



City of San José Federated City Employees' Retirement System

Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018





City of San José Federated City Employees' Retirement System

Roberto L. Peña
Chief Executive Officer

Pension Trust and Postemployment Healthcare Trust Funds of the City of San José, California

Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018

Office of Retirement Services 1737 North First Street, Suite 600 San José, California 95112-4505 Phone: 408-794-1000 Fax: 408-392-6732 www.sjretirement.com

Board Chair Letter



Office of Retirement Services

Federated City Employees' Retirement System

November 12, 2019

The Honorable Mayor and City Council Members of the Federated City Employees' Retirement System City of San José San José, California

Dear Mayor, Council Members, and System Members:

On behalf of the members of the Board of Administration, I present the Federated City Employees' Retirement System's (the System) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2019.

The System's Pension Plan earned a time-weighted net of investment fees rate of return of 4.3% on investments for the fiscal year, compared to a 3.9% return for its policy benchmark and a 5.4% return for the Investment Metrics universe net median of public funds greater than \$1 billion. The System underperformed the net rate of return of 6.75% assumed by the Board and System's actuary for the fiscal year ended June 30, 2019. The System's Pension Plan earned a time-weighted net of investment fees rate of return of 5.9% and 3.2% for the three-year and five-year periods ending June 30, 2019, respectively; while the Investment Metrics net median earned a time-weighted rate of return of 8.7% and 5.6% for the same periods.

The Healthcare Plan earned a time-weighted net of investment fees rate of return of 4.2% on investments for the fiscal year, compared to a 3.9% return for its policy benchmark. Additionally, the System's Healthcare Plan earned a time-weighted net of investment fees rate of return of 5.9% and 2.4% for the three-year and five-year periods ending June 30, 2019, respectively.

The System's net position increased from \$2,346,590,000 to \$2,426,640,000 (see the Financial Section beginning on page 13). The net increase in the System's net position for fiscal year 2018-2019 was \$80,050,000.

The Investment Program continued to manage portfolio investments and move initiatives forward during the fiscal year through our leadership of our CEO and CIO. During fiscal year 2018-2019, the Board implemented a comprehensive investment-governance framework as well as a revised strategic asset allocation.

The Board believes that the professional services rendered by the staff, investment consultant, actuary, and counsel have produced a sound fund capable of sustained growth over the long term. The Board of Administration and Retirement Services staff are available to provide additional information as requested.

Sincerely,

1

Matt Loesch, Chairman Board of Administration

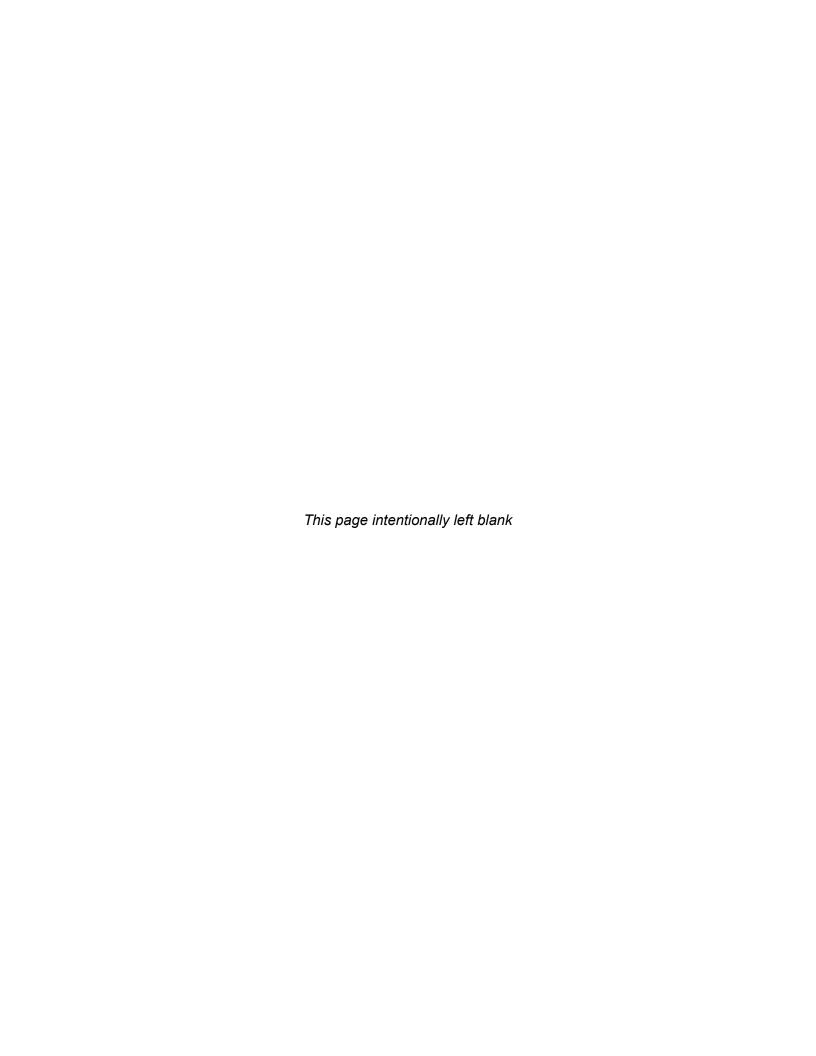
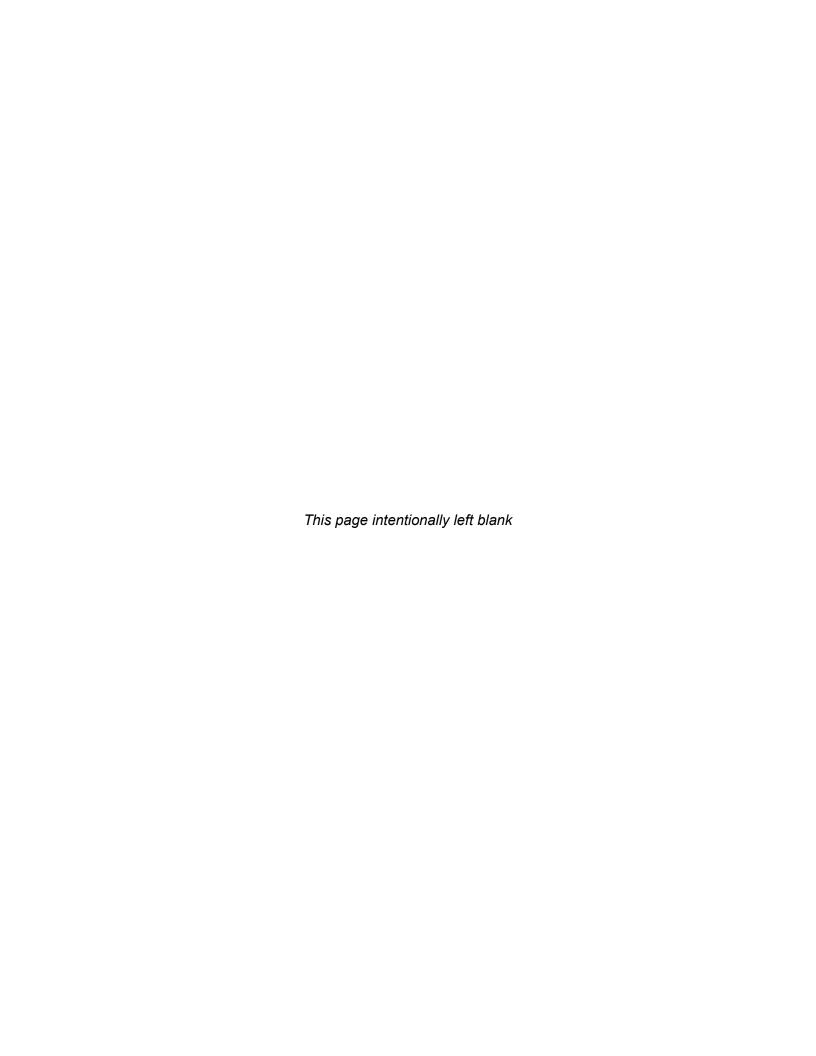


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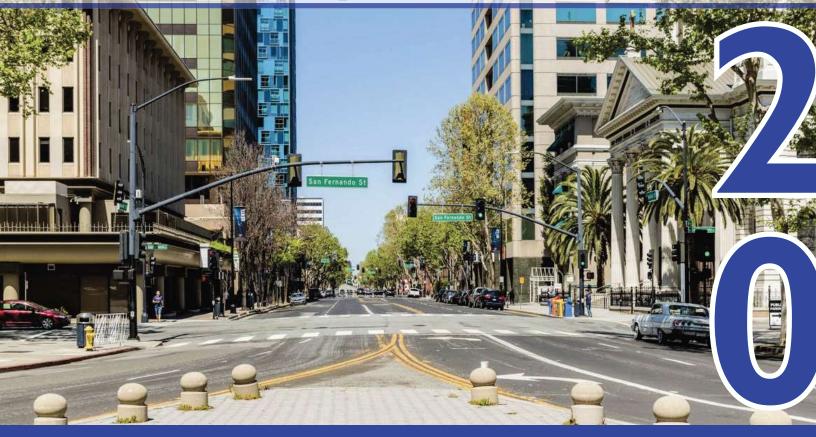
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Introductory Section





Pension Trust and Postemployment Healthcare Trust Funds of the City of San José, California



City of San José
Federated City Employees' Retirement System
Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018

Letter of Transmittal



Office of Retirement Services

Federated City Employees' Retirement System

November 12, 2019

Board of Administration Federated City Employees' Retirement System 1737 North First Street, Suite 600 San José, CA 95112

Dear Trustees:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Federated City Employees' Retirement System (System) for the fiscal year ended June 30, 2019. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the System's management.

This CAFR was prepared to conform to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board (GASB) and the reporting requirements prescribed by the Government Finance Officers' Association of the United States and Canada (GFOA). Transactions of the System are reported on an accrual basis of accounting. For an overview and analysis of the financial activities of the System for the fiscal years ended June 30, 2019 and 2018, please refer to the Management's Discussion and Analysis (MD&A) on page 17.

Grant Thornton LLP, the System's independent auditor, has audited the accompanying financial statements. Because the cost of a control should not exceed the benefits to be derived, management believes internal control is adequate and the accompanying statements, schedules, and tables are fairly presented and free from material misstatement. Sufficient internal controls over financial reporting exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules.

The financial audit provides reasonable assurance that the System's financial statements are presented in conformity with generally accepted accounting principles and are free of material misstatement. The System recognizes that even sound and well-designed internal controls have their inherent limitations in that errors may still occur as a result of factors such as carelessness, faulty judgment, communication breakdowns, and/or that internal controls can be circumvented by internal or external collusion. The System continuously reviews internal controls to ensure that the System's operating policies and procedures are being adhered to and that the controls are adequate to ensure accurate and reliable financial reporting and to safeguard the System's assets.

I am proud to report that the GFOA awarded its Certificate of Achievement for Excellence in Financial Reporting to the System for its CAFR for the fiscal year ended June 30, 2018. This was the 19th consecutive year that the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the System must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Letter of Transmittal (continued)

The System also received the Public Pension Standards Award in recognition of meeting professional standards for plan design and administration by the Public Pension Coordinating Council.

I encourage you to review this report carefully. I trust that you and the members of the System will find this CAFR helpful in understanding the System.

Funding

The System's funding objective for both its defined benefit pension plan and its defined benefit other post-employment benefits (OPEB) healthcare plan is to meet long-term benefit obligations through contributions and investment income. As of the most recent funding valuation dated June 30, 2018, the funding ratio of the defined benefit pension plan and the defined benefit OPEB plan was 53.1%, and 42.6%, respectively, based on the actuarial value of assets.

For the valuation of pension and OPEB benefits, the actuarial assumption for the net rate of return to be earned by the System is currently 6.75%. The impact of the difference between the actual net rate of return earned by the System and the 6.75% assumption will result in an investment gain or loss that will be reflected in the pension and OPEB unfunded liabilities in next year's CAFR, respectively. The net increase in System net position for fiscal year 2018-2019 was \$80,050,000. Details of the components of this increase are included in the *Statement of Changes in Plan Net Position* on page 30. The defined benefit pension plan's funding progress is presented on page 137 and the defined benefit OPEB plan's funding progress is presented on page 153.

Investment Summary

The Board of Administration has exclusive control of all investments of the System and is responsible for the establishment of investment objectives, strategies, and policies. Members of the Board serve in a fiduciary capacity and must discharge their duties with respect to the System and the investment portfolio solely in the interest of, and for the exclusive purposes of providing benefits to, members of the System and defraying the reasonable cost of administration.

Over the past fiscal year, the System Pension Plan's time-weighted net of investment fees rate of return was 4.3% for the fiscal year, compared to a 3.9% return for its policy benchmark and a 5.4% return for the Investment Metrics universe net median of public funds greater than \$1 billion. Additionally, the System Pension Plan earned a time-weighted net of investment fees rate of return of 5.9% and 3.2% for the three-year and five-year periods ending June 30, 2019, respectively, while the Investment Metrics universe net median earned a time-weighted rate of return of 8.7% and 5.6% for the same periods.

The Healthcare Plan's time-weighted net of investment fees rate of return was 4.2% on investments for the fiscal year, compared to a 3.9% return for its policy benchmark. In addition, the Healthcare Plan earned a time-weighted net of investment fees rate of return of 5.9% and 2.4% for the three-year and five-year periods ending June 30, 2019, respectively.

The net position of the System increased from \$2,346,590,000 to \$2,426,640,000 (see the Financial Section beginning on page 13).

Major Initiatives

The Investment Program continued to manage portfolio investments and move initiatives forward during the fiscal year. The continuity of the Investment Program is a testament to the human capital and infrastructure that are in place. The investment team filled open positions, worked on an investment governance framework, and worked with our general consultant, Meketa, in implementing a revised strategic asset allocation.

In November 2016, a charter amendment to alter the pension system for public employees, known as Measure F, was approved, and on June 16, 2017, the ordinance implementing the Framework and Measure F became effective for employees in the System. The provisions of the Framework include, but are not limited to, revising Tier 2 benefits, allowing rehired Tier 1 employees to remain in Tier 1,

Letter of Transmittal (continued)

creating a Voluntary Employee Beneficiary Association (VEBA) for retiree healthcare and an irrevocable opt-out of the defined benefit retiree healthcare plan for eligible employees, defining the qualifications for members of the independent medical panel, and creating a Guaranteed Purchasing Power (GPP) benefit for Tier 1 retirees. The VEBA is being administered by the City, not ORS, and therefore it is also not under the jurisdiction of the Retirement Board.

During fiscal year 2017-2018, ORS completed most of the implementation of Measure F. For fiscal year 2018-2019, ORS issued a request for proposal (RFP) for a 3-doctor Board panel to address Measure F changes but the response was poor, which leaves this aspect of Measure F still outstanding. In addition, ORS worked with the City to implement the reclassification of some members back to Tier 1.

In October 2018, the Post Employment Healthcare plan that was established under IRC Section 401(h) to fund retiree healthcare benefits was exhausted. All post-employment healthcare benefit payments are now made from the IRC 115 trust account, an alternative to the 401(h), which was established in June 2011.

The Office of Retirement Services (ORS) implemented a new pension administration system that went live in February 2019; the implementation of the system started in March 2015. The implementation process spanned approximately 44 months and cost approximately \$9 million. The project completion was extended to the fall of 2019 to allow for the implementation of Measure F-related calculations in the system.

In March 2019, the Chief Operations Officer/Deputy Director, Donna Busse, retired. The Office of Retirement Services conducted a recruitment for the position and subsequently, Barbara Hayman, was promoted to Chief Operations Officer/Deputy Director effective May 2019.

In October 2017, the City Auditor issued report 17-06, *Audit of Retirement Services: Greater Transparency Needed in the Budgeting Process, Interactions Among Stakeholders, Investment Policies, and Plan Administration*. The report was published with five separate findings which are covered in 25 different recommendations and 5 of the 25 recommendations are addressed to the City. ORS has addressed and completed all but 3 of the recommendation over which they have control, including preparing a comprehensive annual budget report through the Manager's Budget Addendum Process (MBA) for the City Council.

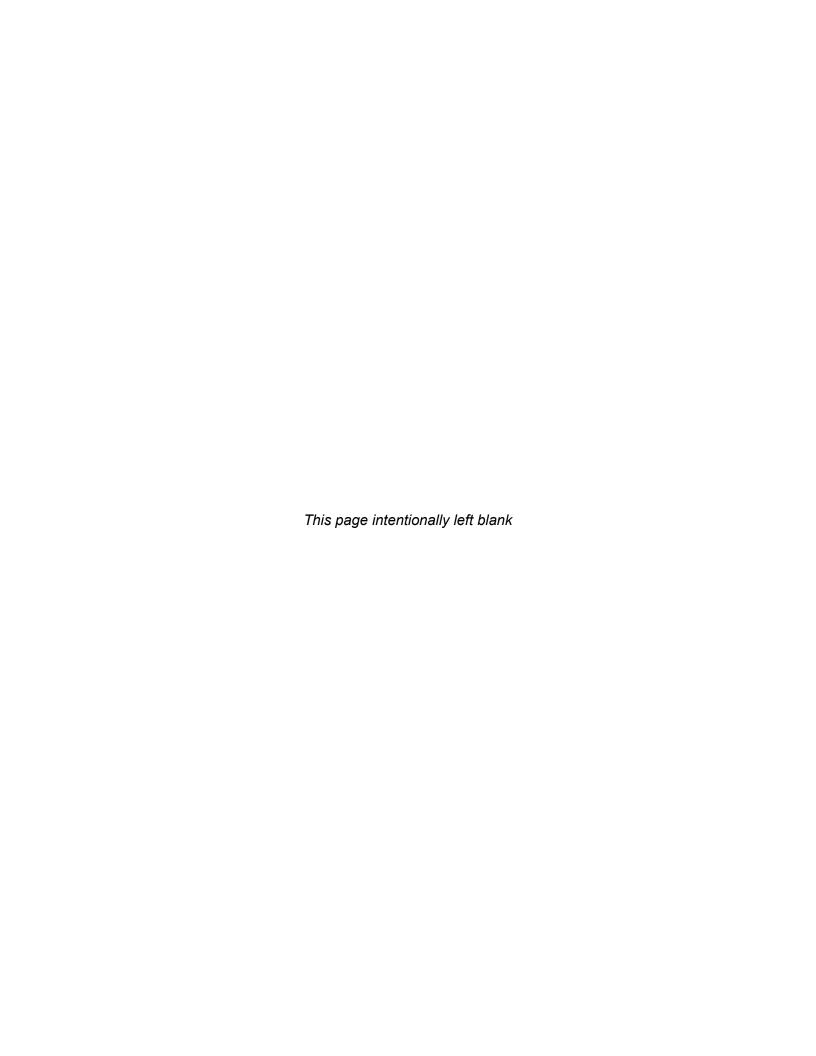
Enrollment audits were conducted for dental, vision and life insurance benefits to ensure that enrollments in the retirement plan matched the enrollments in the vendor systems. In addition, ORS began the Medicare Mandate Compliance initiative which ensures that all members aged 65 and older are compliant with the Medicare mandates in the retirement plan. Staff also participated in the City's medical vendor RFP, which resulted in a new medical insurance vendor for the plan year 2020.

Conclusion

I would like to take this opportunity to thank the members of the System for their confidence in the System management during the past year. I also want to express my gratitude to the Board of Administration for its dedicated effort in supporting the staff through this past year. Finally, I would like to thank the City staff for their support and the consultants and ORS staff for their dedication, commitment to the System and for their diligent work to assure the System's continued successful operation.

Respectfully Submitted,

Roberto L. Peña Chief Executive Officer Office of Retirement Services





Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

San Jose Federated City Employees' Retirement System California

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2018

Presented to

City of San Jose Federated City Employees' Retirement System

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

> Alan H. Winkle Program Administrator

Board of Administration, Administration, and Outside Consultants

BOARD OF ADMINISTRATION

The Retirement System is administered by a seven-member Board of Administration composed of two City employees elected by members of the System, a Retiree Representative and three public members, who are not connected with the City and have significant banking or investment experience, and another public member selected by the six Board members and approved by the City Council. The Board is appointed by the City Council and serves in accordance with Section 2.08.300 of the San Jose Municipal Code.

As of June 30, 2019, the members of the Board were as follows:



MATT LOESCH, CHAIR Employee Representative appointed to the Board in December 2007. His current term expires November 30, 2019.



QIANYU SUN, TRUSTEE Employee Representative appointed to the Board August 2018. Her current term expires November 30, 2021.



JAY CASTELLANO, TRUSTEE Retiree Representative appointed to the Board in May 2018. His current term expires November 30, 2020.



ANURAG CHANDRA, TRUSTEE Public member appointed to the Board in December 2016. His current term expires November 30, 2022.



ELAINE ORR, TRUSTEE Public member appointed to the Board November 2018. Her current term expires November 30, 2022.



VACANT, TRUSTEE



VACANT, TRUSTEE



DEVORA "DEV" DAVIS CITY COUNCIL LIAISON TO THE BOARD Non-voting member appointed to the Board March 2017

OFFICE OF RETIREMENT SERVICES ADMINISTRATION



ROBERTO L. PEÑA, DIRECTOR CHIEF EXECUTIVE OFFICER



BARBARA HAYMAN, DEPUTY DIRECTOR CHIEF OPERATIONS OFFICER



PRABHU PALANI, CHIEF INVESTMENT OFFICER

STANDING PUBLIC MEETINGS

Board Meetings: Third Thursday of the Month, 8:30 AM

Agendas for all public meetings are posted on the bulletin board at City Hall and on the department's website at http://siretirement.com/fed/meetings/agendas.asp or they can be obtained from the Retirement Office at 1737 North First Street, Suite 600, San Jose, CA 95112. Meeting times and locations are subject to change; please call our office at (408) 794-1000 for current information.

Board of Administration, Administration, and Outside Consultants (continued)

OUTSIDE CONSULTANTS

ACTUARY

Cheiron, Inc. Encinitas, CA

AUDITOR

Grant Thornton LLP San Francisco, CA

DOMESTIC RELATIONS ORDER AND DISABILITY COUNSEL

Saltzman & Johnson Law Corporation Alameda, CA

GENERAL & FIDUCIARY COUNSEL

Reed Smith LLP San Francisco, CA

INVESTMENT COUNSEL

Hanson Bridgett LLP Reed Smith LLP San Francisco, CA San Francisco, CA

INVESTMENT CONSULTANTS

Albourne America LLC – Absolute Return San Francisco, CA

Meketa Investments Group, Inc. – General Consultant Carlsbad, CA

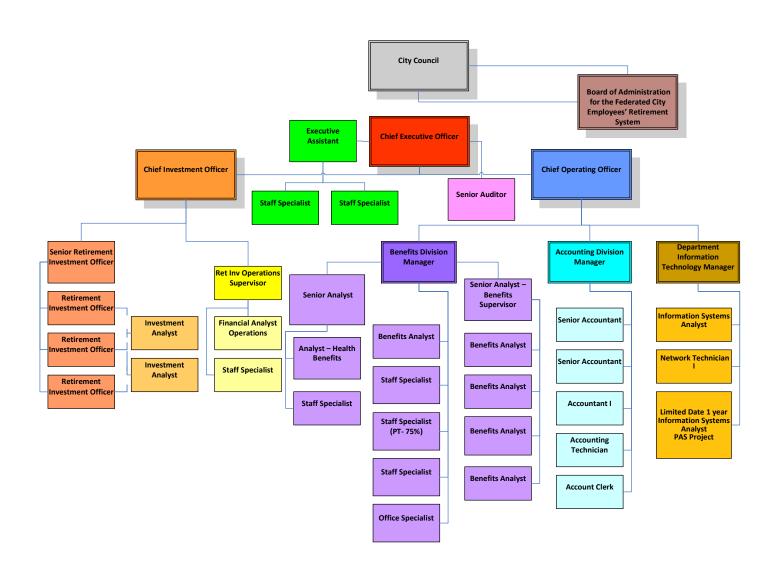
Verus Advisory Inc. – Risk Advisory Seattle, WA

TAX COUNSEL

Ice Miller LLP Indianapolis, IN

A list of investment professionals who provide services for the pension and healthcare trusts can be found on page 110 of the Investment Section of this report. The Schedule of Investment Fees and Schedule of Commissions can be found on pages 120 and 121, respectively.

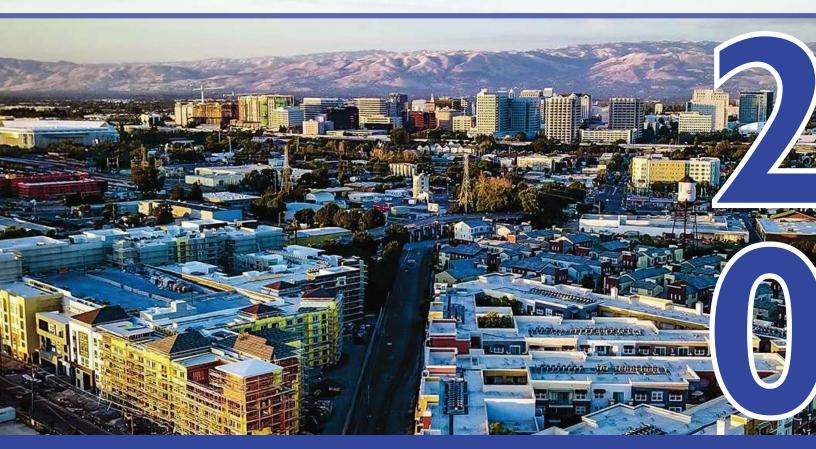
2019 Office of Retirement Services Organizational Chart



Office of Retirement Services

1737 North First Street Suite 600, San Jose, CA 95112 (408) 794-1000 I (800) 732-6477 I (408) 392-6732 Fax www.sjretirement.com

Financial Section



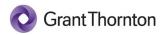


Pension Trust and Postemployment Healthcare Trust Funds of the City of San José, California



City of San José
Federated City Employees' Retirement System
Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018

Independent Auditor's Report



GRANT THORNTON LLP

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REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Board of Administration of the City of San José Federated City Employees' Retirement System San José. California

Report on the financial statements

We have audited the accompanying financial statements of the City of San José Federated City Employees' Retirement System (the "System"), a pension trust fund and postemployment healthcare trust fund of the City of San José, California, as of and for the years ended June 30, 2019 and 2018, 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 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 and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. 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 System'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 System'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.

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Independent Auditor's Report (continued)



Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position of the System as of June 30, 2019 and 2018, and the changes in plan net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

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 - defined benefit pension plan, schedule of investment returns - defined benefit pension plan, schedule of employer contributions - defined benefit pension plan, notes to schedule, schedule of changes in the employer's net pension liability and related ratios – postemployment healthcare plans, schedule of investment returns - postemployment healthcare plan, and schedule of employer contributions - postemployment healthcare plans, be presented to supplement the basic financial statements. Such information, although not a required 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. This required supplementary information is the responsibility of management. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America. These limited procedures 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 supplementary information

Our audit was conducted for the purpose of forming opinion on the financial statements that collectively comprise the System's basic financial statements. The combining schedule of defined benefit pension plan net position as of June 30, 2019, combining schedule of changes in defined benefit pension plan net position for the year ended June 30, 2019, combining schedule of other postemployment plan net position as of June 30, 2019, combining schedule of changes in other postemployment plan net position for the year ended June 30, 2019, and the schedules of administrative expenses and other, schedules of payments to consultants, and schedules of investment expenses for the years ended June 30, 2019 and 2018 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures. These additional procedures included comparing and reconciling the information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards

Independent Auditor's Report (continued)



generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other information

The introductory, investment, actuarial, and statistical sections of the Comprehensive Annual Financial Report are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has 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 it.

Other reporting required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report, dated November 12, 2019, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

San Francisco, California November 12, 2019

Grant Thornton LLP

Management's Discussion and Analysis (unaudited)



November 12, 2019

Board of Administration Federated City Employees' Retirement System 1737 North First Street, Suite 600 San José, California 95112-4505

The Office of Retirement Services is pleased to provide this overview and analysis of the financial activities of the Federated City Employees' Retirement System (the System) for the fiscal years ended June 30, 2019 and 2018. The System, consisting of a single employer Defined Benefit Pension Plan and a Postemployment Healthcare Plan, was established to provide retirement benefits for eligible non-sworn employees of the City of San José (City). We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in our Letter of Transmittal, which begins on page 5 of this report, and in the financial section which follows this discussion.

Financial Highlights for Fiscal Year 2019

- As of June 30, 2019, the System had \$2,426,640,000 in plan net position restricted for pension benefits and postemployment healthcare benefits. Plan net position of \$2,132,152,000 restricted for pension benefits is available to meet the System's ongoing obligations to plan participants and their beneficiaries. The Postemployment Healthcare Plan's net position of \$294,488,000 is available for the exclusive use of retiree medical benefits.
- The System's total plan net position held in trust for pension benefits and postemployment healthcare benefits increased during the fiscal year ended June 30, 2019 by \$80,050,000 or 3.4% from the prior fiscal year, primarily as a result of the appreciation in the fair value of investments caused by favorable market conditions, as well as the increase in contributions during the fiscal year.
- Additions to plan net position during the fiscal year ended June 30, 2019 were \$318,927,000, which includes employer and employee contributions of \$199,416,000 and \$33,184,000, respectively, and net investment income of \$86,327,000. This represents a decrease of \$(36,115,000) or (10.2)% of total additions from the prior fiscal year amount of \$355,042,000.
- Deductions from plan net position for fiscal year ended June 30, 2019 decreased from \$241,614,000 to \$238,877,000 over the prior fiscal year, or approximately (1.1)%, due to the net effect from an increase in retirement benefit payments and a decrease in the transfer of Voluntary Employee Beneficiary Association (VEBA) assets this fiscal year. The increase in retirement benefit payments was attributable to an increased number of retired members and beneficiaries. The one-time election for the VEBA occurred for most of the eligible employees last fiscal year. Any transfers for the VEBA are expected to be minimal from then on.

Overview of the Financial Statements

The System's financial statements, notes to the financial statements, required supplementary and other supplemental information for the year ended June 30, 2019, were prepared in conformity with the principles of governmental accounting and reporting set forth by 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 following discussion and analysis is intended to serve as an introduction to the System's financial statements, which are comprised of these components:

- 1. Statements of Plan Net Position
- 2. Statements of Changes in Plan Net Position
- 3. Notes to the Basic Financial Statements

Please note, however, that this report also contains required supplementary information and other supplemental information in addition to the basic financial statements themselves.

The **Statements of Plan Net Position** are a snapshot of account balances at fiscal year-end. It indicates the assets available for future payments to retirees and any current liabilities that are owed at this time.

The **Statements of Changes in Plan Net Position**, on the other hand, provide a view of current year additions to and deductions from the System.

Both statements are in compliance with accounting principles generally accepted in the United States of America (GAAP) as set forth by the GASB. GAAP requires state and local government pension plans and other postemployment benefit plan reports to use the full accrual method of accounting and make certain disclosures. The System complies with all significant requirements of these pronouncements.

The Statements of Plan Net Position and the Statements of Changes in Plan Net Position report information about the System's activities. These statements include all assets and liabilities, using the full accrual basis of accounting, which recognizes contributions as revenue when currently due pursuant to legal requirements and benefits and refunds of contributions when due and payable under the provisions of the System. All of the fiscal year's additions and deductions are taken into account regardless of when cash is received or paid. All realized gains and losses are reported at the trade date, not the settlement date. In addition, both realized and unrealized gains and losses on investments are reported.

These two statements report the System's net position held in trust for pension benefits and postemployment healthcare benefits (net position)—the difference between assets and liabilities. Over time, increases and decreases in the System's net position are one indicator of whether its financial health is improving or deteriorating. Other factors, such as the net pension liability and the net OPEB liability, should also be considered in measuring the System's overall health.

Notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements (see Notes to Basic Financial Statements beginning on page 32 of this report).

Required Supplementary Information. In addition to the financial statements and accompanying notes, this report presents certain required supplementary information concerning employer contributions and the System's progress in funding its obligations to provide pension and other postemployment healthcare benefits to members and beneficiaries (see Required Supplementary Information beginning on page 64 of this report). The Schedule of Changes in the Employer's Net Pension Liability and Related Ratios of the Defined Benefit Pension Plan was prepared using the System's net position.

Other Supplemental Information. The Combining Schedules of Defined Benefit Pension Plan Net Position and Changes in Defined Benefit Pension Plan Net Position, Combining Schedules of Other Postemployment Plan Net Position and Changes in Other Postemployment Plan Net Position, Schedules of Administrative Expenses and Other, Payments to Consultants, and Investment Expenses are presented immediately following the Required Supplementary Information.

Financial Analysis

As previously noted, plan net position may serve over time as a useful indication of the System's financial position (see Tables 1a and 1c on pages 19 and 20). At the close of fiscal years 2019 and 2018, the System's total assets exceeded the System's total liabilities. The System's financial statements do not include the total pension liability or the total OPEB liability for the Defined Benefit Pension Plan and the Postemployment Healthcare Plan, respectively.

The Pension System's net position as a percentage of the total pension liability and the Postemployment Healthcare Plan's total OPEB liability should also be considered when evaluating the System's financial health. Based on the June 30, 2018 actuarial valuation rolled forward to June 30, 2019, the net position of the Defined Benefit Pension Plan was 50.4% of the total pension liability, and the net position of the Other Postemployment Employee Benefit Plan was 43.8%. For more information on the results and impact of the June 30, 2018 actuarial valuations, please see Notes 4 and 5 to the financial statements beginning on page 55.

NET POSITION FOR THE DEFINED BENEFIT PENSION PLAN (Table 1a)

As of June 30, 2019 and 2018 (In Thousands)

	2019	2018	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Receivables	\$ 17,753 \$	12,416	\$ 5,337	43.0 %
Investments at fair value	2,115,800	2,062,101	53,699	2.6 %
Capital assets, net	2,937	1,684	1,253	74.4 %
Total Assets	2,136,490	2,076,201	60,289	2.9 %
Current liabilities	4,338	6,868	(2,530)	(36.8)%
Total Liabilities	4,338	6,868	(2,530)	(36.8)%
Plan Net Position	\$ 2,132,152 \$	2,069,333	\$ 62,819	3.0 %

NET POSITION FOR THE DEFINED BENEFIT PENSION PLAN (Table 1b)

As of June 30, 2018 and 2017 (In Thousands)

	2018	2017	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Receivables	\$ 12,416 \$	68,585	\$ (56,169)	(81.9)%
Investments at fair value	2,062,101	1,918,487	143,614	7.5 %
Capital assets, net	1,684	1,448	236	16.3 %
Total Assets	2,076,201	1,988,520	87,681	4.4 %
Current liabilities	6,868	15,728	(8,860)	(56.3)%
Total Liabilities	6,868	15,728	(8,860)	(56.3)%
Plan Net Position	\$ 2,069,333 \$	1,972,792	\$ 96,541	4.9 %

NET POSITION FOR THE POSTEMPLOYMENT HEALTHCARE PLAN (Table 1c)

As of June 30, 2019 and 2018 (In Thousands)

	2019	2018	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Receivables	\$ 4,109	\$ 4,211	\$ (102	(2.4)%
Investments at fair value	290,963	273,442	17,521	6.4 %
Capital assets, net	55	70	(15	(21.4)%
Total Assets	295,127	277,723	17,404	6.3 %
Current liabilities	639	466	173	37.1 %
Total Liabilities	639	466	173	37.1 %
Plan Net Position	\$ 294,488	\$ 277,257	\$ 17,231	6.2 %

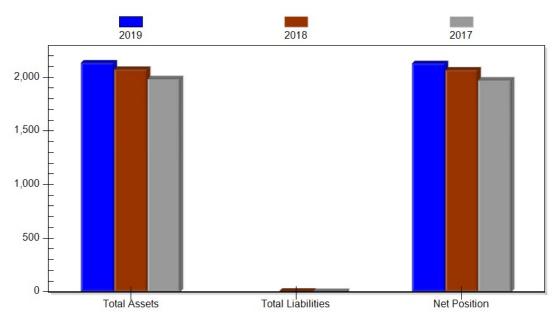
NET POSITION FOR THE POSTEMPLOYMENT HEALTHCARE PLAN (Table 1d)

As of June 30, 2018 and 2017 (In Thousands)

	2018	2017	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Receivables	\$ 4,211 \$	5,944	\$ (1,733)	(29.2)%
Investment at fair value	273,442	270,727	2,715	1.0 %
Capital assets	70	66	4	6.1 %
Total Assets	277,723	276,737	986	0.4 %
Current liabilities	466	16,367	(15,901)	(97.2)%
Total Liabilities	466	16,367	(15,901)	(97.2)%
Plan Net Position	\$ 277,257 \$	260,370	\$ 16,887	6.5 %

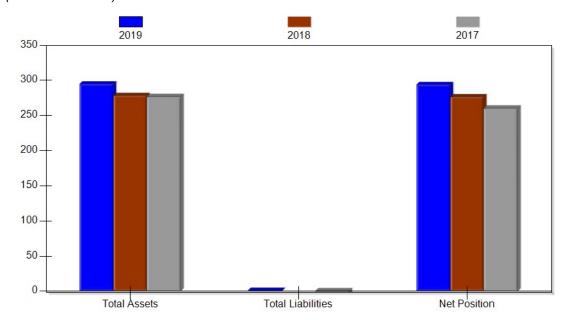
DEFINED BENEFIT PENSION PLAN NET POSITION (Tables 1a and 1b)

As of June 30, 2019, 2018 and 2017 (Dollars in Millions)



POSTEMPLOYMENT HEALTHCARE PLAN NET POSITION (Tables 1c and 1d)

As of June 30, 2019, 2018 and 2017 (Dollars in Millions)



As of June 30, 2019, \$2,132,152,000 and \$294,488,000, in total net position was restricted for pension benefits and postemployment healthcare benefits, respectively (see Tables 1a and 1c on pages 19-20). Plan net position restricted for pension benefits of \$2,132,152,000 is available to meet the System's ongoing obligations to pension plan participants and their beneficiaries. Postemployment Healthcare Plan net position of \$294,488,000 is available for the exclusive use of retiree medical benefits.

As of June 30, 2019, total net position restricted for pension benefits and for the postemployment healthcare benefits increased by 3.0% and 6.2% from the prior year, primarily due to the net appreciation in the fair value of investments of \$65,538,000 and \$3,607,000 for the Defined Benefit Pension Plan and the Postemployment Healthcare Plan, respectively. The appreciation in the fair value of investments was caused by favorable market conditions during the fiscal year. The System's current asset allocation is discussed in detail in Note 2(c) of the financial statements on page 41.

As of June 30, 2018, \$2,069,333,000 and \$277,257,000, in total net position was restricted for pension benefits and postemployment healthcare benefits, respectively (see Tables 1b and 1d on pages 19-20). Plan net position restricted for pension benefits of \$2,069,333,000 was available to meet the System's ongoing obligations to pension plan participants and their beneficiaries. Postemployment Healthcare Plan net position of \$277,257,000 was available for the exclusive use of retiree medical benefits.

As of June 30, 2018, total net position restricted for pension benefits and for the postemployment healthcare benefits increased by 4.9% and 6.5% from the prior year, primarily due to the net appreciation in the fair value of investments of \$98,250,000 and \$6,877,000 for the Defined Benefit Pension Plan and the Postemployment Healthcare Plan, respectively. The appreciation in the fair value of investments was caused by favorable market conditions during the fiscal year. The System's current asset allocation is discussed in detail in Note 2(c) of the financial statements on page 41.

As of June 30, 2019, receivables increased by \$5,337,000 or 43.0% and decreased by \$(102,000) or (2.4)% in the Defined Benefit Pension Plan and Postemployment Healthcare Plan, respectively. Receivables in the Defined Benefit Pension Plan increased mainly due to an increase in employer contribution receivables.

In the previous year, receivables for the Defined Benefit Pension Plan and Postemployment Healthcare Plan decreased by (\$56,169,000) or (81.9%) and by \$(1,733,000) or (29.2)%, respectively, due mainly to a decrease in receivables from brokers and others for year-end investment trades for both plans.

As of June 30, 2019, total liabilities for the Defined Benefit Pension Plan decreased by \$(2,530,000) or (36.8)% and increased by \$173,000 or 37.1% in the Postemployment Healthcare Plan, respectively, compared with June 30, 2018, due to changes in payable to brokers, primarily as a result of the timing of investment transactions. In the previous year, liabilities for the Defined Benefit Pension Plan and the Postemployment Healthcare Plan decreased by \$(8,860,000) or (56.3)% and by \$(15,901,000) or (97.2)%, respectively, from the prior year due to decreases in payables to brokers and other liabilities primarily as a result of the timing of investment transactions.

FEDERATED SYSTEM ACTIVITIES

In the fiscal year ended June 30, 2019, the System's combined Defined Benefit Pension Plan and Postemployment Healthcare Plan net position increased by \$80,050,000 or 3.4%, primarily due to the favorable market conditions during the fiscal year. Key elements of the System's financial activities are described in the sections that follow.

Additions to Plan Net Position

The assets needed to fund retirement benefits are accumulated through the collection of employer and employee contributions along with earnings on investments (net of investment expense). Additions to the Defined Benefit Pension Plan and Postemployment Healthcare Plan for the fiscal year ended June 30, 2019, were \$272,467,000 and \$46,460,000, respectively (see Tables 2a and 2c on pages 23 - 24).

For the fiscal year ended June 30, 2019, total additions for the Defined Benefit Pension Plan and Postemployment Healthcare Plan decreased by \$(22,297,000) and \$(13,818,000), or (7.6)% and (22.9)%, respectively. The primary cause of the decrease from the prior year was a combination of the decrease in net investment income of \$(40,638,000) and the increase in contributions of \$18,341,000 in the Defined Benefit Pension Plan and the decrease of \$(2,864,000) and \$(10,954,000), in net investment income and contributions, respectively, in the Postemployment Healthcare Plan.

The decrease in investment income was due to the less than favorable market conditions during the fiscal year as compared to the prior year, and the increase in employer contributions is due to the increase in City contribution rates of around 5% for Tier 1. While the City contributions increased, employee contributions decreased for the Postemployment Healthcare Plan as a result of the implementation of the VEBA, which stopped contributions for those who opted in to the VEBA.

The System's time-weighted net investment fee rate of return, as determined by the System's investment consultant on an investment (non-GAAP) basis, for the fiscal year ended June 30, 2019 for the Defined Benefit Pension Plan, was 4.3% compared to 5.9% for fiscal year 2018.

For fiscal year ended June 30, 2018, total additions for the Defined Benefit Pension Plan and Postemployment Healthcare Plan decreased by \$(6,956,000) and \$(5,495,000), or (2.3)% and (8.4)%, respectively. The primary cause of the decrease from the prior year was a combination of the decrease in net investment income of \$(28,517,000) and \$(4,705,000), and the increase in City contributions of \$18,287,000 and \$492,000, in the Defined Benefit Pension Plan and Postemployment Healthcare Plan, respectively.

The decrease in net investment income was due to the less than favorable market conditions during the fiscal year as compared to the prior year and the increase in employer contributions was due to the increase in City contribution rates. The System's time-weighted net of investment fee rate of return, as determined by the System's investment consultant on an investment (non-GAAP) basis, for the fiscal year ended June 30, 2018 for the Defined Benefit Pension Plan, was 5.9% compared to 7.5% for fiscal year 2017.

Deductions from Plan Net Position

The System was created to provide a monthly pension allowance, survivor benefits, permanent disability benefits, and postemployment healthcare benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments and healthcare premium payments, as designated by the San José Municipal Code, refunds of contributions to terminated employees, and the cost of administering the System.

Deductions for the fiscal year ended June 30, 2019, totaled \$209,648,000 and \$29,229,000 for the Defined Benefit Pension Plan and Postemployment Healthcare Plan, respectively. Deductions for the Defined Benefit Pension Plan increased 5.8% from the previous year due to an increase in benefit payments (see Table 2a on page 23). The increase in benefit payments is primarily due to continued increases in the number of retirees and beneficiaries with higher final average salaries and added cost of living adjustments. Deductions for the Postemployment Healthcare Plan decreased by (32.6)% from the previous year primarily due to the decrease in the transfer of VEBA assets for the fiscal year. The IRS approved allowing eligible employees who are rehired into the City from calendars years 2018 through 2022 to opt-in to the VEBA if they were not employed during the initial opt-in period. As this represents a limited number of eligible employees who could potentially opt-in to the VEBA, it is estimated that there will be minimal additional amounts transferred from the Postemployment Healthcare Plan to the individual VEBA accounts. Since last fiscal year was the initial transfer of the VEBA assets, it had the most amount whereas the following five years will expect little to no transfer of VEBA assets. (see Table 2c on page 24).

Deductions for the fiscal year ended June 30, 2018, totaled \$198,223,000 and \$43,391,000 for the Defined Benefit Pension Plan and Postemployment Healthcare Plan, respectively. Deductions for the Defined Benefit Pension Plan increased 5.5% from the previous year due to an increase in benefit payments The increase in benefit payments is primarily due to continued increases in the number of retirees and beneficiaries with higher than average salaries and added cost of living adjustments. (see Table 2b on page 24). Deductions for the Postemployment Healthcare Plan increased by 38.9% from the previous year due to the net result of a decrease in healthcare insurance premiums from the implementation of a new lowest cost health plan for the year and the increase in the transfer of VEBA assets for the fiscal year (see Table 2d on page 25).

CHANGES IN PLAN NET POSITION FOR THE DEFINED BENEFIT PENSION PLAN (Table 2a)

For the Fiscal Years Ended June 30, 2019 and 2018 (Dollars in Thousands)

	2019	2018	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Employee contributions	\$ 22,606 \$	20,501	\$ 2,105	10.3 %
Employer contributions	173,006	156,770	16,236	10.4 %
Net investment income ¹	76,855	117,493	(40,638)	(34.6)%
Total Additions	272,467	294,764	(22,297)	(7.6)%
Retirement benefits	190,228	179,366	10,862	6.1 %
Death benefits	13,719	12,970	749	5.8 %
Refund of contributions	1,119	1,064	55	5.2 %
Administrative expenses	4,582	4,823	(241)	(5.0)%
Total Deductions	209,648	198,223	11,425	5.8 %
Net Increase in Plan Net				
Position	62,819	96,541	(33,722)	(34.9)%
Beginning Net Position	2,069,333	1,972,792	96,541	4.9 %
Ending Net Position	\$ 2,132,152 \$	2,069,333	\$ 62,819	3.0 %

¹ Net of investment expenses of \$10,513 and \$10,734 in 2019 and 2018, respectively.

