City of SACRAMENTO

City Council Report

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Title: Fiscal Year 2017/18 Sacramento City Employees' Retirement System Annual Financial Report

Location: Citywide

Recommendation: Receive and file.

Contact: Osvaldo Lopez, Accounting Manager, (916) 808-4740; Dawn Holm, Director, (916) 808-5574, Department of Finance

Presenter: None

Attachments:
1-Description/Analysis
2-FY2017/18 SCERS Annual Financial Report
3-FY2017/18 SCERS Report to AIFM Board and City Council

Description/Analysis

Issue Detail: The Fiscal Year (FY) 2017/18 Sacramento City Employees' Retirement System (SCERS) Annual Financial Report has been prepared by the Accounting Division and audited by external auditors to present the financial results of SCERS for the fiscal year that ended June 30, 2018. The June 30, 2018, Auditor's Report to the Administration, Investment, and Fiscal Management Board (AIFM Board) and Members of City Council provides additional information about the FY2017/18 SCERS audit.

Policy Considerations: This report is consistent with the City's fiscal transparency and accountability principles and is required by the AIFM Board Policy Statement.

Economic Impacts: None

Environmental Considerations: Not applicable.

California Environmental Quality Act (CEQA): This action is not a project subject to CEQA because it involves only organizational or administrative activities that will not result in direct or indirect physical changes in the environment. (CEQA Guidelines §15378(b)(5)).

Sustainability: Not applicable.

Commission/Committee Action: The Fiscal Year 2017/18 Sacramento City Employees' Retirement System (SCERS) Annual Report was presented to the Budget and Audit Committee on April 2, 2019. The Committee approved a Motion to forward the report to the City Council.

Rationale for Recommendation: It is in the best interest of the City Council to review the FY2017/18 SCERS Annual Financial Report and the June 30, 2018 Auditor's Report to the AIFM Board and Members of City Council, in order to understand the structure, obligations, and liabilities of the City's SCERS retirement program:

- SCERS is a defined benefit plan in which retirement benefits for members (applicable City employees) are based upon age, final compensation, and length of service. In 1977, with the passage of Measure E, SCERS became a closed system. Since that time, all of the City's full-time and eligible part-time employees participate in the California Public Employees' Retirement System (PERS) rather than SCERS.

    - As of June 30, 2018 the SCERS plan had 1,029 participants (11 active) with an average age of 64.2 and an average of 36.3 years of service with the City.
- Assets for SCERS are held in trust. Trust monies are used to pay benefits to plan participants and their beneficiaries. The trust is managed pursuant to the City Charter under the direction of the AIFM Board.
- The public accounting firm of Vavrinek, Trine, Day & Co., LLP has audited the SCERS FY2017/18 financial statements and has rendered its unmodified opinion that the financial statements are fairly presented in accordance with generally accepted accounting principles.
- The Auditor's Report to the AIFM Board and Members of City Council provides communication required by audit standards and include statements specifying that there were no significant audit adjustments or disagreements with management in connection with this year's audit.

Financial Considerations: The annual contribution from the City to SCERS of $7.5 million for FY2018/19 has been included in the approved budget.

Local Business Enterprise (LBE): Not applicable.

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SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM
A Component Unit of the City of Sacramento, California

Annual Financial Report

Fiscal Year Ended June 30, 2018
(With Comparative Totals as of June 30, 2017)

SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM
A Component Unit of the City of Sacramento, California
Fiscal Year Ended June 30, 2018

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SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM

A Component Unit of the City of Sacramento
Letter to the Members of the Sacramento City Employees'
Retirement System and the Sacramento City Council
Fiscal Year Ended June 30, 2018

December 18, 2018

TO: Members of the Sacramento City Employees' Retirement System
Members of the Sacramento City Council

Transmitted herewith is the annual report of the Administration, Investment and Fiscal Management Board (Board) for the Sacramento City Employees' Retirement System (SCERS or System). This report addresses Board membership, history of the System, investment objectives, asset allocation, financial results, members' interest credit, fund performance, administration highlights, together with reports by an independent auditor and actuary, all as of the close of the 2018 Fiscal Year, or June 30, 2018.

The Annual Financial Report consists of three main sections: an Introductory Section represented by this letter of transmittal and the identification of the System's financial governing body, and the administrative and consulting services utilized by SCERS; the Financial Section which contains the Independent Auditor's Report; Management's Discussion and Analysis (MD&A), and the financial statements of SCERS; and the Actuarial Section which contains the independent consulting actuary's valuation along with related actuarial data and statements.

BOARD MEMBERSHIP

As set out in the Sacramento City (City) Charter, the Board is comprised of five members, three of whom are City officials (or their designees), and two of whom are public citizen members appointed by the City Council. The Sacramento City Manager, City Treasurer and Director of Finance are the City officials designated to serve on this Board. By City Charter, the public citizen members must be residents of the City of Sacramento, not connected with City government, and at least one of these members must be qualified by training and experience in the management and investment of funds.

The members of the Board as of the close of the fiscal year are as follows:

City Officials
Howard Chan, City Manager (Leyne Milstein, Designee)
John Colville, City Treasurer
Dawn Holm, Director of Finance (Jason Bader Designee)

Public Citizen Members
David DeCamilla - President, DeCamilla Capital Management
Manuel Leon – State of California

David DeCamilla was elected by the Board in January 2010 to serve as Board Chair, a position he held through January 2018. Mr. DeCamilla has served on the Board since February 1985, starting with a partial term as replacement for a departing board member and continuously in full term appointments from February 1998 to the present.

Manuel Leon, an employee of the State of California, State Senate, was appointed to the Board in February 2016 as a public citizen Board member and served as the Vice-Chair from April 2016 to January 2018. In January 2018 he was elected as Chair.

