESOLUTION No. 8042

*Approved to Form
and Legality*



ON MOTION OF MEMBER _____ SECONDED BY MEMBER _____

**RESOLUTION OF APPRECIATION TO JENNIFER
LOGUE FOR THREE YEARS OF SERVICE AS LEGAL
COUNSEL TO THE OAKLAND POLICE AND FIRE
RETIREMENT SYSTEM BOARD**

WHEREAS, Jennifer Logue served as Legal Counsel to the Oakland Police and Fire Retirement System (“PFRS”) Board from February 28, 2019 to March 11, 2022 pursuant to section 401(6) and 2601(a) of the Oakland City Charter; and

WHEREAS, Jennifer Logue has ably performed her duties as Legal Counsel to the PFRS Board with continuous professionalism, including attendance at Committee, Board, and Ad Hoc Committee meetings; and

WHEREAS, during her time as Legal Counsel to the PFRS Board, Attorney Logue provided invaluable assistance on a large and varied number of legal issues, such as Article XXVI of the Oakland City Charter, the Ralph M. Brown Act and parliamentary procedure, spearheading the legal efforts and providing notable advice regarding the PFRS 2026 Actuarial Funding Date Ad Hoc Committee and Emergency Procedures for terminating or limiting trading discretion of PFRS Investment Managers to protect PFRS Fund assets, family law issues, and managing outside counsel; and

WHEREAS, during unprecedented times, Jennifer Logue was instrumental in navigating the everchanging landscape of circumstances, challenges, and legal requirements presented by the Covid-19 pandemic that ensured the PFRS Board continued to meet regularly and safely; and

WHEREAS, Jennifer Logue’s professionalism, judgment, dedication, and discretion were commendable; and

WHEREAS, as of March 11, 2022, Attorney Logue completed her service to the PFRS Board in order to start new duties as City Attorney for the City of Mountain View; therefore, be it

RESOLVED: that the PFRS Board hereby recognizes Jennifer Logue for her three years of service as Legal Counsel to the Oakland Police and Fire Retirement System Board and expresses its sincere appreciation for her dedication and valuable contributions in that role; and be it;

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM BOARD

CITY OF OAKLAND, CALIFORNIA

RESOLUTION No. 8042

FURTHER RESOLVED: That the members of the Oakland Police and Fire Retirement System Board express their sincere best wishes to Jennifer Logue for a healthy and successful future in service to the people of the City of Mountain View.

IN BOARD MEETING, VIA ZOOM CONFERENCE _____ **FEBRUARY 23, 2022** _____

PASSED BY THE FOLLOWING VOTE:

AYES:

NOES:

ABSENT:

ATTEST: _____
PRESIDENT

ATTEST: _____
SECRETARY