CHANGES IN PLAN NET POSITION FOR THE DEFINED BENEFIT PENSION PLAN (Table 2b)

For the Fiscal Years Ended June 30, 2018 and 2017 (Dollars in Thousands)

	2018	2017	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Employee contributions	\$ 20,501 \$	17,227	\$ 3,274	19.0 %
Employer contributions	156,770	138,483	18,287	13.2 %
Net investment income ¹	117,493	146,010	(28,517)	(19.5)%
Total Additions	294,764	301,720	(6,956)	(2.3)%
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Retirement benefits	179,366	169,756	9,610	5.7 %
Death benefits	12,970	12,411	559	4.5 %
Refund of contributions	1,064	1,263	(199)	, ,
Administrative expenses	 4,823	4,380	443	10.1 %
Total Deductions	 198,223	187,810	10,413	5.5 %
Net Increase in Plan Net				
Position	96,541	113,910	(17,369)	(15.2)%
Beginning Net Position	1,972,792	1,858,882	113,910	6.1 %
Ending Net Position	\$ 2,069,333 \$	1,972,792	\$ 96,541	4.9 %

¹ Net of investment expenses of \$10,734 and \$11,827 in 2018 and 2017, respectively.

CHANGES IN PLAN NET POSITION FOR THE POSTEMPLOYMENT HEALTHCARE PLAN (Table 2c)

For the Fiscal Years Ended June 30, 2019 and 2018 (Dollars in Thousands)

				Increase/ (Decrease)
	2019	2018	Amount	Percent
Employee contributions	\$ 10,578 \$	15,545	\$ (4,967)	(32.0)%
Employer contributions	26,410	32,397	(5,987)	(18.5)%
Net investment income ¹	9,472	12,336	(2,864)	(23.2)%
Total Additions	46,460	60,278	(13,818)	(22.9)%
Healthcare insurance premiums	28,826	29,724	(898)	(3.0)%
Administrative expenses	384	170	214	125.9 %
VEBA transfer	19	13,497	(13,478)	
Total Deductions	29,229	43,391	(14,162)	(32.6)%
Net Increase in Plan Net				
Position	17,231	16,887	344	2.0 %
Beginning Net Position	277,257	260,370	16,887	6.5 %
Ending Net Position	\$ 294,488 \$	277,257	\$ 17,231	6.2 %

¹ Net of investment expenses of \$551 and \$403 in 2019 and 2018, respectively.

CHANGES IN PLAN NET POSITION FOR THE POSTEMPLOYMENT HEALTHCARE PLAN (Table 2d)

For the Fiscal Years Ended June 30, 2018 and 2017 (Dollars in Thousands)

	2018	2017	Increase/ (Decrease) Amount	Increase/ (Decrease) Percent
Employee contributions	\$ 15,545		\$ (1,282)	(7.6)%
Employer contributions	32,397	31,905	492	1.5 %
Net investment income ¹	 12,336	17,041	(4,705)	(27.6)%
Total Additions	60,278	65,773	(5,495)	(8.4)%
Healthcare insurance premiums Administrative expenses VEBA transfer Total Deductions	29,724 170 13,497 43,391	31,007 242 - 31,249	(1,283) (72) 13,497 12,142	` ,
Net Increase in Plan Net	40.007	24 504	(47,007)	(54.4)0/
Position	16,887	34,524	(17,637)	(51.1)%
Beginning Net Position	260,370	225,846	34,524	15.3 %
Ending Net Position	\$ 277,257	\$ 260,370	\$ 16,887	6.5 %

¹ Net of investment expenses of \$403 and \$706 in 2018 and 2017, respectively.

Reserves

The System is required by the City of San José Municipal Code to establish various reserves in the System's net position. The System's net position is allocated between the Defined Benefit Pension Plan (which includes the Retirement Fund and the Cost-of-Living Fund) and the Postemployment Healthcare Plan (which includes the 401(h) and 115 Trust). The Defined Benefit Pension Plan Retirement Fund and the Defined Benefit Pension Plan Cost-of-Living Fund both have a General Reserve and Employee Contributions Reserve. The Postemployment Healthcare 401(h) and 115 Funds have a General Reserve only (see table on page 44 for a complete listing and year-end balances of the System's reserves). The 401(h) reserves were depleted in the current fiscal year.

The System's reserves are established from employer and employee contributions and the accumulation of investment income, after satisfying investment and administrative expenses. Additionally, the appreciation or depreciation in the fair value of investments is held in the unrealized gain/loss account, a component of each System's General Reserve.

With the implementation of Measure F, a medical in-lieu component of the General Reserves was created to account for those members who elected to be into the medical-in-lieu credit program. These members are retirees who are eligible for medical insurance and/or dental insurance but who opt not to take it and instead elect to be in the in-lieu credit program. These members are given credits worth 25% of the lowest cost plan, which can be used in future years if the retiree opts to enroll in a City medical or dental plan.

The System's Fiduciary Responsibilities

The System's Board of Administration is the fiduciary trustee of the Defined Benefit Pension Plan and Postemployment Healthcare Plan. Under the California Constitution and the San José Municipal Code, System assets may only be used for the exclusive benefit of providing benefits to plan participants and their beneficiaries and defraying reasonable costs of administration.

Economic Factors and Rates Affecting Next Year

The City and the bargaining units engaged in settlement discussions concerning litigation arising out of a voter-approved ballot measure, known as Measure B, which was approved in 2012. On November 23, 2015, the City and the bargaining units reached an Alternative Pension Reform Settlement Framework (Framework) which was approved by the City Council and the bargaining units' memberships. A ballot measure (Measure F) was presented to the public for voting in the November 2016 election, which determined whether the terms of the Framework will be implemented. Measure F passed, and on June 16, 2017, the ordinance implementing the Framework and Measure F became effective for employees in the System. The provisions of the Framework included, but are not limited to, revising Tier 2 benefit, allowing rehired Tier 1 employees to remain in Tier 1, creating a Voluntary Employee Beneficiary Association (VEBA) for retiree healthcare and an irrevocable opt-out of the defined benefit retiree healthcare plan for eligible employees, defining the qualifications for members of the independent medical panel, and creating a Guaranteed Purchasing Power benefit for Tier 1 retirees. All Tier 1 employees were eligible to opt-in to the VEBA and rehired employees with healthcare contributions will also have the option through calendar year 2022. The VEBA is being administered by the City, not ORS and therefore it is also not under the jurisdiction of the Retirement Board.

The System's actuarial valuations as of June 30, 2018, were used to determine the contribution rates and dollar amounts effective July 1, 2019, for fiscal year 2019-2020. The annual determined contribution rates and dollar amounts were adopted by the Board. The June 30, 2018 actuarial valuations include Board adopted actuarial assumption changes recommended by the System's actuary in the Preliminary June 30, 2018 Actuarial Valuation Results and Contribution Methodology Options presented in February 2019.

Defined Benefit Pension Plan

The System's funding objective is to meet long-term benefit obligations through contributions and investment income. The System's actuarial valuation for funding purposes uses a five-year smoothing method for investment gains and losses. This means that the current year's gains or losses compared to the actuarially assumed rate of return, as calculated at year-end, are recognized over five years. The unfunded actuarial liability (UAL) of \$1,921.3 million, as of June 30, 2018, does not include the impact of approximately \$110.2 million of net deferred investment losses yet to be recognized, primarily resulting from unfavorable investment returns during fiscal years 2015 and 2016. It is anticipated that future actuarial valuations will recognize these remaining deferred net investment losses as described above and the smoothing of any new gains or losses over a five-year period.

The System is exposed to general investment market risk. In a pension plan context, this is the risk that the long-term rate of return earned on the pension plan assets could be below the actuarially assumed rate of return, which is 6.75%, net of investment expenses, in the actuarial valuation as of June 30, 2018. With all other actuarial valuations beng equal, underperforming the assumed rate of return would increase the UAL and decrease the funded status of the System, thereby increasing required contributions to the System. Conversely, with all other actuarial variables being equal, overperforming the assumed rate of return would decrease the UAL and increase the funded status of the System, thereby decreasing required contributions to the System.

In addition to investment market risk, the System is exposed to non-economic or demographic risk. The demographic assumptions, which include rates of termination, retirement, disability and mortality, are often unique to the System's provisions and the specific demographics of the System participants. Deviations from these actuarial assumptions cause the System to experience gains or losses, which in turn can lead to volatility in the contribution rates. To minimize this risk, every two to five years, the System's actuary conducts an experience study to assess whether the experience of the System is conforming to the actuarial assumptions. The actuarial assumptions may be adjusted where it is determined that current assumptions will not provide the most accurate expectation of what may happen

in the future. The Board approved to make changes to the June 30, 2018 actuarial valuation as a result of the demographic experience study presented in November 2017. The next experience study is scheduled to be conducted in late 2019. See Actuarial section for the effects of these changes.

The June 30, 2018 actuarial valuation contained changes on the actuarial assumptions and methods since the last valuation. The discount rate was reduced from 6.875% to 6.75%. Membership requirements were changed by Measure F to allow former members and certain hires with reciprocity to enter Tier 1.

Contribution rates for fiscal year 2019-2020, as determined by the June 30, 2018 actuarial valuation includes the impact of the changes stated above and the recognition of smoothed deferred investment gains and losses.

Postemployment Healthcare Plan

With the passage of Measure F, the Framework became effective as of June 16, 2017. A VEBA for retiree healthcare was created and Tier 1 and some Tier 2 members were eligible for an irrevocable optout of the defined benefit retiree healthcare plan. The VEBA opt-in election period was October 18, 2017 through December 15, 2017, and the healthcare contributions of members who opted in to the VEBA was transferred out of the Postemployment Healthcare Plan in March 2018.

Historically, member and City contributions to the System have been negotiated through collective bargaining and have not been actuarially determined. With the implementation of Measure F, member contributions were fixed at 7.5% of pay; the City's contribution toward the explicit subsidy (or premium subsidy) will be actuarially determined; and the City will also pay the implicit subsidy (difference between the expected claims cost for a retiree or spouse and the total (retiree plus City) premium) on a pay-as you-go basis as part of active health premiums. In addition, the City has an option to limit its contribution to 14% of payroll.

Requests for Information

This financial report is designed to provide the Board of Administration, Mayor and City Council, our membership, taxpayers, and stakeholders, with a general overview of the System's finances and to account for the money it receives. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Federated City Employees' Retirement System 1737 North First Street, Suite 600 San José, California 95112-4505

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Respectfully Submitted,

Roberto L. Peña Chief Executive Officer

Office of Retirement Services

Basic Financial Statements

STATEMENTS OF PLAN NET POSITION

As of June 30, 2019 and 2018 (In Thousands)

		2019	
	Defined Benefit	Postemployment	
	Pension Plan	Healthcare Plan	Total
ASSETS			
Receivables			
Employee contributions	\$ 942	\$ 439	\$ 1,381
Employer contributions	7,627	881	8,508
Brokers and others	5,927	2,297	8,224
Accrued investment income	3,257	492	3,749
Total Receivables	17,753	4,109	21,862
Investments, at fair value:			
Securities and other:			
Public equity	622,761	168,718	791,479
Short-term investment grade bonds	393,019	84,793	477,812
Private equity	381,075	-	381,075
Market neutral strategies	173,354	-	173,354
Bonds (immunized cash flows)	104,988	-	104,988
Core real estate	79,655	19,062	98,717
Commodities	61,455	14,520	75,975
Private debt	72,576	-	72,576
Emerging market bonds	70,416	-	70,416
Growth real estate	52,440	-	52,440
Treasury inflation-protected securities	44,438	-	44,438
Cash and cash equivalents	37,307	3,870	41,177
Private real assets	22,277	-	22,277
International currency contracts, net	39	-	39
Total Investments	2,115,800	290,963	2,406,763
Capital Assets, net	2,937	55	2,992
TOTAL ASSETS	2,136,490	295,127	2,431,617
LIADULTICO			
LIABILITIES Payable to brokers	2,618	473	3,091
Other liabilities	1,720	166	1,886
TOTAL LIABILITIES	4,338	639	4,977
DI AN NET DOOLTION - DECEMBER	500		
PLAN NET POSITION - RESTRICTED			0.455.455
Pension benefits	2,132,152	-	2,132,152
Postemployment healthcare benefits	¢ 2.422.450	294,488	294,488
TOTAL PLAN NET POSITION	\$ 2,132,152	\$ 294,488	\$ 2,426,640

See accompanying notes to basic financial statements.

(continued)

Basic Financial Statements (continued)

STATEMENTS OF PLAN NET POSITION (continued)

As of June 30, 2019 and 2018 (In Thousands)

	2018						
	Defined Benefit Pension Plan	Postemployment Healthcare Plan	Total				
ASSETS							
Receivables							
Employee contributions	\$ 800	\$ 442	\$ 1,242				
Employer contributions	1,671	645	2,316				
Brokers and others	3,833	2,552	6,385				
Accrued investment income	6,112	572	6,684				
Total Receivables	12,416	4,211	16,627				
Investments, at fair value: Securities and other:							
Public equity	601,066	158,607	759,673				
Global fixed income	396,760	76,597	473,357				
Market neutral strategies	253,238	813	254,051				
Private equity	179,724	577	180,301				
Treasury inflation-protected securities	150,527	483	151,010				
Core real estate	111,987	21,186	133,173				
Commodities	92,830	13,625	106,455				
Private debt	78,532	252	78,784				
Emerging market bonds	69,883	224	70,107				
Growth real estate	45,096	145	45,241				
High yield debt	39,939	128	40,067				
Cash and cash equivalents	28,518	760	29,278				
Private real assets	13,833	44	13,877				
International currency contracts, net	168	1	169				
Total Investments	2,062,101	273,442	2,335,543				
Capital Assets	1,684	70	1,754				
TOTAL ASSETS	2,076,201	277,723	2,353,924				
LIADUITICO							
LIABILITIES Payable to brokers	4,979	315	5,294				
Other liabilities	1,889	151	2,040				
TOTAL LIABILITIES	6,868	466	7,334				
I VIAL LIABILITIES	0,000	700	7,004				
PLAN NET POSITION - RESTRICTED F	OR						
Pension benefits	2,069,333	_	2,069,333				
Postemployment healthcare benefits	-	277,257	277,257				
TOTAL PLAN NET POSITION	\$ 2,069,333	\$ 277,257	\$ 2,346,590				

See accompanying notes to basic financial statements.

(concluded)

Basic Financial Statements (continued)

STATEMENTS OF CHANGES IN PLAN NET POSITION

For the Fiscal Years Ended June 30, 2019 and 2018 (In Thousands)

	2019					
	Defined Benefit Pension Plan		Postemployment Healthcare Plan		Total	
ADDITIONS		<u> </u>	1100			Total
Contributions:						
Employee	\$	22,606	\$	10,578	\$	33,184
Employer		173,006		26,410		199,416
Total Contributions		195,612		36,988		232,600
Investment income						
Net appreciation in fair value of						
investments		65,538		3,607		69,145
Interest income		17,120		587		17,707
Dividend income		4,710		5,829		10,539
Less: investment expense		(10,513)		(551)		(11,064)
Net Investment Income		76,855		9,472		86,327
TOTAL ADDITIONS		272,467		46,460		318,927
DEDUCTIONS						
Retirement benefits		190,228		-		190,228
Healthcare insurance premiums		_		28,826		28,826
Death benefits		13,719		-		13,719
Refund of contributions		1,119		-		1,119
Administrative expenses and other		4,582		384		4,966
VEBA transfer		, -		19		19
TOTAL DEDUCTIONS		209,648		29,229		238,877
TOTAL BEBOOTIONS		200,040		20,220		200,011
NET INCREASE		62,819		17,231		80,050
PLAN NET POSITION - RESTRICTED BENEFITS	D FOR	PENSION ANI	POST	EMPLOYMENT	HEA	LTHCARE
BEGINNING OF YEAR		2,069,333		277,257		2,346,590
END OF YEAR	\$	2,132,152	\$	294,488	\$	2,426,640

Basic Financial Statements (continued)

STATEMENTS OF CHANGES IN PLAN NET POSITION (continued)

For the Fiscal Years Ended June 30, 2019 and 2018 (In Thousands)

			2018	
	Defined Benef Pension Plan		employment thcare Plan	Total
ADDITIONS				
Contributions:				
Employee	\$ 20,50	1 \$	15 515	¢ 26.046
Employee	,	•	15,545	\$ 36,046
Total Contributions	156,77		32,397 47,942	189,167 225,213
Total Contributions	177,27	<u> </u>	41,542	225,213
Investment income				
Net appreciation in fair value of				
investments	98,25	0	6,877	105,127
Interest income	20,48		701	21,190
Dividend income	9,48		5,161	14,649
Less: investment expense	(10,73		(403)	(11,137)
Net Investment Income	117,49		12,336	129,829
Net investment income	117,40		12,000	120,020
TOTAL ADDITIONS	294,76	4	60,278	355,042
DEDUCTIONS				
Retirement benefits	179,36	6	_	179,366
Healthcare insurance premiums	,	_	29,724	29,724
Death benefits	12,97	n		12,970
Refund of contributions	1,06			1,064
Administrative expenses and other	4,82		170	4,993
VEBA transfer	4,02	3	_	•
VEDA transier		-	13,497	13,497
TOTAL DEDUCTIONS	198,22	3	43,391	241,614
NET INCREASE	96,54	1	16,887	113,428
	,		,	,
PLAN NET POSITION - RESTRICTE	D FOR PENSION	AND POST	EMPLOYMENT	HEALTHCARE
BENEFITS				
BEGINNING OF YEAR	1,972,79	2	260,370	2,233,162
END OF YEAR	\$ 2,069,33	3 \$	277,257	\$ 2,346,590
				·

Notes to the Basic Financial Statements

NOTE 1 - DESCRIPTION OF THE PLAN

The following description of the City of San José Federated City Employees' Retirement System (the System) is provided for financial reporting purposes only. Readers should refer to the City of San José Municipal Code (SJMC) for more complete information.

(a) General

The System was established in 1941 to provide retirement benefits for certain employees of the City of San José (City). The current System consists of a single employer Defined Benefit Pension Plan and a Postemployment Healthcare Plan and includes all provisions of SJMC Chapters 3.28, 3.44, and 3.52.

The Defined Benefit Pension Plan was established pursuant to Internal Revenue Code (IRC) Section 401(a), is held and administered in the 1975 Federated City Employees' Retirement System (Pension Trust) and includes all provisions of SJMC Chapters 3.28.

The Postemployment Healthcare Plan is comprised of an IRC Section 401(h) plan and an IRC Section 115 trust and is held and administered in the 1975 Federated City Employees' Retirement System and the Federated City Employees' Healthcare Trust Fund, respectively; it includes all provisions of SJMC Chapters 3.28 and 3.52, respectively.

The Postemployment Healthcare Plan, which was established under IRC Section 401(h), is an account within the Pension Trust for retiree healthcare benefits funding and for the payment of retiree healthcare benefits. As a 401(h) plan, the healthcare plan benefits must be subordinate to the pension plan benefits. The medical benefits are considered subordinate if the cumulative actual contributions for medical benefits are no greater than 25% of actual contributions to both pension and medical benefits, ignoring contributions for past service benefit (normal cost only). The System's actuary performs periodic reviews and projections of the IRC 25% subordination test. The 401(h) plan was depleted during this current fiscal year and all post-employment healthcare benefit payments are now made from the IRC 115 trust account.

On June 24, 2011, a new IRC Section 115 trust was established by the San José City Council (City Council) under the provisions of SJMC Chapter 3.52 (Ordinance number 28914) to provide an alternative to the depleted 401(h) account within the Pension Trust for retiree healthcare benefits funding and for the payment of retiree healthcare benefits. A request for private letter ruling on the tax qualified status of the new trust and the pre-tax treatment of employee contributions to the trust was filed with the IRS on October 17, 2011. On August 6, 2013, the City obtained a private letter ruling from the IRS confirming the pre-tax treatment of employee contributions to the 115 Trust. Effective pay period 1 of 2014, beginning on December 23, 2013, employee contributions made for retiree healthcare are deposited into the 115 Trust.

On August 18, 2012, the System received a favorable tax determination letter from the IRS for the Pension Trust, which includes the Defined Benefit Pension Plan and the 401(h) portion of the Postemployment Healthcare Plan. A new determination letter was received on July 8, 2014.

Effective September 30, 2012, pursuant to City of San José Ordinance Number 29120, the System was amended to provide for different retirement benefits for individuals hired, rehired, or reinstated by the City on and after that date but before September 27, 2013. Members subject to these new benefit provisions are referred to as Tier 2 members, whereas members hired before September 30, 2012 are referred to as Tier 1 members. Differences in benefits are noted in the appropriate sections below.

Effective February 3, 2013, pursuant to City of San José Ordinance Number 29184, unrepresented executive management and professional employees who are hired directly into a position in Unit 99 on or after that date, may make a one-time irrevocable election to participate in either a newly created Defined Contribution Plan or become a Tier 2 participant in the System. To be eligible, an employee must not have been previously a member of the City of San José Retirement System. The System does not administer or hold the assets of the Defined Contribution Plan.

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(a) General (continued)

Effective September 27, 2013, pursuant to City of San José Ordinance Number 29283, the System was amended to provide for different retirement benefits for individuals hired or rehired by the City on and after that date. Members subject to these new benefits are referred to as Tier 2B members, having the same benefits as Tier 2 members in the Defined Benefit Pension Plan, except, Tier 2B members do not have Postemployment Healthcare benefits. The ordinance also stated that the City shall bear and pay an amount equal to the additional costs incurred by the Retirement System for that portion of the unfunded liability as determined by the actuary of the Retirement System that the City and the new employees hired on or after September 27, 2013, would have otherwise paid as contributions had those employees been eligible for retiree healthcare. The additional payment by the City shall be for a period of time under the terms and conditions set forth by the City Council.

The City and the Federated bargaining units engaged in settlement discussions concerning litigation arising out of a voter approved ballot measure, known as Measure B, which passed in 2012. On December 15, 2015, and January 12, 2016, the City and the bargaining units representing employees in Federated reached a settlement agreement on the Federated Alternative Pension Reform Settlement Framework (Federated Framework). The terms of the Federated Framework also applied to unrepresented employees, including unrepresented management and executive employees in Unit 99. The Federated Framework included an agreement that a ballot measure would be placed on the November 8, 2016 election for the voters to replace Measure B.

On November 8, 2016, the voters approved the Alternative Pension Reform Act known as Measure F. Measure F included, among other things, prohibiting any enhancements to defined retirement benefits without voter approval; codifying the Tier 2 pension benefit; closing the defined benefit retiree healthcare plan; and prohibiting retroactive defined retirement benefit enhancements. The City Council approved Ordinance Number 29879 on May 16, 2017, amending the San Jose Municipal Code to reflect the terms of Measure F and the Federated Framework. The changes to the Municipal Code became effective thirty (30) days after May 16, 2017. Most of the terms of Measure F and the Federated Framework were implemented on June 18, 2017. The provisions of the Federated Framework include, but are not limited to, revising Tier 2 benefits, allowing rehired Tier 1 employees to remain in Tier 1, creating a defined contribution Voluntary Employee Beneficiary Association (VEBA) for retiree healthcare (medical and dental) and a one time irrevocable election to opt in to the defined contribution VEBA from the defined benefit retiree healthcare plan for eligible employees, defining the qualifications for members of the independent medical panel, and creating a Guaranteed Purchasing Power benefit for Tier 1 retirees. All Tier 1 employees (except those who enter the Plan after June 18, 2017 with "Classic" membership in CalPERS) and Tier 2 employees who were previously making contributions into the defined benefit retiree healthcare plan (Tier 2A), were eligible to opt-in to the VEBA, while all Tier 2 employees (except unrepresented employees) were required to move in to the defined contribution VEBA.

The VEBA opt-in election period was October 18, 2017 through December 15, 2017, and the Internal Revenue Service issued a favorable private letter ruling to the Section 115 Trust on February 7, 2018. The IRS ruled that allowing the contributions to the VEBA to be made from the Sections 115 Trust is consistent with Code Section 115(1) and will not compromise the Section 115 Trust's status under Code Section 115. The contributions for the members who opted in to the VEBA and opted out of the defined benefit healthcare plan were transferred in March 2018 for the initial opt-in period. The IRS approved allowing eligible employees who are rehired into the City from calendar years 2018 through 2022 to opt-in to the VEBA if they were not employed during the initial opt-in period. The VEBA is being administered by the City, not the Office of Retirement Services, and therefore it is also not under the jurisdiction of the Retirement Board.

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(a) General (continued)

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 and postemployment healthcare trust fund. The System is administered by the Chief Executive Officer of the Office of Retirement Services, an employee of the City, who serves at the pleasure of the Federated City Employees' Retirement System Board of Administration (Board of Administration). The seven-member Board of Administration is composed of two City employees elected by members of the System, a retiree representative, and three public members, who are not connected with the City and have significant banking or investment experience, and another public member, who is selected by the six Board members and approved by the City Council. The Board is appointed by the City Council and serves in accordance with Section 2.08.300 of the San José Municipal Code. The contribution and benefit provisions and all other requirements are established by City ordinance. The System is responsible for all direct administrative costs, except for certain support services, which are provided and funded directly by the City. The System is not subject to the provisions of the Employee Retirement Income Security Act of 1974.

All full-time and eligible part-time employees of the City are required to be members of the System, except unrepresented executive management and professional employees in Unit 99 who are first hired on or after February 3, 2013 and have made an irrevocable election to participate in the Defined Contribution Plan pursuant to SJMC Chapter 3.49, instead of Tier 2 of the Defined Benefit Plan. Also excluded are employees who are members of the City's Police and Fire Department Retirement Plan.

With the passage of Measure F, rehires with prior Tier 1 City service who were in Tier 2 became part of the Tier 1 membership Defined Benefit Pension Plan effective June 18, 2017. In addition, employees in Tier 2 who have "Classic" membership with CalPERS may be moved to Tier 1 subject to the identification of these employees and confirmation of "Classic" membership with CalPERS. Rehires in the Tier 1 membership is broken down into the type of coverage the member had in the Postemployment Healthcare Plan prior to the passage of Measure F. The System members are categorized into three membership types based on when they entered the Plan, except for the rehires mentioned above.

The following table summarizes the System members as of June 30, 2019 and 2018, respectively.

	As of June 2019					
Defined Benefit Pension Plan:	Tier 1 Pension only ²	Tier 1 Pension & Medical ³	Tier 2 Pension only ²	Tier 2 Pension & Medical ³	Total	
Retirees and beneficiaries currently receiving benefits ¹	697	3,654	8	-	4,359	
Terminated vested members entitled to future benefits	840	165	530	-	1,535	
Active members	168	1,501	1,867	81	3,617	
Total	1,705	5,320	2,405	81	9,511	
Postemployment Healthcare Plan:		Tier 1 ³		Tier 2A ³	Total	
Retirees and beneficiaries currently receiving benefits ⁴	_	3,654		-	3,654_	
Terminated vested members entitled to future benefits	_	165		-	165	
Active members	-	1,501		81	1,582	
Total	-	5,320		81	5,401	

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(a) General (continued)

	As of June 2018						
Defined Benefit Pension Plan:	Tier 1 Pension only ²	Tier 1 Pension & Medical ³	Tier 2 Pension only ²	Tier 2 Pension & Medical ³	Total		
Retirees and beneficiaries currently receiving benefits ¹	595	3,627	3	-	4,225		
Terminated vested members entitled to future benefits	858	164	412	-	1,434		
Active members	193	1,662	1,610	89	3,554		
Total	1,646	5,453	2,025	89	9,213		
Postemployment Healthcare Plan		Tier 1 ³		Tier 2 ³	Total		
Retirees and beneficiaries currently receiving benefits ⁴	-	3,627	-	-	3,627		
Terminated vested members entitled to							
future benefits	-	164	-	-	164		
Active members ³	-	1,662	-	89	1,751		
Total	-	5,453	_	89	5,542		

¹ The combined domestic relations orders are not included in the count above as their benefit payment is included in the retiree member count

(b) Pension, Disability and Healthcare Benefits

Effective December 9, 1994, the System entered into an agreement with the California Public Employees' Retirement System (PERS) that extends reciprocal retirement benefits to members. In certain situations, this agreement may result in improved retirement benefits for members who move from one eligible retirement system to another.

The following table summarizes the pension, disability, and healthcare benefits for the members. Please consult the Municipal Code for complete information.

	Tier 1 ¹	Tier 1 Classic ⁴	Tier 2A ⁵	Tier 2B ⁶
Contributions				
Employee	14.31% of base salary (Pension: 6.81% ² , Retiree Health: 7.50%) as of 7/1/2018	10.27% of base salary (8.27% Pension, 2.00% VEBA ³) as of 8/12/2018	15.78% (Pension: 8.28% Retiree Healthcare: 7.50% ³) as of 7/1/2018	10.28% (8.28% Pension, 2% VEBA ⁷) as of 7/1/2018
City	99.16% of base salary (Pension: 99.16%, Retiree Health: dollar amount, not rate of pay) as of 7/1/2018	99.16 % of base salary as of 7/1/2018	8.28% (Pension: 7.72% Retiree Healthcare: dollar amount, not rate of pay) as of 7/1/2018	8.28% as of 7/1/2018
Service required to leave contributions in retirement system	5 years		5 years Federated City Service (Year of Service = 2080 hours worked in the applicable 12-month period)	

Includes members that are eligible for catastrophic disability medical benefits only (VEBA) from the Postemployment Healthcare plan

³ Eligible for full retiree medical benefits

Payees that have health and/or dental coverage

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(b) Pension, Disability and Healthcare Benefits (continued)

	Tier 1 ¹	Tier 1 Classic 4	Tier 2A ⁵	Tier 2B ⁶	
Service Retirement					
Age/years of service	55 with 5 years service 30 yrs service at any a		62 years with 5 years Federated City Service May retire on or after 55 years with 5 years Federated City Service. A reduction factor of 5% per year for each year between age fifty-five (55) and the Tier 2 member's age at retirement before age 62, prorated to the closest month		
"Deferred Vested" retirement	(This applies to members who separate from City service before retirement and leave their contributions in the retirement system)		May commence on or after 55 years with 5 year Federated City Service with actuarial equivalent reduction. (This applies to members who separate from City service before retirement an leave their contributions in the retirement system.) Can begin at age 55 with reduction factor of 5% per year for each year between age fifty-five and the Tier 2 member's age at retirement before age 62, prorated to the closes month.		
Allowance	(75% max) • If separation takes pl	ace on or after July 1, tion is highest average	2.0% x Years of Federat Compensation (70% ma • "Final Compensation" (or biweekly) base pay for consecutive Years of Fe • Excludes premium pay additional compensation	x) is the average monthly or the highest 3 derated City Service or any other forms of	
Disability Retirement (Service Connected)				
Minimum service	None				
Allowance	40% of Final Compens of Service in excess of Compensation (Maximum 75% of Final		2% x Years of Federated Compensation (Minimum 70% of Final Compensat	n of 40%, maximum of	
Disability Retirement (Non-Service Connec	ted)			
Minimum service	5 years				
Allowance	of Service in excess of Compensation (Maxil Compensation) If under 55 years old, syear under age 55. For those entering the the calculation is as fol 20% of Final Compens service. Add 2% for each year oyears but less than 16	when when we want to see the s	2% x Years of Federated Compensation. (Minimur 70% of Final Compensat	n of 20%, maximum of	

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(b) Pension, Disability and Healthcare Benefits (continued)

	Tier 1 ¹	Tier 1 Classic ⁴	Tier 2A ⁵	Tier 2B ⁶
Medical Benefits ³	TIEL I	Tier i Classic	TIEF ZA	TIEL ZD
Eligibility	Retired for disability or service with 15 years service or receive allowance that is at least 37.5% of Final Compensation. ("Deferred vested" members are eligible)	N/A - All Federated Tier 1 Classic Employees are mandated to contribute 2.00% of base salary to the VEBA ⁷	Retired for disability or service with 15 years service or receive allowance that is at least 37.5% of Final Compensation. (Certain "Deferred vested" members are also eligible)	N/A
Premiums	Retirement System pays 100% of lowest cost plan that is available to active City employees. If retiree does not choose the lowest cost plan, retiree pays the difference between that premium and the premium for the lowest cost plan	N/A - All Federated Tier 1 Classic Employees are mandated to contribute 2.00% of base salary to the VEBA 7	Retirement System pays 100% of lowest cost single or family premium that is available to active City employees. If retiree does not choose the lowest cost plan, retiree pays the difference between that premium and the premium for the lowest cost plan	N/A
Medicare eligibility	At age 65, Members of FCERS will be required to enroll in Medicare Parts A & B. If a Member does not meet this requirement within 6 months of the date Member turns 65, health care benefits will cease until such requirements are met	N/A - All Federated Tier 1 Classic Employees are mandated to contribute 2.00% of base salary to the VEBA ⁷	At age 65, Members of FCERS will be required to enroll in Medicare Parts A & B. If a Member does not meet this requirement within 6 months of the date Member turns 65, health care benefits will cease until such requirements are met	N/A
Dental Benefits ³ Eligibility	Must be enrolled at retirement with 5 years service or receive retirement allowance of at least 37.5% of Final Compensation. In addition, the employee must retire directly from City service. ("Deferred vested" members are not eligible)	base salary to the VEBA ⁷	Must be enrolled at retirement with 5 years service or receive retirement allowance of at least 37.5% of Final Compensation. ("Deferred vested" members are not eligible)	N/A
Premiums	Fully paid by retirement fund	N/A - All Federated Tier 1 Classic Employees are mandated to contribute 2.00% of base salary to the VEBA ⁷	Fully paid by retirement fund	N/A

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(b) Pension, Disability and Healthcare Benefits (continued)

	Tier 1 ¹	Tier 1 Classic ⁴	Tier 2A ⁵	Tier 2B ⁶				
Reciprocity								
Reciprocity	As of December 9, 1994, the City of San José Federated City Employees' Retirement System adopted a reciprocal agreement with CalPERS. This may result in improved benefits for members who transfer between this retirement system and CalPERS or certain other public agency retirement systems that also have reciprocal agreements with CalPERS. Final eligibility for reciprocity is determined at the time of retirement							
Cost-of-Living Adjusti	ments (COLA)							
COLA	Retirees are eligible for a living adjustment (COLA compounded and paid e prorating of COLA). Regular COLAs are	Retirees are eligible for adjustment (COLA) limit increase in the Consume Jose-San Francisco-Oal Labor Statistics index, C December), or a back-load calculated as follows: i. Service at retirement of per year ii. Service at retirement of before June 16, 2017: 1. iii. Service at retirement per year iv. Service at retirement per year v. Service at retirement per year v. Service at retirement per year The first COLA will be promised to the per year of months retirement per year	ed to the lesser of the er Price Index (San kland, U.S. Bureau of EPI-U, December to ended 2% COLA per ended COLA shall be of 1-10 years: 1.25% of 1-10 years and hired .5% of 11-20 years: 1.5% of 21-25 years: 1.75% of 26 years and above:				

¹ Federated Tier 1 applies to employees hired on or before September 29, 2012.

- ³ Federated employees who opted-in to the VEBA are not eligible for the Defined Benefit Retiree Healthcare Plan (Medical or Dental Benefits). For more information about the VEBA, visit or email veba@sanjoseca.gov.
- ⁴ Employees with "Classic" membership from a CalPERS or reciprocal agency hired by the City of San Jose on or after June 18, 2017. A CalPERS "Classic" member is a member who previously worked for a CalPERS or other reciprocal agency and meets the following criteria: 1. First established CalPERS membership or membership in a CalPERS reciprocal agency prior to January 1, 2013, 2. AND is hired by the City of San Jose after a break in service of less than six months 3. AND did not have concurrent (overlapping) service with the other agency. City of San Jose Reciprocity Election Form must be submitted within thirty (30) days of the first day of employment with the City. Employees in Tier 1 Classic are not eligible for the defined benefit retiree healthcare plan.
- ⁵ Tier 2A applies to employees hired between September 30, 2012 and September 27, 2013.
- ⁶ Tier 2B are employees who were newly hired after September 27, 2013.
- 7 Unit 99 employees are not eligible to contribute to the VEBA.

² Federated Rehires (hired between September 30, 2012 and June 18, 2017) will have an additional contribution rate for the cost of the retroactive benefit.

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(c) Death Benefits

The following table summarizes the survivorship pension and health benefits for Tier 1 members. Please consult the Municipal Code for complete information.

	Tier 1 / Tier 1 Classic
Death Before Retirement	
Non-service-connected death with less than 5 years of service	Return of employee contributions, plus death benefit: 1/12 of compensation in year prior to death x years of service (Benefit may not exceed 50% of the salary earned in year prior to death)
Greater than 5 years of service or service-connected death	To surviving spouse/domestic partner: Years of Service x 2.5% x Final Compensation (40% minimum, 75% maximum, except that "deferred vested" members not eligible for 40% minimum) If no surviving spouse/domestic partner, to surviving children: 1 Child: 25% of spousal/domestic partnership allowance 2 Children: 50% of spousal/domestic partnership allowance 3 Children: 75% of spousal/domestic partnership allowance
	contributions, plus death benefit: 1/12 of compensation in year prior to death x years of service (Benefit may not exceed 50% of the salary earned in year prior to death)
Death After Retirement	
Standard allowance to surviving spouse/domestic partner or children (Minimum 5 years of service)	To surviving spouse/domestic partner: 50% of retiree's allowance If no surviving spouse/domestic partner, to surviving children: 1 Child: 25% of spousal/domestic partnership allowance 2 Children: 50% of spousal/domestic partnership allowance 3 Children: 75% of spousal/domestic partnership allowance If no surviving spouse/domestic partner or surviving children: estate or beneficiary will
	receive the difference between employee contributions (including interest) and the total paid to member by the retirement system at the time of death
Optional Settlements	
Optional settlements	Retiree may choose an optional settlement at retirement that reduces the allowance to provide a survivorship allowance to a designated beneficiary or a higher survivorship allowance to their spouse/domestic partner
Special Death Benefit	
Special death benefit	\$500 death benefit paid to estate or designated beneficiary in addition to benefits above

For death before retirement, the survivorship allowance to surviving spouse/domestic partner lasts until death or remarriage. However, it will last until death if member was at least 55 with at least 20 years of service at the time of death, or 30 years of service regardless of age. For death after retirement, the survivorship allowance to surviving spouse/domestic partner lasts until death. If there is an allowance payable to a surviving spouse/domestic partner, no allowance will be paid to surviving children. Surviving children receive a monthly survivorship allowance only when there is no surviving spouse/domestic partner.

NOTE 1 - DESCRIPTION OF THE PLAN (continued)

(c) Death Benefits (continued)

The following table summarizes the death benefits for Tier 2 members. Please consult the Municipal Code for complete information.

	Tier 2A and 2B
Death Before Retirement	
Non-service-connected death not eligible for retirement	Return of employee contributions, plus interest
Eligible for retirement	To surviving spouse/domestic partner: 2.0% x Years of Federated Service x Final Compensation (70% max) If no surviving spouse/domestic partner, to surviving children until age 18: 1 Child: 25% of spousal/domestic partnership allowance 2 Children: 50% of spousal/domestic partnership allowance 3 Children: 75% of spousal/domestic partnership allowance If no surviving spouse/domestic partner or surviving children: Return of employee contributions, plus death benefit: 1/12 of compensation in year prior to death x years of service (benefit may not exceed 50% of the salary earned in year prior to death.) Employees killed in the line of duty — To surviving spouse/domestic partner: Monthly benefit equivalent to 50% of Final Compensation
Death After Retirement	
Survivorship allowance to surviving spouse/domestic partner or children that was elected by the member at retirement. (Minimum 5 years of service)	To surviving spouse/domestic partner: 50% of retiree's allowance If no surviving spouse/domestic partner, to surviving children until age 18: 1 Child: 25% of spousal/domestic partnership allowance 2 Children: 50% of spousal/domestic partnership allowance 3 Children: 75% of spousal/domestic partnership allowance
	If no surviving spouse/domestic partner or surviving children: estate or beneficiary will receive the difference between employee contributions (including interest) and the total paid to member by the retirement system at the time of death
Optional Settlements	
Optional settlements	Retiree may choose an optional settlement at retirement that reduces the allowance to provide a survivorship allowance to a designated beneficiary or a higher survivorship allowance to their spouse/domestic partner.

For death before retirement, the survivorship allowance to surviving spouse/domestic partner lasts until death, remarriage, or establishment of a domestic partnership if member was at least 62 with at least 20 years of service (or 55 with a reduction factor of 5%) at the time of death. For death after retirement, the survivorship allowance to surviving spouse/domestic partner lasts until death.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of Presentation

The accompanying financial statements present only the financial statements of the System in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP). 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, 2019 and 2018, and the changes in its financial position for the years then ended in conformity with U.S. GAAP. The System is reported in a pension and postemployment healthcare trust fund in the City of San José's basic financial statements.

(b) Basis of Accounting

The financial statements of the System are prepared on the accrual basis of accounting. Contributions are recognized as revenue when due pursuant to legal requirements. Benefits and refunds of contributions are recognized when currently due and payable under the provisions of the System. Activities of the Defined Benefit Pension Plan and the Postemployment Healthcare Plan are accounted for separately. It is required by the Municipal Code that transactions of the Defined Benefit Pension Plan be accounted for in two funds: a Retirement Fund and a Cost-of-Living Fund.

The preparation of the financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from those estimates.

(c) Investments

The City of San José Municipal Code Section 3.28.355 delegates authority to the Board of Administration to invest the monies of the System as provided in Section 3.28.355. The Board has adopted detailed investment guidelines consistent with conditions and limitations set forth in Section 3.28.355.

For the year ended June 30, 2019, the Defined Benefit Pension Plan investment policy was updated, as shown in the following table, which the Board approved on April 18, 2019. The new asset allocation was prepared to align with the long-term expected returns of the underlying asset classes and the System's adopted actuarial assumed rate of return as utilized in the June 30, 2018 valuations.

The System's investment asset allocation is as follows:

		PENSION	
		As of June 30, 2019	
	Target Asset	tion of the second of the seco	Target Asset
Asset Class	Allocation	Asset Class	Allocation
Public equity	30 %	Commodities	3 %
Short-term investment grade bonds	20 %	Emerging market bonds	3 %
Private equity	10 %	Growth real estate	3 %
Market neutral strategies	7 %	Private real assets	3 %
Bonds (immunized cash flows)	5 %	Treasury inflation-protected securities	2 %
Core real estate	5 %	Cash and cash equivalents	-
Venture / growth capital	5 %	International currency contracts, net	-
Private debt	4 %		

The Statements of Plan Net Position for 2019 and 2018 have been updated to reflect the current asset allocation. The presentation of investments throughout the financial statements for 2019 and 2018, have also been updated to reflect the current asset allocation. However, the 2018 asset allocation that follows was the asset allocation as of June 30, 2018.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(c) Investments (continued)

For the year ended June 30, 2018, the Defined Benefit Pension Plan investment policy was updated, as shown in the following tables, which the Board reviewed and approved on April 19, 2018.

	PENSION						
	As of June 30, 2018						
	Minimum	Target Asset	Maximum				
Asset Class	Allocation	Allocation	Allocation				
Global equity	20 %	28 %	36 %				
Private equity	4 %	9 %	14 %				
Global fixed income	23 %	33 %	43 %				
Private debt	2 %	6 %	10 %				
Absolute return	6 %	11 %	16 %				
Global tactical asset allocation / opportunistic	-	-	5 %				
Real assets	8 %	13 %	18 %				
Cash and cash equivalents	-	-	10 %				

The absolute return and global tactical asset allocation/opportunistic asset class includes allocations to global macro and relative value hedge fund strategies and managers with unconstrained global mandates. In addition, during times of significant market dislocations, opportunistic mandates would be allocated to this asset class.

The real assets asset class includes allocations to real estate, commodities, infrastructure, and natural resources.

On April 19, 2018, the Board adopted a new asset allocation for the 115 healthcare trust. The Postemployment Healthcare Plan investment policy was originally approved on March 21, 2013. While the investment policy has not been updated, the presentation of investments throughout the financial statements for 2019 and 2018 have been reclassified to reflect the pension's asset allocation for easier presentation and comparison. The asset classes in the healthcare policy are broad classifications which were further broken down to more specific allocation to align with the pension asset classification.

HEALTHCARE	As of June 30, 2019			As of June 30, 2018		
Asset Class	Target Minimum Asset Maximum Allocation Allocation				Target Asset	Maximum
Global equity	40 %	55 %	54 %	40 %	55 %	54 %
Fixed income	20 %	28 %	40 %	20 %	28 %	40 %
Real assets	15 %	17 %	30 %	15 %	17 %	30 %

The real assets asset class allocates to commodities, natural resources, infrastructure, and real estate.

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price on the last business day of the fiscal year at current exchange rates, if applicable. Investments that do not have an established market, such as private equity, commingled real estate funds and certain pooled fund investments, are reported at estimated fair value based on the most recently available investor reports or audited financial statements issued by the manager of those funds. The fund manager provides an estimated unrealized gain/loss of the fund based on the most recently available audited financial statements and other fund information. See Note 3 starting on page 46 for more detailed information on the fair value of investments.

The fair value of derivative investments that are not exchange traded, such as swaps and rights is determined by the System's custodian based on the base market value of similar instruments. Futures contracts are marked-to-market at the end of each trading day, and the settlement of gains or losses occur on the following business day through variation margins. The fair value of international currency forwards represents the unrealized gain or loss on the related contracts, which is calculated based on the difference between the specified contract exchange rate and the exchange rate at the end of the reporting period.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(c) Investments (continued)

Purchases and sales of securities are reflected on the trade date. Investment income is recognized as earned.

Investment expenses presented within the accompanying financial statements consist of management and performance fees and other investment-related fees. Other investment-related fees include expenses for shared investment-related administration, consultants, custody, and legal services. These fees are disclosed within the Investment Expenses in the Statement of Changes in Plan Net Position and detailed in the Investment Expenses Schedule in the Other Supplemental Information section.

The investment expenses do not include the commissions and fees paid to transact public securities. Partnership management fees paid for the private equity program are drawn from the committed capital and reported as an increase in the cost basis. These fees and costs are included within the net asset value (NAV) or public securities cost and are also reported in the net appreciation/(depreciation) in fair value of investments line items on the financial statements.

For the years ended June 30, 2019 and 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 4.17% and 6.03%, respectively. For the year ended June 30, 2019 and 2018, the annual money-weighted rate of return on healthcare plan investments, net of healthcare plan investment expenses, was 4.33% and 4.55%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

(d) Capital Assets

Capital assets are recorded at cost and comprise of all costs related to the development of a new pension administration system. The capital asset went into production on February 1, 2019 and is being amortized using the straight line method of amortization over a 10 year period ending 2029. For fiscal year 2019, the amortization expense was \$133,809. It is being amortized per GASB Statement No. 51, Accounting and Financial Reporting for Intangible Assets.

	As of			As of
Capital asset and accumulated amortization	June 30, 2018	Additions	Deletions	June 30, 2019
Capital assets, amortizable:				
Pension administration system	\$ 1,754	\$ 1,372	\$ -	\$ 3,126
Total capital assets, cost	1,754	1,372	-	3,126
Less accumulated amortization for:	-	-	_	_
Pension administration system	-	(134)	-	(134)
Total accumulated amortization	-	(134)	-	(134)
Capital assets, net of accumulated amortization	\$ 1,754	\$ 1,238	\$ -	\$ 2,992

(e) Plan Net Position Restricted for Pension and Postemployment Healthcare Benefits

The System is required by the City of San José Municipal Code to establish various reserves in the plan net position. The plan net position is allocated between the Defined Benefit Pension Plan (which includes the Retirement Fund and the Cost-of-Living Fund) and the Postemployment Healthcare Plan (which includes the 115 Trust).

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(e) Plan Net Position Restricted for Pension and Postemployment Healthcare Benefits (continued)

As of June 30, 2019 and 2018, plan net position totaling \$2,426,640,000 and \$2,346,590,000, respectively, is allocated as follows (in thousands):

		Cost-of-	Total Defined Benefit	Post- employ- ment	(Post- employ- ment			
	Retirement Fund	Living Fund	Pension Plan	Health- care 401(h)		Health- are (115)		Total OPEB	Grand Total
June 30, 2019									
Employee contributions reserve	\$ 315,806	\$ 48,642	\$ 364,448	\$ -	\$	-	\$	-	\$ 364,448
General reserve	1,089,855	677,849	1,767,704	-		294,200		294,200	2,061,904
Retiree healthcare in-lieu premium credit	_	-	_	_		288		288	288
TOTAL	\$1,405,661	\$726,491	\$2,132,152	\$ -	\$	294,488	\$	294,488	\$2,426,640
June 30, 2018									
Employee contributions	A 040 000	# 50.000	Φ 005 000	•	Φ.		Φ.		Φ 005 000
reserve	\$ 312,093	\$ 53,303	\$ 365,396		\$	-	<u>\$</u>	<u> </u>	\$ 365,396
General reserve	1,078,382	625,555	1,703,937	9,032		267,836		276,868	1,980,805
Retiree healthcare in-lieu premium credit	-	-	-	389		-		389	389
TOTAL	\$1,390,475	\$678,858	\$2,069,333	\$ 9,421	\$	267,836	\$	277,257	\$2,346,590

Employee Contributions Reserve represents the total accumulated employee contributions of current active and deferred members plus credited interest. The reserve is accounted for separately due to the possibility of a return of accumulated employee contributions, plus credited interest, to the member upon separation from City employment. Terminated members' returns of contributions are paid from the Defined Benefit Pension Plan only. No employee contributions are paid into or out of the healthcare plan reserves.

General Reserve is a reserve that represents net earnings resulting from interest earnings, employer contributions, and realized and unrealized investment gains and losses. It also represents an accumulation of funds necessary to pay all accumulated vested retirement obligations.

(f) Allocation of Investment income

Earnings on investments, excluding unrealized gains and losses, are recorded first in the general reserve category of plan net position. An allocation is made semi-annually from the general reserve category to the employee contributions category of plan net position based on the balance in that account at an annual rate of 3%, as specified by the City of San José Municipal Code.

(g) Implementation of Governmental Accounting Standards Board Statements

GASB Statement No. 83, Certain Asset Retirement Obligations, was issued in November 2016. An Asset Retirement Obligation (ARO) is a legally enforceable liability associated with the retirement of a tangible capital asset. This Statement requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. This Statement is not applicable to the System.

GASB Statement No. 84, *Fiduciary Activities*, was issued in January 2017. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. It clarifies the criteria for

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(g) Implementation of Governmental Accounting Standards Board Statements (continued)

identifying fiduciary activities, with the focus on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Activities meeting certain criteria should be reported in a fiduciary fund in the financial statements. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. This Statement is not applicable to the System.

GASB Statement No. 87, *Leases*, was issued in June 2017. The objective of this Statement is to improve accounting and financial reporting for leases by governments to better meet the information needs of financial statement users. The Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It also established a single model for lease accounting based on the principle that leases are financings of the right to use an underlying asset. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. The System will adopt the provisions of Statement No. 87 for the fiscal year beginning with July 1, 2020.

GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, was issued in March 2018. The primary objective of this Statement is to improve financial reporting for notes related to debt, including direct borrowings and direct placements. The requirements of this Statement are effective for reporting period beginning after June 15, 2018. This Statement is not applicable to the System.

GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period, was issued in June 2018. The objectives of this Statement are to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and to simplify accounting for interest cost incurred before the end of a construction period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. This Statement is not applicable to the System.

GASB Statement No. 90, *Majority Equity Interests - An Amendment of GASB Statements No. 14 and No. 61*, was issued in August 2018. The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. This Statement is not applicable to the System.

GASB Statement No. 91, Conduit Debt Obligations, was issued in May 2019. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. This Statement is not applicable to the System.

(h) Reclassifications and Presentation

Certain reclassifications of prior year's balances have been made to conform with the current year presentation.

NOTE 3 - INVESTMENTS

Investments are subject to certain types of risks, including interest rate risk, custodial credit risk, credit quality risk, foreign currency risk and concentration of credit risk. The following describes those risks:

Interest Rate Risk – The fair value of fixed income investments fluctuates in response to changes in market interest rates. Increases in prevailing interest rates generally translate into decreases in fair value of those instruments. The fair value of interest-sensitive instruments may also be affected by the creditworthiness of the issuer, prepayment options, and other general interest rate conditions. Certain fixed income investments have call provisions that could result in shorter maturity periods. The System does not have a policy regarding interest rate risk. However, the System does settle on a transaction plus one day basis (T+1), therefore limiting the System's exposure to counterparty risk.

The following tables provide the segmented time distribution for fixed income investments based on expected maturity (in months and years) as of June 30, 2019 and 2018.

INVESTMENT MATURITIES AT FAIR VALUE

As of June 30, 2019 (In Thousands)

	0-3 Months	3- 6 Months	6 Months - 1 Year	1- 5 Years	5-10 Years	More than 10 Years	Total Fair Value	Cost
Treasury inflation-								
protected securities	\$ 1,406	\$ -	\$ 5,562	\$ 37,470	\$ -	\$ -	\$ 44,438	\$ 44,485
Short-term investment								
grade bonds	477,812	-	-	-	-	-	477,812	477,810
Emerging market bonds	-	-	-	-	70,416	-	70,416	67,147
Bonds (immunized cash								
flows)	4,861	7,400	12,327	80,400	-	-	104,988	104,587
Cash and cash								
equivalents	41,177	-	-	-	-	-	41,177	40,246
TOTAL FIXED INCOME	\$ 525,256	\$ 7,400	\$ 17,889	\$117,870	\$ 70,416	\$ -	\$ 738,831	\$ 734,275

INVESTMENT MATURITIES AT FAIR VALUE

As of June 30, 2018 (In Thousands)

						More		-
	0-3	3-6	6 Months		5-10	than 10	Total Fair	II .
	Months	Months	-1 Year	Years	Years	Years	Value	Cost
Fixed Income								
Global Fixed Income:								
Commingled funds	\$ -	\$ -	\$ -	\$186,811	\$ 152,446	\$ 38,679	\$377,936	\$376,935
Corporate bonds	-	-	-	1	-	-	1	1
Mortgage-backed								
securities	_	-	-	-	703	61,052	61,755	62,770
Other debt securities	-	-	-	-	16,517	17,148	33,665	33,797
Total Global Fixed								
Income	-	-	-	186,812	169,666	116,879	473,357	473,503
High Yield Debt	40,067	-	-	-	-	-	40,067	30,084
Emerging Market								
Bonds	-	-	-	-	70,107	-	70,107	71,007
Treasury Inflation-								
Protected Securities	-	-	-	151,010	-	-	151,010	154,284
Cash and Cash								
Equivalents	29,278	-	-	-	_	-	29,278	29,252
TOTAL FIXED INCOME	\$ 69,345	\$ -	\$ -	\$337,822	\$ 239,773	\$ 116,879	\$763,819	\$758,130

NOTE 3 - INVESTMENTS (continued)

Custodial Credit Risk – Custodial credit risk is the risk that the System will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party, if that outside party fails. The System does not have a policy regarding custodial credit risk. As of June 30, 2019 and 2018, all of the System's investments are held in the System's name and/or not exposed to custodial credit risk.

Credit Quality Risk – The System's investment policy allows for investments in a wide variety of domestic and international debt securities that may carry a high rating, low rating, or be unrated. Investment managers may, as part of their investment strategy, invest in securities where the issuer's ability or willingness to pay is limited. At times, these debt securities may be converted into other debt, equity, or hybrid securities that have different risk and return characteristics than the securities initially purchased. The System may hedge against the possible adverse effects of currency fluctuations on the System's portfolio of international fixed income obligations when it is considered appropriate. This is typically achieved using forward currency contracts. Short-term investments may consist of commercial paper rated at least A1 or P1, repurchase agreements, short-term U.S. securities, and other money market investments. Nationally recognized statistical rating organizations provide ratings of debt securities' quality based on a variety of factors, such as the financial condition of the issuers, which provide investors with some idea of the issuer's ability to meet its obligations.

The following table provides information for the portfolio as of June 30, 2019 and 2018 concerning credit risk. These tables reflect only securities held in the System's name.

RATINGS OF FIXED INCOME INVESTMENTS

As of June 30, 2019 and 2018 (Dollars in Thousands)

		2019		2018
S&P Quality Rating	Fair Value	Fair Value as a % of Total Fixed Income	Fair Value	Fair Value as a % of Total Fixed Income
AAA	-	-	\$ 255	0.03%
AA+	\$ 631,994	85.54%	159,561	20.89
AA	-	-	484	0.06
A+	-	-	1,197	0.16
A	-	-	4,887	0.64
A-	-	-	1,962	0.26
BBB+	-	-	1,222	0.16
BBB	-	-	5,418	0.71
BBB-	-	-	2,840	0.37
BB	-	-	2,723	0.36
BB-	-	-	1,263	0.17
B+	-	-	516	0.07
В	-	-	1,814	0.24
B-	-	-	359	0.05
CCC	-	-	1,860	0.24
CC	-	-	1,615	0.21
D	-	-	2,697	0.35
Not Rated	106,837	14.46	573,146	75.03
TOTAL	\$ 738,831	100.0%	\$ 763,819	100.0%

Foreign Currency Risk – This is the risk that changes in exchange rates will adversely affect the fair value of underlying investments. To mitigate this risk, the System's investment policy permits individual investment managers to mitigate the impact of currency fluctuation on the underlying asset value. The System's investment managers enter into international forward currency contracts, which are commitments to purchase or sell stated amounts of international currency. The System utilizes these contracts to control exposure and facilitate the settlement of international security purchase and sale transactions. At June 30, 2019 and 2018, the System's net position in these contracts is recorded at fair

NOTE 3 - INVESTMENTS (continued)

value as international currency contract investments. The fair values of international currency contracts are determined by quoted currency prices from national exchanges. The System's commitments relating to international currency contracts are settled on a net basis.

The following tables provide information as of June 30, 2019 and 2018, concerning the fair value of investments that are subject to foreign currency risk:

FOREIGN CURRENCY RISK ANALYSIS

As of June 30, 2019 (In Thousands)

	20	19 2	2018	2019 2	018	2019	2018	2019	2018	2019 2	2018	2019	2018
Currency Name		Cas		Public E		Interna Curre Contrac	itional ency	Priv Equ	ate	Growth Esta	Real	To: Expo	tal
Australian													
dollar	\$	- \$	11 \$	3,965 \$	3,913	\$ - 9	\$ 26 \$	- :	\$ - \$	S - S	\$ - \$	3,965 \$	3,950
Brazilian real		-	-	-	57	-	-	-	-	-	-	-	57
British pound		-	51	16,354	22,033	-	44	-	-	-	-	16,354	22,128
Canadian dollar		1	18	4,850	7,507	-	(7)	-	-	-	-	4,851	7,518
Chile peso		-	-	-	93	-	-	-	-	-	-	-	93
China yuan renminbi		_	_	_	_	39	135	-	_	_	_	39	135
Colombian													
peso		-	-	-	5	-	-	-	-	-	-	-	5
Danish krone		-	-	399	5,457	-	-	-	-	-	-	399	5,457
Euro currency	10	1	71	12,772	17,563	-	(50)	1,194	1,583	11,698	7,980	25,765	27,147
Hong Kong dollar		_	24	1,185	3,011	-	_	_	_	-	_	1,185	3,035
Hungarian forint		_	_	_	11	_	_	_	_	_	_	_	11
Indonesian													
rupiah		_	-	-	61	_	_	_	-	_	_	-	61
Israeli shekel		-	-	-	70	-	-	-	-	-	-	-	70
Japanese yen		-	113	4,612	13,479	-	30	-	-	-	-	4,612	13,622
Korean won		-	-	8,137	8,192	-	-	-	-	-	-	8,137	8,192
Malaysian ringgit		_	_	_	249	_	_	_	_	_	_	_	249
Mexican peso		_	-	_	74	_	-	-	_	_	_	_	74
New Zealand dollar		_	_	-	47	_	_	-	_	_	_	_	47
Norwegian													
krone		-	-	503	1,547	-	-	-	-	-	-	503	1,547
Philippine peso		-	-	-	3	-	-	-	-	-	-	-	3
Polish zloty		-	-	-	39	-	-	-	-	-	-	-	39
Singapore dollar		_	_		349	_	_	_	_	_	_		349
South African					0.10								0.10
rand		_	_	_	48	_	_	_	_	_	_	_	48
Swedish krona		-	(5)	1,675	2,369	-	_	_	_	_	_	1,675	2,364
Swiss franc		-	-	15,137	14,276	-	(9)	_	_	_	_	15,137	14,267
Taiwanese new dollar		8	_		38	_	-	_	_	_	_	8	38
Thai baht		-			38	_						-	38
TOTAL	\$11		283 \$	69,589 \$					\$1 583 ¢			82,630	

NOTE 3 - INVESTMENTS (continued)

Investment Concentration Risk – The System's investment policy specifies that investments shall be diversified with the intent to minimize the risk of large investment losses. The total portfolio shall be constructed in a way to provide prudent diversification with regard to the concentration of holdings in individual asset classes, issues, issuers, geographies, or industries. In addition, assets will be assigned to a variety of investment managers that employ a range of investment management strategies. No single investment management firm shall be authorized to manage more than 15% of the System's assets without Board approval, with the exception of passive management where the System's assets are not held in the System's name at the System's custodian bank. In such cases, there is no concentration limit. As a general rule, System assets placed with an investment manager should not represent more than 10% of the total assets managed by that firm, without prior Board approval. As of June, 30, 2019 and 2018, the System did not hold investments in any one issuer, excluding U.S. government guaranteed investments, that represented 5% or more of the total plan net position or total investments.

Derivatives – The System's investment policy allows for investments in derivative instruments that comply with the System's objectives of providing a cost effective means of managing portions of a portfolio and to manage risk through hedging activities. The System is currently authorized to use derivative strategies to equitize cash during portfolio transitions until physical securities are in place and to reproduce or replicate a physical holding that corresponds to a Board approved policy benchmark. In addition to the System's internal derivative policies, it is understood that the mandates of certain investment managers retained by the System may use derivatives.

Derivative investments are reported at fair value. Derivative instruments traded on a national or international exchange are valued at the last reported sales price on the last business day of the fiscal year at current exchange rates, if applicable. Futures contracts are marked-to-market at the end of each trading day, and the settlement of gains or losses occur on the following business day through variation margins. As a result, futures have no fair value as of June 30, 2019 or 2018. The fair value of international currency forwards represents the unrealized gain or loss on the related contracts, which is calculated based on the difference between the specified contract exchange rate and the exchange rate at the end of the reporting period.

The fair values and notional amounts for derivative instruments outstanding as of June 30, 2019 and 2018, classified by type, and the changes in fair value of such derivative instruments for the years then ended as reported in the 2019 and 2018 financial statements are as follows (amounts in thousands):

	Net Appreciation/ in Fair Value of I through June	Inve	estments	Fair Value at June		
Investment Derivative Instruments	Classification		Amount	Classification	Amount	Notional Amount/ Shares
Fixed income futures long	Investment income	\$	(208)		-	-
Fixed income futures short	Investment income		30		-	-
FX forwards	Investment income		255	Long-Term Instruments	\$ 39	\$ 3,774
Index futures long	Investment income		(452)	Futures	-	3
Index futures short	Investment income		(668)	Futures	-	-
Total Derivative Instruments		\$	(1,043)		\$ 39	

NOTE 3 - INVESTMENTS (continued)

	Net Appreciation/ (in Fair Value of I through June	nvestments	Fair value at June			
Investment Derivative Instruments	Classification	Amount	Classification	Amount		Notional Amount/ Shares
Foreign currency forwards	Investment income	\$ 956	Foreign currency contracts, net	\$ 169	9 \$	5 53,923
Futures options bought/written	Investment income	(5,386	Fixed income - collective short-term investments		-	17,853
Rights/ warrants	Investment income	(37) Public equity		-	
Total Derivative Instruments		\$ (4,467	()	\$ 169	9	

Derivative investments are also subject to counterparty credit risk (non-exchange traded). The following describes the risks applicable to the investment derivative instruments that are reported as of June 30, 2019 and 2018.

Counterparty Credit Risk – The System is exposed to credit risk on derivative instruments that are in asset positions and non-exchange traded. The System's investments in forward currency contracts bear counterparty credit risk in that parties to the contracts may fail to perform according to the terms of the contract. As of June 30, 2019, total commitments in forward currency contracts to purchase and sell international currencies were \$3,774,000, with fair values of \$3,785,000 and \$3,746,000, respectively, held by counterparties with S&P rating of A and above. As of June 30, 2018, total commitments in forward currency contracts to purchase and sell international currencies were \$53,923,000, with fair values of \$53,926,000 and \$53,757,000, respectively, held by counterparties with S&P rating of A and above.

Fair Value Measurements – The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 inputs are inputs other than quoted prices included in Level 1 that are observable for an asset or liability, either directly or indirectly. Inputs to the valuation include: 1) quoted prices for similar assets or liabilities in active markets; 2) quoted prices for identical or similar assets or liabilities in markets that are not active; 3) inputs other than quoted prices that are observable for the asset or liability; and 4) market-corroborated inputs.

Level 3 inputs are unobservable inputs for an asset or liability where there are little market activities. The inputs into the determination of fair value are based upon the best information in the circumstances and may require management judgment or estimation.

NOTE 3 - INVESTMENTS (continued)

The System has the following recurring fair value measurements as of June 30, 2019 and 2018:

Investments Measured at Fair Value As of June 30, 2019		Fair	Value Measi	urements Us	sing
(In Thousands)	Total	Level 1	Level 2	Level 3	Net Asset Value (NAV)
Investments by Fair Value Level					
Public equity	\$ 791,479 \$	244,781	- \$	- ;	\$ 546,698
Short-term investment grade bonds	477,812	477,812	-	-	-
Private equity	381,075	-	-	2,511	378,564
Market neutral strategies	173,354	-	-	-	173,354
Bonds (immunized cash flows)	104,988	56,533	48,455	-	-
Core real estate	98,717	-	-	-	98,717
Commodities	75,975	-	-	-	75,975
Private debt	72,576	-	5,166	9,551	57,859
Emerging market bonds	70,416	-	-	-	70,416
Growth real estate	52,440	-	-	-	52,440
Treasury inflation-protected securities	44,438	44,438	-	-	-
Cash and cash equivalents	41,177	41,177	-	-	-
Private real assets	22,277	_	-	-	22,277
International currency contracts	39	39	-	-	-
Total investments measured at fair value	\$ 2,406,763 \$	864,780 \$	53,621	12,062	\$ 1,476,300

Investments Measured at Fair Value As of June 30, 2018		Fair	Value Meas	urements U	sing
(In Thousands)	Total	Level 1	Level 2	Level 3	Net Asset Value (NAV)
Investments by Fair Value Level					
Public equity	\$ 759,673 \$	257,663 \$	- 9	-	\$ 502,010
Global fixed income	473,357	13,626	94,637	500	364,594
Market neutral strategies	254,051	-	-	-	254,051
Private equity	180,301	-	-	2,737	177,564
Treasury inflation-protected securities	151,010	151,010	-	-	<u> </u>
Core real estate	133,173	-	-	-	133,173
Commodities	106,455	-	-	-	106,455
Private debt	78,784	-	5,134	17,001	56,649
Emerging market bonds	70,107	-	-	-	70,107
Growth real estate	45,241	-	-	-	45,241
High yield debt	40,067	-	-	-	40,067
Cash and cash equivalents	29,278	29,278	-	-	<u> </u>
Private real assets	13,877	-	-	_	13,877
International currency contracts	169	169	-	-	-
Total investments measured at fair value	\$ 2,335,543 \$	451,746 \$	99,771	20,238	\$ 1,763,788

NOTE 3 - INVESTMENTS (continued)

Equity and Fixed Income Securities

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using prices determined by the use of matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices for similar securities that are observable in the market place. Debt and equity securities classified in Level 3 are securities whose inputs to valuation techniques are unobservable by the market place. Many of these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by the custodian bank.

Alternative Investments

Alternative investments include public equity, private equity, market neutral strategies, core real estate, commodities, emerging market bonds, private debt, growth real estate, and private real assets. These are investments for which exchange quotations are not readily available and are valued at estimated fair value, as determined in good faith by the General Partner (GP) of each investment firm retained by the System. These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP. The assets in the alternative investment program are classified as Level 3 assets or at the NAV Level. A more detailed explanation of the Level 3 and NAV valuation methodologies follows.

Investments in non-public equity securities are valued by the GP using one or more valuation methodologies outlined in GASB Statement No. 72, Fair Value Measurement and Application, depending upon the availability of data required by each methodology. In some cases, the GP may use multiple approaches to estimate a valuation range. For the immediate time period following a transaction, the determination of the fair value for equity securities, in which no liquid trading market exists, can generally be approximated based on the transaction price (absent any significant developments). Thereafter, or in the interim, if significant developments relating to such portfolio company or industry occur which may suggest a material change in value, the GP should value each investment by applying generally accepted valuation methods including: (1) the market approach (such as market transaction and comparable public company multiples, which are based on a measurement of the company's historical and projected financial performance with typical metrics including enterprise value / latest 12 months EBITDA or projected fiscal year EBITDA) or (2) the income or discounted cash flow approach.

The determination of fair value using these methodologies should take into consideration a range of factors, including but not limited to, the price at which the investment was acquired, the nature of the investment, local market conditions, trading values on public exchanges for comparable securities, current and projected operating performance, and financing transactions subsequent to the acquisition of the investment. Because of the subjective nature of estimated fair value of the private investments, such value may differ significantly from the values that would have been used had a ready market existed for these investments. These financial instruments have been classified as Level 3 or NAV in the fair value hierarchy, provided that the NAV is calculated and used as a practical expedient to estimate fair value in accordance with GAAP requirements. These investments are not categorized within the fair value hierarchy.

The following tables present the category, fair value, unfunded commitments, redemption frequency and redemption notice period for investments for which fair value is presented using the NAV as of June 30, 2019 and 2018:

NOTE 3 - INVESTMENTS (continued)

Investments Measured at the NA	V					
As of June 30, 2019			Unfunded		Redemption Frequency	Redemption
(In Thousands)		Fair Value	Commitmen	ts	(If Currently Eligible)	Notice Period
Public equity	\$	546,698	\$	-	Daily, Monthly, Quarterly	1-90 Days
Private equity		378,564		-	Daily, NA	30 Day, NA
Market neutral strategies		173,354		-	Weekly, Monthly, Quarterly	14-75 Days
Core real estate		98,717		-	Quarterly, NA	14-60 Days, NA
Commodities		75,975		-	Daily	3 Days
Emerging market bonds		70,416		-	Daily, Quarterly	45 - 60 Days
Private debt		57,859	88,5	30	NA	NA
Growth real estate		52,440	37,7	30	NA	NA
Private real assets		22,277	7,6	52	NA	NA
Total investments measured at		_				
NAV	\$	1,476,300	\$ 133,9	92		

Investments Measured at the NAV				
As of June 30, 2018	Foir Value	Unfunded	Redemption Frequency (If Currently Eligible)	Redemption
(In Thousands)	 Fair Value	Commitments		Notice Period
Public equity	\$ 502,010	\$ -	Daily, Monthly, Quarterly	1-90 days
Global fixed income	364,594	-	Daily	1-2 days
Market neutral strategies	254,051	-	Weekly, Monthly, Quarterly	14-75 days
Private equity	177,564	223,213	Weekly, Monthly, Quarterly	14-75 Days
Core real estate	133,173	-	Quarterly	14-90 days
Commodities	106,455	=	Daily	3 days
Emerging market bonds	70,107	-	Daily, Quarterly	45 - 60 days
Private debt	56,649	72,854	N/A	N/A
Growth real estate	45,241	58,969	N/A	N/A
High yield debt	40,067	-	Quarterly	60 days
Private real assets	13,877	12,265	N/A	N/A
Total investments measured at	_			
NAV	\$ 1,763,788	\$ 367,301		

Public equity - This type includes investments in eight commingled investment funds and three long/short limited partnership funds. Public equities are shares of ownership of a firm listed on an exchange; the Plan holds global public equities in order to benefit from their total return (capital appreciation plus current yield) over a long-term horizon. Seven commingled funds offer daily liquidity with one day notice and one is monthly with two weeks' notice. One long / short fund offers monthly redemptions with three month notice, one offers quarterly redemptions with one month notice, and one offers quarterly redemptions with two months' notice, subject to a 12.5% quarterly gate.

Short-term investment grade bonds - This type includes investments in one commingled investment funds. Short-term investment grade bonds funds typically invest in contractual cash flows of US governments and corporations with maturities less than 3 years and a credit rating of greater than BBB-. The commingled funds offer daily liquidity with notice periods of one to two days.

Private equity - This type includes investments in one commingled investment fund and nine private equity limited partnership funds, which generally invest in privately held companies. These investments cannot be redeemed early from the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. The only way to exit these funds is through a sale in a secondary market. The commingled investment offers daily liquidity with a thirty day notice.

NOTE 3 - INVESTMENTS (continued)

Market neutral strategies - This type includes investments in eleven limited partnership hedge funds that invest both long and short in a wide array of securities, including listed and OTC derivatives, and typically use leverage and hedging to capture directional market movements or relative market mispricing. The redemption frequencies range from weekly to quarterly with notice periods of two weeks to 75 days. Three funds have 25% investor-level redemption gates, one fund has a 20% fund level gate, one fund has a fund-level gate of 8.33%, and one fund has a 2-year lock that is in effect until August 31, 2020.

Bonds (immunized cash flows) - This type includes one separate account. Bonds (immunized cash flows) are investments in cash flows of US governments and corporations where the payout of cash flows are matched against a forecasted liability stream. The goal of an immunized cash flow portfolio is to ensure the System has adequate liquidity to meet cash outflows.

Core real estate - This type includes investments in one open-end real estate fund, one closed-end real estate fund and two real estate limited partnership funds. Core real estate funds typically invest in physical properties. The goal of core real estate is to produce the System price appreciation and income while maintaining a low correlation to stocks and bonds held by the System. The closed-end real estate funds cannot be redeemed early from the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. The only way to exit both the closed end fund and the limited partnership fund is through a sale in a secondary market. The open-end real estate funds offer quarterly redemptions with notice periods of two weeks and three months.

Commodities - This type includes investments in one limited partnership commodities fund. Commodities are physical or tangible assets that have value due to their substance and properties. The goal of commodities is to help the portfolio maintain purchasing power through periods of inflation. The commodities fund offers daily liquidity with three business days' notice.

Private debt - This type includes investments in seven private debt limited partnership funds. These investments cannot be redeemed early from the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. The only way to exit these funds is through a sale in a secondary market.

Emerging market bonds - This type includes investments in two limited partnership funds. Emerging market bonds funds typically invest in contractual cash flows of governments and other sovereign entities, corporations, securitizations, and derivatives thereof in emerging market countries with a sovereign rating less than BBB-. One partnership has quarterly redemption period with a notice period of 45 days; the other has a daily redemption period with a 1 day notice period.

Growth real estate - This type includes thirteen limited partnership real estate funds which generally invests in physical properties. The goal of growth real estate is to produce the System price appreciation and income while maintaining a low correlation to be stocks and bonds. The only way to exit these funds is through a sale in a secondary market.

Treasury inflation-protected securities (TIPS) - This type includes investments in one commingled investment fund. TIPS funds typically invest in contractual cash flows of US governments where the amount of principal outstanding is index to inflation. The goal of TIPS is to help the portfolio maintain purchasing power through periods of inflation. The commingled funds offer daily liquidity with notice periods of one day.

Private real assets - This type includes three limited partnership real asset funds. Private real assets are physical or tangible assets that have value due to their substance and properties. The goal of real assets is to help the portfolio maintain purchasing power through periods of inflation. The only way to exit these funds is through a sale in a secondary market.

NOTE 4 - DEFINED BENEFIT PENSION PLAN: NET PENSION LIABILITY AND CONTRIBUTIONS

Net Pension Liability. The components of the net pension liability (i.e., the total pension liability determined in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans - An Amendment of GASB Statement No. 25*, less the plan net position) as of June 30, 2019 and 2018, were as follows (dollars in thousands):

	2019	2018
Total pension liability	\$ 4,229,613	\$ 4,057,348
Plan fiduciary net position	2,132,152	2,069,333
Net pension liability	\$ 2,097,461	1,988,015
Plan fiduciary net position as a percentage of the total pension liability	50.4 %	51.0 %

Actuarial Assumptions. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and investment return. Experience studies are performed by the Board's actuary to determine appropriate revisions to the actuarial assumptions, as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in November 2015, and the next experience study is scheduled to be conducted in late 2019.

The total pension liability as of June 30, 2019 and 2018 is based on results of an actuarial valuation date of June 30, 2018 and 2017, respectively, and rolled-forward to June 30, 2019 and 2018 using standard roll forward procedures. A summary of the actuarial assumptions used to determine the total pension liability is shown below.

Actuarial Assumptions		
Valuation date	June 30, 2018	June 30, 2017
Measurement date	June 30, 2019	June 30, 2018
Inflation rate	2.50%	2.50%
Discount rate	6.75% per annum	6.875% per annum
Mortality	Healthy annuitants: 0.952 for males and 0.921 for females, times the CalPERS 2009 Healthy Annuitant Mortality Table. Healthy non-annuitants: 0.919 for males and 0.918 for females, times the CalPERS 2009 Employee Mortality Table. Disabled annuitants: 1.051 for males and 1.002 for females, times the CalPERS 2009 Ordinary Disability Mortality Table. Mortality is projected from 2009 on a generational basis using the MP-2018 scale	Healthy annuitants: 0.952 for males and 0.921 for females, times the CalPERS 2009 Healthy Annuitant Mortality Table. Healthy non-annuitants: 0.919 for males and 0.918 for females, times the CalPERS 2009 Employee Mortality Table. Disabled annuitants: 1.051 for males and 1.002 for females, times the CalPERS 2009 Ordinary Disability Mortality Table. Mortality is projected from 2009 on a generational basis using the MP-2017 scale
Active, withdrawal, death, disability service retirement	Tables based on current experience	Tables based on current experience
Salary increases	The base wage inflation assumption of 3.25% plus a merit / longevity increase based on years of service ranging from 4.50% at hire to 0.25% for members with 14 or more years of service	The base wage inflation assumption of 2.85% plus a merit / longevity increase based on years of service ranging from 4.50% at hire to 0.25% for members with 14 or more years of service
Projected total payroll increases	For the amortization schedule, payroll is assumed to grow 3.25% per year	For the amortization schedule, payroll is assumed to grow 3.00% per year
Cost-of-Living Adjustment	Tier 1 - 3% per year; Tier 2 - 1.25% to 2.00% depending on years of service	Tier 1 - 3% per year; Tier 2 - 1.25% to 2.00% depending on years of service

NOTE 4 - DEFINED BENEFIT PENSION PLAN: NET PENSION LIABILITY AND CONTRIBUTIONS (continued)

The assumption for the long-term expected rate of return on pension plan investments of 6.75% and 6.875%, for years ended June 30, 2018 and 2017, respectively, was selected by estimating the median nominal rate of return based on long-term capital market assumptions adopted by the Board, including nominal expected rates of return for each asset class, and reducing the estimated median by a margin so that there is estimated to be a greater than 50 percent probability of achieving the return.

Best estimates of geometric real rates of return for each major asset class included in the System's target asset allocation as of June 30, 2019 and 2018, (see the discussion of the System's investment policy) are summarized in the following table:

	2	019	2	2018			
Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return	Target Asset Allocation	Long-Term Expected Real Rate of Return			
Public equity	30%	6.2%	28%	4.0%			
Short-term investment grade bonds	20%	0.8%	N/A	N/A			
Private equity	10%	7.3%	9%	6.4%			
Market neutral strategies	7%	2.7%	11%	2.8%			
Bonds (immunized cash flows)	5%	0.8%	N/A	N/A			
Core real estate	5%	3.1%	N/A	N/A			
Venture / growth capital	5%	7.2%	N/A	N/A			
Private debt	4%	4.6%	6%	3.9%			
Commodities	3%	2.3%	4%	1.9%			
Emerging market bonds	3%	2.6%	4%	2.4%			
Growth real estate	3%	5.3%	N/A	N/A			
Private real assets	3%	6.7%	N/A	N/A			
Treasury inflation protected securities	2%	1.0%	N/A	N/A			
Cash	-	N/A	-	-			
Core bonds	N/A	N/A	25%	1.0%			
High yield debt	N/A	N/A	4%	2.6%			
Infrastructure	N/A	N/A	1%	3.0%			
Real estate	N/A	N/A	8%	3.9%			

Discount Rate. The discount rate used to measure the total pension liability was 6.75% and 6.875% for measurement years ended June 30, 2019 and 2018, respectively. It is assumed that System member contributions and City contributions will be made based on the actuarially determined rates based on the Board's funding policy. Based on those assumptions, the System's net position is expected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in Discount Rate. In accordance with GASB Statement No. 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the following presents the net pension liability of the City, as of June 30, 2019 and 2018, calculated using the discount rate of 6.75% and 6.875%, respectively, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1.0% lower or 1.0% higher than the current rate (in thousands):

NOTE 4 - DEFINED BENEFIT PENSION PLAN: NET PENSION LIABILITY AND CONTRIBUTIONS (continued)

			2019			2018					
			Discount				1%	Discount		1%	
	19	% Decrease	Rate	19	% Increase		Decrease (F. 975%)	Rate		Increase	
		(5.75%)	(6.75%)		(7.75%)		(5.875%)	(6.875%)		(7.875%)	
Total pension liability (TPL)	\$	4,814,252 \$	4,229,613	\$	3,752,961	\$	4,619,958 \$	4,057,348	\$	3,598,634	
Plan fiduciary net position		2,132,152	2,132,152		2,132,152		2,069,333	2,069,333		2,069,333	
Net pension liability	\$	2,682,100 \$	2,097,461	\$	1,620,809	\$	2,550,625 \$	1,988,015	\$	1,529,301	
Plan fiduciary net position as											
a percentage of the TPL		44.3 %	50.4 %	, 0	56 .8 %		44.8 %	51.0 %	<u> </u>	57.5 %	

Contributions to the Defined Benefit Pension Plan by both the City and the participating employees are based upon an actuarially determined percentage of each employee's pensionable and earnable salary sufficient to provide adequate assets to pay benefits when due.

On June 24, 2008, the City Council adopted Ordinance No. 28332 amending Chapter 3.28 of Title 3 of the San José Municipal Code to provide the City with the option to make lump sum payments of City required contributions to the System (referred to as prefunding).

In November 2010, the Board adopted a funding policy (referred to as the floor methodology) setting the City's funding policy contribution amount to be the greater of the dollar amount reported in the actuarial valuation or the dollar amount determined by applying the percentage of payroll reported in the valuation to the actual payroll, if actual payroll exceeds the actuarial payroll, for the fiscal year.

In October 2014, the Board approved implementing an incremental reduction approach to determining "actuarial equivalence" for the prefunding when the economic expansion has exceeded 58 months in duration and/or the S&P 500 has returns in excess of 130%. This approach will ensure that as business expansions and/or market valuation mature and exceed historic norms, the System reduces the incentive for the City to prefund its contributions. The incremental reduction to the discount rate that is used to calculate the prefunding is 15% per year, up to a maximum of 45%, which was the reduction for fiscal year June 30, 2019.

In February 2016, the Board approved the City's request that the floor methodology for Tier 1 be used only for the annual employer Normal Cost contribution (which includes administrative expenses) and that the annual employer Unfunded Actuarial Liability (UAL) contribution be set at the dollar amount recommended by the actuary and adopted by the Board in the annual actuarial valuation report beginning fiscal year 2017.

San José City Council Ordinance No. 29120 implemented the terms approved by the City Council on June 12, 2012 for Tier 2 pension benefits for new System members hired on or after September 30, 2012. The new tier includes significant benefit changes from the existing Tier 1 plan as described in Note 1. In addition, the contribution rate for Tier 2 members includes a change in the cost sharing between the City and active Tier 2 members which is a 50/50 split of all costs, including UAL. Currently, Tier 1 members split normal cost with 8/11 paid by the City and 3/11 paid by Tier 1 members. The responsibility for funding the UAL is generally not shared with the Tier 1 employees.

Beginning September 2014, the Board approved the City's request to exclude Tier 2 from the floor methodology to ensure that the City does not pay more than the actuarially determined contribution (ADC). Therefore, the contribution rate determined by the actuary multiplied by the actual payroll will be used.

The City's contributions for the Defined Benefit Pension Plan during the fiscal years ended June 30, 2019 and 2018 were as follows. Tier 1 was calculated using the floor methodology.

NOTE 4 - DEFINED BENEFIT PENSION PLAN: NET PENSION LIABILITY AND CONTRIBUTIONS (continued)

Fiscal year			2019					
Actuarial valuation year	2017							
(In Thousands)		Tier 1	Tier 2	Total				
Actual payroll	\$	162,904	\$ 135,920	\$ 298,824				
Actuarial payroll		158,776	N/A	N/A				
Actual payroll in excess of actuarial payroll		4,128	N/A	N/A				
Normal cost rate for pension and COLA portion of total City rate		18.61 %	N/A	N/A				
Additional contributions due to the Floor Methodology		768	N/A	768				
Prefunded contribution amount (BOY) ¹		154,548	N/A	154,548				
Regular contributions paid throughout the year		-	10,744	10,744				
Adjustments and accruals		6,358	588	6,946				
Total contributions for the fiscal year	\$	161,674	\$ 11,332	\$ 173,006				

Beginning of year

Fiscal year		2018	
Actuarial valuation year		2016	
(In Thousands)	Tier 1	Tier 2	Total
Actual payroll	\$ 172,721	\$ 117,783	\$ 290,504
Actuarial payroll	165,552	N/A	N/A
Actual payroll in excess of actuarial payroll	7,169	N/A	N/A
Normal cost rate for pension and COLA portion of total City rate	18.00 %	N/A	N/A
	1,290	N/A	1,290
Prefunded contribution amount (BOY) ¹	152,822	N/A	152,822
Regular contributions paid throughout the year	-	9,023	9,023
Adjustments and accruals	(6,437)	72	(6,365)
Total contributions for the fiscal year	\$ 147,675	\$ 9,095	\$ 156,770

¹ Beginning of year

Contributions to the Defined Benefit Pension Plan for both the City and the participating members are based upon an actuarially determined percentage of each member's covered payroll sufficient to provide adequate assets to pay benefits when due. The contribution rates for fiscal years ended June 30, 2019 and 2018 were based on the actuarial valuations performed as of June 30, 2017 and 2016, respectively.

The City and the participating member's contribution rates in effect for the Defined Benefit Pension Plan during the fiscal years ended June 30, 2019 and 2018 were as follows:

Period	City - Board	Adopted ¹	Mem	iber ²
	City Tier 1 ¹	City Tier 2	Employee Tier 1	Employee Tier 2
07/01/18 - 06/30/19	99.16%	8.28%	6.81%	8.28%
07/01/17 - 06/30/18	94.04%	7.72%	6.60%	7.72%

¹ The actual contribution rates paid by the City for fiscal years ended June 30, 2019 and June 30, 2018 differed for Tier 1 due to the City funding the actuarially determined contribution amount based on the greater of the dollar amount reported in the actuarial valuation or the dollar amount determined by applying the percentage of payroll reported in the valuation to the actual payroll, if actual payroll exceeds the actuarial payroll, for the fiscal year.

² Under Measure F, certain Tier 2 members who had previous Tier 1 service or prior service with a reciprocal employer were reclassified to Tier 1. Ordinance No. 30183, which became effective January 4, 2019, amended the Municipal Code to reflect these changes. Effective 3/24/19, reclassified Tier 1 members paid an additional 3.00% in contributions. Classic Tier 1 members paid an additional 1.46% effective 8/12/18.

NOTE 5 - POSTEMPLOYMENT HEALTHCARE PLAN: NET OPEB LIABILITY AND CONTRIBUTIONS

Net OPEB Liability. The components of the net Other Postemployment Benefit (OPEB) liability of the System (i.e., the System's liability determined in accordance with GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans*, less the plan fiduciary net position) as of June 30, 2019 and 2018, were as follows (dollars in thousands):

	2019	2018
Total OPEB liability	\$ 672,193	\$ 651,222
Plan fiduciary net position	294,488	277,257
Net OPEB liability	\$ 377,705	\$ 373,965
Plan fiduciary net position as a percentage of the total OPEB liability	43.8 %	42.6 %

Actuarial Assumptions. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and investment return. Experience studies are performed by the Board's actuary to determine appropriate revisions to the actuarial assumptions, as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in November 2015, and the next experience study is scheduled to be conducted in late 2019.

The total OPEB liability as of June 30, 2019 and 2018 is based on results of an actuarial valuation date of June 30, 2018 and 2017, and rolled-forward to June 30, 2019 and 2018 using generally accepted actuarial procedures. A summary of the actuarial assumptions used to determine the total OPEB liability is shown below.

is shown below.		
Actuarial Assumptions		
Valuation date	June 30, 2018	June 30, 2017
Measurement date	June 30, 2019	June 30, 2018
Actuarial cost method	Entry age normal, level of % of pay	Entry age normal, level of % of pay
Discount rate (net)	6.75%	6.875%
Inflation rate	2.50%	2.50%
Projected payroll increase	es	
Wage inflation rate	3.25%	3.25%
Merit increase	Merit component added based on an individual's years of service ranging from 4.50% to 0.25%.	Merit component added based on an individual's years of service ranging from 4.50% to 0.25%.
Rates of mortality	Mortality is projected from 2009 on a generational basis using the MP-2018 scale	Mortality is projected from 2009 on a generational basis using the MP-2017 scale
Healthy annuitant	0.952 for males and 0.921 for females, times the CalPERS 2009 Healthy Annuitant Mortality Table.	0.952 for males and 0.921 for females, times the CalPERS 2009 Healthy Annuitant Mortality Table.
Healthy non-annuitant	0.919 for males and 0.918 for females, times the CalPERS 2009 Employee Mortality Table.	0.919 for males and 0.918 for females, times the CalPERS 2009 Employee Mortality Table.
Disabled annuitant	1.051 for males and 1.002 for females, times the CalPERS 2009 Ordinary Disability Mortality Table.	1.051 for males and 1.002 for females, times the CalPERS 2009 Ordinary Disability Mortality Table.
Healthcare Cost Trend F	Rates	
Medical	The valuation assumes that future medical inflation will be at a rate of 8.00% to 4.25% per annum graded down over a 15 year period for medical pre-age 65 and 6.00% to 4.25% per annum graded down over a 15 year period for medical post-age 65.	The valuation assumes that future medical inflation will be at a rate of 8.50% to 4.25% per annum graded down over a 15 year period for medical pre-age 65 and 6.00% to 4.25% per annum graded down over a 15 year period for medical post-age 65.
Dental	Dental inflation is assumed to be 3.50%	Dental inflation is assumed to be 3.50%

NOTE 5 - POSTEMPLOYMENT HEALTHCARE PLAN: NET OPEB LIABILITY AND CONTRIBUTIONS (continued)

The assumption for the long-term expected rate of return on OPEB plan investments of 6.75% and 6.875% for the valuation years ended June 30, 2018 and June 30, 2017, respectively, was selected by estimating the median nominal rate of return based on long-term capital market assumptions adopted by the Board, including nominal expected rates of return for each asset class, and reducing the estimated median by a margin so that there is estimated to be a greater than 50 percent probability of achieving the return.

Best estimates of geometric real rates of return for each major asset class included in the System's target asset allocation as of June 30, 2019 and 2018, (see the discussion of the System's investment policy) are summarized in the following table. The assets are invested both in a 401(h) account within the pension plan and in a 115 trust. The table below refers only to the 115 trust. The 401(h) account was depleted during this current fiscal year.

	20)19	2018				
Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return	Target Asset Allocation	Long-Term Expected Real Rate of Return			
Public equity	56.0%	6.1%	55.0%	4.7%			
Short-term investment grade bonds	29.0%	0.8%	28.0%	0.8%			
Core real estate	10.0%	4.3%	8.0%	2.7%			
Commodities	5.0%	2.3%	5.0%	1.9%			
Cash	-	0.3%	-	0.2%			
Natural resources	N/A	N/A	4.0%	4.4%			

Discount Rate. The discount rate used to measure the total OPEB liability was 6.75% and 6.875% for the measurement years ended June 30, 2019 and 2018, respectively, and is based on the long-term expected rate of return on investments. It is assumed that plan member contributions remain fixed at 7.5% of pay for employees eligible to participate in the postemployment healthcare plan and the City contributes the actuarially determined contribution toward the explicit subsidy up to a maximum of 14% of total payroll. In addition, the City pays the implicit subsidy on a pay-as-you-go basis. Based on those assumptions, the System's fiduciary net position is expected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the Net OPEB Liability to Changes in Discount Rate. In accordance with GASB No. 74 regarding the disclosure of the sensitivity of the net OPEB liability to changes in the discount rate, the following presents the net OPEB liability of the City, as of June 30, 2019 and 2018, calculated using the discount rate of 6.75% and 6.875%, respectively, as well as what the City's net OPEB liability would be if it were calculated using a discount rate that is 1.00% lower or 1.00% higher than the current rate:

		2019			2018				
	1% Decrease (5.75%)	Discount Rate (6.75%)	1% Increase (7.75%)	1	1% Decrease 5.875%)		Discount Rate 6.875%)		1% ncrease 7.875%)
Total OPEB liability	\$ 767,787	\$ 672,193	\$ 594,436	\$	743,145	\$	651,222	\$	576,449
Plan fiduciary net position	294,488	294,488	294,488		277,257		277,257		277,257
Net OPEB liability	\$ 473,299	\$ 377,705	\$ 299,948	\$	465,888	\$	373,965	\$	299,192
Plan fiduciary net position as a percentage of the total OPEB liability	38.4 %	43.8 %	49.5 %		37.3 %		42.6 %		48.1 %

NOTE 5 - POSTEMPLOYMENT HEALTHCARE PLAN: NET OPEB LIABILITY AND CONTRIBUTIONS (continued)

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates. The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that were 1.0% (7.0% decreasing to 3.25%) lower or 1.0% higher (9.0 % decreasing to 5.25%) than the current healthcare cost trend rates (dollar amounts in thousands):

		2019				2018					
	1%		ealth Care		1%		1%		ealth Care		1%
	ecrease	Co	ost Trend		ncrease	D	ecrease	Co	st Trend		ncrease
Total OPEB liability	\$ 586,304	\$	672,193	\$	778,112	\$	568,651	\$	651,222	\$	753,005
Plan fiduciary net position	294,488		294,488		294,488		277,257		277,257		277,257
Net OPEB liability	\$ 291,816	\$	377,705	\$	483,624	\$	291,394	\$	373,965	\$	475,748
Plan fiduciary net											
position as a percentage											
of the total OPEB liability	50.2 %		43.8 %		37.8 %		48.8 %		42.6 %		36.8 %

The Postemployment Healthcare Plan is an IRC Section 401(h) and an IRC Section 115 Trust, which is in the actuarial valuations and thus the disclosures throughout this note. The 401(h) plan was depleted during this current fiscal year leaving only the 115 Trust in the Healthcare Plan at the end of the fiscal year.

On June 24, 2008, the City Council adopted Ordinance No. 28332 amending Chapter 3.28 of Title 3 of the San José Municipal Code to provide the City with the option to make lump sum payments of City required contributions to the System (referred to as prefunding).

In November 2010, the Board adopted a funding policy (referred to as the floor methodology) setting the annual contribution to be the greater of the dollar amount reported in the actuarial valuation or the dollar amount determined by applying the percentage of payroll reported in the valuation to the actual payroll, if actual payroll exceeds the actuarial payroll, for the fiscal year.

In October 2014, the Board approved implementing an incremental reduction approach to determining "actuarial equivalence" for the prefunding when the economic expansion has exceeded 58 months in duration and/or the S&P 500 has returns in excess of 130%. This approach will ensure that as business expansions and/or market valuation mature and exceed historic norms, the System reduces the incentive for the City to prefund its contributions. The incremental reduction to the discount rate that is used to calculate the prefunding is 15% per year, up to a maximum of 45%, which was the reduction for fiscal year June 30, 2019.

On August 27, 2013, San Jose City Council adopted Ordinance No. 29283 to exclude Tier 2 members hired on or after September 27, 2013 from retiree medical and dental benefits (referred to as Tier 2B members) but the City shall bear and pay an amount equal to the additional costs incurred by the System for that portion of the unfunded liability as determined by the actuary for the System that the City and Tier 2B members would have otherwise paid as contributions had those employees been eligible for the retiree healthcare defined benefit.

In September 2014, the Board approved the City's request to exclude all forms of Tier 2 from the floor methodology to ensure that the City does not pay more than the actuarially determined contributions (ADC) and that contributions are based on the ADC percentages developed by the actuary. Instead, the contribution rate determined by the actuary multiplied by the actual payroll is what will be used.

NOTE 5 - POSTEMPLOYMENT HEALTHCARE PLAN: NET OPEB LIABILITY AND CONTRIBUTIONS (continued)

Historically, member and City contributions to the System have been negotiated through collective bargaining and have not been actuarially determined. No amount was determined on an actuarial basis to fund the Healthcare Plan prior to fiscal year 2019. With the passage of Measure F, the Federated Alternative Pension Reform Settlement Framework (Federated Framework) became effective as of June 16, 2017. A Voluntary Employee Beneficiary Association (VEBA) for retiree healthcare was created and Tier 1 and some Tier 2 members were eligible for an irrevocable opt-out of the defined benefit retiree healthcare plan. The VEBA opt-in election period was October 18, 2017 through December 15, 2017, and the healthcare contributions of members who opted in to the VEBA was transferred out of the Postemployment Healthcare Plan in March 2018 and moved in to the defined contribution VEBA. All Tier 1 employees (except those who enter the Plan after June 18, 2017 with "Classic" membership in CalPERS) and Tier 2 employees who were previously making contributions into the defined benefit retiree healthcare plan (Tier 2A), were eligible to opt-in to the VEBA, while all Tier 2 employees (except unrepresented employees) were required to move in to the defined contribution VEBA. The VEBA is being implemented by the City, not ORS, and therefore it is also not under the jurisdiction of the Retirement Board.

With the implementation of Measure F, member contributions were fixed at 7.5% of pay. The City's contribution toward the explicit subsidy will be actuarially determined beginning with the fiscal year ending June 30, 2019, and the City will also pay the implicit subsidy on a pay-as-you-go basis as part of active health premiums. In addition, the City has an option to limit its contributions to 14% of payroll. The explicit subsidy (or premium subsidy) is paid by the System and is the premium for health coverage selected by the retiree, up to 100% of the premium for the lowest cost plan offered to active employees. The implicit subsidy is the difference between the expected claims cost for a retiree or spouse and the total (retiree plus City) premium.

In February 2018, the Board approved the contribution policy that sets the City healthcare contributions as a flat dollar amount, beginning with fiscal year 2019. The City's contribution for the Postemployment Healthcare Plan during the fiscal year ended June 30, 2019, was \$26,410,000. This consisted of prefunded City contributions in the amount of \$20,856,000, \$4,082,000 in implicit subsidy, and \$1,472,000 in adjustments and accruals.

The City's contributions for the Postemployment Healthcare Plan during the fiscal year ended June 30, 2018 were as follows in the table below.

Fiscal Year			201	8				
Actuarial Valuation Year	2016							
(In Thousands)		Tier 1	Tier 1			Total		
Actual payroll ²	\$	166,797	\$	117,783	\$	284,580		
Actuarial payroll		165,552		N/A		N/A		
Actual payroll in excess of actuarial payroll		1,245		N/A		N/A		
Normal cost rate for healthcare portion of total City rate		2.89 %		N/A		N/A		
Additional contributions due to the Floor Methodology		36		N/A		36		
Prefunded contribution amount (BOY) 1		15,292		N/A		15,292		
Regular contributions paid throughout the year		-		14,372		14,372		
Implicit subsidy		3,818		-		3,818		
Adjustments and accruals		(1,239)		118		(1,121)		
Total contributions for the fiscal year	\$	17,907	\$	14,490	\$	32,397		

Beginning of year

² Actual payroll represents Tier 1 which does not include members participating in the VEBA.

NOTE 5 - POSTEMPLOYMENT HEALTHCARE PLAN: NET OPEB LIABILITY AND CONTRIBUTIONS (continued)

The City and the participating member's contribution rates in effect for the Postemployment Healthcare Plan during the fiscal years ended June 30, 2019 and 2018 were as follows:

Period	City - Board Ad	dopted	Members with Healthcare
	City Tier 1	City Tier 2	Tier 1 and Tier 2
07/01/18 - 06/30/19	\$20,856,12	25 ¹	7.50 %
03/25/18 - 06/30/18	9.41 %	12.66 %	7.50 %
07/01/17 - 03/24/18	9.41 %	12.66 %	8.76 %

¹ Beginning of year, explicit subsidy amount

NOTE 6 - COMMITMENTS

As of June 30, 2019 and 2018, the System had unfunded commitments to contribute capital for private market fund investments in the amount of \$133,992,000 and \$367,301,000, respectively.

NOTE 7 - LITIGATION

The System handles various claims and legal actions in the ordinary course of its business. In the opinion of management and independent legal counsel, the ultimate disposition of these matters is not likely to have a material adverse effect on the System's financial position as a whole.

Required Supplementary Information

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS - DEFINED BENEFIT PENSION PLAN (unaudited)

(Dollars in Thousands)

Total Pension Liability	2019	2018	2017	2016	2015	2014
Service cost (middle of year)	\$ 61,808	\$ 59,628	\$ 51,887	\$ 49,011	\$ 46,795	\$ 43,334
Interest (includes interest on service cost)	272,787	264,250	249,388	229,609	221,690	214,487
Changes of benefit terms	-	1,781	12,132	-	-	-
Differences between expected and actual experience	(11,662)	17,461	40,853	39,720	13,005	-
Changes of assumptions	54,398	(15,582)	60,233	205,875	108,674	-
Benefit payments, including refunds of member contributions	(205,066)	(193,400)	(183,430)	(173,318)	(164,562)	(155,936)
Net Change in Total Pension Liability	172,265	134,138	231,063	350,897	225,602	101,885
Total Pension Liability - Beginning	4,057,348	3,923,210	3,692,147	3,341,250	3,115,648	3,013,763
Total Pension Liability - Ending	\$ 4,229,613	\$ 4,057,348	\$ 3,923,210	\$ 3,692,147	\$ 3,341,250	\$ 3,115,648
Plan Fiduciary Net Position						
Contributions - employer	\$ 173,006	\$ 156,770	\$ 138,483	\$ 124,723	\$ 114,751	\$ 107,544
Contributions - employee	22,606	20,501	17,227	15,920	13,621	13,596
Net investment income	76,855	117,493	146,010	(35,010)	(16,642)	263,688
Benefit payments, including refunds of member contributions	(205,066)	(193,400)	(183,430)	(173,318)	(164,562)	(155,936)
Administrative expense	(4,582)	(4,823)	(4,380)	(3,940)	(3,898)	(3,201)
Net Change in Plan Fiduciary Net Position	\$ 62,819	\$ 96,541	\$ 113,910	\$ (71,625)	\$ (56,730)	\$ 225,691
Plan Fiduciary Net Position -						
Beginning	2,069,333	1,972,792	1,858,882	1,930,507	1,987,237	1,761,546
Plan Fiduciary Net Position -	¢ 0 400 450	f 0 000 000	¢ 4 070 700	¢ 4 050 000	¢ 4 000 507 (* 4 007 007
Ending					\$ 1,930,507	
Net Pension Liability - Ending	\$ 2,097,461	\$ 1,988,015	\$ 1,950,418	\$ 1,833,265	\$ 1,410,743	\$ 1,128,411
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	50.41%	51.00%	50.29%	50.35%	57.78%	63.78%
Covered Payroll	\$ 298,824			-		
Net Pension Liability as a Percentage of Covered Payroll	701.91 %	684.33 %	719.31 %	711.20 %	586.15 %	514.24 %

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

SCHEDULE OF INVESTMENT RETURNS - DEFINED BENEFIT PENSION PLAN (unaudited)

	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of						
return, net of investment expense	4.17%	6.03%	7.53%	(0.79)%	(1.07)%	7.49%

The rate shown above is based on the Defined Benefit and does not include the 115 trust.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information (continued)

SCHEDULE OF EMPLOYER CONTRIBUTIONS - DEFINED BENEFIT PENSION PLAN (unaudited) (Dollars in Thousands)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined contributions	\$ 173,006	\$ 156,770	\$ 138,483	\$ 129,456	\$ 114,751	\$ 102,811	\$ 103,109	\$ 87,082	\$ 59,180	\$ 54,566
Contributions in relation to actuarially determined contributions	173,006	156,770	138,483	124,723	114,751	107,544	103,109	87,082	59,180	54,566
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ 4,733	\$ -	\$ (4,733)	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 298,824	\$ 290,504	\$ 271,153	\$ 257,771	\$ 240,678	\$ 219,434	\$ 217,375	\$ 223,158	\$ 275,869	\$ 308,684
Contributions as a percentage of covered payroll	57.90 %	53.96 %	51.07 %	48.39 %	47.68 %	49.01 %	47.43 %	39.02 %	21.45 %	17.68 %

Actuarial valuations have been performed biennially through June 30, 2007. Effective with the June 30, 2009 valuation, which determined contribution rates for fiscal year 2011, the plan transitioned to annual actuarial valuations.

NOTES TO SCHEDULE

Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported.

Fiscal	r.	II.	II.	III	II.	III	m	m		п
Year	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Valuation date	2017	2016	2015	2014	2013	2012	2011	2010	2009	2007 ¹
Actuarial cost method	Entry age	Entry age	Entry age	Entry age	Entry age	Entry age	Entry age	Entry age	Entry age	Entry age
Asset valuation method	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market	5-year smoothed market
Discount rate	6.875%	6.875%	7.00%	7.00%	7.00%	7.25%	7.00%	7.50%	7.95%	7.75%
Salary increases	3.25% plus merit component based on years of service	2.85% plus merit component based on years of service	2.85% plus merit component based on years of service	merit .	2.85% plus merit component based on years of service	five years	3.25% plus merit component based on years of service	3.25% plus merit component based on years of service	wage	a total rate of 4.08% plus an increase for merit/ longevity for the first 5 years of
Amortization growth rate	3.00%	2.85%	2.85%	2.85%	2.85%	2.43%	3%	3.25%	3.90%	3.83%

Required Supplementary Information (continued)

NOTES TO SCHEDULE (continued)

Fiscal										
Year	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Valuation										
date	2017	2016	2015	2014	2013	2012	2011	2010	2009	2007 ¹
Amortization method	actuarial liability as of June 30, 2009 was amortized over a closed 30-year period commencing June 30, 2009. Gains, losses and plan changes are amortized over 20-year periods, and assumption changes are amortized over 25-year periods. Tier 2's Unfunded Actuarial Liability as of June 30, 2017 is amortized over a 10-year period.	amortized over a closed 30 year period as a level percentage of pay. Gains and losses, assumption changes and plan changes are amortized over closed 20-year periods as a level percentage of pay. The amortization payment for the 2015 assumption changes is phased-in over 3 years.	of pay. Gains and losses, assumption changes and plan changes are amortized over closed 20-year periods as a level percentage of pay. The amortization payment for the 2015 assumption changes is phased-in over 3 years.	amortized over a closed 30 year period as a level percentage of pay. Gains and losses, assumption changes and plan changes are amortized over closed 20-year periods as a level percentage of pay.	2009 was amortized over a closed 30 year period commencing June 30, 2009 as a level percentage of Tier 1 pay. Actuarial gains and losses, assumption changes and plan changes are amortized over closed 20-year periods as a level percentage of Tier 1 and Tier 2 pay.	2009 was amortized as a level percentage of payroll over a closed 30-year period commencing June 30, 2009. Actuarial gains and losses, assumption changes and plan changes since June 30, 2009 are amortized as a level percentage of payroll over closed 20-year periods beginning with the valuation in which they are first recognized.	Level percent of pay, closed, layered	layered	Level percent of pay, closed, layered	layered
Mortality	Adjusted 2009 CalPERS mortality tables projected on a generational basis with the SOA MP-2017 projection	Adjusted 2009 CalPERS mortality tables projected on a generational basis with the SOA MP-2015 projection	Adjusted 2009 CalPERS mortality tables projected on a generational basis with the SOA MP-2015 projection	RP-2000 Combined Mortality projected to 2015 using Scale AA and	RP-2000 Combined Mortality projected to 2015 using Scale AA and	Mortality projected to	RP-2000 Combined Mortality projected to 2015 using Scale AA and	RP-2000 Combined Mortality projected to 2015 using Scale AA and	annuity mortality table set back 3 years for males and 1 year for	1994 group annuity mortality table set back 3 years for males and 1 year for females. Disabled used 1981 disability mortality

¹ Actuarial valuations were performed biennially through June 30, 2007. Effective June 30, 2009, the System transitioned to annual actuarial valuations.

Required Supplementary Information (continued)

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET OPEB LIABILITY AND RELATED RATIOS - POSTEMPLOYMENT HEALTHCARE PLAN (unaudited)

(Dollars in Thousands)

Total OPEB Liability	2019	2018	2017
Service cost (BOY)	\$ 7,723 \$	7,889 \$	11,109
Interest (includes interest on service cost)	43,182	42,669	49,978
Changes of benefit terms	-	(57,623)	
Differences between expected and actual experience	(10,418)	(995)	
Changes of assumptions	9,310	(77,795)	
Benefit payments, including refunds of member contributions	(28,826)	(29,724)	(31,007)
Net Change in Total OPEB Liability	20,971	(115,579)	30,080
Total OPEB Liability - Beginning	651,222	766,801	736,721
Total OPEB Liability - Ending	\$ 672,193 \$	651,222 \$	766,801
Plan Fiduciary Net Position			
Contributions - employer	\$ 26,410 \$	32,397 \$	31,905
Contributions - employee	10,578	15,545	16,827
Net investment income	9,472	12,336	17,041
Benefit payments, including refunds of member contributions	(28,826)	(29,724)	(31,007)
Administrative expense	(384)	(170)	(242)
VEBA transfer	(19)	(13,497)	-
Net Change in Plan Fiduciary Net Position	\$ 17,231 \$	16,887 \$	34,524
Plan Fiduciary Net Position - Beginning	277,257	260,370	225,846
Plan Fiduciary Net Position - Ending	\$ 294,488 \$	277,257 \$	260,370
Net OPEB Liability - Ending	\$ 377,705 \$	373,965 \$	506,431
Plan Fiduciary Net Position as a Percentage of the Total OPEB			
Liability	43.81 %	42.57 %	33.96 %
Covered Payroll	\$ 298,824 \$	290,504 \$	271,153
Net OPEB Liability as a Percentage of Covered Payroll	126.40 %	128.73 %	186.77 %

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

SCHEDULE OF INVESTMENT RETURNS - POSTEMPLOYMENT HEALTHCARE PLAN (unaudited)

	2019	2018	2017
Annual money-weighted rate of return, net of investment expense	4.33%	4.55%	7.20%

The rate shown above is based on the 115 trust only and does not include the 401(h).

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information (continued)

SCHEDULE OF EMPLOYER CONTRIBUTIONS - POSTEMPLOYMENT HEALTHCARE PLAN (unaudited)

Beginning in FYE 2010, contributions were scheduled to phase in to the full ARC as defined in the bargaining agreements and consistent with the parameters of GASB 45, but the contribution rates were capped before the full ARC was reached. With the contribution rates capped, the ARC was determined as the minimum amount that was consistent with the parameters of GASB 45. No amount had been determined on an actuarial basis prior to fund the plan, and consequently, the schedule of employer contributions was not provided. With the implementation of Measure F, Actuarially Determined Contributions (ADC) were calculated beginning for the fiscal year ending June 30, 2019.

	2019
Actuarially determined contributions (ADC)	\$ 26,410
Actual contribution related to ADC	26,410
Contribution deficiency/ (excess) relative to ADC	-
Covered - employee payroll (Pay)	\$ 298,824
Actual contributions as % of covered payroll	8.84 %

(Dollars in Thousands)

NOTES TO SCHEDULE

Fiscal Year	2019
Valuation date	2017
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the fiscal year
Key methods and assumptions used	
Actuarial cost method	Individual entry age
Amortization method	20-year layered amortizations as a level dollar amount with 3-year phase-in and phase-out
Asset valuation method	Market value of assets
Amortization growth rate	0.00%
Discount rate	6.875%
Ultimate rate of medical inflation	4.25%
Salary increases	3.25% plus merit component based on years of service
Mortality	Adjusted 2009 CalPERS mortality tables projected on a generational basis with the SOA MP-2018 projection scale

A complete description of the methods and assumptions used to determine contributions for the year ending June 30, 2019 can be found in the June 30, 2017 actuarial valuation report.

Other Supplemental Information

COMBINING SCHEDULE OF DEFINED BENEFIT PENSION PLAN NET POSITION *As of June 30, 2019 (In Thousands)*

		Cost-of-Living	
	Retirement Fund	Fund	Total
ASSETS			
Receivables			
Employee contributions	\$ 739	\$ 203	\$ 942
Employer contributions	4,444	3,183	7,627
Brokers and others	5,705	222	5,927
Accrued investment income	2,847	410	3,257
Total Receivables	13,735	4,018	17,753
Investments, at fair value Securities and other:			
Public equity	410,205	212,556	622,761
Short-term investment grade bonds	258,877	134,142	393,019
Private equity	251,010	130,065	381,075
Market neutral strategies	114,186	59,168	173,354
Bonds (immunized cash flows)	69,154	35,834	104,988
Core real estate	52,468	27,187	79,655
Commodities	40,479	20,976	61,455
Private debt	47,805	24,771	72,576
Emerging market bonds	46,382	24,034	70,416
Growth real estate	34,542	17,898	52,440
Treasury inflation-protected securities	29,271	15,167	44,438
Cash and cash equivalents	24,573	12,734	37,307
Private real assets	14,674	7,603	22,277
International currency contracts, net	26	13	39
Total Investments	1,393,652	722,148	2,115,800
Capital Assets, net	2,049	888	2,937
TOTAL ASSETS	1,409,436	727,054	2,136,490
LIABILITIES			
Payable to brokers	2,618	_	2,618
Other liabilities	1,157	563	1,720
TOTAL LIABILITIES	3,775	563	4,338
PLAN NET POSITION - RESTRICTED FO			
Pension benefits	1,405,661	726,491	2,132,152
TOTAL PLAN NET POSITION	<u>\$ 1,405,661</u>	\$ 726,491	\$ 2,132,152

COMBINING SCHEDULE OF CHANGES IN DEFINED BENEFIT PENSION PLAN NET POSITIONFor Fiscal Year Ended June 30, 2019 (In Thousands)

	Retirement Fund	Cost-of-Living Fund	Total
ADDITIONS			
Contributions			
Employee	\$ 17,672	\$ 4,934	\$ 22,606
Employer	97,830	75,176	173,006
Total Contributions	115,502	80,110	195,612
Investment income			
Net appreciation in fair value of			
investments	43,460	22,078	65,538
Interest income	11,619	5,501	17,120
Dividend income	3,186	1,524	4,710
Less: investment expense	(7,117)	(3,396)	·
Net Investment Income	51,148	25,707	76,855
TOTAL ADDITIONS	166,650	105,817	272,467
DEDUCTIONS			
Retirement benefits	139,518	50,710	190,228
Death benefits	7,891	5,828	13,719
Refund of contributions	953	166	1,119
Administrative expenses and other	3,102	1,480	4,582
TOTAL DEDUCTIONS	151,464	58,184	209,648
NET INCREASE	15,186	47,633	62,819
PLAN NET POSITION - RESTRICTED FO	OR PENSION BENEF	ITS	
BEGINNING OF YEAR	1,390,475	678,858	2,069,333
END OF YEAR	\$ 1,405,661		

COMBINING SCHEDULE OF OTHER POSTEMPLOYMENT PLAN NET POSITION

As of June 30, 2019 (In Thousands)

	Postemployment Healthcare 401(h)	Postemployment Healthcare (115)	Total
ASSETS			
Receivables			
Employee contributions	\$ -	\$ 439	\$ 439
Employer contributions	· -	881	881
Brokers and others	-	2,297	2,297
Accrued investment income	-	492	492
Total Receivables		4,109	4,109
Investments, at fair value Securities and other:			
Public equity	-	168,718	168,718
Short-term investment grade bonds	-	84,793	84,793
Core real estate	-	19,062	19,062
Commodities	-	14,520	14,520
Cash and cash equivalents	-	3,870	3,870
Total Investments		290,963	290,963
Capital Assets, net	-	55	55
TOTAL ASSETS	-	295,127	295,127
LIABILITIES Payable to brokers		470	470
Payable to brokers Other liabilities	-	473	473
TOTAL LIABILITIES	-	166 639	166 639
TOTAL LIADILITIES	-	639	039
PLAN NET POSITION - RESTRICTED FO	OR		
Postemployment healthcare benefits	-	294,488	294,488
TOTAL PLAN NET POSITION	\$ -	\$ 294,488	\$ 294,488

COMBINING SCHEDULE OF CHANGES IN OTHER POSTEMPLOYMENT PLAN NET POSITIONFor Fiscal Year Ended June 30, 2019 (In Thousands)

	Postemployment Healthcare 401(h)	Postemployment Healthcare (115)	Total
ADDITIONS	Healthicare 401(II)	neallicare (115)	I Otal
Contributions			
Employee	\$ -	\$ 10,578	\$ 10,578
Employer	Ψ <u>-</u>	26,410	26,410
Total Contributions	-	36,988	36,988
Investment income			
Net appreciation in fair value of			
investments	63	3,544	3,607
Interest income	3	584	587
Dividend income	-	5,829	5,829
Less: investment expense	-	(551)	(551)
Net Investment Income	66	9,406	9,472
TOTAL ADDITIONS	66	46,394	46,460
DEDUCTIONS			
Healthcare insurance premiums	9,460	19,366	28,826
Administrative expenses and other	23	361	384
VEBA transfer	-	19	19
TOTAL DEDUCTIONS	9,483	19,746	29,229
NET (DECREASE) / INCREASE	(9,417)	26,648	17,231
PLAN NET POSITION - RESTRICTED F	OR POSTEMPLOYM	ENT HEALTHCARE	
BEGINNING OF YEAR	9,417	267,840	277,257
END OF YEAR		\$ 294,488	

SCHEDULES OF ADMINISTRATIVE EXPENSES AND OTHER

For the Fiscal Years Ended June 30, 2019 and 2018

	2019				2018	
		Original Budget		Actual	Under Budget	Actual
Personnel services	\$	3,340,000	\$	2,961,017	\$ 378,983	\$ 2,899,282
Non-personnel/equipment ¹		1,287,000		1,041,045	245,955	1,208,473
Professional services		1,172,000		830,239	341,761	884,965
Amortization expense ²		-		133,809	-	-
TOTAL ADMINISTRATIVE EXPENSES & OTHER	\$	5,799,000	\$	4,966,110	\$ 966,699	\$ 4,992,720

¹ \$416,700 and \$447,000 of investment-related expenses including data processing, travel, and supplies were included in the budget approved by the Board for FY 18-19 and FY 17-18, respectively. The actual amounts spent for those items are included in the Schedule of Investment Expenses - Other Investment Fees.

SCHEDULES OF PAYMENTS TO CONSULTANTS

For the Fiscal Years Ended June 30, 2019 and 2018

Firm	Nature of Service	2019	2018
Cheiron Inc	Actuarial consultant	\$ 209,491	\$ 174,400
Cortex Applied Research, Inc	Governance consultant	40,038	39,226
Grant Thornton LLP	External auditors	101,343	62,232
Ice Miller	Legal tax counsel	12,464	22,369
Josephine's Professional Staffing	Temporary investment staff	-	21,753
Levi, Ray, & Shoup	Web development and maintenance	16,832	17,424
Levi, Ray, & Shoup	Programming changes and business continuance services	11,379	22,137
Medical Director/Other Medical	Medical consultants	76,988	119,295
Pension Benefit Information	Reports on deceased benefit recipients	3,900	4,238
Reed Smith LLC	Fiduciary and general counsel	116,323	171,209
Saltzman & Johnson	Legal counsel	54,369	78,398
Trendtec Inc	Temporary staff	185,687	145,135
Other Consultants	Miscellaneous professional services	1,425	7,149
TOTAL		\$ 830,239	\$ 884,965

² Amortization expense is excluded from the budget totals since it is a non-cash item.

SCHEDULES OF INVESTMENT EXPENSES

For the Fiscal Years Ended June 30, 2019 and 2018

Investment Managers' Fees	2019	2018
Public equity	\$ 2,145,500 \$	2,415,107
Private equity	1,000,138	642,901
Growth real estate	862,370	-
Private debt	546,495	1,124,172
Short-term investment grade bonds	85,453	1,063,466
Core real estate	771,969	1,824,508
Commodities	867,908	620,676
Market neutral strategies	3,548,632	2,342,868
Total investment managers' fees	9,828,465	10,033,698
Other Investment Fees		
Investment consultants	592,500	590,000
Custodian bank	524,171	342,504
Investment legal fees	95,527	118,081
Other investment fees	23,255	53,148
Total other investment fees	1,235,453	1,103,733
TOTAL INVESTMENT EXPENSES	\$ 11,063,918 \$	11,137,431

Investment Section





Pension Trust and Postemployment Healthcare Trust Funds of the City of San José, California



City of San José
Federated City Employees' Retirement System
Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018

Report of Investment Activity



MEKETA INVESTMENT GROUP

BOSTON MA CHICAGO IL

August 29, 2019

MIAMI FL NEW YORK NY

Mr. Roberto L. Peña

PORTLAND OR

Director

SAN DIEGO CA

San Jose Federated City Employees' Retirement System

LONDON LIK

1737 North First Street, Suite 600

San Jose, CA 95112-4505

Dear Mr. Peña:

Please find below a summary of the market environment and System performance for the 2019 fiscal year.

2019 FISCAL YEAR MARKET ENVIRONMENT OVERVIEW^{1,2}

While the early start of 2019 may have been characterized by worries of rising interest rates globally, this quickly shifted throughout the year as increasing concerns of a slowing global growth – made worse by trade tensions between the U.S. and China – prompted major central banks to consider more accommodative policies. In the U.S., the Federal Reserve held federal funds rate steady at its June meeting, while signaling the potential for future interest rate cuts. The European Central Bank (ECB) for its part also held rates steady with a potential for further reduction, and the Bank of Japan showed no signs of pulling back from its unprecedented monetary stimulus. Of all the central banks, the U.S. has the most room to lower rates, while Japan and Europe are already in negative territory. With growth revisions for 2019 and 2020 (IMF forecast of 3.2% and 3.5% respectively) down by 0.1%, key risks to monitor will not only be continued trade tensions between U.S. and China, but the declining growth in China, political uncertainty in Europe, and risks related to Brexit dealings.

While global equities rebounded significantly from December lows to close out fiscal year 2019, the past twelve months certainly saw heightened volatility, with the VIX reaching 36 in December before re-tracing to 25 and further retreating to more muted levels by the June 30 fiscal year end. Nonetheless, for much of the fiscal year, most markets embraced a "risk on" appetite. The following table illustrates the volatility experienced, using VIX as a proxy:

U.S. equities, as represented by the Russell 3000 Index, closed out the fiscal year with a 9.0% return. Non-US equity markets, however, did not fare as well. Emerging markets delivered negative returns in the first half of the year, to close out the fiscal year with a 1.2% return. Trade tensions and a strong U.S. dollar strength continued to weigh down on results. The MSCI EAFE Index, representing foreign developed

Relevant market reference benchmark: domestic equity (Russell 3000), international developed equity (MSCI EAFE), emerging markets (MSCI Emerging Markets), and high yield (Barclays High Yield).

² Time-weighted rate of return based on the market rate of return is used as the basis for the calculation.

August 29, 2019 Page 2 of 5

markets, followed closely behind returning 1.1%. Overall growth has declined in Europe given the slowdown in Germany, uncertainties related to Brexit, and trade tensions.

The trend of U.S. growth stocks outperforming value stocks persisted throughout the year, with growth holding a 3.3% lead over value, as the Russell 3000 Growth closed out the year with a 10.6% return, versus 7.3% for the Russell 3000 Value.

Within fixed income, investment grade markets closed out the year on a strong note. Throughout out the first half of FY 2019, concerns over rising interest rates and inflation created headwinds. In the U.S., the Federal Reserve increased short-term interest rates to a range of 2.3% to 2.5% by December but this hawkish stance turned dovish in the second half as central banks abruptly shifted to a more accommodative policy by early January. Investment grade credit and high yield rebounded alongside the equity markets as a result, with the high yield market posting one of the strongest returns in nearly 10 years (7.3% for the quarter ending March 31, 2019). Despite this, the deterioration of U.S. and Chinese trade talk in May prompted a temporary drop in global equity prices and U.S. Treasury yields. The 3mo-10yr segment of the yield curve inverted for the second time in 2019, causing investors to question whether this might be a sign of worse things to come. Historically, the yield curve has been relied on as a barometer of economic strength and potential recession indicator. Inversions in the yield curve have historically preceded recessions, with a few exceptions.

Over the trailing year, the broad U.S. bond market, represented by the Bloomberg Barclays Aggregate Index, returned 7.8%, high yield bonds returned 7.5% and TIPS returned 4.8% while emerging market bonds (as represented by JPM GBI-EM Global Diversified Index) posted a 9.0% return for the year.

Within other asset classes, natural resource stocks (S&P Global Natural Resources Index) returned -4.0%, commodities (Bloomberg Commodity Index) lost -6.8%, and REITs (MSCI U.S. REIT Index) gained 11.1%. U.S. crude settled at \$58.52/ barrel, down roughly 10% from prior fiscal year end levels, but well above the December 31 value of \$47.84. OPEC-led production cuts along with sanctions on Iran and Venezuela drove the higher prices though tempered by the slowing global economy.

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FISCAL 2020 OUTLOOK

Looking forward, there are several issues that we will continue to monitor. First is the slowing global growth. After increasing rates over the last several years from record lows, major central banks have shifted to a more accommodative stance. With little room for a reduction in rates outside the U.S., there is speculation of other policy measures being implemented such as negative rates and/or further quantitative easing implemented. Outside of the U.S., European economic conditions appear bleak as we continue to witness political uncertainty and ongoing structural issues. Brexit negotiations remain a concern. Within emerging markets, and China specifically, growth has slowed. Second, in the U.S., equity markets remain extended despite the volatility spike in the fourth quarter, and the current economic cycle has been one of the longest on record now going into the tenth year. Also in the U.S., trade policy remains a key issue. We also see declining growth in China and the impact of trade tensions with the U.S.

Given slowing global growth, compounded by trade tensions, major central banks have pivoted to a more dovish tone. The U.S. and ECB are expected to start cutting rates and could move back to quantitative easing, while the BOJ maintains its massive monetary support. These policies have been a major boost to the markets and could support global growth. The key questions remain whether or not they are pivoting too early and if this rally in risk assets is short-lived or more sustainable. Note: following the close of fiscal year 2019, the Federal Reserve did cut rates by 25 basis points.

The U.S. economy and equity markets have experienced a long period of growth since the Global Financial Crisis due in part to central bank support. Late cycle dynamics of low unemployment and rising inflation are in place, and valuations are stretched for equites, despite the recent pullback witnessed in December 2018. With the long economic and market expansions, and the many unresolved political and trade issues, we could see heightened volatility in the remainder of 2019. Other key issues in the U.S. will be policy uncertainty related to tariffs, immigration, and strategic alliances.

China has the second largest economy behind the U.S. After a long period of growth driven by government investment and exports, it continues to manage a repositioning of its economy to one based increasingly on domestic consumption. This rebalancing process has led to a slowing of the economy which has hurt countries that have become reliant on its trade. The recent focus on tariffs between the U.S. and China is another key issue that could have a disproportionately negative impact on China, as the U.S. is one of their largest export destinations (18% of exports). Another core issue in China remains its high debt levels, particularly in the corporate sector.

August 29, 2019 Page 4 of 5

Europe continues to have the structural problem of maintaining a single currency and central bank, while fiscal policy rests with each individual country. Consequently, countries that are experiencing financial difficulties are unable to use the traditional tools of lowering interest rates and devaluing their currency to stimulate growth. This has caused tensions within the Eurozone, as highlighted by the recent elections in Italy and the prior elections in Germany, as well as the on-going issues in Greece. Given the size of Italy's bond market and economy within the euro area, an Italian sovereign debt crisis or its departure from the euro would have significant consequences. Further, Brexit uncertainty continues to affect the Eurozone. In March 2019, Theresa May's withdrawal proposal was rejected by Members of Parliament for a third time, increasing the likelihood of a no-deal Brexit when the current extension expires in October 2019. Note: following the close of fiscal year 2019, Boris Johnson became UK Prime Minister in July, increasing the likelihood of a no-deal Brexit. We will continue to monitor these issues and others.

PLAN INVESTMENT RESULTS AND ASSET ALLOCATION FOR THE RETIREMENT SYSTEM^{1,2}

The San Jose Federated City Employees' Retirement System had \$2.1 billion in assets at the end of the 2019 fiscal year. For the fiscal year, the Retirement System returned +4.3% net of fees, outperforming the Policy Benchmark (+3.9%) and Investable Benchmark (+3.7%). The Retirement System's return fell short of the 6.75% assumed actuarial rate of return, though it has exceeded that rate in six of the past ten fiscal years. The Retirement System's standard deviation of returns was 8.1%, exhibiting lower volatility than the peer median (8.8%).

Key factors for the Retirement System's performance for the fiscal year, relative to the Policy Benchmark³:

- *Private Markets*: The Retirement System's Private Markets Program continued to expand throughout the fiscal year as new commitments were made in various asset classes. As of the end of the 2019 fiscal year, Private Markets represented 24.8% of the Retirement System. Private Markets returned +7.3% for the fiscal year, outperforming the Private Markets Benchmark return of +6.0%.
- Global Equity: The Retirement System's Global Equity allocation returned +6.4% for the fiscal year, outperforming the MSCI ACWI IMI Net USD return of +4.6% over the same period. The Retirement System's two Global Equity managers each outperformed their respective benchmarks over the 2019 fiscal year period.
- Other: The Retirement System's Other aggregate returned +2.8% for the fiscal year, outperforming the Other Benchmark by 230 basis points. Over the fiscal year, we estimate that Other added approximately 0.2% to the Retirement System's return, relative to the Policy Benchmark, driven by benchmark outperformance within Core Real Estate, Commodities, and TIPS.

 $^{^{\, 1} \,}$ Performance figures calculated by custodian bank.

² Time-weighted rate of return based on the market rate of return is used as the basis for the calculation.

³ Attribution calculated with Brinson-Fachler Model using custodian data.

August 29, 2019 Page 5 of 5

PLAN INVESTMENT RESULTS AND ASSET ALLOCATION FOR THE HEALTH CARE TRUST^{1,2}

The San Jose Federated Retiree Health Care Trust had \$297.8 million in assets at the end of the 2019 fiscal year. For the 2019 fiscal year, the Health Care Trust returned +4.2% net of fees, outperforming the Policy Benchmark (+3.9%). The Trust's outperformance was primarily due to the Other aggregate, driven by Core Real Estate and Commodities outperformance. The Trust experienced strong returns in its Growth aggregate, returning +5.7% for the fiscal year and outperforming its Public Equity Benchmark by 30 basis points while the Zero Beta aggregate (+2.1%) underperformed its benchmark, the ICE Bank of America Merrill Lynch 91 Days Treasury Bills TR, by 20 basis points.

SUMMARY

Performance for the San Jose Federated City Employees' Retirement System over the 2019 fiscal year exceeded its benchmarks. We believe that the Retirement System's portfolio has been enhanced and has a high probability of achieving the actuarial rate over the long-term, while exhibiting lower volatility than peers. We are looking forward to continuing our work with Staff and the Board of Administration to assist the Retirement System in meeting its obligations to participants.

Sincerely,

Laura Wirick, CFA, CAIA

Principal

1 1.

Larry Witt, CFA Consultant

LBW/HS/LSW/CJT/jls

Hannah Schriner Consultant

Chris Theordor Investment Analyst

Performance figures calculated by custodian bank.

² Time-weighted rate of return based on the market rate of return is used as the basis for the calculation.

Statement of Investment Policy

PENSION - INCLUDES THE 401 (H) INVESTMENTS

EXECUTIVE SUMMARY

The purpose of this document is to set forth the goals and objectives of the San Jose Federated City Employees' Retirement System, and to establish guidelines for the implementation of investment strategy.

This document will be reviewed at least annually by the Board of Administration of the San Jose Federated City Employees' Retirement System ("Board"). Any revisions to this document may be made only with the approval of the Board.

The Board of Administration recognizes that a stable, well-articulated investment policy is crucial to the long-term success of the System. As such, the Board members have developed this Investment Policy Statement with the following goals in mind:

- To clearly and explicitly establish the objectives and constraints that govern the investment of the System's assets,
- To establish a long-term target asset allocation with a high likelihood of meeting the System's objectives given the explicit constraints, and
- To protect the financial health of the System through the implementation of this stable long-term investment policy.

This document includes detail on the System's adopted asset allocation policy (summarized in Appendix A) and process, including the selected Functional asset class structure and the System benchmarks approved by the Board. It also includes the System's policy on manager selection, retention, evaluation, and termination, as well as the System's adopted risk policy, with specific risk parameters summarized in Appendix B.

Throughout this document, expected returns and volatilities were based on capital market assumptions from the general consultant.

I. SAN JOSE FEDERATED CITY EMPLOYEES' RETIREMENT SYSTEM'S GOALS

The San Jose Federated City Employees' Retirement System was established to provide retirement income for San Jose Federated City Employees' Retirement System employees and their families. The System's assets are structured to provide growth from capital gains and income, while maintaining sufficient liquidity to meet beneficiary payments.

II. INVESTMENT OBJECTIVES

The investment strategy of the San Jose Federated City Employees' Retirement System is designed to ensure the prudent investment of System assets in such a manner as to provide real growth of assets over time while protecting the value of the assets from undue volatility or risk of loss.

A. Risk Objectives

- **1.** To accept the optimal level of risk required to achieve the System's return objective as stated immediately below.
- 2. To target total portfolio investment risk consistent with the investment beliefs and strategic goals set forth by the San Jose Federated City Employees' Retirement System Board.
- 3. To consider the financial health of the Sponsor when assuming investment risks.
- **4.** To use diversification to minimize exposure to company and industry-specific risks in the aggregate investment portfolio.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

B. Return Objective

1. In a manner consistent with the goals stated in Section I above, to manage the System's assets as to achieve the highest, reasonably prudent return possible.

III. INVESTMENT CONSTRAINTS

A. Legal and Regulatory

The San Jose Federated City Employees' Retirement System is a defined benefit retirement program for certain employees of the City of San Jose in the State of California. The terms of the System are described in the San Jose Municipal Code.

B. Time Horizon

The System will be managed on a going-concern basis. The assets of the System will be invested with a long-term time horizon (ten to twenty years or more), consistent with the participant demographics and the purpose of the System.

C. Liquidity

The Board members intend to maintain sufficient liquidity to meet at least five years of anticipated beneficiary payments, net of System sponsor and member contributions.

D. Tax Considerations

The System is a tax-exempt entity. Therefore, investments and strategies will be evaluated only on the basis of expected risks and potential returns.

IV. RISK AND RETURN CONSIDERATIONS

The Board members accept the risks associated with investing in the capital markets (market risks), but will minimize wherever possible those risks for which the System is unlikely to be compensated (non-market or diversifiable risks).

V. DIVERSIFICATION

The Board members of the San Jose Federated City Employees' Retirement System recognize that an important element of risk control is diversification. Therefore, investments will be allocated across multiple classes of assets, chosen in part for their low correlation of expected returns. Within each asset type, investments will be distributed across many individual holdings, with the intention of further reducing volatility.

The specific degrees of diversification within asset classes will be addressed in each separate account manager's investment guidelines, or in each commingled manager's fund documents.

The purpose of the functional classifications and major asset classes are defined in the language and table below.

A. Functional Sub-portfolios

The investment strategy for the Investment Program employs three functional sub-portfolios to construct the comprehensive asset allocation. The allocation to the sub-portfolios is assessed at least annually and is based on projected capital market assumptions. The Chief Investment Officer ("CIO") shall review the relative size and composition of these sub-portfolios and advise the Investment Committee ("IC") of any necessary revisions to the allocation among the sub-portfolios.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- 1. Growth Sub-portfolio: The purpose of the Growth Sub-portfolio is to grow invested assets over the long-term in order to pay future benefits. This portfolio is characterized by a long investment horizon and can, therefore, accept a higher level of volatility. Assets in this portfolio may be volatile, have reduced liquidity, and derive the bulk of their return from capital appreciation. These assets include public and private equity, corporate and other debt with credit risk premiums, private real estate and other private assets. The success of this portfolio will be measured primarily by compounded annual growth rates in conjunction with the annualized standard deviation of returns as the primary measure of risk. Performance evaluation will, therefore, focus on the long-term total risk-adjusted return of the portfolio.
- 2. Zero Beta Sub-Portfolio: The purpose of the Zero Beta Sub-portfolio is to ensure that the overall (total portfolio) a) is relatively immune from market fluctuations while providing a source of alpha b) is a source of capital for purchasing undervalued assets in the Growth sub-portfolio, and c) has adequate assets available to pay benefits over an extended timeframe (the immunized cash portfolio). It will contain an "absolute return" program that invests in risk assets in isolation but whose combined long and short betas are relatively neutral to market movements, an immunized cash portfolio, as well as cash and cash-like assets such as short-term bonds, derivatives, and other investments that provide fixed, contractual cash flows with a minimum level of credit risk. For the immunized cash portfolio, the Board has established a target allocation amount of up to 60 months' worth of projected benefit payments in the Zero Beta Sub-portfolio, which will be drawn down and replenished annually. The Zero Beta portfolio is expected to provide a stable offset to the rest of the portfolio during periods of severe market stress and to effectively dampen the market volatility across the entire portfolio. The success of the Zero Beta Sub-portfolio will be measured by its ability to offset declines in value in the Growth Sub-portfolio, as well as its ability to provide liquidity during times of market stress.
- 3. Other Sub-Portfolio: The purpose of the Other Sub-portfolio is to ensure that the overall portfolio is specifically protected against inflation risks while also providing for further diversification. The success of the Other sub-portfolio will be measured by its ability to protect the portfolio from inflation risk while also providing an additional source of return and diversification.

B. Interaction between the Functional Sub-Portfolios

The allocations to the Growth, Zero Beta, and Other sub-portfolios will vary over time. When Growth assets are undervalued, the Zero Beta Sub-portfolio will act as a source of funds and when Growth assets are overvalued the Zero Beta sub-portfolio will act as a use for harvested Growth portfolio returns. The Growth and Other sub-portfolios will be subject to the volatility of the markets in which each functional sub-portfolio invests. In order to reallocate between the functional sub-portfolios, the CIO and the General Consultant will conduct an annual capital review to assess the relative value and risks associated with each asset class and deliver a review of the capital markets to the Board. The Consultant will provide the Board current forward-looking risk and return assumptions for all major asset classes. In conjunction with this review, the CIO will provide a recommendation of how best to allocate assets within each functional subportfolio. If necessary, the CIO will recommend changes in target allocations to the underlying asset classes in order to deploy the Investment Program's assets effectively in the upcoming year. While considering changes to the allocation to each functional sub-portfolio, the CIO will view the totality of all functional portfolios, and consider the impact of changes to the overall risk and return profile of the total portfolio.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Public Equity - Growth

The purpose of Public Equity is to provide the System exposure to the total return due to equity capital owners, including exposure to capital appreciation from economic growth, while managing volatility relative to the equity market.

Private Markets - Growth

The purpose of Private Markets is to provide the System exposure to asset growth and income while diversifying the portfolio and capturing an illiquidity premium.

Emerging Market Bonds - Growth

The primary purpose of Emerging Market Bonds is to provide the System exposure to rates and credit risk within emerging markets.

Cash - Zero Beta

The purpose of Cash is to maintain sufficient liquidity for System benefit payments and expenses.

Short-Term Investment Grade Bonds - Zero Beta

The purpose of Short-Term Investment Grade Bonds is to provide the System a return while mitigating risk.

Market Neutral Strategies - Zero Beta

The purpose of Market Neutral Strategies is to produce alpha based returns while reducing overall System volatility and increasing Sharpe ratio.

Bonds (Immunized Cash Flows) - Zero Beta

The purpose of Bonds (Immunized Cash Flows) is to provide liquid funds for expected outflows and allow for other assets to be invested in an illiquid fashion.

Treasury Inflation-Protected Securities (TIPS) - Other

The purpose of TIPS is to provide exposure to inflation in addition to interest rates.

Core Real Estate - Other

The purpose of Core Real Estate is to produce the System income and price appreciation while maintaining a low correlation to both stocks and bonds.

Commodities -Other

The purpose of Commodities is to increase the System's portfolio diversification and provide a hedge against unexpected inflation.

Core Bonds -Other

The purpose of Core Bonds is to produce returns and income for the System by providing exposure to rates and credit risk.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

VI. ASSET ALLOCATION POLICY

Asset Allocation and Portfolio Construction

- **A.** The Board recognizes that establishing an appropriate strategic asset allocation (SAA) portfolio is critical to the long-term success of the investment program, as asset allocation is the single biggest determinant of the expected risk and return of the System.
- **B.** In arriving at the SAA, the Board shall follow a building block approach whereby it approves a series of benchmark portfolios, each offering expected risk and return characteristics that are preferable to the one before it. This building block approach is further explained below:
 - 1. Liability Benchmark Portfolio (LBP). As the first step in the portfolio construction process, the Board shall approve a LBP. The LBP is the portfolio that offers the lowest possible expected funding risk, where funding risk is defined as the risk that assets will grow at a slower rate than the system's liabilities. The LBP is expected to consist solely of bonds that match the duration of the liabilities.
 - 2. Low-Cost Passive Portfolio (LCPP). If the Board believes a portfolio can be constructed that offers expected return/risk characteristics that are preferable to those of the LBP, but does not wish to invest significant resources in staff and consultants, the Board would then approve a LCPP. The LCPP would be simple to construct and implement and would consist only of public market asset classes managed on a passive basis. It would exclude private market asset classes and hedge funds, which are complex and costlier to implement.
 - 3. Strategic Asset Allocation Portfolio (SAAP). If the Board believes an even more diversified portfolio would enhance the risk-adjusted return characteristics of the System and justify a meaningful investment in staff and consulting resources, the Board would then develop and approve an SAAP. The SAAP would be more complex than the LCPP because it would likely include private market asset classes and/or hedge funds. The staff and consulting resources required to manage such a portfolio would significantly increase the cost and administrative complexity of the System.
 - **4.** *Investable Benchmark Portfolio* (IBP). The Benchmark Portfolio would include the same underlying benchmarks as the SAAP, but would use an actual invested weight for each asset class. This will account for weighting differences to the SAAP in asset classes that take more than one year to invest (private markets asset classes).
- C. The Board believes the above building-block approach represents a thoughtful way of approaching its asset allocation decisions, as it makes each step in the portfolio construction process clear and explicit. It also requires the Board to consider and confirm the rationale for accepting the potential incremental risk, complexity and cost introduced by moving from one portfolio model to the next. Their relative merits would include evaluation on a net-of-expenses basis.
- **D.** The benchmarks approved by the Board as of the date of this document, and the expected return of each, are described below:
 - 1. A LBP consisting of a market benchmark with a duration profile similar to the System's liabilities. The expected return for the LBP is 3.1% (20 years/geometric mean) as of the date of this document.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- 2. A LCPP consisting of the following asset classes and targets, and the broad, commonly-used market indices that could be used for each asset class, are shown in Appendix A. The expected return for the LCPP is 7.0% (20 years/geometric mean) as of the date of this document.
- **3.** A SAAP consisting of the following asset classes and targets is shown in Appendix A. The expected return of the SAAP is 7.8% (20 years/geometric mean) as of the date of this document.

Asset Allocation Tools & Methods

- A. The LBP will be re-evaluated annually following the results of the annual actuarial study. LCPP and SAPP shall be established and modified based on the results of formal asset allocation studies performed approximately every three years or when a significant market correction occurs. The capital market assumptions (CMA) used in such studies shall be reviewed and updated annually or when the S&P 500 experiences a decrease of more than 20% from peak. The Board shall consult with the general investment consultant in connection with such asset allocation studies and CMA reviews.
- **B.** Asset allocation studies shall be designed to ensure rigorous and objective analysis, and minimize decision-making bias by:
 - 1. Requiring the use of a portfolio construction engine ("Engine"); and
 - 2. Requiring that the Board and IC always focus first on establishing the most reasonable and defensible inputs to the Engine. That is, if the Board is uncomfortable with the results of the Engine, it shall respond by reviewing the reasonableness of the inputs to the Engine, rather than simply modifying the results.
- **C.** When arriving at the LCPP and the SAAP, asset allocation studies shall include the four basic steps outlined below:
 - 1. Step 1: Inputs
 - a. For each study, the Board shall approve the inputs to the Engine including:
 - Permitted asset classes (Permitted asset classes for the LCPP shall include only public markets and permitted asset classes for the SAA Portfolio shall include both public and private markets);
 - · CMAs; and
 - Material constraints (e.g. maximum allocations to certain asset classes), along with supporting rationale.
 - b. The CIO shall propose the inputs to the IC, with prior input from the Board's general investment consultant, and work with the investment consultant throughout the process to make subsequent revisions to inputs, based on feedback from the IC.
 - c. The Board, IC, CIO and investment consultant are expected to reach a consensus regarding the above inputs and the Board shall formally approve them. Staff shall document the process by which it arrives at its recommended inputs.
 - 2. Step 2: Modeling and Analysis
 - a. The investment consultant will incorporate the approved inputs into the Engine to be used to identify and analyze potential asset allocation choices for each study and present the results to the CIO.
 - b. The Board expects that the Engine will rely on mean-variance optimization ("MVO").

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- c. The Board shall also consider the results of the MVO analysis under additional constraints to ensure adherence with approved risk limits including:
 - Stress testing, including historical scenario analysis and factor-specific testing;
 - · Liquidity analysis under normal and stressed conditions; and
 - Cash flow management requirements for the immunization of certain projected benefits and expenses.

3. Step 3: Recommendations

- a. The CIO will present the current asset allocation and a number of reasonable alternatives along the so-called "efficient frontier" for the Board to consider.
- b. In presenting the alternatives, the CIO initially will present only the return/risk characteristics of each alternative and will not reveal the underlying asset class allocations (i.e. "blind" format). This will allow the Board/IC to focus initially on the return/risk implications of each alternative, rather than the underlying asset allocations.
- c. After the Board has engaged in a preliminary discussion and analysis of the alternatives, the underlying asset allocations of each alternative will be revealed for further consideration.
- d. The Board/IC may provide feedback to the CIO and investment consultant, which may require further analysis and a request for revised recommendations for the Board/IC to consider.

4. Step 4: Approvals

- a. The Board/IC will review the final analyses and recommendations from the CIO and general consultant and approve:
 - Low Cost Portfolio Benchmark weights; and
 - Strategic Asset Allocation Portfolio weights, targets and ranges (maximum minimum).

Rebalancing

- A. The CIO shall adhere to the SAAP asset and sub-asset class "targets" approved by the Board and shall rebalance to within the approved range at least quarterly if the actual weights at the sub-asset class levels are not within 10% of the approved target, considering the cost of more frequent rebalancing. For example, if the target allocation for an asset class is 20%, re-balancing will be triggered quarterly when the actual allocation for the asset class deviates by +/- 2% (i.e. 10% x 20%, reaching 18% or 22%). The CIO may use discretion to rebalance to within the approved range at more frequent intervals than quarterly, and when actual weights are within 10% of the approved target, subject to an assessment of market risk, active risk, and transactions costs. Synthetic rebalancing through an overlay provider may also be used when appropriate. The Immunized Cash Flows portfolio is exempt from this rebalancing provision, as it is amortizing by design.
- **B.** Total System active risk (i.e. tracking error) is to be maintained below 3%. While asset class exposures may fall within acceptable capital allocation ranges as noted above, total System tracking error is not to exceed this 3% threshold.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Evaluating Asset Allocation Decisions

- **A.** The Board shall periodically evaluate the effectiveness of its asset allocation decisions using the above portfolio benchmarks (i.e. Liability Portfolio Benchmark, Low-Cost Passive Portfolio, and Strategic Asset Allocation Portfolio).
- **B.** The following table uses hypothetical returns to illustrate how the above benchmarks shall be used to evaluate the Board's asset allocation decisions.

Portfolio Benchmark	Net Return (%)	Value Added (%)	Conclusions
A. Liability Benchmark Portfolio	3.1	N/A	
B. Low Cost Passive Portfolio	7.0	3.9 (B - A)	By deviating from a portfolio with modest funding risk to a low-cost, passive portfolio that does not require significant staff or consulting resources, the Board shall have added net value of 3.2%
C. SAA Portfolio	7.8	0.8 (C - B)	By enhancing the passive portfolio with investments in private markets and hedge funds, the Board added net value of 0.8%

- **C.** The Board will evaluate two additional benchmarks in order to assess the value added by the CIO, investment staff, and the investment consultants:
 - Actual Portfolio: This is the actual portfolio implemented by the CIO and investment staff with support from investment consultants. The Actual Portfolio includes private markets and hedge funds and reflects any active management exercised by the CIO and the underlying investment managers, subject to Board-approved policies and CIO-approved procedures.
 - 2. Investable Benchmark Portfolio: The Investable Benchmark Portfolio is identical to the SAAP but is adjusted for the fact that the SAAP is not constantly "investable" with respect to private market asset classes. For private markets, the Investable Benchmark Portfolio would apply the best available private market benchmarks and, for weighting purposes, would reflect the pacing Systems for private markets (assuming the pacing Systems are reasonable). For example, if the private equity pacing System called for 15% to be invested in private equity by the end of the performance measurement period, then the Investable Benchmark Portfolio would reflect a 15% allocation to private equity, even though the SAA Portfolio calls for 22% to be invested in private equity.

The following table illustrates how the performance of the CIO would be evaluated. Again, the returns are hypothetical and for illustration purposes only.

	Net Return	Value Added	
Portfolio Benchmark	(%)	(%)	Conclusions
A. Actual Portfolio	7.5	0.5	CIO outperformed the Benchmark Portfolio
		(A - B)	from these sources:
			i) manager selection (including security
			selection effects) and
			ii) other effects
B. Benchmark Portfolio	7.0	N/A	

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- **D.** For the benefit of stakeholders, the Board shall also measure and report for comparison purposes, on a quarterly basis, the actual portfolio return relative to the return of the LCPP and relative to commonly cited benchmarks, including:
 - 1. A 60% equity and 40% fixed income portfolio ("60/40 Portfolio") comprised of 60% MSCI ACWI IMI (net, unhedged) and 40% Bloomberg Barclays Global Aggregate Bond Index: and
 - 2. A peer group benchmark consisting of other U. S. public pension Systems similar in size to the system, as reported in the InvestorForce Public DB > \$1B Net.

VII. MANAGER SELECTION, RETENTION, EVALUATION & TERMINATION POLICY Background

- A. The Board has delegated to the CIO the authority to select and terminate all investment managers of the System subject to constraints and parameters contained herein. Such authority shall be further subject to Manager Selection, Retention, Evaluation & Termination Procedures ("Procedures"), approved by the CIO, that provide more detailed constraints and parameters.
- **B.** It is the Board's intention that the CIO shall have the necessary authority and resources to effectively select, retain, evaluate, and terminate investment managers with the exceptions of venture capital and co-investments (due to the nascent nature of the venture capital program and investment concentration risk of co-investments). The Venture Capital program shall be approved by the Investment Committee and the Board prior to its implementation. These exceptions do not pertain to funds where an external manager has discretion.
- **C.** Accordingly, the CIO shall have the authority to:
 - 1. Manage the Investment Personnel of the System, including:
 - a. Recommending to the CEO the appointment and duties of all professional, technical, and clerical employees of the Investment Division;
 - b. Directing and supervising all Investment Personnel on a day-to-day basis; and
 - c. Evaluating all Investment Personnel and managing their professional development.
 - **2.** Select and terminate investment consultants to assist in the selection, retention, evaluation, and termination of investment managers.
 - a. The CIO may use the services of the general investment consultant appointed by the Board. Alternatively, if the services of the general consultant can be unbundled to separate manager research services, the CIO may select a consultant(s) of his or her choice to carry out manager research services that would otherwise have been included in the general investment consultant scope of services.
 - b. The CIO shall ensure that the total fees and expenses associated with the consultants he or she selects are reasonable and shall provide a report of such fees and expenses to the Investment Committee and the Board on at least a quarterly basis.
 - c. While the CIO shall have the authority to select and terminate investment consultants to assist staff in selecting, retaining, evaluating and terminating investment managers, the Board shall approve all contracts with investment consultants selected by the CIO to ensure such contracts reflect fair and reasonable value for the System.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- **3**. Delegation of authority to the CIO to select and terminate investment managers reflects the Board's desire to:
 - a. Promote efficiency and effectiveness in the manager selection and termination processes;
 - b. Focus the Board's time and attention on investment policy, asset allocation, and oversight, rather than manager selection and termination; and
 - c. Establish clear accountability on the part of the CIO and investment staff for manager selection, retention, evaluation, and termination.

General Constraints and Parameters

- **A.** The CIO's authority to select and terminate investment managers shall be subject to the following general constraints and parameters:
 - 1. Investment managers shall meet the following **minimum qualifications** to be selected to manage any assets of the fund:
 - a. Be **registered as an investment advisor** under the Investment Advisor's Act of 1940 or comparable legislation, unless the manager represent and warrants that it is exempt from such registration under applicable law.
 - b. Agree to enter into a contract with the System requiring them to perform their services consistent with the fiduciary services established under (a) the Investment Advisor's Act of 1940; (b) California law applicable to fiduciaries of public employee retirement systems, which includes the California State Constitution, Art. XVI sec. 17 and the San Jose Municipal Code and/or (c) terms and conditions substantially comparable to the foregoing that are satisfactory to the System.
 - 2. The nature and size of the manager's mandate shall be consistent with:
 - a. The asset allocation policy of the System;
 - b. Applicable constraints (e.g. manager or strategy concentrations) contained in this Investment Policy Statement; and the total System active risk limit(s)¹ contained in the risk section of this IPS
- ¹ Active risk or tracking error limits may apply at the total fund level, or another aggregation (e.g. public markets assets only, excluding private markets). Risk limits may also be based on concentration, expressed for example, as a percentage (%) of some total amount of risk.
 - **3.** Notwithstanding paragraph 2) b) above, the CIO shall not approve the selection of an investment management firm for mandates that exceed the following limits:
 - **4.** When a market movement is the cause of a breach in the following limits, it should be reported to the IC at the earliest of a mutually agreed-upon time during which the Investment Committee could convene with a quorum, or at the next regularly scheduled Investment Committee meeting, along with a report on how the breach was addressed, or a recommendation to address the breach.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Basis*	Description	Management Firm Concentration Limit ¹
	Separately managed accounts (active)	15%
	Commingled funds and SMAs (public, passive)	No limit ²
Vehicle	Commingled funds (public, active)	15%
	Commingled funds (hedge funds)	15%
	Commingled funds (private strategies)	15%³
	Passive strategies	No limit
Public Markets ⁴	Active strategies (excluding hedge funds)	10%
	Hedge funds	10%
		Transaction Limit ⁵
	Total \$ commitment to asset class (e.g. Private Debt)	150% of Board-approved pacing plan (cumulative) ⁶
Private Markets (excluding	Primary fund commitment (1st allocation to mgr.)	2%**
venture capital)	Primary fund commitment (follow-on)	3%**
-	Secondary fund investment	1%**

^{*} To be selected, the manager must satisfy the "Vehicle" constraint and the appropriate "Public Markets" or "Private Markets" constraints

- ¹ Percentage (%) of total System assets allowable per investment manager.
- ² Rationale: Fund is constrained by the asset allocation. This is the "default" option for investing, and scale determines pricing.
- ³ For private strategies, limit applies to the capital invested plus future callable commitments.
- ⁴ Some of these limits related to public markets may be "interim", to be replaced by risk-based limits for example.
- ⁵ Percentage (%) of total System assets allowable per investment manager
- ⁶ This would allow, for example, a commitment that in Year 1 that is 50% above "plan". The "cumulative" provision would allow for a "catch-up" for any slower-than-Systemed investments in prior years.

Manager Selection

Manager Selection Process

- **A.** The process used to select an investment manager shall, at a minimum, include the following elements:
 - 1. Imposition of a Quiet Period/No Contact policy. Board members and staff shall not have contact with individuals or entities who are seeking engagement by the System in response to an RFP, RFI, purchase order, or other solicitation or contracting process, except in accordance with the published terms of the contracting process or except for, and limited to, contact necessary in connection with ongoing System business with an individual or entity. The System's RFPs, RFIs, and other contract solicitations shall include notice that a "quiet period" will be in place from the beginning of the contracting process until the selection of the successful party such that these communications shall not occur, except as provided above. As part of the contracting process, potential contracting parties shall be required to disclose potential conflicts of interest. Board members and staff shall not use or attempt to use influence, outside of the individual authority to cause the organization to enter into a contract with any individual or entity. Board members and staff may refer individuals or entities for consideration for contracting to the appropriate System staff member(s) responsible for the particular procurement or contract process.

^{**} Percentage (%) of total System assets

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- 2. Identification of a mandate to implement the Board's SAA Policy Portfolio.
- Comprehensive operational due diligence performed by the investment staff, qualified investment consultant, or qualified quasi-discretionary investment manager;
- **4.** In the case of private markets, comprehensive operational due diligence performed by the investment staff, qualified investment consultant, or qualified quasi-discretionary investment manager;
- **5**. **Legal review** by qualified investment counsel of the manager agreement and related documentation;
- **6. An internal meeting of investment officers, including the CIO** and the officer responsible for the asset class in question, during which staff's due diligence analysis is reviewed and debated and a staff recommendation is made;
- 7. Approval by the CIO;
- 8. Concurrence by a qualified investment consultant or quasi-discretionary investment manager as to the reasonableness of the selection decision;
- **9.** Written affirmation to the Investment Committee by the CIO that the process used to select the manager complied with applicable policies and the Procedures. Such affirmation shall be submitted to the Investment Committee at the next regularly scheduled Investment Committee meeting following the selection of the manager.
- **B.** The Procedures shall include any checklists and templates to be used in the due diligence process. Such Procedures shall be presented to the Investment Committee for review and input at least every three years, or sooner upon request of the Investment Committee or any member of the Board.
- **C.** Whenever amendments are made to the Procedures, a copy shall be provided to the Investment Committee at its next regularly scheduled meeting.
- **D.** Should any Investment Officer responsible for performing manager due diligence and preparing manager selection and termination recommendations to the CIO cease to be employed by the City for any reason, the CIO shall inform the Investment Committee immediately.
- **E.** The selection of an investment manager that would contravene a provision of this policy or the Procedures shall require Investment Committee approval.
- **F.** A file or files shall be established to serve as a permanent record of the due diligence process for each investment manager hired and shall contain a summary of the due diligence information and analysis generated during the search process, as well as the legal documentation.
- **G.** The internal audit plan of the internal auditor shall include a review of a random sample of investment manager selection decisions at least once per year to confirm compliance with this policy and the Procedures approved by the CIO, the scope of which shall not include the investment performance of such selection decisions. The results of such review shall be reported to the Audit Committee and the Investment Committee.
- **H.** A "**Watch List**" will be established for underperforming managers and managers under extraordinary review for qualitative reasons, and will be maintained by the General Consultant.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- 1. Quantitative criteria for underperformance which would trigger placement on the Watch List includes manager underperformance versus the appropriate benchmark over a three and/or five year period.
- 2. Potential actions resulting from placement on the Watch List include finding appropriate resolution of outstanding issues, renewed confidence in the manager or strategy, or determination that the termination of the manager or strategy is appropriate.
- 3. Investment staff will identify underperforming managers in conjunction with consultants.
- **4.** As necessary, nuanced investment strategies or fund types may require customized review.
- I. The System will seek alignment of interests when negotiating fees while pursuing the best net of fees performance results. Investment costs shall be monitored, controlled, and whenever possible negotiated to ensure cost effectiveness. The Board shall give consideration to the impact of administrative expenses, external management fees and performance fees when establishing the asset mix policy of the System. The Board will be provided reports on investment costs of the System at least annually.
- J. The System's staff, in coordination with its investment consultants and legal counsel, will negotiate, monitor, and report on fees with investment managers regularly to ensure market competitiveness and appropriateness.
- K. The System will seek to ensure that excessive fees are not being paid for alternative assets by reviewing manager fees at least annually. Fee structures could incorporate fixed fees, performance based fees, high water marks, waterfall, hurdles, floors and caps. The System may also incorporate multi-year performance periods with clawbacks as needed.

Manager Termination Procedures

A. City of San Jose Department of Retirement Services investment staff is aware that the ongoing review and analysis of investment managers is just as important as the due diligence implemented during the investment manager selection process. The performance of the investment managers will be monitored on an ongoing basis and it is at the CIO's discretion to take corrective action by terminating and/or replacing an investment manager if it is deemed appropriate at any time for any reason.

The CIO, in agreement with the appropriate consultant for the manager/asset class in question, may terminate an investment manager or product due to a variety of reasons.

These reasons can include but are not limited to the following:

- 1. System asset allocation change
- 2. limited market opportunity
- **3.** style drift
- 4. violation of policies or guidelines
- **5.** key personnel turnover
- **6.** failure to achieve performance or risk objectives
- 7. legal or regulatory action
- **8.** any change deemed likely to impact or impair investment performance

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

9. any other material adverse events, whether reputational or financial, that could be expected to cause significant headline risk

Termination of private funds is typically not possible. If the CIO wishes to exit a private fund, they may evaluate opportunities for secondary market sales of fund interests.

The CIO will report any termination actions at the next Committee meeting, detailing the rationale for action.

XIII. RISK POLICY

Purpose and scope

The purpose of this Risk Policy is to ensure that the total portfolio investment risk is consistent with the investment beliefs and strategic goals set forth by the San Jose Federated City Employees' Retirement System Board. This document defines the roles and responsibilities for maintaining this Risk Policy, management of the investment risks of the System, and monitoring the results. It also articulates the Board's philosophy towards investment risk. The System intends to use risk management to make more informed decisions and improve the likelihood of achieving its strategic goals and objectives within the appendix, specific risk targets and limits are established.

The Risk Policy will cover investment risk, liquidity risk, credit risk, and funding risk. The Risk Policy will not cover enterprise risk concepts such as operational risk, regulatory risk, legal risk, and counterparty risks.

Objectives

The objectives of the risk management program are:

- **A.** To communicate the System's commitment to risk management and the central role in achieving System goals and objectives;
- **B.** To formalize and communicate a consistent approach for managing risk;
- **C.** To ensure the investment risks assumed by the System are appropriate given the financial health of the Sponsor;
- **D.** To ensure the System operates within the agreed risk tolerance and risk limits.

Definitions

To aid with the interpretation of this policy, a glossary of terms is included in the Appendix D, which defines all the technical terms used in this policy.

Governance

Consistent with the Board's governance model, which delegates specific authority, responsibility, and accountability to others based on areas of expertise, this Risk Policy defines the following roles and responsibilities. The Board retains sole responsibility of governing the System, setting investment policy and risk policy, and monitoring the Investment Program. The Board delegates specific areas of responsibility while retaining appropriate oversight of the delegated activity.

Board of Administration

The Board maintains the sole and plenary authority and fiduciary responsibility for the Investment Program. The Board also understands it may delegate certain responsibilities under the Investment Program for purposes of administrative efficiency and expertise. The areas of the Investment Program the Board may not delegate include:

A. Engaging Board consultants and service providers

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- **B.** The governance model of the Investment Program
- **C.** Monitoring the Investment Program
- **D.** Establishing and maintaining investment policy, including:
 - **1.** The Investment Policy Statement ("IPS")
 - 2. This Risk Policy
 - 3. Investment objectives
 - 4. Strategic asset allocation
 - 5. Allocation-level performance benchmarks
 - **6.** Risk philosophy

Investment Committee

The Investment Committee ("IC") is a subset of the Board assigned to review investment related matters in greater detail. The IC has been assigned authority to assist the Board in its duties by meeting on at least a quarterly basis regarding matters of investment policy, risk management, portfolio structure, vendor selection, real estate operations, human resources, reporting, and monitoring. Please refer to the IC Charter for specific detail.

Staff

San Jose Retirement Services Staff ("Staff"), including the Chief Executive Officer (CEO) and Chief Investment Officer (CIO), is broadly responsible for supporting the Board in the effective execution of the Investment Program. The CIO has been delegated authority to execute specific elements of the Investment Program as outlined herein. Staff risk operating zones are defined in Appendix C.

General Investment Consultant

The General Investment Consultant ("GC") is appointed by the Board to provide independent, objective investment advice. The GC is a fiduciary to the System under California law. The GC works with Staff and specialty consultants in the development of recommendations while recognizing its fiduciary duty is to provide prudent investment advice to the Board. The GC provides advice without discretionary authority to execute on its advice. With regard to this Risk Policy, the GC contributes to the following:

- **A.** Asset allocation recommendations among classes and subclasses
- **B.** Investment manager selection, evaluation, and termination
- **C.** Investment performance monitoring
- **D.** Investment risk monitoring
- E. Capital markets projections
- **F.** Coordination with the System's actuary in conducting periodic asset/liability studies and other required reporting
- **G.** Recommend changes to the actual portfolio to achieve compliance with this Risk Policy
- **H.** Board education

Specialty Investment Consultants

A. Absolute Return Consultant

The Absolute Return Consultant ("AC") is appointed by the Board to provide independent, objective investment advice. The AC is a fiduciary to the System under California law. The AC works with Staff and the other consultants in the development of recommendations while recognizing its fiduciary duty is to provide prudent investment advice to the Board. The AC provides advice without discretionary authority to execute on its advice. With regard to this Risk Policy, the AC contributes to the following:

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

- **1.** Assists with providing transparency into the absolute return investment strategies, including recent holdings and transactions.
- 2. Assists with the analysis of recommended investment strategies that have not yet been incorporated into the System including recent holdings and transactions.
- 3. Board education

B. Risk Advisory Consultant

The Risk Advisory Consultant ("RC") is appointed by the Board to provide independent, objective investment advice. The RC is a fiduciary to the System under California law. The RC works with Staff and the other consultants in the development of recommendations while recognizing its fiduciary duty is to provide prudent investment advice to the Board. The RC provides advice without discretionary authority to execute on its advice. With regard to this Risk Policy, the RC contributes to the following:

- 1. Asset allocation recommendations among classes and subclasses
- 2. Investment manager evaluation
- 3. Risk policy development and maintenance
- 4. Investment risk monitoring
- **5.** Recommend changes to the actual portfolio to achieve compliance with this Risk Policy
- **6.** Board education

Investment Managers

Investment Managers are delegated the responsibility of investing and managing System assets in accordance with the IPS, Risk Policy, and all other applicable laws and the terms of the applicable investment documents evidencing the System's acquisition of an interest in an investment vehicle, and other controlling documents. Investment Managers are responsible for making all investment decisions on a discretionary basis regarding assets placed under their jurisdiction and will be accountable for achieving their investment objectives. Such discretion shall include decisions to buy, hold, and sell investments in amounts and proportions that are reflective of the stated investment mandate.

Custodian Bank

The Custodian Bank, selected by the Board to act as the principal custodian of assets of the trust, is delegated the responsibility of holding the assets and evidence of interests owned by the System in investment vehicles and cash (and equivalents). The Board may authorize the Custodian Bank to invest in temporary short-term fixed income investments both for the investment strategies and as a part of the cash portion of System assets. Such investments will be managed in general accordance with short-term fixed income investment guidelines as detailed in the Custodial Agreement. Cash managed for investment strategies shall be considered to be sub-portions of the assets managed by the directing Investment Managers.

Philosophy

An institutional investment program is inherently exposed to many types of risk. This Risk Policy focuses primarily on the investment risks caused by the markets to which the System is exposed (e.g. domestic equities, real estate, domestic fixed income, and others). Related risks such as counterparty, geopolitical, and fraudulent or unethical behavior, among others, are not addressed in this Risk Policy.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

This Risk Philosophy represents the foundational principles on which the Investment Program is based. Every investment decision should be made with these foundational principles in mind to promote the fulfillment of fiduciary obligations. The statements below set forth the Board's Risk Philosophy, in order of importance:

Investment Risk Policy Should Consider the Financial Health of the Sponsor

Contribution volatility (i.e. the volatility of annual contributions made to the System by the Sponsor) represents a significant budgetary constraint on the Sponsor's financial planning with important implications for taxpayers. The Investment Program shall, therefore, assume a level of volatility that can be tolerated by the Sponsor in both normal as well as stressed market conditions.

The funded status (i.e. funded ratio), viewed as a general proxy for the health of the System, is reviewed on both actuarial and market value of assets bases. While a higher funded ratio is always preferred, the Investment Program shall not accept a level of risk that for a given probability could cause the funded ratio to fall below the limit identified in Appendix B.

The System will manage funding risk in three main ways:

- **A.** Actuarial review: The actuary will periodically review the System's liabilities
- **B.** Asset/Liability studies: The general consultant will periodically perform this study to identify changes in the relationship between assets and liabilities
- **C.** Asset Allocation: The System will periodically conduct asset allocation studies to ensure:
 - 1. portfolio diversification
 - 2. expected portfolio returns over the long-term (i.e. 10 years or more) in combination with projected contributions are sufficient to meet expected liabilities

Volatility and Drawdown are the Primary Measures of Investment Risk

Because the System must satisfy long-term liabilities and receives regular contributions from the Sponsor, the Investment Program invests for the long-term appreciation of assets. It is, therefore, able to withstand short-term volatility spikes without undue impairment of capital. For this reason, long-term volatility (i.e. 8 years or more) is considered the appropriate timeframe. Volatility is forecasted through the System's strategic asset allocation and risk reporting processes and is measured and monitored as outlined in Appendix B and C.

Market corrections due to economic recession, geo-political instability, and other causes have historically proven detrimental to the funded status of the System. Drawdown and tail-risk metrics are designed to assess potential investment returns during such periods of market stress. Historical drawdown scenario analysis provides insight into how the portfolio would respond if it were exposed to prior stressed market conditions. Tail-risk analysis provides insight into the probabilities of experiencing a negative investment return with a small (e.g. 5%) probability. These metrics provide insight into how much may be lost during a stressed market environment. Because market corrections are statistically infrequent and typically caused by unforeseen events, neither approach can be used with certainty, but each provides insight into the potential impact a worst-case scenario may represent to the System and Sponsor.

Active Risk, Factor Exposures, and Liquidity must be Monitored

Implementation of any strategic asset allocation introduces deviations between the System's actual portfolio and its policy index. While it is generally desired to minimize these differences to achieve efficiency, deviations from the policy index may be desirable for various reasons. To ensure the actual portfolio is appropriately adhering to the policy index, active risk must be measured and monitored through tracking error statistics.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Factor exposures capture the underlying economic drivers supporting asset class returns. While the policy index and actual portfolio are constructed primarily through asset class forecasts, factor exposures provide important insight into the underlying economic drivers supporting the Investment Program. Each security owned within each investment strategy has some exposure to various economic drivers. The Investment Program's total exposure to the economic drivers is, therefore, driven by the exposures inherent in those securities as well as the correlations across the factor exposures. To understand better the System's exposure to the economic drivers and anticipate how the Investment Program will perform under various economic environments, factor exposures must be measured and monitored.

In addition to benefit payments, the System must meet its obligations to pay its expenses and satisfy capital calls. Generally, these cash outflows are predictable and can be met through the normal administration of the System. Under stressed market conditions, however, liquidity within the Investment Program can change significantly and with little advance notice while the System must continue to meet its obligations. Liquidity must, therefore, be monitored and measured to ensure that the System can continue to meet its financial obligations during periods of market stress without being forced to sell assets at stressed prices.

Monitoring

Reporting processes are designed to provide the Board with the information needed to execute its oversight function. As such, the Board has developed the following monitoring structure.

The Investment Committee, CIO and RC will monitor the Investment Program's risk exposures quarterly. This detailed review process will include security-level exposure analysis of the Investment Program's factor exposures; asset class exposures; tracking error; tail-risk and drawdown scenario analysis, and geographic exposures.

The Board, Staff, and RC will monitor the Investment Program's adherence to this Risk Policy on a quarterly basis. This review process will summarize the detailed reporting used by the Investment Committee and also include the ranges and targets outlined in **Appendix B**.

Management

Aside from liquidity management responsibilities assigned to the CIO in the System's IPS, the Board retains full authority and responsibility for ensuring adherence of the Investment Program to this Risk Policy.

The System's risk management function is expected to evolve through time. The objective of the risk management function is to ensure the System operates within the Board's agreed risk tolerance and limits. The main goals of the risk management function are:

- **A.** Identify: risks that will impact the System's ability to meet its goals and objectives;
- **B.** Estimate the significant risks to which the System is exposed;
- **C.** Manage: risk must be managed and should be commensurate with the rewards;
- **D.** Communicate: risks must be reported and monitored on a regular basis.

To a large extent, many factors that impact future benefits and contributions are uncontrollable, however, the potential impacts are considered in strategy development. The System uses three approaches (actuarial valuation, asset/liability studies, and asset allocation studies, as discussed above) to address and manage risk.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

The Board may delegate authority to the CIO and Staff for certain functions as detailed below. Delegation of authority will be coordinated with workflow, compliance and reporting procedures that are clearly defined, reviewed, and approved. The Board shall be notified timely of all investment decisions made by the CIO and their implications to the System.

A. Rebalancing

Portfolio rebalancing may occur by adjusting allocations to individual investment strategies or managers or through the use of an overlay provider using derivatives.

B. Relative Risk

While the Board recognizes that the majority of investment risk over the long term is dependent on the asset allocation decision, it recognizes the cost of precisely matching the strategic asset allocation is considerable and not always optimal. In addition to asset class weightings versus policy, annualized tracking error will be used to measure the disparity of returns between the actual positions in the Investment Program compared to the strategic asset allocation. Annualized tracking error, as measured quarterly by the RC, shall adhere to the targets and ranges outlined in **Appendix C**.

IX. INVESTMENT COSTS

The Board members intend to monitor and control investment costs at every level of the San Jose Federated City Employees' Retirement System.

- **A.** Professional fees will be negotiated whenever possible.
- **B.** Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
- **C.** If possible, assets will be transferred in-kind during manager transitions and System restructurings to eliminate unnecessary turnover expenses.
- **D.** Managers will be instructed to minimize brokerage and execution costs.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Appendix A ASSET ALLOCATION TARGETS¹

	Target (%)	SAAP Asset Class Benchmarks	LCPP Asset Class Benchmarks	Tracking Error Target Range (basis points)
Growth	58			
Public Equity	30	Custom Public Equity Benchmark ²	LCPP Custom Public Equity Benchmark	0 - 400
Total Private Markets	25	Actual Return		N/A
Private Equity	10		Russell 3000	
Venture/Growth Capital	5		Russell 3000	
Private Debt	4		Bloomberg Barclays	
			Aggregate	
Growth Real Estate	3		Global NAREIT	
Private Real Assets	3		S&P Global Natural	
			Resources	
Emerging Market Bonds	3	50/50 JPM EMBI	50/50 JPM EMBI GD/JPM	0 - 300
		GD/JPM GBI-EM GD	GBI-EM GD	
Zero Beta	32			
Cash	0	ICE BofAML 3-Month T- Bills	ICE BofAML 3-Month T-Bills	0 - 100
Short-term IG Bonds	20	ICE BofAML 3-Month T- Bills	ICE BofAML 3-Month T-Bills	0 - 100
Market Neutral Strategies	7	LIBOR 3-Month	LIBOR 3-Month + 1%	0 - 1,000
Bonds (Immunized Cash Flows)	5	Actual Return	ICE BofAML 3-Month T-Bills	N/A
Other	10			
TIPS	2	Bloomberg Barclays 0-5 Year TIPS	Bloomberg Barclays 0-5 Year TIPS	0 - 100
Core Real Estate	5	NCREIF ODCE Equal Weighted	Global NAREIT	0 - 400
Commodities	3	Bloomberg Commodity Index	Bloomberg Commodity Index	0 - 700

LIABILITY BENCHMARK PORTFOLIO: Bloomberg Barclays U.S. Long Treasury Index.

- Approved by the Board of Administration in June 2018.
 13% MSCI US IMI, 7% MSCI World ex US IMI, 10% MSCI EM IMI.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Appendix B

SCHEDULE OF OPERATING RANGES AND LIMIT TARGETS

Characteristic	Measurement	Operating Min.	Range Max.	Board Approved Limit
Funded ratio	Probability that the Actuarial funded ratio will fall below the Board Approved Limit		n.m.	5% probability of falling below 60%
Sponsor contributions	Probability that Sponsor contributions in a single year will exceed a specified limit	ľ	\$220mm	5% probability of exceeding \$335mm
Interest on UAL	Probability that the Interest cost of unfunded actuarial liability will increase above a specified limit		\$80mm	5% probability of exceeding \$150mm
Total fund absolute volatility	Forecast Annualized standard deviation of returns of the actual portfolio	8%	10%	12%
Total fund relative volatility	Forecast Tracking error of the actual portfolio vs. the strategic asset allocation policy index		2%	4%
Drawdown exposure	Average of three worst historical scenario drawdown events	n/a	n/a	(30)%
Liquidity	Liquidity Coverage Ratio (LCR) 5-yr projection	2.0	3.0	1.2

Appendix CFORECASTED RISK OPERATING ZONES

Risk Guideline	CIO	IC	Board
Total Portfolio Forecast Risk	8-11%	<8%; 11-12%	>12%
Total Portfolio Forecast Beta	0.5-0.8	0.3-0.5; 0.8-1	<0.3; >1
Total Portfolio Duration	0-3 years	3-5 years	>5 years
Total Portfolio Credit Spread Duration	0-3 years	3-5 years	>5 years
Total Portfolio Relative Risk	< 10%	10% - 20%	> 20%
Equity Factor Relative Risk	< 10%	10% - 20%	> 20%
Interest Rate Factor Relative Risk	< 10%	10% - 20%	> 20%
Credit Factor Relative Risk	< 10%	10% - 20%	> 20%
Currency Factor Relative Risk	< 10%	10% - 20%	> 20%
Portfolio Active Risk	0.5%-3%	0-0.5%; 3-4%	>4%
Average Drawdown risk	0-25%	25-30%	<-30%

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Appendix D DEFINITIONS

Actuarial Assumptions: Assumptions made by the actuary that influence the valuation of liabilities

Active Risk: Measures the volatility of an investment strategy versus its benchmark.

Concentration Risk: Lack of diversification in exposure to markets or managers.

Confidence Interval: A range of values so defined that there is a specified probability that the value of a parameter lies within it.

Counterparty Risk: The risk that a party in a transaction does not fulfill its contractual obligation. Both sides of a contract are exposed to this risk.

Credit Risk: Also referred to as default risk. This is the risk the borrower fails to repay a loan or meet a contractual obligation.

Currency Risk: The potential loss on the price of an asset due to fluctuating foreign currency exchange rates.

Drawdown: A measure of both returns and time over which an investment experienced a decline in value from a peak to a trough. It is based on actual historical results.

Duration: Measures how long (in years) it takes to be repaid the bond's price by the bond's total cash flows. This measure is used to determine the interest rate sensitivity of the portfolio.

Funded Ratio: The ratio of assets to liabilities. Assets can be defined in terms of the market value of assets or the actuarial value of assets. Liabilities are defined as all future benefit payments discounted at the actuarial assumed return.

Funding Risk: Also referred to as surplus risk, this is the risk of assets and liabilities not matching.

Inflation Risk: The risk that general prices of goods and services are rising, which erodes the purchasing power of money.

Interest Rate Risk: The risk than an investment will decline in value as a result of a change in interest rates. This risk is measured by its duration.

Investment Risk: The risk associated with investing in capital markets.

Liquidity: Is comprised of both the time required to complete the transaction and the impact that the transaction has on the price of the asset. There are two types of liquidity risk: Market liquidity risk and funding liquidity risk. Market liquidity risk refers to the risk that an asset cannot be sold without loss of value. Funding liquidity risk refers to the risk that the System will not be able to meet financial obligations as they come due.

Liquidity Coverage Ratio: The ratio of liquidity available to liquidity needs.

PENSION - INCLUDES THE 401(H) INVESTMENTS (continued)

Portfolio Construction Engine: A software program relying on mean-variance portfolio optimization. Portfolio optimization requires inputs of asset class returns, standard deviations, and correlations in order to develop an output of total portfolio expected returns and standard deviations, which can be compared along with their Sharpe ratios.

Risk: The uncertainty of an event occurring.

Standard Deviation: The square root of the average squared deviation of the returns from its mean.

Strategic Asset Allocation: The asset classes and weights that are targeted for the policy benchmark.

Tail Risk: Tail-risk measures both the probability and expected returns of a significant loss. When assuming normally distributed returns, tail-risk is the left tail of the return distribution. The normal distribution used for mean-variance optimization underestimates the risk of rare events when markets exhibit fat tails (for example, during the Global Financial Crisis).

Volatility: The standard deviation of returns. Standard deviation (SD) is the square root of the average squared deviation of the returns from its mean.

Statement of Investment Policy

HEALTHCARE

- 1) This investment policy statement governs investments for the City of San José Federated City Employees' Retiree Health Care Trust Fund (the Fund). The Fund is an Internal Revenue Code Section 115 trust which was established on June 24, 2011. The Fund is outside of the Federated City Employees' Retirement System (the System) for the payment of retiree healthcare benefits in order to provide an alternative to the existing 401(h) account, which is within the System.
- 2) Fund will be managed as an ongoing concern with a long-term investment time horizon, consistent with the demographic profile of the members and beneficiaries of the System.

INVESTMENT OBJECTIVES

- 3) The primary objective of the investment portfolio is to provide a funding source for the subsidizing of postretirement healthcare benefits to members of the San José Federated City Employees' Retirement System and their beneficiaries.
 - a) A range of risks will be monitored in connection with the Fund, with an emphasis on the risk of loss of Fund assets.
- 4) In developing the investment policies of the Fund, various factors will be considered including, but not limited to:
 - a) The structure and duration of the Fund's liabilities;
 - b) Modern Portfolio Theory;
 - c) The portfolio management practices followed by other institutional investors;
 - d) The liquidity needs of the Fund.

FIDUCIARY STANDARDS

- 5) The Trustees are subject to the following duties under law:
 - a) The assets of the Fund are trust funds and shall be held for the exclusive purposes of providing benefits to members of the System and their beneficiaries and defraying reasonable expenses of administering the Fund.
 - b) The Trustees shall discharge their duties with respect to the Fund solely in the interest of, and for the exclusive purposes of providing benefits to, members of the System and their beneficiaries, maintaining the actuarial soundness of the System, and defraying reasonable expenses of administering the Fund. The Trustees' duties to the members and their beneficiaries shall take precedence over any other duty.
 - c) The Trustees shall discharge their duties with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of like character and with like aims.
 - d) The Trustees shall diversify the investments of the Fund so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.

HEALTHCARE (continued)

6) Investment staff, investment consultants, investment managers, custodians and all other parties charged with handling the Fund's assets shall utilize the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of like character and with like aims, and shall comply with all applicable laws, rules and regulations.

FUND GOVERNANCE

- 7) The governance structure of the Fund is described in the City Charter and in various governance policies established by the Board of Administration, including but not limited to:
 - a) Policy on the Role of the Board of Administration;
 - b) Policy on the Role of the Investment Committee;
 - c) Policy on the Role of the Director of Retirement Services;
 - d) Policy on the Role of the Chief Investment Officer;
 - e) Policy on Roles in Vendor Selection.

ASSET ALLOCATION

8) The current asset allocation policy of the Fund (at market value) as of 4/19/2018 is set out below:

Broad Asset Class	Minimum	Target	Maximum
Global equity	40%	55%	54%
Fixed income	20%	28%	40%
Real assets	15%	17%	30%
Total		100 %	

- 9) The Trustees are committed to implementing and maintaining the above asset allocation policy, but also recognizes that circumstances may arise where it is not possible or practical to timely implement or maintain the policy. In such circumstance, the Trustees will monitor the status of the asset allocation policy and seek to comply with the policy when it is possible and prudent to do so.
- 10) The asset allocation policy of the Fund will be reviewed at a minimum every five years.
- 11) The Trustees will also approve an Investment Structure, which provides additional detail as to the allocation of assets to categories of investment within the broad asset classes that comprise the asset allocation policy.

REBALANCING

12) The asset allocation of the Fund will be monitored on a monthly basis and the assets of the Fund are to be rebalanced, by Staff, to within the target ranges when fluctuations in market values cause the portfolio to fall outside the guideline ranges set out above. Such re-balancing shall occur as soon as practical unless the approval of the Investment Committee is obtained.

HEALTHCARE (continued)

13) When re-balancing, funds will generally be taken from accounts that are most significantly above their approved ranges and will be transferred to accounts that are most significantly below their approved ranges until allocation is within the guideline ranges, also taking into account liquidity and transactional cost considerations. An asset allocation overlay service may be engaged to monitor allocation and to initiate rebalancing actions to maintain the portfolio in accordance with these guidelines. The Fund will be rebalanced to tactical rather than long-term target allocations in circumstances where the Trustees have approved a tactical allocation.

DIVERSIFICATION

14) Investments shall be diversified with the intent to minimize the risk of large investment losses. Consequently, the total portfolio will be constructed and maintained to provide prudent diversification with regard to the concentration of holdings in individual issues, issuers, or industries. Furthermore, assets will be assigned to a variety of investment managers that employ a range of investment management strategies.

LIQUIDITY MANAGEMENT

15) The projected cash flow needs of the Fund are to be reviewed at least quarterly and the custodian and investment managers of the Fund are to be informed in writing in a timely manner of the liquidity needs of the Fund. If necessary, cash flow needs will be coordinated through the Fund's rebalancing provisions contained herein.

PROXY VOTING

16) The Trustees recognize that the voting of proxies is important to the overall performance of the System. The Trustees have delegated the responsibility of voting all proxies to the investment managers or a third party service provider. The Trustees expect that the proxy voting service will execute all proxies in a timely fashion and in the best interest of plan members and beneficiaries. Also, the Trustees expect the managers to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions. The Trustees intend to review the managers' proxy voting on at least an annual basis.

HIRING & TERMINATING INVESTMENT MANAGERS

- 17) Investment managers should meet the following criteria in order to be considered to manage the assets of the Fund.
 - a) Be capable of providing adequate and satisfactory information on the history of the firm, key personnel, key clients, fee schedules, and support personnel. Such information must demonstrate acceptable financial and staff stability and longevity.
 - b) Be able to clearly articulate the investment strategy that will be followed and demonstrate that the strategy has been successfully adhered to over time.
 - c) Have no past or outstanding legal judgments against them, which reflect negatively upon the firm or call into guestion the ability of the firm to serve as a fiduciary of the System.
- 18) As a general rule, Fund assets placed with an investment manager should not represent more than 10% of the total assets managed by that firm. Exceptions to this rule shall require the approval of the Trustees.

HEALTHCARE (continued)

MONITORING INVESTMENT MANAGERS

- 19) The Fund's investment managers will be monitored on an ongoing basis and may be terminated by the Fund at any time due to performance or other developments that call into question the manager's ability to continue to effectively manage assets of the Fund.
- 20) The majority of the Fund's assets are currently passively managed, in which case the manager should be expected to produce long-term returns that are reasonably close to those of the relevant benchmark. For any active investment managers, quarterly performance will be measured and evaluated relative to appropriate long-term performance benchmark and objectives, though it is understood that investment managers will, from time to time, underperform their benchmarks and objectives. Persistent underperformance by an investment manager, however, will be viewed as the basis for an extraordinary review of that manager and the manager's potential termination.
- 21) Certain other events may also trigger an extraordinary review, and possible termination, of an investment manager. These include, but are not limited to:
 - a) Failure to adhere to the terms of a contract between the manager and the Fund;
 - b) Loss of an investment professional(s) directly responsible for managing the Fund's assets, or who is/are so significant to the firm's overall investment process as to call into question the future efficacy of that process:
 - c) The sale of the investment management firm to another entity, or other change in ownership;
 - d) The purchase of another entity by the investment management firm;
 - e) Significant account losses and/or extraordinary addition of new accounts;
 - f) Regulatory actions against the firm, particularly any that represent violations of securities laws and regulations;
 - g) Any other event which may impair the manager's ability to perform in a satisfactory manner or puts the Fund's assets at undue risk of loss.

DERIVATIVE SECURITIES

- 22) Derivative securities are financial instruments that "derive" their value from an underlying commodity, index, or security. Examples include futures, options and forward contracts. Derivatives can provide a cost-effective means of managing portions of a portfolio and to manage risk through hedging activities. Examples of such uses include:
 - a) Equitizing cash during portfolio transitions until "physical" securities are in place;
 - b) Managing asset allocation on a temporary basis;
 - c) Hedging foreign currency risk, subject to approved limits.
- 23) In general, the use of derivatives for the purposes noted above, and similar risk management purposes, is supported by the Investment Committee and the Trustees. Speculative positions in derivatives however are not authorized under any circumstances.

HEALTHCARE (continued)

- 24) The Fund is currently authorized to use derivatives strategies to equitize cash during portfolio transitions until physical securities are in place, and to reproduce or replicate a physical holding that corresponds to a Board-approved policy benchmark. Additional derivatives strategies must similarly be authorized by this Investment Policy Statement prior to being utilized within the Fund.
- 25) Given the nature of many commodity manager mandates, it is recognized and understood that commodity managers retained by the Fund may use derivatives that are contrary to paragraphs 23 and 24 above.

INVESTMENT RESTRICTIONS

26) Fund assets are currently invested primarily in mutual fund investment vehicles, given the current asset size of the Fund. The type of investment vehicles utilized by the Fund will be revisited as the asset size of the Fund increases. In instances when the Fund invests through a commingled fund or separate account, investment management agreements will be established for each investment manager retained by the Fund. Such agreements shall specify any policies, risk controls, portfolio characteristics, reporting requirements, and other requirements or restrictions that may be applicable to the manager.

INVESTMENT COSTS

- 27) The Trustees intend to monitor and control investment costs at every level of the Fund.
 - a) Professional fees will be negotiated whenever possible.
 - b) Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
 - c) If possible, assets will be transferred in-kind during manager transitions and Fund restructurings to eliminate unnecessary turnover expenses.
 - d) Managers will be instructed to minimize brokerage and execution costs.

VALUATION OF INVESTMENTS

- 28) The Fund's investments shall be valued using market values or other suitable methods of valuation. The frequency of valuation shall be dependent upon the nature of the asset.
- 29) Where a public market price is not available for an investment, a suitable method of valuation shall be used including the use of: discounted cash flows, earnings multiples, appraisals, prevailing market rates for instruments with similar characteristics or other pricing models as appropriate. Independent, qualified appraisers may be used to provide valuations or verify the reasonableness of internal valuations.

OTHER

- 30) Appendix A contains the long-term Policy Benchmark.
- 31) Exceptions to this Investment Policy Statement must be approved by the Trustees.

POLICY REVIEW & HISTORY

32) This policy will be reviewed at least annually.

HEALTHCARE (continued)

Appendix A

LONG-TERM POLICY BENCHMARK

Asset Class Benchmark		Target (%)	
Global equity			
	MSCI ACWI IMI	47	
Global fixed income			
	Barclays Global Aggregate	30	
Real assets			
Real estate	NCREIF ODCE Equal Weighted	7	
Commodities	Bloomberg Commodity Index	6	
Infrastructure	DJ Brookfield Global Infrastructure Index	5	
Natural resources	S&P Global Natural Resources	5	

Investment Professionals

As of June 30, 2019

	PUBLIC EQUITY	
Artisan Partners	GQG Partners	Russell Investments
Comgest	Marshall Wace LLC	Sandler Capital Management
Cove Street Capital	Northern Trust	Senator Investment Group
Dimensional Fund Advisors	Oberweis Asset Management	•
	PRIVATE EQUITY	
Great Hill Partners	Northern Trust	Pathway Capital
Innovation Endeavors	Pantheon Ventures	•
Neuberger Berman	Partners Group	
	GROWTH REAL ESTATE	
DRA Advisors	Torchlight Investors	
GEM Realty Capital	Tristan Capital Partners	
	PRIVATE DEBT	
Arrowmark Partners	Cross Ocean Partners	White Oak Global Advisors
Blackstone Group	Medley Capital LLC	
Crestline Investors	Octagon Credit Investors	
	PRIVATE REAL ASSETS	
Global Infrastructure Partners	Lime Rock Partners	
	MARKET NEUTRAL STRATEGIES	
AHL Partners LLP	JD Capital	Systematica Investments, Ltd
D.E. Shaw & Co, LP	Kepos Capital LP	Wadhwani Asset Management LLP
Dymon Asia Capital, Ltd	Pharo Management LLC	
Hudson Bay Capital Management	Pine River Capital Management LP	
	EMERGING MARKET BONDS	
Blue Bay Asset Management	Wellington Management	
SH	HORT-TERM INVESTMENT GRADE B	
	BlackRock Financial Management In	С
	BONDS (IMMUNIZED CASH FLOWS	5)
	Insight Investment	
TREA	ASURY INFLATION-PROTECTED SEC	URITIES
	Northern Trust	
	CORE REAL ESTATE	
American Realty Advisors	Clarion Partners	Vanguard Group
BlackRock Financial Management Ir		
	COMMODITIES	
	Credit Suisse Asset Management	
	CONSULTANTS	
Albourne America LLC (Absolute	Meketa Investments Group (General	, ,
Return Advisors)	Consultant)	Services)
	CUSTODIAN	
	State Street Bank & Trust Company	
	PORTFOLIO OVERLAY SERVICES	
	Russell Investments	

Schedule of Investment Results for Pension Trust

NET PERFORMANCE SUMMARY BY ASSET CLASS

For Period Ended June 30, 2019

	One Year	Three Years	Five Years	Ten Years
Total Fund (net of manager fees)	4.3%	5.9%	3.2%	6.5%
Policy Benchmark	3.9%	6.5%	3.4%	7.2%
Inv Metrics Public DB > \$1 Billion (Net Median)	5.4%	8.7%	5.6%	9.0%
		_		
Public Equity	3.9%	10.1%	5.2%	N/A
Public Equity Benchmark	5.2%	11.7%	6.2%	N/A
Short-term Investment Grade Bonds	N/A	N/A	N/A	N/A
ICE BofAML 91 Days T-Bills TR	N/A	N/A	N/A	N/A
Private Equity	9.1%	9.5%	8.9%	N/A
San Jose Custom Private Equity Benchmark	11.1%	15.5%	11.8%	N/A
Moulest Novitual Charterine	7.70/	4.60/	2.70/	N/A
Market Neutral Strategies	7.7%	4.6%	3.7%	N/A
Absolute Return Benchmark	1.9%	0.2%	1.3%	N/A
Bonds (Immunized Cash Flows)	N/A	N/A	N/A	N/A
Immunized Cash Flows Benchmark	N/A	N/A	N/A	N/A
Core Real Estate	7.8%	7.4%	9.6%	9.1%
NCREIF ODCE Equal Weighted (Net)	6.0%	7.0%	9.1%	8.8%
Commodities	5.0%	0.9%	7.6%	N/A
Bloomberg Commodity Index TR USD	6.8%	2.2%	9.1%	N/A
Private Debt	4.5%	2.5%	0.0%	N/A
S&P Global Leveraged Loan +2%	5.2%	7.3%	4.9%	N/A
Emerging Market Bonds	0.1%	6.6%	N/A	N/A
MSCI Emerging Market IMI Net	0.5%	10.0%	N/A	N/A
	-	-	0	0
Growth Real Estate	0.0%	0.0%	N/A	N/A
Treasury Inflation-Protected Securities	3.4%	1.7%	1.0%	N/A
BBgBarc U.S. TIPS 0-5 Years	3.2%	1.7%	0.9%	N/A
Private Real Assets	12.3%	10.8%	N/A	N/A

Basis of Calculation: Time-Weighted Rate of Return

Source: Meketa Investment Group's Fund Evaluation Report dated June 30, 2019

Schedule of Investment Results for Healthcare Trust

NET PERFORMANCE SUMMARY BY ASSET CLASS

For Period Ended June 30, 2019

	One Year	Three Years	Five Years	Ten Years
Total Fund (net of manager fees)	4.2%	5.9%	2.4%	N/A
Policy Benchmark	3.9%	7.0%	3.5%	N/A
Public Equity	5.7%	11.6%	6.0%	N/A
Public Equity Benchmark	5.4%	11.7%	6.2%	N/A
Short-Term Investment Grade Bonds	N/A	N/A	N/A	N/A
ICE BofAML 91 Days T-Bills TR	N/A	N/A	N/A	N/A
Core Real Estate	7.2%	6.7%	N/A	N/A
NCREIF ODCE Equal Weighted (Net)	6.0%	7.0%	N/A	N/A
Commodition				
Commodities	5.1%	0.4%	N/A	N/A
Bloomberg Commodity Index TR USD	6.8%	2.2%	N/A	N/A

Basis of Calculation: Time-Weighted Rate of Return

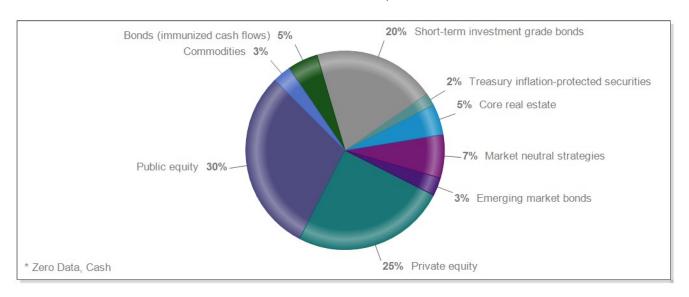
Source: Meketa Investment Group's Fund Evaluation Report dated June 30, 2019

Pension Investment Review

INCLUDES THE 401(H) INVESTMENTS

TARGET ASSET ALLOCATION

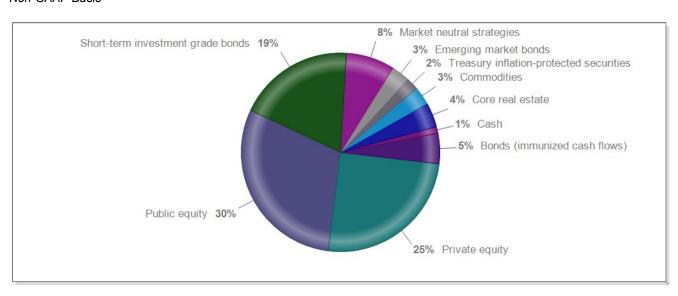
As of June 30, 2019



ACTUAL ASSET ALLOCATION

As of June 30, 2019

Non-GAAP Basis



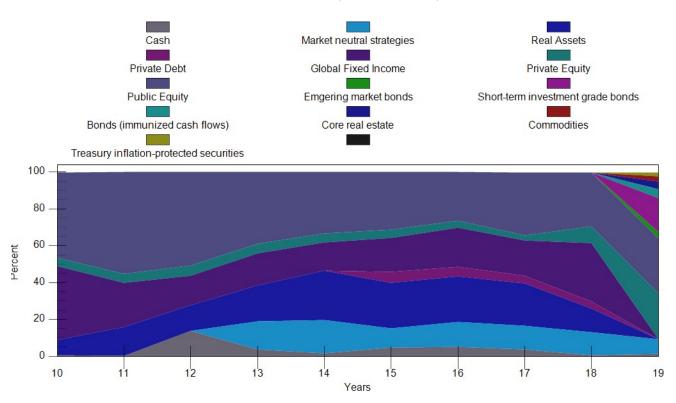
Asset Class	\$ In Millions
Public equity	\$ 636.8
Private equity	527.0
Emerging market bonds	70.4
Market neutral strategies	173.1
Short-term investment grade bonds	395.6
Bonds (immunized cash flows)	105.0
Cash	25.6
Core real estate	88.0
Commodities	61.5
Treasury inflation-protected securities	44.4
TOTAL	\$ 2,127.2

Pension Investment Review (continued)

INCLUDES THE 401(H) INVESTMENTS (continued)

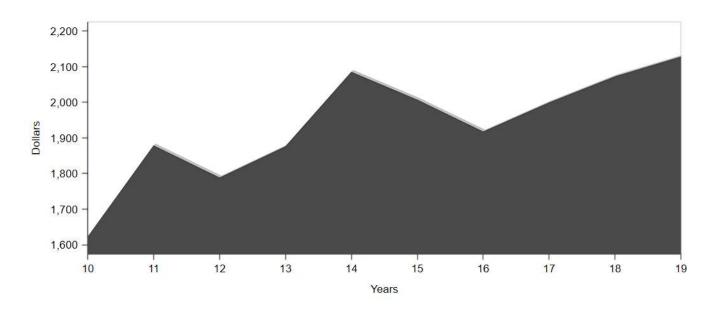
HISTORICAL ASSET ALLOCATION (Actual)

As of June 30, 2010 - June 30, 2019



MARKET VALUE GROWTH OF PLAN ASSETS

For Ten Years Ended June 30, 2019 (Dollars in Millions)

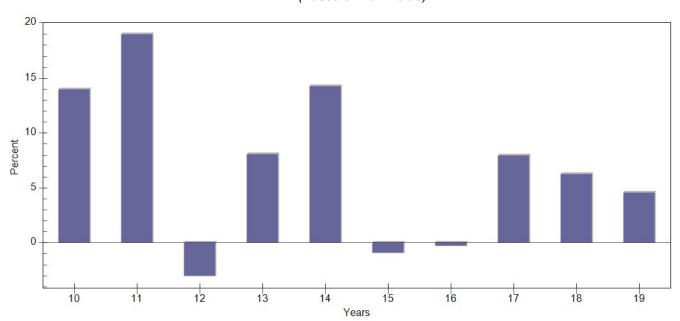


Pension Investment Review (continued)

INCLUDES THE 401(H) INVESTMENTS (continued)

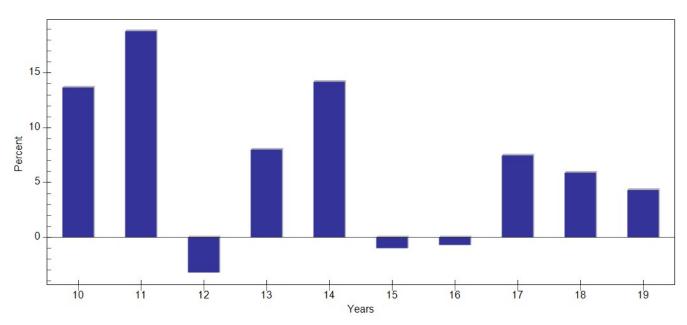
HISTORY OF GROSS PERFORMANCE

For Fiscal Years 2010 - 2019 (Based on Fair Value)



HISTORY OF NET PERFORMANCE

For Fiscal Years 2010 - 2019 (Based on Fair Value)

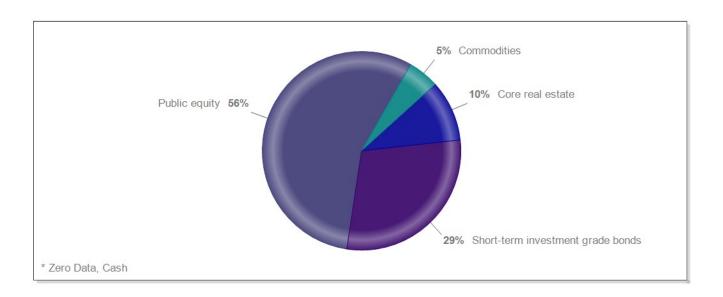


Investment Review

HEALTHCARE

TARGET ASSET ALLOCATION

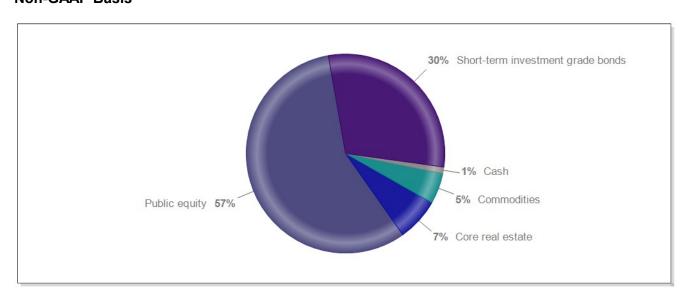
As of June 30, 2019



ACTUAL ASSET ALLOCATION

As of June 30, 2019

Non-GAAP Basis



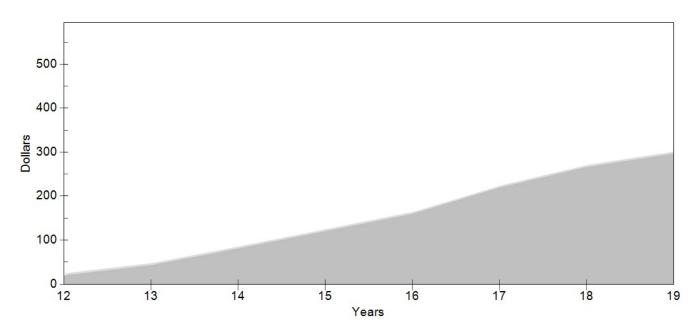
Asset Class	\$ In Millions
Public equity	\$ 168.7
Short-term investment grade bonds	90.0
Core real estate	21.0
Commodities	14.5
Cash	3.5
TOTAL	\$ 297.7

Investment Review (continued)

HEALTHCARE (continued)

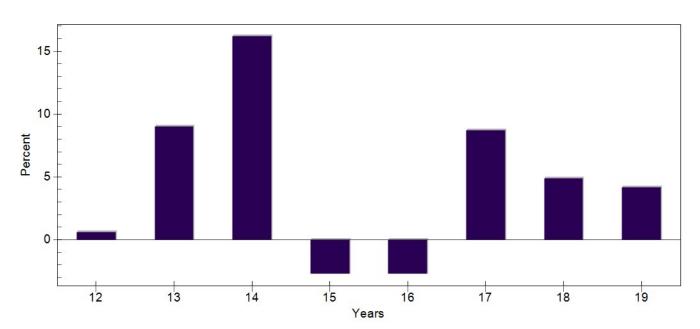
MARKET VALUE GROWTH OF PLAN ASSETS

For Eight Years Ended June 30, 2019 (Dollars in Millions)



HISTORY OF NET PERFORMANCE

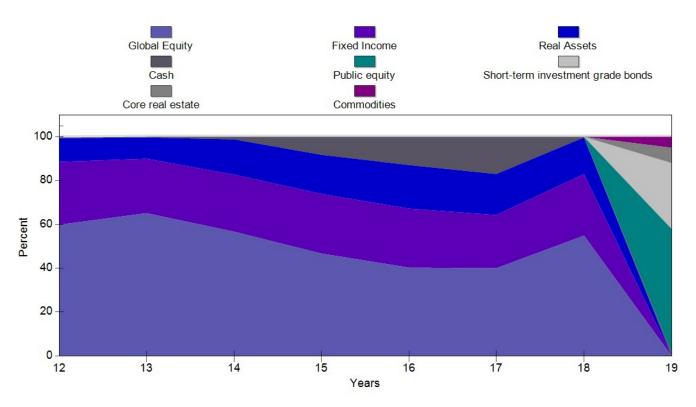
For Fiscal Years 2012 - 2019 (Based on Fair Value)



Investment Review (continued)

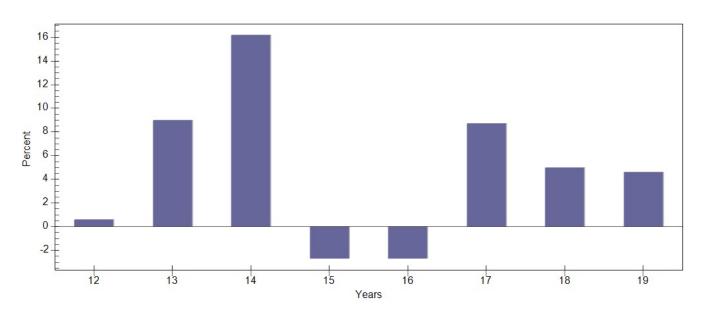
HEALTHCARE (continued)

HISTORICAL ASSET ALLOCATION (Actual) As of June 30, 2012 - June 30, 2019



HISTORY OF GROSS PERFORMANCE

For Fiscal Years 2012 - 2019 (Based on Fair Value)



List of Largest Assets Held

LARGEST DISCLOSABLE STOCK HOLDINGS (By Fair Value) For Pension

As of June 30, 2019

Description	Country	Shares	Fair Value (\$US)
SAMSUNG ELECTRONICS CO LTD	Korea, Republic of	151,312	\$6,159,151
ARCH CAPITAL GROUP LTD	United States	118,233	\$4,384,080
NXP SEMICONDUCTORS NV	Netherlands	44,731	\$4,366,193
CITIGROUP INC	United States	61,919	\$4,336,188
EXPEDIA GROUP INC	United States	32,548	\$4,329,860
ABB LTD REG	Switzerland	215,305	\$4,325,974
CIE FINANCIERE RICHEMONT REG	Switzerland	50,369	\$4,279,557
FACEBOOK INC CLASS A	United States	22,020	\$4,249,860
ALLERGAN PLC	Ireland	25,161	\$4,212,706
DENTSPLY SIRONA INC	United States	70,807	\$4,132,297

A complete list of portfolio holdings is available upon request.

LARGEST DISCLOSABLE BOND HOLDINGS (By Fair Value) For Pension

As of June 30, 2019

Security Name	Country	Maturity Date	Interest Rate	Shares	Fair Value (\$US)
FANNIE MAE	United States	1/19/2023	2.375%	4,285,000	\$4,369,243
US TREASURY N/B	United States	9/30/2022	1.875%	4,324,000	\$4,345,274
STRIPS	United States	8/15/2022	0.010%	4,318,000	\$4,086,167
STRIPS	United States	11/15/2022	0.010%	4,323,000	\$4,073,606
TSY INFL IX N/B	United States	4/15/2020	0.125%	4,036,885	\$3,994,538
US TREASURY N/B	United States	8/31/2022	1.875%	3,927,000	\$3,944,632
TSY INFL IX N/B	United States	4/15/2021	0.125%	3,511,176	\$3,478,522
TSY INFL IX N/B	United States	4/15/2022	0.125%	3,419,736	\$3,392,925
TSY INFL IX N/B	United States	4/15/2023	0.625%	3,348,191	\$3,387,632
TSY INFL IX N/B	United States	1/15/2024	0.625%	3,317,941	\$3,375,706

A complete list of portfolio holdings is available upon request.

Schedule of Investment Fees

For Fiscal Year Ended June 30, 2019

Includes the 401 (h) and 115 Trust

	Assets Under Management at		
	Fair Value ¹	Fees	Basis Points
Investment Managers' Fees			
Public equity	\$ 805,474,558	\$ 2,145,500	27
Private equity	526,949,574	1,000,138	19
Emerging market bonds	70,416,422	-	-
Growth real estate	-	862,370	-
Private debt	-	546,495	-
Short-term investment grade bonds	485,590,884	85,453	2
Core real estate	109,004,129	771,969	71
Commodities	75,974,715	867,908	114
Market neutral strategies	173,111,981	3,548,632	205
Bonds (immunized cash flows)	108,526,833	-	-
Treasury inflation-protected securities	44,423,093	-	-
Cash	25,554,491	-	-
TOTAL INVESTMENT MANAGERS' FEES	\$ 2,425,026,680	\$ 9,828,465	41

¹ Includes cash in managers' accounts; non-GAAP basis

	Fees
Other Investment Fees	
Investment consultants	\$ 592,500
Custodian bank	524,171
Investment legal fees	95,527
Other investment fees	23,255
TOTAL OTHER INVESTMENT FEES	\$ 1,235,453

Schedule of Commissions

For the Fiscal Year Ended June 30, 2019

Brokerage Firm	Shares / Par	Base Commissions	Base Comm Cost / Share
A			
ABG SECURITIES LIMITED	2,291.00	55.16 \$	0.0241
APEX CLEARING CORPORATION	20,044.00	381.70	0.0190
В			
BANCO SANTANDER CENTRAL HISPANO	2,684.00	115.80	0.0431
BANK J.VONTOBEL UND CO. AG	8,106.00	568.51	0.0701
BANK OF AMERICA CORPORATION	1,215.00	10.52	0.0087
BARCLAYS CAPITAL INC.	34,689.00	1,168.05	0.0337
BLOOMBERG TRADEBOOK LLC	4,600.00	92.00	0.0200
BMO CAPITAL MARKETS CORP	1,623.00	32.46	0.0200
BNP PARIBAS SECURITIES SERVICES	729,854.00	866.79	0.0012
BNP PARIBAS SECURITIES SERVICES AUSTR	,		
BR	162,740.00	915.48	0.0056
BNP PARIBAS SECURITIES SERVICES SA	204,660.00	1,534.12	0.0075
BOFA SECURITIES, INC.	79,906.000	1,075.12	0.0135
C			
CACEIS BANK DEUTSCHLAND GMBH	16,729.00	330.50	0.0198
CANACCORD GENUITY (AUSTRALIA) LIMITED	3,000.00	5.20	0.0017
CANACCORD GENUITY CORP.	32,383.00	495.33	0.0153
CARNEGIE A.S.	24,345.00	424.49	0.0174
CARNEGIE INVESTMENT BANK AB	56,924.00	2,259.23	0.0397
CARNEGIE SECURITIES FINLAND	1,500.00	20.98	0.0140
CHINA INTERNATIONAL CAPITAL CO	230,500.00	816.67	0.0035
CIBC WORLD MKTS INC	27,966.00	269.57	0.0096
CICC US SECURITIES INC	2,723.00	108.92	0.0400
CITIBANK N.A. SPAIN	3,700.00	26.87	0.0073
CITIBANK OF COLOMBIA	6,637.00	6.94	0.0010
CITIGROUP GLOBAL MARKETS INC.	13,600.00	189.76	0.0140
CLSA SINGAPORE PTE LTD.	89,900.00	4,023.22	0.0448
COWEN EXECUTION SERVICES LLC	16,063.00	39.41	0.0025
CRAIG - HALLUM	3,400.00	68.00	0.0200
CREDIT INDUSTRIEL ET COMMERCIA	14,100.00	503.40	0.0357
CREDIT LYONNAIS SECURITIES (ASIA)	255,000.00	834.57	0.0033
CREDIT MUTUEL-CIC BANQUES	9,800.00	525.90	0.0537
CREDIT SUISSE SECURITIES (USA) LLC	512,149.00	5,875.46	0.0115
D			
DAIWA SECURITIES AMERICA INC	317,000.00	9,638.50	0.0304
DANSKE BANK AS	39,305.00	1,253.10	0.0319
F			
FLOW CORRETORA DE MERCADORIAS LTDA.	14,199.00	62.88	0.0044
FOKUS BANK ASA	7,800.00	143.32	0.0184

Schedule of Commissions (continued) For the Fiscal Year Ended June 30, 2019

Brokerage Firm	Shares / Par	Base Commissions	Base Comm Cost / Share
G			
GABELLI & COMPANY	57,175.00	1,715.25	0.0300
GMP SECURITIES LTD.	6,000.00	68.52	0.0114
GOLDMAN SACHS & CO LLC	572,218.00	3,762.03	0.0066
GOLDMAN SACHS INTERNATIONAL	11,905.00	101.45	0.0085
Н			
HSBC BANK PLC	68,395.00	756.33	0.0111
l e e e e e e e e e e e e e e e e e e e			
ICHIYOSHI SECURITIES CO.,LTD.	148,600.00	5,868.71	0.0395
INSTINET	798,380.00	8,077.48	0.0101
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	46,280.00	157.83	0.0034
INSTINET LLC	7,192.00	33.52	0.0047
INSTINET PACIFIC LIMITED	948,700.00	1,991.72	0.0021
INSTINET SINGAPORE SERVICES PT	34,300.00	19.25	0.0006
INSTINET U.K. LTD	237,153.00	4,596.14	0.0194
INVESTMENT TECHNOLOGY GROUP LTD	13,720.00	125.18	0.0091
ITAU USA SECURITIES INC	6,445.00	225.02	0.0349
J			
J.P. MORGAN SECURITIES INC	46,027.00	970.19	0.0211
J.P. MORGAN CLEARING CORP.	19,384.00	155.06	0.0080
J.P. MORGAN SECURITIES LIMITED	11,002.00	181.86	0.0165
J.P. MORGAN SECURITIES LLC	19,584.00	193.19	0.0099
J.P. MORGAN SECURITIES PLC	701,720.00	9,827.48	0.0140
J.P. MORGAN SECURITIES (FAR EAST) LTD SEOUL	10,520.00	1,211.26	0.1151
JEFFERIES & COMPANY INC	2,630,093.00	10,768.31	0.0041
JEFFERIES INTERNATIONAL LTD	170,561.00	235.76	0.0014
JOH. BERENBERG, GOSSLER & CO. KG	320.00	14.77	0.0462
JONESTRADING INSTITUTIONAL SERVICES LLC	31,300.00	361.00	0.0115
K	,		
KOREA INVESTMENT AND SECURITIES CO., LTD	5,074.00	493.59	0.0973
L			
LARRAIN VIAL	2,018.00	73.81	0.0366
LIQUIDNET CANADA INC	791.00	12.04	0.0152
LIQUIDNET EUROPE LIMITED	2,256.00	70.44	0.0312
LIQUIDNET INC	19,900.00	398.00	0.0200
LOOP CAPITAL MARKETS	9,207.00	138.12	0.0150

Schedule of Commissions (continued)

For the Fiscal Year Ended June 30, 2019

Brokerage Firm	Shares / Par	Base Commissions	Base Comm Cost / Share
M			
MACQUARIE CAPITAL (EUROPE) LTD	3,424.00	29.21	0.0085
MACQUARIE CAPITAL (USA) INC	2,933.00	117.32	0.0400
MACQUARIE SECURITIES KOREA LIMITED	76.00	73.55	0.9678
MERRILL LYNCH INTERNATIONAL	308,340.00	1,514.95	0.0049
MORGAN STANLEY AND CO INTERNATIONAL	210.00	158.72	0.7558
MORGAN STANLEY CO INCORPORATED	37,188.00	1,274.14	0.0343
N			
NATIONAL FINANCIAL SERVICES CORPORATION	13,207.00	52.55	0.0040
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	672.00	131.68	0.1960
NOMURA SECURITIES CO LTD	28,000.00	34.47	0.0012
0			
ODDO ET CIE	10,758.00	202.01	0.0188
P			
PEEL HUNT LLP	28,600.00	297.87	0.0104
PERSHING SECURITIES LIMITED	20,791.00	141.46	0.0068
R			
RAYMOND JAMES LTD	4,600.00	68.67	0.0149
RBC CAPITAL MARKETS, LLC	9,000.00	270.00	0.0300
RBC DOMINION SECURITIES INC.	2,572.00	102.88	0.0400
REDBURN (EUROPE) LIMITED	178,717.00	1,100.93	0.0062
ROBERT W. BAIRD CO INCORPORATE	58,304.00	1,513.84	0.0260
ROYAL BANK OF CANADA EUROPE LTD	10,215.00	46.78	0.0046
SAMELING SECURITIES COLLED	40.00	07.50	4.500.4
SAMSUNG SECURITIES CO LTD	18.00	27.53	1.5294
SANFORD C. BERNSTEIN AND CO. LLC	83,766.00	2,517.37	0.0301
SANFORD C BERNSTEIN LTD	8,890.00	219.56	0.0247
SCOTIA CAPITAL (USA) INC	5,748.00	114.96	0.0200
SIDOTI & COMPANY LLC	12,000.00	342.00	0.0285
SKANDINAVISKA ENSKILDA BANKEN	65,985.00	2,641.28	0.0400
SKANDINAVISKA ENSKILDA BANKEN LONDON	42,068.00	616.40	0.0147
SMBC SECURITIES INC	241,700.00	6,651.62	0.0275
SOCIETE GENERALE LONDON BRANCH	1,675,282.00	13,933.82	0.0083
STIFEL NICOLAUS & CO INC	9,492.00	301.02	0.0317
SUNTRUST CAPITAL MARKETS, INC	1,500.00	30.00	0.0200
SVENSKA HANDELSBANKEN	33,054.00	933.84	0.0283
THE HONOROUS AND SHANOHAL BANK			
THE HONGKONG AND SHANGHAI BANK	2,123.00	41.39	0.0195
TORONTO DOMINION SECURITIES INC	28,945.00	439.48	0.0152

Schedule of Commissions (continued) For the Fiscal Year Ended June 30, 2019

Brokerage Firm	Shares / Par	Base Commissions	Base Comm Cost / Share
TOURMALINE PARTNERS	111,900.00	1,119.00	0.0100
U			
UBS AG	13,280.00	324.89	0.0245
UBS LIMITED	7,344.00	172.97	0.0236
UBS SECURITIES PTE.LTD., SEOUL	4,047.00	396.44	0.0980
W			
WEEDEN & CO.	18,600.00	558.00	0.0300
WELLS FARGO BANK N.A.	18,729.00	596.06	0.0318
WILLIAM BLAIR & COMPANY L.L.C	2,580.00	103.20	0.0400
WOLFE TRAHAN SECURITIES	13,100.00	393.00	0.0300
TOTAL	12,705,113.00	\$ 126,946.10 \$	0.0100

Investment Summary

PENSION - INCLUDES THE 401 (H) INVESTMENTS

As of June 30, 2019 (Dollars in Thousands)

Type of Investments	Fair Value	% of Portfolio
Public equity	\$ 636,756	30.0 %
Private markets	526,950	25.0
Emerging market bonds	70,416	3.0
Market neutral strategies	173,111	8.0
Short-term investment grade bonds	395,548	19.0
Bonds (immunized cash flows)	104,988	5.0
Cash and cash equivalents	25,554	1.0
Core real estate	88,018	4.0
Commodities	61,455	3.0
Treasury inflation-protected securities	44,423	2.0
TOTAL FAIR VALUE	\$ 2,127,219	100.0 %

The amounts presented above may vary from the amounts presented in the financial statements due to the investment summary presenting amounts at the manager level and the financial statements presenting amounts at the security level.

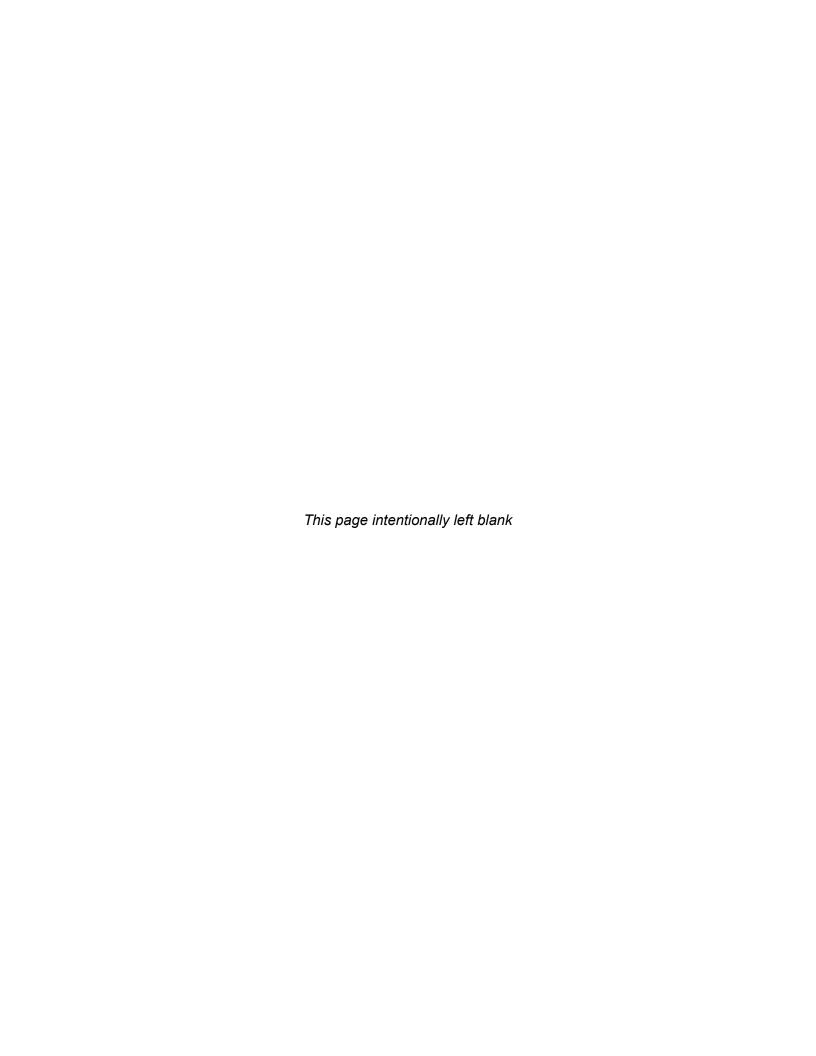
Includes cash to support synthetic exposure.

HEALTHCARE - 115 TRUST

As of June 30, 2019 (Dollars in Thousands)

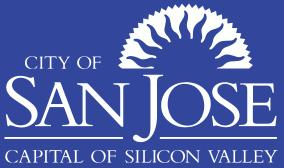
Type of Investments		Fair Value	% of Portfolio	
Public equity	\$	168,719	57.0 %	
Short-term investment grade bonds		90,043	30.0	
Bonds (immunized cash flows)		3,539	1.0	
Core real estate		20,986	7.0	
Commodities		14,520	5.0	
TOTAL FAIR VALUE	\$	297,807	100.0 %	

The amounts presented above may vary from the amounts presented in the financial statements due to the investment summary presenting amounts at the manager level and the financial statements presenting amounts at the security level.



Actuarial Section





Pension Trust and Postemployment Healthcare Trust Funds of the City of San José, California



City of San José

Federated City Employees' Retirement System

Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018

Actuary's Certification Letter - Pension



Classic Values, Innovative Advice

July 24, 2019

Board of Administration City of San José Federated City Employees' Retirement System 1737 North 1st Street, Suite 580 San José, CA 95112

Dear Members of the Board:

The purpose of this letter is to provide the certification for the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) for the City of San José Federated City Employees' Retirement System (System) with respect to pension benefits.

Actuarial Valuation Used for Funding Purposes

Actuarial valuations are performed annually, but prior to June 30, 2009, actuarial valuations were performed every other year. The most recent actuarial valuation was performed as of June 30, 2018. Please refer to that report for additional information related to the funding of the System.

We prepared the following schedules for inclusion in the Actuarial Section of the CAFR based on the June 30, 2018 actuarial valuation. All historical information prior to the June 30, 2010 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Gabriel, Roeder, Smith and Company.

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Analysis of Financial Experience
- Schedule of Funded Liabilities by Type
- Schedule of Funding Progress
- Summary of Plan Provisions

The funding ratios shown in the schedule of funded liabilities by type and the schedule of funding progress exhibits are ratios compared to the funding target and are for the purpose of evaluating funding progress in a budgeting context. These ratios are not appropriate for measuring or assessing the sufficiency of System assets to cover the estimated cost of settling the System's benefit obligations.

The Board of Administration is responsible for establishing and maintaining the contribution policy for the System. The actuarial methods and assumptions used in the actuarial valuation are adopted by the Board of Administration with advice from the actuary. In our opinion, the assumptions and methods used in the actuarial valuation for funding purposes are consistent with applicable Actuarial Standards of Practice. The actuarial cost method and the actuarial assumptions used for funding purposes are the same as those used for financial reporting purposes.

Actuary's Certification Letter - Pension (continued)

Board of Administration July 24, 2019 Page 2

Actuarial Valuation Used for Financial Reporting Purposes

For financial reporting purposes, the Total Pension Liability is based on the June 30, 2018 actuarial valuation updated to the measurement date of June 30, 2019. The Board reduced the discount rate and updated the mortality improvement table for the June 30, 2018 valuation. These changes are detailed in the actuarial assumptions and methods attachment of this letter. These changes are reflected effective July 1, 2018 for financial reporting purposes. Consequently, the update was based upon the Total Pension Liability as of the valuation date reflecting the new assumptions, and projected to the measurement date with the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 67/68 report as of June 30, 2019 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the CAFR based on the June 30, 2019, 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
- Notes to the Schedule of Employer Contributions

Reliance on the Information Provided by the System and Compliance with ASOPs and GAAP

In preparing our valuations and the schedules for the CAFR, we relied on information (some oral and some written) supplied by the City of San José Office of Retirement Services. 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 for funding and financial reporting purposes may differ significantly from the current measurements presented in this CAFR due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

This letter and the schedules named above have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. The schedules provided for financial reporting purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter and these exhibits. This letter does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.



Actuary's Certification Letter - Pension (continued)

Board of Administration July 24, 2019 Page 3

This letter and the schedules named above were prepared for the System for the purposes described herein. Other users of this information are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Sincerely, Cheiron

William R. Hallmark, ASA, EA, FCA, MAAA

William R. Hall ask

Consulting Actuary

Steven M. Hastings, FSA, EA, MAAA

Consulting Actuary

laquelie ling

Jacqueline R. King, ASA, EA, MAAA

Associate Actuary

Actuarial Assumptions and Methods

DEFINED BENEFIT PENSION

<u>Actuarial Assumptions</u>

The wage inflation assumption, amortization payment growth rate, and mortality improvement scale were adopted by the Board of Administration with our input at the December 21, 2017 Board meeting. The discount rate assumption was adopted by the Board of Administration with our input at the November 15, 2018 Board meeting. The Tier 2 retirement rates were adopted at the May 4, 2017 Board meeting based on a special analysis presented at that meeting. All other assumptions were adopted at the November 19, 2015 Board meeting based on recommendations from our experience study covering plan experience during the period from July 1, 2010 through June 30, 2015. Please refer to the full experience study report for details, including the rationale for each assumption.

1) Discount Rate

6.75%. The Board expects a long-term rate of return of 7.3% based on Meketa's 20-year capital market assumptions and the System's current investment policy. A margin for adverse deviation was used to improve the probability of achieving the discount rate.

2) Wage Inflation and Payroll Growth

3.25%, compounded annually.

3) Amortization Payment Growth

3.00%, compounded annually.

4) Price Inflation

2.50%, compounded annually.

5) Administrative Expenses

1.0% of payroll is added to the normal cost of the system for expected administrative expenses.

6) Salary Increase Rate

In addition to the wage inflation component of 3.25% shown above, the following merit component is added based on an individual member's years of service:

	Table B-1										
	Table B-1 Salary Merit Increases										
Years of Service	Merit/ Longevity	Years of Service	Merit/ Longevity	Years of Service	Merit/ Longevity						
0	4.50%	6	0.95%	12	0.35%						
1	3.50%	7	0.75%	13	0.30%						
2	2.50%	8	0.60%	14	0.25%						
3	1.85%	9	0.50%	15+	0.25%						
4	1.40%	10	0.45%								
5	1.15%	11	0.40%								

7) Family Composition

Percentage married is shown in the following Table B-2. Male retirees are assumed to be three years older than their partner, and female retirees are assumed to be two years younger than their partner.

Table B-2						
Percentage Married						
	Males	Females				
Percentage	80%	60%				

DEFINED BENEFIT PENSION (continued)

8) Rates of Termination

Sample rates of termination are shown in the following Table B-3.

	Table B-3									
				Rates of 1	Termination	on				
Age	20	25	30	35	40	45	50	55	60	65
0 Years of										
Service	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	0.00%
1-4 Years of										
Service	17.50%	15.50%	13.50%	11.50%	9.50%	8.00%	7.00%	6.00%	5.00%	0.00%
5 or more Years										
of Service	9.00%	9.00%	7.00%	5.50%	4.50%	3.50%	3.00%	3.00%	0.00%	0.00%

^{*} Withdrawal/ termination rates do not apply once a member is eligible for retirement

9) Rate of Reciprocity

25% of terminating employees are assumed to subsequently work for a reciprocal employer and receive 3.25% pay increases per year.

10) Rates of Refund

Tier 1:

Sample rates of vested terminated and reciprocal employees electing a refund of contributions are shown in the following Table B-4.

Table B-4									
Rates of Refund									
Age	20	25	30	35	40	45	50	55	
Refund	40.0 %	40.0 %	27.5 %	17.0 %	8.0 %	3.0 %	1.0 %	0.0 %	

Tier 2:

Vested terminated and reciprocal employees are expected to take a refund if it exceeds the actuarial present value of their deferred benefit payment.

11) Rates of Disability

Sample disability rates of active members are provided in Table B-5.

	Table B-5										
Rates of Disability at Selected Ages											
Age	20	25	30	35	40	45	50	55	60	65	70
Disability	0.014%	0.014%	0.021%	0.063%	0.136%	0.201%	0.218%	0.200%	0.181%	0.167%	0.149%

40% of disabilities are assumed to be duty-related, and 60% are assumed to be non-duty.

DEFINED BENEFIT PENSION (continued)

12) Rates of Mortality

Mortality rates for actives, retirees, beneficiaries, terminated vested, and reciprocals are based on the sex-distinct employee and annuitant CalPERS mortality tables as described below. The CalPERS tables are from their 2014 experience study with a central experience year of 2009 and prior to the 20-year projection of those rates using Scale BB. Future mortality improvements are reflected by applying the most recent projection scale issued by the Society of Actuaries on a generational basis from the base year of 2009. The projection scale used for this valuation is MP-2018.

	Table B-5								
Base Mortality Tables									
Category	Male	Female							
	0.952 times the CalPERS 2009 Healthy	0.921 times the CalPERS 2009 Healthy							
Healthy Annuitant	Annuitant Mortality Table (Male)	Annuitant Mortality Table (Female)							
	0.919 times the CalPERS 2009 Employee	0.918 times the CalPERS 2009 Employee							
Healthy Non-Annuitant	Mortality Table (Male)	Mortality Table (Female)							
	1.051 times the CalPERS 2009 Ordinary	1.002 times the CalPERS 2009 Ordinary							
Disabled Annuitant	Disability Mortality Table (Male)	Disability Mortality Table (Female)							

13) Rates of Retirement for Tier 1 Members

Rates of retirement for Tier 1 members are based on age according to the following Table B-6 – Tier 1.

	Table B-6 Tier 1										
	Rates of Retirement by Age and Service										
		15 or more Years				15 or more Years					
	Less than	of Service and	30 or more		Less than	of Service and	30 or more				
	15 Years of	less than 30	Years of		15 Years of	less than 30	Years of				
Age	Service	years of Service	Service	Age	Service	years of Service	Service				
50	0.0%	0.0%	70.0%	61	8.0%	30.0%	45.0%				
51	0.0%	0.0%	70.0%	62	9.0%	30.0%	45.0%				
52	0.0%	0.0%	70.0%	63	10.0%	30.0%	45.0%				
53	0.0%	0.0%	70.0%	64	15.0%	35.0%	45.0%				
54	0.0%	0.0%	70.0%	65	20.0%	40.0%	45.0%				
55	8.0%	35.0%	50.0%	66	20.0%	40.0%	45.0%				
56	8.0%	22.5%	50.0%	67	20.0%	40.0%	45.0%				
57	8.0%	22.5%	50.0%	68	20.0%	40.0%	45.0%				
58	8.0%	22.5%	50.0%	69	20.0%	40.0%	45.0%				
59	8.0%	22.5%	50.0%	70 & over	100.0%	100.0%	100.0%				
60	8.0%	22.5%	45.0%								

DEFINED BENEFIT PENSION (continued)

14) Rates of Retirement for Tier 2 Members

Rates of retirement for Tier 2 members are based on age and service according to the following Table B-6 – Tier 2.

	Table B-6 Tier 2										
Tier 2 Rates of Retirement by Age and Service											
Age Age											
Years of Service	55	56	57	58	59	60-61	62	63-69	70 & over		
5-10	3.0%	2.0%	2.5%	3.0%	3.5%	4.0%	7.5%	5.0%	100.0%		
11-20	5.0%	3.5%	4.5%	5.5%	7.0%	8.5%	12.5%	10.0%	100.0%		
21-25	7.0%	4.0%	5.0%	7.0%	9.0%	10.0%	17.5%	15.0%	100.0%		
26-34	10.0%	7.0%	8.5%	11.0%	13.5%	14.5%	25.0%	25.0%	100.0%		
35+	15.0%	10.5%	12.75%	16.5%	20.25%	21.75%	100.0%	100.0%	100.0%		

15) Deferred Member Benefit

The benefit was estimated based on information provided by the Office of Retirement Services. The data used to value the estimated deferred benefit were credited service, date of termination, and last pay rate. Based on the data provided, the highest average salary was estimated.

Tier 1 terminated vested members are assumed to retire at age 57 and Tier 2 terminated vested members are assumed to retire at age 62.

16) Changes Since Last Valuation

The discount rate was reduced from 6.875% to 6.75%.

The mortality improvement table was updated from MP-2017 to MP-2018.

Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below. All components of the contribution allocation procedure were established prior to the June 30, 2010 actuarial valuation except as specifically noted below.

1) Actuarial Cost Method

The Entry Age actuarial cost method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund all benefits between each member's date of hire and last assumed date of employment. The actuarial liability is the difference between the present value of future benefits and the present value of future normal costs. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and actuarial liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and actuarial liability for the System. The actuarial liability for the System represents the target amount of assets the System should have as of the valuation date according to the actuarial cost method.

2) Asset Valuation Method

For the purpose of determining contribution rates and amounts, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contribution rates.

The actuarial value of assets is calculated by recognizing 20% of the difference in each of the prior four years of actual investment returns compared to the expected return on the market value of assets.

DEFINED BENEFIT PENSION (continued)

3) Amortization Method

The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.

The Tier 1 unfunded actuarial liability as of June 30, 2009 is amortized as a level percentage of Tier 1 pay over a closed 30-year period commencing June 30, 2009. Tier 1 actuarial gains and losses and plan changes are amortized over 20-year periods and Tier 1 assumption changes are amortized over 25-year periods beginning with the valuation date in which they first arise. Effective June 30, 2017, all prior assumption amortization base periods were increased by 5 years so they have the same remaining period as if they had originally been amortized over 25 years. Amortization payments are scheduled to increase 3.00% each year while aggregate payroll is expected to grow 3.25% each year.

The Tier 2 unfunded actuarial liability as of June 30, 2017 is amortized over a closed 10-year period. Future Tier 2 actuarial gains and losses, assumption changes, and plan changes will be amortized over 10-year periods beginning with the valuation date in which they first arise. Amortization payments are scheduled to increase 3.00% each year while aggregate payroll is expected to grow 3.25% each year.

The amortization payment for the 2015 assumption changes was phased in over a 3-year period. The phase-in was calculated by multiplying the first year amortization payment by one third. For the second year, the amortization schedule is recalculated reflecting the one-third payment in the first year and the remaining 19-year period, and the calculated amortization payment is then multiplied by two-thirds. For the third year, the amortization schedule is again recalculated reflecting the prior payments and the remaining 18-year period. With this valuation, the phase-in period is complete.

4) Contributions

The Board adopted a policy in 2010 and modified it in 2015 setting the City's contribution to be the UAL contribution amount reported in the actuarial valuation plus the greater of the normal cost dollar amount reported in the actuarial valuation (adjusted for interest based on the time of the contribution) and the dollar amount determined by applying the normal cost as a percent of payroll reported in the actuarial valuation to the actual payroll for the fiscal year. The City and Member contributions determined by a valuation become effective for the fiscal year commencing one year after the valuation date. For Tier 1, City contributions are normally made on the first day of the fiscal year. All other contributions are made on a payroll-by-payroll basis.

The total contribution rate is the sum of the normal cost rate, assumed administrative expenses, and the UAL rate. Under Measure F, the total contribution rate cannot be less than the normal cost rate. The normal cost rate is determined by dividing the total normal cost determined under the actuarial cost method by the payroll expected for members active on the valuation date. The UAL payments are adjusted for interest from the valuation date to the date of expected payment in the following fiscal year. The UAL rate is determined by dividing the UAL payments by the total expected payroll for the year (including members active on the valuation date and new entrants expected to replace active members who are expected to leave employment).

For Tier 1, members contribute 3/11ths of the normal cost rate (including administrative expenses, but excluding reciprocity), and the City pays the remainder of the total contribution rate. Tier 1 members who were rehired into Tier 2 and then returned to Tier 1 under Measure F also pay half of the increased cost attributable to their Tier 2 service.

For Tier 2, the members and the City each pay half of the total contribution rate. However, the member's UAL contribution rate cannot increase by more than 0.33% of pay each year. The City contributes any amounts in excess of this cap that would otherwise be contributed by the member.

5) Changes Since Last Valuation

None.

DEFINED BENEFIT PENSION (continued)

		SCH	EDULE OF ACTIVE	MEMBER DATA	
Valuation Date	Active Count	<u> </u>	Annual Payroll	Average Annual Pay	Percent Change in Average Pay
2018	3,554	\$	298,985,000	\$ 84,126	-0.2 %
2017	3,410		287,339,000	84,264	4.1
2016	3,297		266,823,000	80,929	4.2
2015	3,236		251,430,000	77,698	3.3
2014	3,121		234,677,000	75,193	3.0
2013	3,094		225,779,000	72,973	-0.6
2012	3,076		225,859,000	73,426	5.0
2011	3,274		228,936,000	69,925	-11.2
2010	3,818		300,811,000	78,788	-0.5
2009	4,079		323,020,000	79,191	7.1

2009 is an increase over a two year period, not an annual increase.

SC	SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS										
	Beginning of					Removed from					
		Period	Added to Rolls		Rolls		End of Period				
									% Increase	Average	
		Annual		Annual		Annual		Annual	in Annual	Annual	
Period	Count	Allowances	Count	Allowances	Count	Allowances	Count	Allowances	Allowances 1	Allowances	
2017-2018	4,115	\$ 187,714	223	\$ 9,133	113	\$ 3,994	4,225	\$ 198,157	5.6%	\$ 47	
2016-2017	4,003	177,751	225	8,843	113	3,894	4,115	187,714	5.6	46	
2015-2016	3,901	168,917	212	7,907	110	3,904	4,003	177,751	5.2	44	
2014-2015	3,800	159,124	200	8,266	99	3,122	3,901	168,917	6.2	43	
2013-2014	3,711	150,934	194	7,274	105	3,405	3,800	159,124	5.4	42	
2012-2013	3,602	142,063	198	7,036	89	2,360	3,711	150,934	6.2	41	
2011-2012	3,428	129,869	250	14,158	76	1,964	3,602	142,063	9.4	39	
2010-2011	3,111	112,660	398	19,615	81	2,406	3,428	129,869	15.3	38	
2009-2010	2,930	101,194	206	10,700	79	2,204	3,111	112,660	11.3	37	
2007-2009	2,691	84,723	376	14,890	137	3,450	2,930	101,194	19.4	35	

¹Years prior to 2009-2010 are increases over a two year period, not an annual increase.

Dollar amounts in thousands

DEFINED BENEFIT PENSION (continued)

ANALYSIS OF FINANCIAL EXPERIENCE											
Gain or (Loss) for Year Ending on Valuation Date Due To:											
Actuarial Valuation Data	Investment				Total Financial	Non- Recurring		To			
Actuarial Valuation Date	Income		Experience		Experience	ı.	ems	Exper	ience		
June 30, 2018	\$ (49,921)	\$	4,702	\$	(45,219)	\$	(56,306)	\$ (1	01,525)		
June 30, 2017	(44,650)		(13,819)		(58,469)		1,813	(56,656)		
June 30, 2016	(81,539)		(29,989)		(111,528)		(60,233)	(1	71,761)		
June 30, 2015	(3,641)		(45,998)		(49,639)		(191,527)	(2	41,166)		
June 30, 2014	39,675		(13,600)		26,075		(103,404)	(77,329)		
June 30, 2013	(76,502))	2,899		(73,603)		(63,668)	(1	37,271)		
June 30, 2012	(119,331))	2,023		(117,308)		43,109	(74,199)		
June 30, 2011	(82,166))	83,403		1,237		(187,548)	(1	86,311)		
June 30, 2010	(124,137))	45,785		(78,352)		(18,467)	(96,819)		

Dollar amounts in thousands

	SCHEDULE OF FUNDED LIABILITIES BY TYPE											
	Actuarial Liability for:											
Valuation Date	Active Member Contributions	Retirees, Beneficiaries and Other Inactives	Remaining Active Members' Liabilities	Reported Assets ¹	Portion of Actuarial Liability Covered by Reported Assets							
June 30,	(A)	(B)	(C)		(A)	(B)	(C)					
2018	\$ 230,282	\$ 3,002,012	\$ 868,527	\$ 2,179,488	100 %	65 %	0 %					
2017	236,819	2,830,143	857,004	2,101,435	100	66	0					
2016	240,872	2,722,224	823,634	2,034,741	100	66	0					
2015	243,828	2,553,892	772,178	2,004,481	100	69	0					
2014	233,289	2,331,656	670,120	1,911,773	100	72	0					
2013	234,217	2,164,153	615,393	1,783,270	100	72	0					
2012	234,619	2,001,498	604,883	1,762,973	100	76	0					
2011	234,574	1,848,254	687,400	1,788,660	100	84	0					
2010	242,944	1,504,698	762,716	1,729,413	100	99	0					
2009	228,967	1,393,114	864,074	1,756,558	100	100	16					

¹Actuarial Value of Assets

Dollar amounts in thousands

DEFINED BENEFIT PENSION (continued)

SCHEDULE OF FUNDING PROGRESS											
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Liability (AL)	Unfunded AL (UAL)	Funded Ratio	Covered Payroll	UAL as a % of Covered Payroll					
June 30, 2018 ¹⁰	\$ 2,179,488	\$ 4,100,821	\$ 1,921,333	53.1 %	\$ 298,985	643 %					
June 30, 2017 ⁹	2,101,435	3,923,966	1,822,531	53.6 %	287,339	634 %					
June 30, 2016 ⁸	2,034,741	3,786,730	1,751,989	53.7 %	266,823	657 %					
June 30, 2015 ⁷	2,004,481	3,569,898	1,565,417	56.1 %	251,430	623 %					
June 30, 2014 ⁶	1,911,773	3,235,065	1,323,292	59.1 %	234,677	564 %					
June 30, 2013⁵	1,783,270	3,013,763	1,230,493	59.2 %	225,779	545 %					
June 30, 2012 ⁴	1,762,973	2,841,000	1,078,027	62.1 %	225,859	477 %					
June 30, 2011 ³	1,788,660	2,770,227	981,567	64.6 %	228,936	429 %					
June 30, 2010 ²	1,729,413	2,510,358	780,945	68.9 %	300,811	260 %					
June 30, 2009 ¹	1,756,558	2,486,155	729,597	70.7 %	323,020	226 %					

Dollar amounts in thousands

Demographic and economic assumption changes, including reducing the discount rate from 8.25% to 7.75% increased the AL by \$229 million.

Increasing the discount rate from 7.75% to 7.95% decreased the AL by \$59 million.

Demographic and economic assumption changes, including reducing the discount rate from 7.95% to 7.5% increased the AL by \$188 million

⁴ Elimination of the Supplemental Retirement Benefit Reserve reduced the AL by \$43 million.

⁵ Reducing the discount rate from 7.5% to 7.25% and wage inflation to 2% for 5 years and 2.85% thereafter increased the AL by \$64 million.

Reducing the discount rate from 7.25% to 7.0% and eliminating the temporary 2% wage inflation increased the AL by \$103 million.

⁷ Demographic and economic assumption changes decreased the AL by \$192 million.

⁸ Reducing the discount rate from 7.00% to 6.875% increased the AL by \$60 million.

⁹ Measure F implementation increased the AL by \$14 million and assumption changes decreased the AL by \$16 million.

¹⁰ Assumption changes increased the AL by \$54 million.

Summary of Pension Plan Provisions - Tier 1

1) Membership Requirement

Participation in the System is immediate upon the first day of full-time employment for members hired before September 30, 2012, including members that are rehired after September 30, 2012 and had prior service under Tier 1 and did not take a return of contributions. In addition, any person accepting employment on or after September 30, 2012 who is otherwise eligible for this plan and who was a "classic" member in another California public retirement system with which this system has reciprocity, and who has a break in service of less than six months from that covered employment and employment with the City, shall be a Tier 1 member of this system.

2) Final Compensation

Members who separated from City service prior to June 30, 2001

The highest average annual compensation earnable during any period of three consecutive years.

Members who separated from City service on or after June 30, 2001

The highest average annual compensation earnable during any period of twelve consecutive months.

3) Credited Service

One year of service credit is given for 1,739 or more hours of Federated City service rendered in any calendar year. A partial year (fraction with the numerator equal to the hours worked, and the denominator equal to 1,739) is given for each calendar year with less than 1,739 hours worked.

4) Member Contributions

Member:

The amount needed to fund 3/11ths of benefits accruing for the current year. These contributions are credited with interest at 3.0% per year, compounded annually.

Employer:

The Employer contributes the remaining amounts necessary to maintain the soundness of the Retirement System.

5) Service Retirement

Eligibility:

Age 55 with five years of service, or any age with 30 years of service.

Benefit - Member:

2.5% of Final Compensation for each year of credited service, subject to a maximum of 75% of Final Compensation.

Benefit - Survivor:

50% of the service retirement benefit paid to a qualified survivor.

6) Service-Connected Disability Retirement

Eligibility:

No age or service requirement.

Benefit - Member:

2.5% of Final Compensation for each year of credited service, subject to a minimum of 40% and a maximum of 75% of Final Compensation. Workers' Compensation benefits are generally offset from the service-connected benefits under this system.

Benefit - Survivor:

50% of the disability retirement benefit paid to a qualified survivor.

Summary of Pension Plan Provisions - Tier 1 (continued)

7) Non-Service Connected Disability Retirement

Eligibility:

Five years of service.

Benefit - Member:

Members who were hired prior to September 1, 1998:

The amount of the service-connected benefit reduced by 0.5% for each year that the disability age preceded 55.

Members who were hired on or after September 1, 1998:

20% of Final Compensation, plus 2% of Final Compensation for each year of credited service between six and 16 years, plus 2.5% of Final Compensation for each year of credited service in excess of 16 years, subject to a maximum of 75% of Final Compensation.

Benefit - Survivor:

50% of the disability retirement benefit paid to a qualified survivor.

8) Death While an Active Employee

Less than five years of service, or no qualified survivor:

Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus one month of salary for each year of service, up to a maximum of six years.

Five or more years of service:

2.5% of Final Compensation for each year of credited service, subject to a minimum of 40% and a maximum of 75% of Final Compensation. The benefit is payable until the spouse or registered domestic partner marries or establishes a domestic partnership. If the member was age 55 with 20 years of service at death, the benefit is payable for the lifetime of the member's spouse or registered domestic partner.

9) Withdrawal Benefits

Less than five years of service:

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service:

The amount of the service retirement benefit, payable at age 55.

10) Additional Post-Retirement Death Benefit

A death benefit payable as a lump sum equal to \$500 will be paid to a qualified survivor upon the member's death.

11) Post-Retirement Cost-of-Living Benefit

Benefits are increased every April 1 by 3.0%, regardless of actual inflation.

12) Changes Since the Last Valuation

None.

Summary of Pension Plan Provisions - Tier 2

1) Membership Requirement

Any person who is hired, rehired or reinstated by the City on or after September 30, 2012 except those who elect to participate in a defined contribution plan, had prior service under Tier 1 and did not take a return of contributions, or had prior service as a "classic" member in a reciprocal system with less than a six month break in service.

2) Final Compensation

The average annual compensation earnable during the highest three consecutive years of service. Final compensation only includes base pay, excluding premium pay and any other additional compensation.

3) Credited Service

One year of service credit is given for 2,080 or more hours of Federated City service rendered in any calendar year. A partial year (fraction with the numerator equal to the hours worked, and the denominator equal to 2,080) is given for each calendar year with less than 2,080 hours worked.

4) Member Contributions

50% of total Tier 2 contributions to the pension plan, including, but not limited to administrative expenses, normal cost and unfunded actuarial liability. However, the member's UAL contribution rate cannot increase by more than 0.33% of pay each year. The City contributes any amounts in excess of this cap that would otherwise be contributed by the member.

The member contribution rate cannot be less than 50% of the normal cost rate.

5) City Contributions

50% of total Tier 2 contributions to the pension plan, including, but not limited to administrative expenses, normal cost, and unfunded actuarial liability. In addition, the City contributes any UAL amounts in excess of the member UAL cap until the member rate covers 50% of the UAL rate.

The City contribution rate cannot be less than 50% of the normal cost rate.

6) Unreduced Service Retirement

Eligibility:

Age 62 with five years of service.

Benefit - Member:

2.0% of Final Compensation for each year of credited service attributable to Tier 2, subject to a maximum of 70% of Final Compensation.

Benefit - Survivor:

50% of the service retirement benefit paid to a qualified survivor.

7) Early Service Retirement

Eligibility:

Age 55 with five years of service.

Benefit - Member:

Benefit reduced by a factor of 5% for each year the member retires before age 62.

The early retirement reduction is applied to the benefit after the application of the maximum of 70% of final compensation.

8) Service-Connected Disability Retirement

Eligibility:

No age or service requirement.

Summary of Pension Plan Provisions - Tier 2 (continued)

<u>Benefit - Member:</u>

2.0% of Final Compensation for each year of credited service, subject to a minimum of 40% of Final Compensation and a maximum of 70% of Final Compensation, less the amounts specified in Section 3.28.1330 and Section 3.28.1340.

9) Non-Service Connected Disability Retirement

Eligibility:

Five years of service.

Benefit - Member:

2.0% of Final Compensation for each year of credited service attributable to Tier 2, subject to a minimum of 20% of Final Compensation and a maximum of 70% of Final Compensation less the amounts specified in Section 3.28.1330 and Section 3.28.1340.

10) Death Before Retirement

Less than five years of service, or no qualified survivor:

Lump sum benefit equal to the accumulated refund of all employee contributions with interest, plus one month of salary for each year of service, up to a maximum of six years.

Five or more years of service:

2.5% of Final Compensation for each year of credited service, subject to a minimum of 40% and a maximum of 70% of Final Compensation. The benefit is payable until the spouse or registered domestic partner marries or establishes a domestic partnership. If the member was age 55 with 20 years of service at death, the benefit is payable for the lifetime of the member's spouse or registered domestic partner.

11) Withdrawal Benefits

Less than five years of service:

Lump sum benefit equal to the accumulated employee contributions with interest.

Five or more years of credited service:

The amount of the service retirement benefit reduced for early retirement, and payable when retirement eligibility is reached.

12) Benefit Forms

Annuity benefits are paid in the form of a 50% joint and survivor annuity or an actuarially equivalent annuity with 75% or 100% continuance to a survivor.

13) Post-retirement Cost-of-Living Benefit

Benefits are increased every April 1 by the change in the December CPI-U for San José-San Francisco-Oakland, subject to a cap based on years of service as shown in the table below.

Years of Service	Maximum COLA
At least 1, but less than 11	1.25% ¹
At least 11, but less than 21	1.50%
At least 21, but less than 26	1.75%
At least 26	2.00%

¹ 1.5% for members hired before Measure F effective date

The first COLA after retirement shall be prorated based on the number of months retired.

14) Changes Since the Last Valuation

None.

Actuary's Certification Letter OPEB



Classic Values, Innovative Advice

July 25, 2019

Board of Administration City of San José Federated City Employees' Retirement System 1737 North 1st Street, Suite 580 San José, CA 95112

Dear Members of the Board:

The purpose of this letter is to provide the certification for the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) for the City of San José Federated City Employees' Retirement System (System) with respect to Other Postemployment Benefits (OPEB) provided through the City of San José Federated Postemployment Healthcare Plan ("Plan").

Actuarial Valuation Used for Funding Purposes

Actuarial valuations are performed annually, but prior to June 30, 2009, actuarial valuations were performed every other year. The most recent actuarial valuation was performed as of June 30, 2018. Please refer to that report for additional information related to the funding of the Plan.

We prepared the following schedules for inclusion in the Actuarial Section of the CAFR based on the June 30, 2018 actuarial valuation. All historical information prior to the June 30, 2010 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Gabriel, Roeder, Smith and Company.

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Member Benefit Coverage Information
- Analysis of Financial Experience
- Schedule of Funding Progress
- Summary of Key Substantive Plan Provisions

The funding ratios shown in the member benefit coverage information and the schedule of funding progress exhibits are ratios compared to the funding target and are for the purpose of evaluating funding progress in a budgeting context. These ratios are not appropriate for measuring or assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations.

Employees hired on or after September 1, 2013 are not eligible to enter the Plan.

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Actuary's Certification Letter OPEB (continued)

Board of Administration July 25, 2019 Page 2

Historically, member and City contributions to the Plan had been negotiated through collective bargaining and were not actuarially determined. With the implementation of Measure F, member contributions are now fixed at 7.5% of pay; the City's contribution toward the explicit subsidy is actuarially determined; and, the City also pays the implicit subsidy on a pay-as-you-go basis as a part of active health premiums. Finally, the City has an option to limit its contribution for the explicit subsidy to 14% of payroll.

The actuarial methods and assumptions used in the actuarial valuation are adopted by the Board of Administration with advice from the actuary. In our opinion, the assumptions and methods used in the actuarial valuation for funding purposes are consistent with applicable Actuarial Standards of Practice. The actuarial cost method and the actuarial assumptions used for funding purposes are the same as those used for financial reporting purposes.

Actuarial Valuation Used for Financial Reporting Purposes

For financial reporting purposes, the Total OPEB Liability is based on the June 30, 2018 actuarial valuation updated to the measurement date of June 30, 2019. The Board reduced the discount rate, updated the mortality improvement scale, and adjusted plan enrollment assumptions for the June 30, 2018 valuation. These changes are detailed in the actuarial assumptions and methods attachment of this letter. These changes are reflected effective July 1, 2018 for financial reporting purposes. Consequently, the update was based upon the Total OPEB Liability as of the valuation date reflecting the new assumptions, and projected to the measurement date with the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 74/75 report as of June 30, 2019 for additional information related to the financial reporting of the Plan. We prepared the following schedules for inclusion in the Financial Section of the CAFR as shown in the June 30, 2019, GASB 74/75 report.

- Change in Net OPEB Liability
- Sensitivity of Net OPEB Liability to Changes in Discount Rate and Healthcare Cost Trend Rates
- Schedule of Changes in Net OPEB Liability and Related Ratios
- Schedule of Employer Contributions

Reliance on the Information Provided by the System and Compliance with GAAP

In preparing our valuations and the schedules for the CAFR, we relied on information (some oral and some written) supplied by the City of San José Office of Retirement Services. 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 for funding and financial reporting purposes may differ significantly from the current measurements presented in this CAFR due to such factors as the



Actuary's Certification Letter OPEB (continued)

Board of Administration July 25, 2019 Page 3

following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

This letter and the schedules named above and have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter and these exhibits. This letter does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This letter and the schedules named above were prepared for the Plan for the purposes described herein. Other users of this information are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

This letter and the exhibits named above do not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations.

Sincerely, Cheiron

William R. Hallmark, ASA, EA, FCA, MAAA

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Consulting Actuary

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Associate Actuary



Actuarial Assumptions and Methods

POSTEMPLOYMENT HEALTHCARE

Economic Assumptions:

The expected return on plan assets and per person cost trend assumptions shown below were adopted by the Board of Administration with our input at the December 20, 2018 Board meeting.

1) Expected Return on Plan Assets:

6.75% per year. The Board expects a long-term rate of return of 6.80% based on Meketa's 20-year capital market assumptions and the System's current investment policy.

2) Per Person Cost Trends:

		Annual Increase %													
To Calendar Year		2024	2022	2023	2024	2025	2026	2027	2028	2020	2030	2034	2032	2033	2034+
Pre-	2020	2021	2022	2023	2024	2025	2020	LUZI	2020	2023	2030	200 1	2002	2000	20041
Medicare	8.00	7.73	7.46	7.20	6.93	6.66	6.39	6.13	5.86	5.59	5.32	5.05	4.79	4.52	4.25
Medicare Eligible	6.00	5.88	5.75	5.63	5.50	5.38	5.25	5.13	5.00	4.88	4.75	4.63	4.50	4.38	4.25
Dental	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

Actual premium increases for 2019 were reflected with the above rates applying thereafter. Deductibles, Co-payments, Out-of-Pocket Maximums, and Annual Maximum (where applicable) are assumed to increase at the above trend rates.

3) Changes Since Last Valuation:

The expected return on Plan assets was lowered from 6.875% to 6.75%.

Plan enrollment assumptions were updated based on recent experience and the expected impact of added and dropped plans. The per person cost trends were updated.

Demographic Assumptions:

The Plan election assumptions were adopted by the Board of Administration at the December 20, 2018 Board meeting based on our recommendations. The other demographic assumptions shown below were adopted at the November 19, 2015 Board meeting based on recommendations from our experience study covering plan experience during the period from July 1, 2010 through June 30, 2015. Please refer to the full experience study report for details, including the rationale for each assumption.

POSTEMPLOYMENT HEALTHCARE (continued)

1) Retirement Rates:

Rates of retirement for Tier 1 members are based on age according to the following Table - Tier 1.

				R 1						
Age	Rates of Retirement 15 or more years Less than of service and less 30 or more 15 years of than 30 years of years of service service service				15 or more years					
50	0.0%	0.0%	70.0%	61	8.0%	30.0%	45.0%			
51	0.0	0.0	70.0	62	9.0	30.0	45.0			
52	0.0	0.0	70.0	63	10.0	30.0	45.0			
53	0.0	0.0	70.0	64	15.0	35.0	45.0			
54	0.0	0.0	70.0	65	20.0	40.0	45.0			
55	8.0	35.0	50.0	66	20.0	40.0	45.0			
56	8.0	22.5	50.0	67	20.0	40.0	45.0			
57	8.0	22.5	50.0	68	20.0	40.0	45.0			
58	8.0	22.5	50.0	69	20.0	40.0	45.0			
59	8.0	22.5	50.0	70 & over	100.0	100.0	100.0			
60	8.0	22.5	45.0							

Rates of retirement for Tier 2 members are based on age according to the following Table - Tier 2.

	TIER 2 Rates of Retirement by Age and Service								
	Age Age								
Years of Service	55	56	57	58	59	60-61	62	63-69	70 & over
5 - 10	3.0%	2.0%	2.5%	3.0%	3.5%	4.0%	7.5%	5.0%	100.0%
11 - 20	5.0	3.5	4.5	5.5	7.0	8.5	12.5	10.0	100.0
21 - 25	7.0	4.0	5.0	7.0	9.0	10.0	17.5	15.0	100.0
26 - 34	10.0	7.0	8.5	11.0	13.5	14.5	25.0	25.0	100.0
35+	15.0	10.5	12.75	16.5	20.25	21.75	100.0	100.0	100.0

Tier 1 terminated vested members are assumed to retire at age 57 and Tier 2 terminated vested members are assumed to retire at age 62.

2) Rates of Termination:

Sample rates of termination are shown in the following table.

	Rates of Termination									
Age	20	25	30	35	40	45	50	55	60	65
0 Years of Service	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	0.00%
1-4 Years of Service	17.50	15.50	13.50	11.50	9.50	8.00	7.00	6.00	5.00	0.00
5 or more Years of Service	9.00	9.00	7.00	5.50	4.50	3.50	3.00	3.00	0.00	0.00

^{*}Withdrawal/termination rates do not apply once a member is eligible for retirement.

POSTEMPLOYMENT HEALTHCARE (continued)

3) Rates of Refund:

Tier 1:

Sample rates of vested terminated employees electing a refund of contributions are shown in the following Table.

Rates of Refund								
Age	20	25	30	35	40	45	50	55
Refund	40.00%	40.00%	27.50%	17.00%	8.00%	3.00%	1.00%	0.00%

Tier 2:

Vested terminated employees are expected to take a refund it if exceeds the actuarial present value of their deferred benefit payment.

4) Rates of Mortality:

Mortality rates for actives, retirees, beneficiaries, terminated vested, and reciprocals are based on the sex-distinct employee and annuitant CalPERS mortality tables as described below. The CalPERS tables are from their 2014 experience study with a central experience year of 2009 and prior to the 20-year projection of those rates using Scale BB. Future mortality improvements are reflected by applying the most recent projection scale issued by the Society of Actuaries on a generational basis from the base year of 2009. The projection scale used for this valuation is MP-2018.

	Base Mortality Tables	
Category	Male	Female
	0.952 times the CalPERS 2009 Healthy	0.921 times the CalPERS 2009 Healthy
Healthy Annuitant	Annuitant Mortality Table (Male)	Annuitant Mortality Table (Female)
	0.919 times the CalPERS 2009 Employee	0.918 times the CalPERS 2009 Employee
Healthy Non-Annuitant	Mortality Table (Male)	Mortality Table (Female)
	1.051 times the CalPERS 2009 Ordinary	1.002 times the CalPERS 2009 Ordinary
Disabled Annuitant	Disability Mortality Table (Male)	Disability Mortality Table (Female)

5) Disability Rates:

Sample rates of disability are shown in the following table.

	Rates of Disability at Selected Ages										
Age	20	25	30	35	40	45	50	55	60	65	70
Disability	0.014%	0.014%	0.021%	0.063%	0.136%	0.201%	0.218%	0.200%	0.181%	0.167%	0.149%

40% of disabilities are assumed to be duty related, and 60% are assumed to be non-duty.

6) Salary Increase Rate:

Wage inflation component: 3.25%

POSTEMPLOYMENT HEALTHCARE (continued)

In addition, the following merit component is added based on an individual member's years of service.

		Salary Merit	Increases		
	Merit/		Merit/		Merit/
Years of Service	Longevity	Years of Service	Longevity	Years of Service	Longevity
0	4.50%	6	0.95%	12	0.35%
1	3.50%	7	0.75%	13	0.30%
2	2.50%	8	0.60%	14	0.25%
3	1.85%	9	0.50%	15+	0.25%
4	1.40%	10	0.45%		
5	1.15%	11	0.40%		

7) Percent of Retirees Electing Coverage

85% of active members are assumed to elect coverage upon retirement and 15% are assumed to enter the In-Lieu credit program. 50% of term vested members are assumed to elect coverage upon retirement and 50% are assumed to enter the In-Lieu credit program. Retirees are assumed to continue in their current plan.

Members who elect to receive the In-Lieu credits are assumed to remain in the In-Lieu credit program for five years, after which they are assumed to elect coverage and use their In-Lieu credits.

A new, Sutter Health Vista High Deductible plan will be offered as of 1/1/2019.

Retirees who are not yet age 65 are assumed to be eligible for Medicare when they reach age 65 and are assumed to enroll in the Medicare-eligible plan corresponding to their current Pre-Medicare plan election. Future retirees are assumed to elect plans in the proportion shown in the table below.

Assumed Elections for Future Retirees ¹							
Medical Coverage	% Electing	In-Lieu	% Electing				
Active Members	85 %	Active Members	15 %				
Terminated Vested Members	50	Terminated Vested Members	50				

¹ Eligible for coverage

Ass	Assumed Plan Elections for Future Retirees ¹								
	% Electing		% Electing						
Pre-Medicare Medical Plans		Medicare-Eligible Medical Plans							
Kaiser DHMO	11 %	Kaiser Senior Advantage	58 %						
Kaiser \$25 Co-pay	64	BS Medicare HMO	8						
Kaiser HDHP	8	BS Medicare PPO	34						
Sutter Health DHMO	1								
Sutter Health \$20 Co-pay	4	Dental Plans (All Retirees)							
Sutter Health Vista	-	Delta Dental PPO	97						
PPO \$25 Co-pay	12	DeltaCare HMO	3						

¹ Eligible for coverage and elect coverage

8) Family Composition:

85% of married males and 70% of married females will elect spouse coverage in a medical plan at retirement. 100% of employees with a spouse will elect spouse coverage in a dental plan at retirement.

Pre-Medicare, 31% of males and 21% of females will cover children.

POSTEMPLOYMENT HEALTHCARE (continued)

9) Dependent Age:

For current retirees, actual spouse date of birth was used when available. For future retirees, male retirees are assumed to be three years older than their partner, and female retirees are assumed to be two years younger than their partner.

10) Married Percentage:

Percentage Married							
Gender Males Females							
Percentage 80% 60%							

11) Administrative Expenses:

Included in the average monthly premiums.

12) Changes Since Last Valuation

Plan enrollment assumptions were updated based on recent experience and the expected impact of added and dropped plans.

The mortality improvement table was updated from MP-2017 to MP-2018.

In-Lieu election and period coverage assumptions were added.

Claim and Expense Assumptions:

The claim and expense assumptions shown below were adopted by the Board of Administration at the December 20, 2018 Board meeting based upon our recommendations.

The claims costs are based on the fully insured premiums charged to the City for the active and retiree population in 2018 and 2019. For non-Medicare adults, the premiums for each coverage tier (retiree only, retiree plus spouse, retiree plus child(ren) and retiree plus family) were blended based on enrollment data for the 2018 calendar year. The same process was used for Medicare adults, except only Medicare-eligible retirees were included. The resulting per person per month (PPPM) cost was then adjusted using age curves. The pre-Medicare adult claims curves were then loaded for the cost of children; the load for children decreases by retiree age since older retirees have fewer children. The impact of children on Medicare costs was assumed to be de minimis. All claims costs are developed separately for the Federated, Police, and Fire Postemployment Healthcare Plans of the City of San José.

This report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations.

1) Average Annual Claims and Expense Assumptions:

The following claim and expense assumptions were developed as of July 1, 2018 based on the premiums for 2018 and 2019. The explicit subsidy amount (100% of the premium for the lowest cost health plan available to active City employees) is assumed to grow based on the Pre-Medicare cost trend rates.

POSTEMPLOYMENT HEALTHCARE (continued)

The following tables show the claims costs for each medical plan as of the valuation date:

	SAMPLE CLAIMS COSTS - NON-MEDICARE ELIGIBLE											
		Kaiser DHMO				Kaiser \$2	25 C	o-Pay	Kaiser HDHP			
Age		Male Female			Male	Female			Male	Female		
40	\$	6,225	\$	7,885	\$	7,965	\$	9,969	\$	4,890	\$	6,050
45		6,594		7,876		8,319		9,866		5,038		5,934
50		7,220		8,262		8,983		10,242		5,367		6,095
55		8,261		8,996		10,149		11,037		5,985		6,499
60		9,927		9,674		12,069		11,763		7,040		6,863
64		11,884		9,666		14,359		11,682		8,320		6,771

	SAMPLE CLAIMS COSTS - NON-MEDICARE ELIGIBLE											
		Sutter DHMO				Sutter \$20	pay		PPO \$100 Co-pay			
Age		Male		Female		Male		Female		Male		Female
40	\$	9,605	\$	11,650	\$	7,576	\$	9,624	\$	11,573	\$	14,623
45		9,668		11,247		8,052		9,634		12,223		14,579
50		10,048		11,333		8,845		10,131		13,345		15,261
55		10,940		11,846		10,151		11,058		15,231		16,582
60		12,602		12,290		12,228		11,915		18,265		17,798
64		14,700		11,968		14,660		11,923		21,838		17,763

	SAMPLE CLAIMS COSTS - MEDICARE ELIGIBLE											
	Kaiser Senior Adv					BS Me	ed F	PPO	BS Med HMO			
Age	Male Female				Male Female				Male	Female		
65	\$	3,409	\$	3,007	\$	5,670	\$	5,001	\$	6,779	\$	5,980
70		3,620		3,066		6,021		5,099		7,198		6,097
75		4,161		3,448		6,920		5,735		8,273		6,856
80		4,724		3,910		7,857		6,503		9,395		7,775
85		5,102		4,273		8,486		7,107		10,146		8,497

SAMPLE CLAIMS COSTS - DENTAL											
	Delta Dental PPO DeltaCare HMO										
Age		Male		Female		Male		Female			
All	\$	686	\$	686	\$	312	\$	312			

2) Medicare Part D Subsidy:

Per GASB guidance, the Part D Subsidy has not been reflected in this valuation.

3) Medicare Part B:

All Medicare eligible retirees are assumed to participate in Medicare Part B.

4) Medicare Eligibility:

All retirees who turn age 65 are assumed to be eligible for Medicare.

5) Annual Limits:

Assumed to increase at the same rate as trend.

POSTEMPLOYMENT HEALTHCARE (continued)

6) Lifetime Maximums:

Are not assumed to have any financial impact.

7) Geography:

Implicitly assumed to remain the same as current retirees.

8) Retiree Contributions:

Retirees pay the difference between the actual premium for the elected medical plan and the lowest cost medical plan available to active members, if the retiree is eligible to receive the explicit subsidy. No retiree contributions are required for dental.

9) Changes Since Last Valuation:

All claims costs are developed separately for the Federated, Police, and Fire Postemployment Healthcare Plans of the City of San Jose.

Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below.

1) Actuarial Cost Method

The Entry Age actuarial cost method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal costs. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and actuarial liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and actuarial liability for the System. The actuarial liability for the System represents the target amount of assets the System should have as of the valuation date according to the actuarial cost method.

2) Asset Valuation Method

The actuarial value of assets equals the market value of assets.

3) Amortization Method

The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets. The unfunded actuarial liability as of June 30, 2017 is amortized as a level dollar amount over a closed 20-year period. All future amortization bases will be amortized over 20-year periods with a 3-year phase-in and phase-out.

4) Contributions

The City will contribute the annual implicit subsidy as part of active employee health premiums and will prefund the explicit subsidy based on the normal cost and amortization payment described above less expected employee contributions. The City has the option to limit its contribution to no more than 14% of total payroll.

Active members that are eligible for full benefits will contribute 7.50% of pay.

5) Changes Since Last Valuation:

None.

POSTEMPLOYMENT HEALTHCARE (continued)

		SCHEDUL	E OF ACTIVE	MEMBER DATA		
	Active	Member Co	unts			
Valuation Date As of June 30,	Under Age 65	Age 65+	Total	Annual Payroll	Average Annual Pay	Percentage Change in Average Pay
2018 ²	3,377	84	3,461	\$284,008,289	\$ 82,060	-2.6 %
2017 ²	3,321	89	3,410	287,339,424	84,264	-0.9
2016 ¹	2,310	77	2,387	202,911,153	85,007	5.8
2015 ¹	2,527	74	2,601	208,957,370	80,337	5.9
2014 ¹	2,800	64	2,864	217,167,654	75,827	3.7
2013	3,028	65	3,093	226,097,882	73,100	-0.4
2012	3,017	59	3,076	225,859,144	73,426	5.0
2011	3,201	73	3,274	228,936,398	69,926	-11.2
2010	3,721	97	3,818	300,811,165	78,788	-0.5
2009	3,988	91	4,079	323,020,387	79,191	N/A

¹ Does not include Tier 2B active employees.

² Includes members that are only eligible for catastrophic disability benefits.

S	CHEDU	LE OF RETIR	REES AN	D BENEFIC	IARIES	ADDED TO A	ND REI	MOVED FROM	M ROLLS	
	Beginn	ing of Period	Added to Rolls	Removed from Rolls	End	of Period	Ne	t Change	% Change	Average
Davied	Count	Annual	Count	Count	Count	Annual	Count	Annual	Annual	Annual
Period	Count	Subsidy	Count	Count	Count	Subsidy	Count	Subsidy	Subsidy	Subsidy
Medical		* • • • • • • • • • • • • • • • • • • •	400	400		400 -0-010		• (0.055.050)	(40.0)0/	— — — —
2017-18	2,920	\$23,621,494	139	136	2,923	\$20,565,618	3	\$ (3,055,876)		\$ 7,036
2016-17	2,821	21,844,128	210	111	2,920	23,621,494	99	1,777,366	8.1	8,090
2015-16	2,769	21,341,423	183	131	2,821	21,844,128	52	502,705	2.4	7,743
2014-15	2,737	21,940,885	152	120	2,769	21,341,423	32	(599,462)	(2.7)	7,707
2013-14	2,718	22,656,997	151	132	2,737	21,940,885	19	(716,112)	(3.2)	8,016
2012-13	2,680	25,223,474	158	120	2,718	22,656,997	38	(2,566,477)	(10.2)	8,336
2011-12	2,557	25,518,761	203	80	2,680	25,223,474	123	(295,287)	(1.2)	9,412
2010-11	2,245	20,520,530	429	117	2,557	25,518,761	312	4,998,231	24.4	9,980
2009-10	2,078	17,710,949	243	76	2,245	20,520,530	167	2,809,581	15.9	9,141
2007-09	1,976	14,970,264	N/A	N/A	2,078	17,710,949	102	2,740,685	18.3	8,523
Dental										
2017-18	3,322	\$ 3,414,299	152	99	3,375	\$ 3,477,633	53	\$ 63,334	1.9 %	\$ 1,030
2016-17	3,264	3,224,133	170	112	3,322	3,414,299	58	190,166	5.9	1,028
2015-16	3,206	3,212,072	159	101	3,264	3,224,133	58	12,061	0.4	988
2014-15	3,133	3,130,058	160	87	3,206	3,212,072	73	82,014	2.6	1,002
2013-14	3,103	3,742,351	138	108	3,133	3,130,058	30	(612,293)	(16.4)	999
2012-13	3,044	3,924,332	144	85	3,103	3,742,351	59	(181,981)	(4.6)	1,206
2011-12	2,906	3,744,833	203	65	3,044	3,924,332	138	179,499	4.8	1,289
2010-11	2,588	3,017,473	413	95	2,906	3,744,833	318	727,360	24.1	1,289
2009-10	2,375	2,410,561	291	78	2,588	3,017,473	213	606,912	25.2	1,166
2007-09	2,248	2,346,934	N/A	N/A	2,375	2,410,561	127	63,627	2.7	1,015

Annual subsidies are explicit amounts

POSTEMPLOYMENT HEALTHCARE (continued)

	MEMBER E	BENEFIT COVE	RAGE INFORMA	TION	
	Actuarial Liab	oility			
Actuarial Valuation Date	Retirees, Beneficiaries and Other Inactives	Active Members	Reported Assets	Portion of Liabi Reported	
	(A)	(B)		(A)	(B)
6/30/2018	\$ 426,984	\$ 223,130	\$ 277,256	65 %	0 %
6/30/2017	408,627	221,825	248,583	61	0
6/30/2016	450,793	313,468	225,845	50	0
6/30/2015	469,903	347,770	209,761	45	0
6/30/2014	435,826	293,580	199,776	46	0
6/30/2013	495,967	374,905	157,695	32	0
6/30/2012	611,267	485,353	137,798	23	0
6/30/2011	652,157	493,203	135,454	21	0
6/30/2010	515,284	411,087	108,011	21	0
6/30/2009	421,367	375,081	85,564	20	0

Dollar amounts in thousands

		ANA	LY	SIS OF FINANC	ĮΑ	L EXPERIENC	CE			
	Gain (or Loss) for Year Ending on Valuation Date Due to:									
				Combined		Total		Non-		
Actuarial		Investment		Liability		Financial		Recurring	Total	
Valuation Date		Income		Experience		Experience		Items	Experience	
6/30/2018	\$	(5,915)	\$	26,064	\$	20,149	\$	(11,137)\$	9,012	
6/30/2017		117		5,259		5,376		123,632	129,008	
6/30/2016		(16,044)		(11,608)		(27,652)		99,545	71,893	
6/30/2015		(19,264)		6,948		(12,316)		(64,155)	(76,471)	
6/30/2014		19,767		31,177		50,944		148,417	199,361	
6/30/2013		6,847		5,834		12,681		114,786	127,467	
6/30/2012		(14,897)		(27,919)		(42,816)		136,154	93,338	
6/30/2011		10,131		(35,166)		(25,035)		(131,557)	(156,592)	
6/30/2010		6,705		(43,746)		(37,041)		(36,785)	(73,826)	
6/30/2009		N/A		N/A		N/A		N/A	N/A	

Dollar amounts in thousands

		SCHEDULE (OF FUNDING PE	ROGRESS		
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Liability (AL)	Unfunded AL (UAL)	Funded Ratio	Annual Covered Payroll	UAL as a Percentage of Covered Payroll
	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
6/30/2018	\$ 277,256	\$ 650,114	\$ 372,858	42.6 %	\$ 298,985	125 %
6/30/2017	248,583	630,452	381,869	39.4	287,339	133
6/30/2016	225,845	764,261	538,416	29.6	266,823	202
6/30/2015	209,761	817,673	607,912	25.7	251,430	242
6/30/2014	199,776	729,406	529,630	27.4	234,677	226
6/30/2013	157,695	870,872	713,177	18.1	226,098	315
6/30/2012	137,798	1,096,620	958,822	12.6	225,859	425
6/30/2011	135,454	1,145,360	1,009,906	11.8	228,936	441
6/30/2010	108,011	926,371	818,360	11.7	300,069	273
6/30/2009	85,564	796,448	710,884	10.7	308,697	230

Dollar amounts in thousands

Summary of Key Substantive Plan Provisions

POSTEMPLOYMENT HEALTHCARE

Eligibility: Employees hired before September 2013 that did not elect to opt-in to the Voluntary Employees' Beneficiary Association (VEBA).

Medical:

Employees who retire (include deferred vested members) with at least 15 years of service with the City ("OPEB benefit service"), or with a monthly pension equal to at least 37.5% of final compensation, are eligible to elect medical coverage upon retirement. Tier 1 employees (hired before September 30, 2012) are eligible for retirement at age 55 with five years of service or at any age with 30 years of service. Tier 2 employees (hired on or after September 30, 2012) are eligible for unreduced service retirement at age 65 with five years of service or reduced service retirement at age 55 with five years of service. Service credited through reciprocity agreements counts towards an employee's required service to retire, but only service with the City counts towards the required years of service to receive OPEB benefits. Employees who retire with less than 15 years of service can elect coverage, but receive no explicit subsidy.

Employees who become disabled with at least 15 years of service or have a monthly pension equal to at least 37.5% of final compensation are eligible to elect medical coverage upon retirement.

Spouses or domestic partners of retired members are allowed to participate if they were enrolled in the City's medical plan at the time of the member's retirement. Dependent children are eligible to receive coverage until the age of 26.

Surviving spouses / domestic partners / children of deceased members are eligible for coverage if the following conditions are met:

- 1) The employee has 15 years of service at time of death or is entitled to a monthly pension of at least 37.5% of final compensation; and
- 2) Both the member and the survivors were enrolled in the active medical plan immediately before death; and,
- 3) The survivor will receive a monthly pension benefit.

Dental:

Employees who retire or become disabled directly from City service with at least five years of service or with a monthly pension equal to at least 37.5% of final compensation, and are enrolled in a City dental plan at retirement, are eligible to elect dental coverage upon retirement. Spouses, domestic partners, or children of retired members are allowed to participate if they were enrolled in the City's dental plan at the time of the member's retirement.

Surviving spouses / domestic partners / children of deceased members are eligible for coverage if the following conditions are met.

- 1) The employee has five years of service at time of death or is entitled to a monthly pension of at least 37.5% of final compensation; and,
- 2) Both the member and the survivors were enrolled in the active dental plan immediately before death; and,
- 3) The survivor will receive a monthly pension benefit.

Summary of Key Substantive Plan Provisions (continued)

POSTEMPLOYMENT HEALTHCARE (continued)

Benefits for Retirees:

Medical: The System, through either the 401(h) account or 115 trust, pays 100% of the premium for the lowest cost health plan available to active City employees. The member pays the difference, if another plan is elected.

<u>Dental</u>: The System, through either the 401(h) account or 115 trust, pays 100% of the dental insurance premiums.

Premiums: Monthly premiums for calendar years 2018 and 2019 are as follows.

		2018 MON	THLY PREI	MIUMS			
Plan		Single	Employee	e / Spouse	E	mployee / Child	Family
Non-Medicare Monthly Rates - N	ledic	al					
Kaiser DHMO	\$	486.24	\$	972.48	\$	850.92 \$	1,458.72
Kaiser \$25 Co-pay		593.84		1,187.68		1,039.22	1,781.52
Kaiser HDHP		409.70		819.40		716.98	1,229.10
Blue Shield PPO \$25 Co-pay		1,104.14		2,208.26		1,932.26	3,312.40
Sutter Health \$20 Co-pay		627.26		1,254.52		1,097.66	1,881.72
Sutter Health DHMO		513.62		1,027.22		898.84	1,540.86
Medicare-Eligible Monthly Rates	- Me	dical					
Kaiser Senior Advantage	\$	306.28	\$	612.56	\$	612.56 \$	918.84
Blue Shield Medicare PPO		528.57		1,057.14		1,057.14	1,885.26
Blue Shield Medicare HMO		602.56		1,205.12		1,205.12	1,205.12
Dental							
Delta Dental PPO	\$	50.88	\$	111.92	\$	122.12 \$	157.72
DeltaCareHMO		24.44		48.86		42.74	73.30

Blue Shield HMO Medicare family rates assume the children are on the Non-Medicare \$20 Co-pay HMO

	2019 MON	THLY PREMIUMS		
Plan	Single	Employee / Spouse	Employee / Child	Family
Non-Medicare Monthly Rates - M	edical			
Kaiser DHMO	\$ 528.20	\$ 1,056.40	\$ 924.36	\$ 1,584.60
Kaiser \$25 Co-pay	645.08	1,290.16	1,128.88	1,935.24
Kaiser HDHP	445.04	890.08	778.82	1,335.12
Blue Shield PPO \$25 Co-pay	1,435.38	2,870.74	2,511.94	4,306.12
Sutter Health \$20 Co-pay	652.28	1,304.56	1,141.44	1,956.78
Sutter Health DHMO	534.06	1,068.12	934.56	1,602.12
Sutter Health Vista	445.74	891.50	780.04	1,337.22
Medicare-Eligible Monthly Rates	- Medical			
Kaiser Senior Advantage	\$ 300.80	\$ 601.60	\$ 601.60	\$ 902.40
Blue Shield Medicare PPO	528.57	1,057.14	1,057.14	1,585.71
Blue Shield Medicare HMO	602.56	1,205.12	1,205.12	1,807.68
Dental				
Delta Dental PPO	\$ 50.88	\$ 111.92	\$ 122.12	\$ 157.72
DeltaCare HMO	24.44	48.86	42.74	73.30

Summary of Key Substantive Plan Provisions (continued)

POSTEMPLOYMENT HEALTHCARE (continued)

		SUMMARY	OF 2019 BE	NEFIT PLAN	S		
Non-Medicare Plans:	Kaiser \$25 Co-Pay	Kaiser DHMO	Kaiser High Deductible	Sutter Health Plus \$20 Co-pay HMO	Sutter Health Plus \$1,500 Deductible	Sutter Health Vista \$2,500 Deductible	Blue Shield PPO \$25 Co- pay (In Network)
Annual Out-of-Pocket Maximum (One Person/Family)	\$1,500/ \$3,000	\$4,000/ \$8,000	\$5,950/ \$11,900	\$1,500/ \$3,000	\$4,000/ \$8,000	\$4,000/ \$8,000	\$2,100/ \$4,200
Annual Deductible (one person/family)	None	\$1,500/ \$3,000	\$3,000/ \$6,000	None	\$1,500/ \$3,000	\$2,500/ \$5,000	\$100/\$200
Office Visit Co-pay	\$25	\$40	30%1	\$20	\$20	20%1	\$25
Emergency Room Co-pay	\$100	30% ¹	30%1	\$100	30%¹	20% ¹	\$100
Hospital Care Co-pay	\$100	30%1	30%1	\$100	30%1	20%1	\$100
Prescription Drug Re	etail Co-pay (3	0-day supp	oly):				
Generic	\$10	\$10	\$10	\$10	\$10	\$10	\$10
Brand	\$25	\$30	\$30	\$30	\$30	\$30	\$25
Non-Formulary	N/A	N/A	N/A	\$60	\$60	\$60	\$40

¹ After deductible is paid.

Medicare-Eligible Plans:	Kaiser	BS HMO	BS PPO
Annual Out-of-Pocket Maximum	\$1,500/	\$1,000/	\$2,000/
(One Person/Family)	\$3,000	\$2,000	\$4,000
Annual Deductible			\$100/
(One Person/Family)	None	None	\$200
Office Visit Co-pay	\$25	\$25	\$25
Emergency Room Co-pay	\$50	\$100	\$100
Hospital Care Co-pay	\$250	\$100	\$100 + 10%
Prescription Drug Retail Co-pay (30-day supply)			
Generic	\$10	\$10	\$10
Brand	\$10	\$25	\$25
Non-Formulary	N/A	\$40	\$40

Cost Sharing Provisions:

It is assumed for the purpose of this valuation that the City of San Jose will in the future maintain a consistent level of cost sharing for benefits with the retirees. This may be achieved by adjusting benefit provisions, contributions, or both.

VOLUNTARY EMPLOYEES' BENEFICIARY ASSOCIATION (VEBA)

Eligibility: Employees who elected to opt-in to the Voluntary Employees' Beneficiary Association

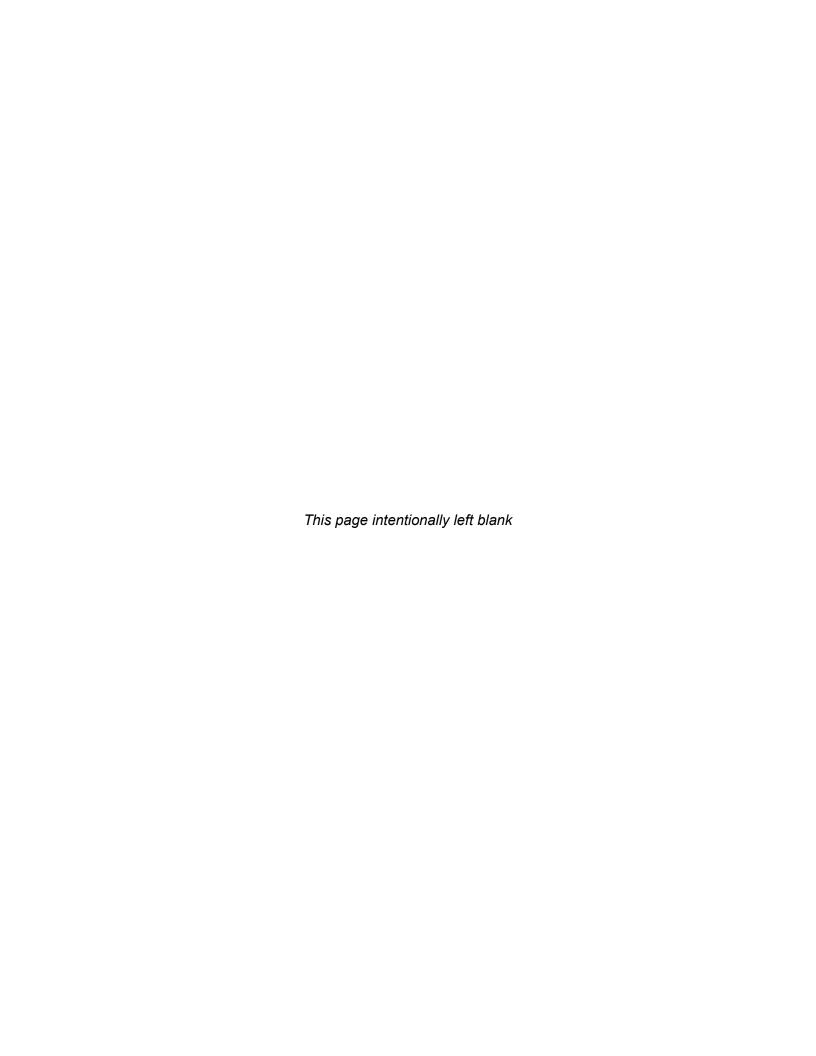
(VEBA).

Contributions: Employees are required to make mandatory contributions into the VEBA on a pre-tax

basis.

Medical: VEBA funds can be used to reimburse members for eligible healthcare expenses.

VEBA members on service-connected disability will receive benefits from the Postemployment Healthcare Plan only up to age 65 once VEBA funds are exhausted.



Statistical Section





The Statistical Section provides additional historical perspective, context, and detail in order to provide a more comprehensive understanding of this fiscal year's financial statements, note disclosures, and supplementary information, which covers Pension Plan and Postemployment Healthcare Plans, including 401(h) and 115. This section also provides a multi-year trend of financial and operating information to facilitate comprehensive understanding of how the organization's financial position and performance has changed over time. More specifically, the financial and operating information provides contextual data for the Plan's net assets, benefits, refunds, contribution rates, and different types of retirement benefits. The financial and operating trend information is located on the following pages.

Pension Trust and Postemployment Healthcare Trust Funds of the City of San José, California

City of San José
Federated City Employees' Retirement System
Comprehensive Annual Financial Report for the Fiscal Years ended June 30, 2019 and June 30, 2018

Statistical Review

CHANGES IN PLAN NET POSITION FOR FISCAL YEARS 2010-2019 (In Thousands) PENSION BENEFITS (Schedule 1a)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Additions										
Employee contributions	\$ 22,606	\$ 20,501	\$ 17,227	\$ 15,920	\$ 13,621	\$ 13,596	\$ 12,652	\$ 10,555	\$ 24,602	\$ 13,396
Employer contributions	173,006	156,770	138,483	129,456	114,751	107,544	103,109	87,082	59,180	54,566
Investment income/ (loss) 1	76,855	117,493	146,010	(35,010)	(16,642)	263,688	146,367	(68,903)	287,179	197,755
Total additions to plan net position	272,467	294,764	301,720	110,366	111,730	384,828	262,128	28,734	370,961	265,717
Deductions										
Benefit payments	190,228	179,366	169,756	160,499	152,119	143,921	136,075	126,001	110,415	98,110
Death benefits	13,719	12,970	12,411	11,530	10,724	9,845	9,187	8,601	7,883	7,583
Refunds	1,119	1,064	1,263	1,289	1,719	2,170	1,545	2,195	1,980	1,219
Administrative expenses and other	4,582	4,823	4,380	3,940	3,898	3,201	3,024	3,306	2,867	2,641
Total deductions from plan net position	209,648	198,223	187,810	177,258	168,460	159,137	149,831	140,103	123,145	109,553
Changes in Plan Net Position	\$ 62,819	\$ 96,541	\$ 113,910	\$ (66,892)	\$ (56,730)	\$ 225,691	\$ 112,297	\$ (111,369)	\$ 247,816	\$ 156,164

¹ Net of expenses

POSTEMPLOYMENT HEALTHCARE BENEFITS (Schedule 1b)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Additions										
Employee contributions	\$ 10,578	\$ 15,545	\$ 16,827	\$ 17,881	\$ 18,645	\$ 17,494	\$ 15,979	\$ 14,995	\$ 16,041	\$ 15,815
Employer contributions	26,410	32,397	31,905	30,465	26,959	19,298	21,251	25,834	17,146	17,027
Investment income/(loss) 1	9,472	12,336	17,041	(2,447)	(5,922)	28,737	13,817	(5,140)	21,842	13,852
Total additions to plan net position	46,460	60,278	65,773	45,899	39,682	65,529	51,047	35,689	55,029	46,694
Deductions	- ,		,	-,	,	,	, ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,-
Healthcare insurance premiums	28,826	29,724	31,007	29,577	29,443	27,924	30,943	33,077	27,370	24,066
Administrative expenses and other	384	170	242	237	254	257	207	268	216	181
VEBA Transfer	19	13,497		-	-	-		-	-	-
Total deductions from plan net position	29,229	43,391	31,249	29,814	29,697	28,181	31,150	33,345	27,586	24,247
Changes in Plan Net Position	\$ 17,231	\$ 16,887	\$ 34,524	\$ 16,085	\$ 9,985	\$ 37,348	\$ 19,897	\$ 2,344	\$ 27,443	\$ 22,447

¹ Net of expenses

Statistical Review (continued)

BENEFIT AND REFUND DEDUCTIONS FROM PLAN NET POSITION BY TYPE (In Thousands) PENSION BENEFITS (Schedule 2a)

Type of Benefit	2019	2018	2016	2016	2015	2014	2013	2012	2011	2010
Age and Service Benefits				."		! '			4	
Retirees - service	\$160,545	\$151,977	\$144,863	\$ 137,392	\$130,512	\$ 124,399	\$118,178	\$109,662	\$ 95,562	\$ 84,606
Retirees - deferred vested	20,573	18,445	16,486	14,961	13,507	12,017	10,692	9,261	8,047	6,996
Survivors - service	8,310	7,723	7,281	6,697	6,079	5,376	5,089	4,791	4,425	4,207
Survivors - deferred vested	275	276	284	287	279	272	232	161	130	138
Deaths in Service Benefits	3,244	3,010	2,878	2,776	2,702	2,610	2,413	2,349	2,202	2,161
Disability Benefits										
Retirees - duty	4,355	4,235	4,241	4,017	3,980	3,624	3,505	3,609	3,493	3,498
Retirees - non-duty	2,407	2,418	2,246	2,258	2,336	2,278	2,164	2,011	2,039	1,899
Survivors - duty	541	537	508	456	444	448	437	402	356	338
Survivors - non-duty	1,228	1,197	1,168	1,132	1,072	945	903	827	770	739
Ex-Spouse Benefits	2,469	2,518	2,212	2,053	1,932	1,797	1,649	1,529	1,274	1,111
Total benefits	\$203,947	\$192,336	\$182,167	\$ 172,029	\$162,843	\$ 153,766	\$145,262	\$134,602	\$118,298	\$105,693
Type of Refund										
Separation	1,119	1,064	1,263	1,289	1,719	2,170	1,545	2,195	1,980	1,219
Total Refunds	\$ 1,119	\$ 1,064	\$ 1,263	\$ 1,289	\$ 1,719	\$ 2,170	\$ 1,545	\$ 2,195	\$ 1,980	\$ 1,219

Statistical Review (continued)

BENEFIT AND REFUND DEDUCTIONS FROM PLAN NET POSITION BY TYPE (In Thousands) POSTEMPLOYMENT HEALTHCARE BENEFITS (Schedule 2b)

Type of Benefit	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Age and Service Benefits										
Retirees - service		_		ļ						
Medical	\$17,152		\$18,668	\$17,734	\$18,061		\$19,493	\$20,262	\$18,971	\$16,344
Dental	3,083	3,040	2,923	2,799	2,521	2,850	3,089	3,083	2,840	2,474
Retirees - deferred vested										
Medical	1,543	1,635	1,641	1,477	1,455	1,243	1,436	1,418	1,241	1,180
Dental	13	10	10	10	12	18	21	23	24	27
Survivors - service										
Medical	966	955	949	890	921	737	874	954	1,024	938
Dental	181	176	174	167	148	227	333	339	329	308
Survivors - deferred vested										
Medical	19	20	26	33	31	28	32	24	18	16
Dental	1	1	1	2	2	3	5	2	-	-
Death in Service Benefits										
Medical	237	262	274	272	302	281	361	389	412	366
Dental	47	48	46	45	38	59	78	78	79	74
Disability Benefits										
Retirees - duty										
Medical	838	949	957	938	981	920	1,133	1,217	1,253	1,241
Dental	116	121	116	115	109	130	146	157	162	161
Retirees - non-duty										
Medical	215	252	268	281	340	321	413	462	530	513
Dental	56	56	55	59	58	77	89	87	92	84
Survivors - duty										
Medical	82	93	105	100	111	97	124	125	125	100
Dental	15	16	17	16	15	22	33	32	30	27
Survivors - non-duty										
Medical	150	153	172	179	177	142	178	192	195	171
Dental	25	25	26	26	23	32	44	45	45	42
Ex-Spouse Benefits										
Medical	4	4	3	3	3	3	3	4	-	-
Dental	1	1	1	1	1	1	1	1	-	-
Implicit Subsidy Medical										
Tier 1	4,082	3,818	4,577	4,430	3,811	4,165	3,057	4,383	-	-
Tier 2		-	-	-	323	415	_	-	_	-
Tier 2B	-	-	-	-	-	151	-	-	-	-
Total Benefits	\$28,826	\$29,724	\$31,009	\$29,577	\$29,443	\$27,924	\$30,943	\$33,277	\$27,370	\$24,066

Statistical Review (continued)

EMPLOYER AND EMPLOYEE CONTRIBUTION RATES FOR FISCAL YEARS 2010-2019 (Schedule 3)

	=		Employ	ee Rate		
Fiscal Year	Tier 1	Tier 2 / 2B	All Tiers	Tier 1	Tier 2 / 2B	All Tiers
	Pension %	Pension %	OPEB\$	Pension %	Pension %	OPEB %
2019	99.16%	8.28%	\$20,856,125	6.81%	8.28%	7.50%

As of fiscal year ending June 30, 2019, the City healthcare contributions are set as a flat dollar amount.

	Fed 1	ier 1	Fed Ti	ier 2	Fed Ti	er 2B
Fiscal Year	Employee Rate	Employer Rate	Employee Rate	Employer Rate	Employee Rate	Employer Rate
	%	%	%	%	%	%
2018	15.36	103.45	16.48	17.13	7.72	7.72
2017	15.23	87.47	14.80	15.45	6.04	18.70
2016	15.09	75.57	14.46	15.11	5.70	18.36
2015	14.40	69.66	14.29	14.94	5.53	18.19
2014	13.98	59.51	14.69	15.34	6.68	17.27
2013	13.00	52.36	13.94	14.59	N/A	N/A
2012	11.20 ¹	35.50	N/A	N/A	N/A	N/A
2011	10.30 ¹	29.59 ²	N/A	N/A	N/A	N/A
2010	9.35	24.01	N/A	N/A	N/A	N/A

¹ Some bargaining units negotiated temporary higher rates.

² Some bargaining units negotiated temporary higher member contribution rates, which directly offset the City's contribution rate.

Retired Members by Type of Benefit

PENSION BENEFITS

As of June 30, 2019

			Ty	pe of	Retire	ment	1		O	ption :	Selected	2
Monthly Benefit Amount	Number of Retirees & Beneficiaries	1	2	3	4	5	6	7	A	В	С	Total
\$1-500	107	17	_	-	2	18	46	24	35	16	56	107
\$501-1,000	236	50	4	-	_	47	108	27	100	26	110	236
\$1,001-1,500	356	114	4	5	6	76	122	29	165	44	147	356
\$1,501-\$2,000	354	124	6	11	11	80	105	17	147	47	160	354
\$2,001-\$2,500	367	178	11	27	14	59	60	18	157	46	164	367
\$2,501-\$3,000	376	218	13	17	8	48	58	14	159	46	171	376
\$3,001-\$4,000	357	233	3	22	13	41	39	6	148	42	167	357
\$3,501-\$4,000	323	235	2	16	10	21	35	4	138	39	146	323
\$4,001-\$4,500	327	267	7	10	1	9	29	4	137	39	151	327
\$4,501-\$5,000	306	254	4	4	4	7	33		138	37	131	306
\$5,001-\$5,500	284	242	4	4	2	8	21	3	147	23	114	284
\$5,501-\$6,000	213	189	3	2	1	5	13		110	28	75	213
\$6,001-\$6,500	206	179	3	1	1	5	17		105	24	77	206
\$6,501-\$7,000	154	145	-	-	-	2	7	_	78	17	59	154
Over \$7,000	503	474	2	1	-	1	25	_	293	42	168	503
TOTAL	4,469	2,919	66	120	73	427	718	146	2,057	516	1,896	4,469

¹ Retirement Codes

- 1. Service
- 2. Survivor (survivor of active employee)
- 3. Service Connected Disability
- 4. Non-Service Connected Disability
- 5. Continuance (survivor of retired employee)
- 6. Deferred Vested
- 7. Ex-Spouse

² Option Descriptions

- A. Unmodified 50% Continuance
- B. Option 1: 100% Continuance/reduced pension
- C. No Survivor No Continuance

POSTEMPLOYMENT HEALTHCARE BENEFITS

As of June 30, 2019

	Type of	Subsidy
Amount Monthly Benefit	Health	Dental
Ineligible/Deferred	1,426	1,060
\$1 - 60	-	1,599
\$61 - 250	88	1,810
\$251 - 500	1,549	-
\$501 - 750	396	-
\$751 - 1000	799	-
Over \$1,000	211	-
TOTAL	4,469	4,469

Average Benefit Payment Amounts

PENSION BENEFITS

As of June 30, 2019

				Years	of Service Cr	edit		
Time Periods		0-5	6-10	11-15	16-20	21-25	26-30	31+
As of June 30, 2019								
Average monthly benefit ¹	\$	1,042 \$	1,679 \$	2,752 \$	3,743 \$	5,175 \$	6,327 \$	7,023
Average final average salary	\$	6,726 \$	5,947 \$	6,057 \$	6,178 \$	6,652 \$	6,574 \$	6,527
Number of retired members ²		183	495	568	759	665	1,021	139
As of June 30, 2018					_			
Average monthly benefit ¹	\$	1,020 \$	1,642 \$	2,685 \$	3,603 \$	5,035 \$	6,202 \$	6,889
Average final average salary	\$	6,320 \$	5,872 \$	5,957 \$	6,000 \$	6,524 \$	6,461 \$	6,475
Number of retired members ²		173	485	550	738	653	968	138
As of June 30, 2017								
Average monthly benefit ¹	\$	1,024 \$	1,588 \$	2,605 \$	3,488 \$	4,870 \$	6,039 \$	6,730
Average final average salary	\$	6,171 \$	5,737 \$	5,817 \$	5,780 \$	6,370 \$	6,334 \$	6,403
Number of retired members ²		160	473	545	702	642	945	138
As of June 30, 2016								
Average monthly benefit ¹	\$	1,031 \$	1,544 \$	2,534 \$	3,393 \$	4,725 \$	5,966 \$	6,630
Average final average salary	\$	6,009 \$	5,602 \$	5,714 \$		6,313 \$	6,243 \$	6,329
Number of retired members ²		154	459	525	667	637	914	136
As of June 30, 2015								
Average monthly benefit ¹	\$	1,005 \$	1,506 \$	2,459 \$	3,291 \$	4,591 \$	5,801 \$	6,464
Average final average salary	\$	5,609 \$	5,492 \$	5,583 \$		6,253 \$	6,134 \$	6,378
Number of retired members ²		153	443	503	664	631	878	136
As of June 30, 2014		.00		000		00.	0.0	
Average monthly benefit ¹	\$	965 \$	1,444 \$	2,379 \$	3,202 \$	4,459 \$	5,649 \$	6,284
Average final average salary	\$	5,464 \$	5,313 \$	5,438 \$		6,171 \$	6,011 \$	6,346
Number of retired members ²		146	435	499	639	615	844	136
As of June 30, 2013		140	400	400	000	010	044	100
Average monthly benefit ¹	\$	948 \$	1,366 \$	2,232 \$	3,070 \$	4,213 \$	5,420 \$	5,895
Average final average salary	\$	3,724 \$	5,000 \$	5,189 \$		6,127 \$	6,019 \$	6,638
Number of retired members ²		117	413	454	629	608	854	159
As of June 30, 2012		117	410	707	023	000	004	100
Average monthly benefit ¹	¢	914 \$	1,329 \$	2,140 \$	2,982 \$	4,080 \$	5,255 \$	5,722
Average final average salary	\$ \$	3,516 \$	4,803 \$	4,975 \$		5,975 \$	5,920 \$	6,513
Number of retired members ²	Ψ	113	402	433	619	586	831	159
As of June 30, 2011		110	402	400	019	300	001	100
Average monthly benefit ¹	\$	842 \$	1,267 \$	2,036 \$	2,835 \$	3,851 \$	5,036 \$	5,577
Average final average salary	<u>φ</u> \$	4,303 \$	4,570 \$			5,360 \$	5,544 \$	6,056
Number of retired members ²	Ψ	131	371	388	566	465	726	139
As of June 30, 2010		101	3/ 1	300	J00	405	120	108
Average monthly benefit ¹	¢	838 \$	1 170 6	1.000	2,700 \$	2 744 🕈	4,852 \$	- 5.446
Average final average salary	<u>\$</u> \$	4,203 \$	1,179 \$ 4,221 \$	1,980 \$ 4,393 \$		3,714 \$ 5,129 \$	4,852 \$ 5,311 \$	5,410 5,929
Number of retired members ²	φ							
Namber of reflied Highliners		124	343	367	537	417	664	130

¹ Includes cost-of-living increases ² Does not include survivors and ex-spouses

Average Benefit Payment Amounts (continued) POSTEMPLOYMENT HEALTHCARE BENEFITS

As of June 30, 2019

	Years of Service Credit							
Time Periods		0-5	6-10	11-15	16-20	21-25	26-30	31+
As of June 30, 2019	-							
Average health subsidy	\$	672 \$	567	\$ 586	\$ 585 \$	614 \$	680 \$	556
Number of health participants ¹		19	20	270	691	623	974	133
Average dental subsidy	\$	85 \$	85	\$ 88	\$ 88	91 \$	94 \$	84
Number of dental participants ¹		56	238	389	629	583	972	139
As of June 30, 2018								
Average health subsidy	\$	642 \$	472	\$ 570	\$ 563 <mark>\$</mark>	597 \$	654 \$	550
Number of health participants ¹		18	25	266	686	618	936	133
Average dental subsidy	\$	85 \$	84	\$ 89	\$ 89	92 \$	94 \$	84
Number of dental participants ¹		59	244	392	623	582	933	138
As of June 30, 2017	-							
Average health subsidy	\$	785 \$	569	666	\$ 667	726 \$	776 \$	633
Number of health participants ¹		18	24	260	634	595	906	131
Average dental subsidy	\$	83 \$	84	\$ 88	\$ 89	92 \$	94 \$	86
Number of dental participants ¹		59	250	394	593	574	908	138
As of June 30, 2016								
Average health subsidy	\$	605 \$	354	589	\$ 629	707 \$	741 \$	593
Number of health participants ¹		24	44	260	595	594	874	130
Average dental subsidy	\$	79 \$	80	\$ 84	\$ 86 \$	89 \$	90 \$	83
Number of dental participants ¹		64	250	390	572	576	877	137
As of June 30, 2015								
Average health subsidy	\$	587 \$	337	\$ 586	\$ 635 <mark>\$</mark>	719 \$	725 \$	616
Number of health participants ¹		26	50	241	594	584	839	133
Average dental subsidy	\$	82 \$	84	\$ 87	\$ 86 \$	91 \$	90 \$	84
Number of dental participants ¹		66	249	375	569	571	845	137
As of June 30, 2014								
Average health subsidy	\$	614 \$	338	592	\$ 666 \$	755 \$	760 \$	635
Number of health participants ¹		24	55	247	587	580	807	130
Average dental subsidy	\$	85 \$	84	\$ 86	\$ 86 \$	91 \$	90 \$	83
Number of dental participants ¹		63	244	372	548	565	811	135
As of June 30, 2013								
Average health subsidy	\$	582 \$	380	\$ 589	\$ 712 <mark>\$</mark>	778 \$	790 \$	680
Number of health participants ¹		27	64	226	576	562	817	148
Average dental subsidy	\$	100 \$	101	\$ 101	\$ 102 <mark>\$</mark>	100 \$	101 \$	100
Number of dental participants ¹		65	243	341	544	558	818	151
As of June 30, 2012								
Average health subsidy	\$	698 \$	426	\$ 645	\$ 797 \$	873 \$	902 \$	768
Number of health subsidy ¹		27	66	218	580	547	800	150
Average dental subsidy	\$	107 \$	107	\$ 107	\$ 108 \$	107 \$	107 \$	106
Number of dental participants ¹		63	245	325	540	542	800	151

Average Benefit Payment Amounts (continued) **POSTEMPLOYMENT HEALTHCARE BENEFITS** (continued)

As of June 30, 2019

				Years	of	Service (Credit		
Time Periods		0-5	6-10	11-15		16-20	21-25	26-30	31+
As of June 30, 2011	-								
Average health subsidy	\$	866 \$	773	\$ 764	\$	855	\$ 898	\$ 928	\$ 848
Number of health subsidy ¹		21	39	191		544	448	711	138
Average dental subsidy	\$	108 \$	110	\$ 109	\$	110	\$ 110	\$ 109	\$ 108
Number of dental participants ¹		64	233	300		500	430	708	139
As of June 30, 2010	-								
Average health subsidy	\$	587 \$	461	\$ 650	\$	797	\$ 828	\$ 867	\$ 816
Number of health participants ¹		28	65	212		515	402	649	128
Average dental subsidy	\$	103 \$	104	\$ 103	\$	103	\$ 103	\$ 103	\$ 103
Number of dental participants ¹		61	218	289		474	384	646	130

¹ Does not include survivors and ex-spouses

Retirements During Fiscal Year 2018-2019

SERVICE RETIREMENTS			
ABE, ROGER A.	GUTIERREZ, CHRISTINA J.	NGUYEN, YEN-CHI H.	
ABOUZIA, BIJAN	HARRIS, GRISELDA E.	NUSBAUM, JENNY A.	
ADLER, ROBERT K.	HATFIELD, ANTOINETTE J.	O'CONNOR, KEVIN P.	
ARENAS, MANUEL	HOWIE, MICHAEL B.	ODELL, ADRIENE P.	
ARIMURA, ARLEEN C.	JONES, ARION T.	O'HARA, EDGAR H.	
AZEVEDO, MICHAEL B.	KIRMSE, MELANIE A.	OLOW, JULIE A.	
BAXTER, VICTORIA	KOJIMA, DAVID S.	PATTERSON, JO E.	
BERTINI, FRANK	KONATSU, MARK M.	PEASLAND, MICHAEL	
BLAKE, RANDI A.	KOOSHA, SAM	PEREIRA, RAYMOND	
BOPF, DAVID K.	KU, LESLIE S.	PEREZ, LEONARD	
BRAGER, KENNETH A.	LASACA, GILBERT C.	POLO, JEAN M.	
BROGAN, LINDA G.	LAWRENCE, GREGORY A.	QUINTANA, JOE G.	
BRYANT, TRACY J.	LEE, LOUISE J.	RAMOS, FRANK V.	
BUSSE, DONNA K.	LICERALDE, ISMAEL B.	REGVALL, LEIF	
CAPALDO, KATHRYN A.	LINDSAY, DUANE B.	REYNOLDS, ROBERT J.	
CARREON, ADELMO A.	LIOU, LAN-JOUN D.	RIOLO, GREGORY A.	
CARROLL, KELLIE A.	LLANOS, SANDRA A.	ROBERTS, STEVEN D.	
CELIO, DAVID P.	LOMELI FRANCO, ANGELICA M.	RODRIGUEZ, CRISTINA M.	
CHACON, ROSA MARIA V.	LOWES, STEPHEN W.	ROMERO, ANDREW E.	
CHAVEZ, FRANK E.	LUIS, MARTY J.	RUCH, JOHN A.	
CHEN, TSANG-TSE	LUJAN, MARYLOU	RUCH, LEAH T.	
COWL, GEORGE K.	LUU, LAURA LAN M.	SALCIDO, JOSE	
CRAMER, PRISCILLA L.	MAAS, JERRY A.	SALDIVAR, VICTOR A.	
CROSS, STEPHEN E.	MACIAS, STEVEN L.	SAMUEL, DONALD C.	
CROWLEY, PATRICK C.	MACK, KAREN D.	SANTO, CORRIE L.	
CRUZ, GEORGE	MACKENZIE, RUSSELL J.	SANTOS, THERESA G.	
DAMEY, MARK S.	MARTIN, MICHAEL D.	SATAKE, NORMAN	
DAYLEY, WARD C.	MATCHTAKOV, ANDREY	SAWICKI, MARCELA P.	
DE HAAN, MAYUMI S.	MATZ, ROBERT V.	SEDILLO, ANTHONY J.	
DIAZ, MARITES S.	MC CAHAN, MARGARET K.	SERRANO, NORMAN S.	
DONAHUE, LESLIE A. DREW, KENNETH D.	MCCABE, CAROLYN K. MEDINA, TERENCE M.	SMITH, KEVIN M. SORIANO, RUBEN L.	
ENCINIAS, JESSE	MENDOZA, ROSARIO	SUNSERI, DAN K.	
ENRIQUEZ, JOHN	MILLER, KAYLEENE W.	SUNSERI, DONALD K.	
ERICKSON, SHARON W.	MILOWICKI, DIANE N.	TALAMANTES, RICK A.	
ESGET, ANNIE L.	MITCHELL, DAVID J.	TAYLOR, PAMELA	
ESPITIA, DANETTE	MODAK, NANDITA	TENG, RICHARD	
FERRIGNO, TERRY M.	MOORE, MICHAEL	TESTA, PETER	
FINCH, TONY J.	MORENO, JUAN A.	TOSK, IRVING I.	
FISCHER, SHARON M.	MORRIS, LENORA J.	TRAN, GIAO N.	
FLORES, NASARIO	MURTHA, THOMAS D.	VALDEZ, JERRY J.	
GASKA, FRANK J.	MUSER, MARK A.	VU, HOANG	
GEZZI, DESIREE D.	NAGARAJ, MEERA	WALSH, KELLEY	
GIANNOCCARO, NANCY	NAIR, GEETA	WALSH, SUSAN B.	
GREY, NATALIE	NGUYEN, KIMNHUNG P.	WRIGHT, KENNEY	
GRISSOM, PAMELA L.	NGUYEN, MAITHI		

Retirements During Fiscal Year 2018-2019 (continued)

DEFERRED VESTED RETIREMENTS				
HOOVER, LESLIE P.	RAUSCHHUBER, NEIL			
IMADA, MICHAEL H.	RICHMOND, YANCIE M.			
KENNY, CATHERINE	ROBERTO, JUDITH			
KONG, FANLANG	ROCK, GLENN			
LEE, MELVIN	ROGIER, VANESSA L.			
LEWIS, TODD B.A	ROSE, LISA M.			
MACHUCA, LUIS V.	SIMPSON, KERRY S.			
MARTINEZ, AUGUSTINE A.	SMITH, KEVIN T.			
MARTINEZ, GRACIELA O.	SNYDER, JOHN			
MCPHERSON, DAVID A.	SUWADA, BRIAN J.			
MERCADO, SONNY B.	TAN, LAY-TING			
MILLS, DEBORAH	ULAT, ALICIA P.			
MORAN, GENARO S.	URIAS, BARBARA			
MORDWINOW, TAMERA L.	VEGA, SYLVIA E.			
NAVA, JESUS	VIZCAY, THOMAS J.			
OKEREKE, KINGSLEY C.	WAGNER, LAURENCE J.			
OWEN, CLARK	YOUNG, MATTHEW C.			
PADILLA, JAIME	ZAMORA, MARGARET			
SERVICE CONNECTED DISABILITY RETIREMENTS				
SERRANO, MIGUEL S.				
NON-SERVICE CONNECTED DISABILITY RETIREMENTS				
BRAVER, JULIAN R.				
EARLY RETIREMENTS				
DE LA ROCHA, MICHAEL A.				
	HOOVER, LESLIE P. IMADA, MICHAEL H. KENNY, CATHERINE KONG, FANLANG LEE, MELVIN LEWIS, TODD B.A MACHUCA, LUIS V. MARTINEZ, AUGUSTINE A. MARTINEZ, GRACIELA O. MCPHERSON, DAVID A. MERCADO, SONNY B. MILLS, DEBORAH MORAN, GENARO S. MORDWINOW, TAMERA L. NAVA, JESUS OKEREKE, KINGSLEY C. OWEN, CLARK PADILLA, JAIME CE CONNECTED DISABILITY RETIRE SERRANO, MIGUEL S. EVICE CONNECTED DISABILITY RETIRE BRAVER, JULIAN R. EARLY RETIREMENTS			

Deaths During Fiscal Year 2018-2019

DEATHS AFTER RETIREMENT			
ALLEN, ERNESTINE M.	HOFFMAN, BONITA	OBERG, JOHN R.	
AMARILLAS, HENRY G.	HOWSMON, FRANK E.	OCCHIPINTI, BARBARA A.	
ATHEARN, IRENE M.	HULSEY, BOBBY G.	PASKERT, JOSEPH D.	
BLAKE, BRENDAN	HUNTLEY, GARY L.	PEELER, ELEANOR	
BOGGINI, DAVID K.	HYDE, WILMA J.	PRATT, THOMAS D.	
BOWEN, BRIAN	JACKSON, HELEN	REED, JOANNA J.	
BRUNNER, BASIL G.	JEREMIAS, NANCY J.	RIOS, CATHERINE	
CABRAL, MARY H.	KERR, JAMES W.	RIOS, GERARDO V.	
CANEPA, KENNETH T.	KIMBLE, DOROTHY J.	RIVERO, RAUL B.	
CARREON, MANUELA	KNIGHT, MARIA H.	RODRIGUEZ, MAX	
CARSON, LILLIAN C.	KOMROSKY, MARLENE J.	ROGGEVEEN, ROBERTA A.	
CAVALLINI, JEANNE A.	LANE, JOHN R.	RUDD, MICHAEL L.	
CHAVEZ, OTTO H.	LONG C/O PAGC, JAMES P.	SCHIFANO, PATRICIA A.	
COVICH, ALEC D.	LOPEZ, ALBERT D.	SCHULTZ, WILMA T.	
DEL RE, CHARLES M.	LOUIS, EDWIN B.	SILVA, SHERYL R.	
DIEP, EDWARD	MARCUS, SUSAN T.	SPENCER, WILLARD J.	
DUNKLE, KENNETH W.	MC BRIDE, C DONALD	STANGEL, WILLA M.	
ERICKSON, EILEEN M.	MC CARTHY, SUSAN	TAGGART, VIVIAN B.	
FORRESTER, JOHN W.	MCKIERNAN, DENNIS R.	TARANGO, ORALIA	
FOX, HARWOOD R.	MENDEZ, RAY	TARKINGTON, WILLIAM J.	
GARCIA, LOURINE H.	MENDOZA, ART T.	TERRITO, PATRICIA A.	
GUERRERO-DALEY, TERESA	MILLER, JUDY P.	TYSON, SANDRA R.	
GUTING, ANDRES R.	MORENO, JUAN A.	UNDERWOOD, PAUL E.	
HALL, DAN I.	MORREALE, FRANK J.	WALLS, EFFIE M.	
HANNON, DENNIS A.	MULA, PAUL	WATANABE, ROBERT H.	
HINDIYEH, OMAR	MURILLO, NORMAND B.		
DEATHS BEFORE RETIREMENT			
FENERIN, PETER C.	MORA, ELSA N.		





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