John Colville, City Treasurer, was appointed to his current position in February 2016 and assumed his position on the Board in February 2016 upon his appointment as Interim City Treasurer. Prior to his appointment as City Treasurer, Mr. Colville served as Interim City Treasurer and prior to that, as Chief Investment Officer for the City. As Chief Investment Officer, Mr. Colville supervised the investment activities of the City Treasurer's Office, including the investment of City and SCERS funds. Mr. Colville has been a City employee since 2004. Currently, Mr. Colville serves as Vice Chair of the board having been elected in January 2018.

Howard Chan, City Manager, was appointed to his current position in February 2017 and assumed the Board membership position at that time. Mr. Chan has appointed Leyne Milstein, Assistant City Manager, to serve as his designee. She has served on the board in various capacities since 2008.

Dawn Holm, Finance Director, has designated Jason Bader to serve as her designee. Mr. Bader began his board service in 2018. Mr. Bader is a Principal Management Analyst and joined the City in 2005.

HISTORY

SCERS is a defined benefit plan in which retirement benefits for City member employees are based upon age, final compensation and length of service. City employee members make contributions to the System and, until 1993, the City made a normal contribution which was a percentage of total City payrolls. These cash payments are held in trust and invested to meet the retirement benefits of members. However, if these invested assets prove inadequate to meet the defined benefits, the City must contribute additional monies to pay benefits. Between fiscal year 1988/1989 and fiscal year 2006/2007, the System's anticipated liabilities were fully funded or in an actuarial surplus condition, and the City was not required to make contributions to the System during that time period. The City has been required to make contributions from fiscal year 2007/2008 through the present.

In 1977, with the passage of Measure E, SCERS became a "closed" system, i.e. there would be no additional employees participating in the plan. Since that time, all full-time and eligible part-time employees of the City participate in the California Public Employees' Retirement System (CalPERS) rather than SCERS. In 1977, the average age of SCERS active members was 36 years.

In June 1989, the voters of Sacramento approved the transfer of SCERS active safety members to CalPERS. Effective December 30, 1989, SCERS active safety members were transferred to CalPERS with a cash transfer of $103.3 million in January 1990.

As of June 30, 2018, the average age of SCERS active members is 64.2 years and the average years of service is 36.3 years. As of said date, there are 11 active miscellaneous members and a total of 1,029 plan participants.

Pursuant to the Sacramento City Charter, the Board has exclusive authority to invest and manage the System's funds. The Board, in turn, has selected the Sacramento City Treasurer and Treasurer's Office investment personnel to conduct daily investment activities consistent with Board-approved policies and direction. The City Treasurer's office also serves as staff to the Board.

INVESTMENT OBJECTIVES

The overarching goal of the SCERS investment program is to utilize prudent investment practices to generate adequate long-term returns that, when combined with employer and employee contributions, will result in sufficient assets to pay the present and future obligations of the System. In furtherance of this goal, the Board has adopted an investment policy that, among other things, authorizes the investment in different asset classes to promote both long-term returns and short-term cash needs. The emphasis on cash income and fixed-income investments is intended to meet current benefit payments on a continuing basis, while equity investments are intended to grow the asset base with dividend income providing additional support for current benefit payments.

The emphasis on interest revenue and dividend income is particularly important for SCERS as there are no new entrants to the system to provide a continuing source of funds to help cover the liabilities of the system. Cash payments for benefits have exceeded contributions since 1989. Accordingly, the cash generation emphasis in SCERS investments is a critical feature required from SCERS status as a "closed" plan, that has negligible and declining numbers of active, contributing members. Equity investments are permitted to inject an element of growth within the investment portfolios to grow the System's asset base. However, SCERS equity allocations are less than the levels utilized by many other pension plans so that the volatility in valuation inherent in equity investments will not unduly interfere with the ability of the investments to generate an adequate level of cash flow.

The Board annually reviews and approves the SCERS investment policy and forwards the same to the City Council for its approval pursuant to City Charter requirements. All SCERS investments are held by a third-party custodian, except for real estate trust deeds.

ASSET ALLOCATION

Pursuant to the SCERS investment policy, the Board annually reviews its asset allocation, i.e. the allocation of the System's funds to different investment asset classes. On May 1, 2017, the Board established the asset allocation of the investment of SCERS funds during the fiscal year beginning July 1, 2017 and ending June 30, 2018. The approved asset allocation is as follows:

Fixed Income	
Fixed Bond	35%
Equity	
Large Cap Growth	35%
Equity Income	25%
International	5%
	100%

ACTUARIAL EARNING ASSUMPTION

During the fiscal year ending June 30, 2018, SCERS actuarial earnings assumption was 6.5 percent.

FINANCIAL RESULTS

The plan net position of SCERS decreased from $288.510 million to $286.609 million by the end of fiscal year ended June 30, 2018. This $1.90 million decrease is summarized as follows:

SCERS PLAN NET POSITION	$ in thousands
Plan net position 6/30/17	$288,510
Members Contributions	55
City Contributions	8,645
Net Investment Income	20,982
Benefit Payments & Expenses	-31,583
Plan net position 6/30/18	$ 286,609

SCERS' Actuarial Accrued Liability (AAL) as of June 30, 2018 is approximately $324.67 million. AAL represents the present value of all future benefits that will be paid by SCERS. SCERS funding ratio using market value of assets was 88.3 percent of AAL on June 30, 2018. The funding ratio is defined as that portion of the total AAL for which there are assets available for benefits. As such, the System's actuary indicates that for every dollar of benefits due, SCERS has approximately $0.88 of assets available for payment.

An actuarial analysis of assets shows the rate of investment return for fiscal 2017-18 was 7.6% percent net of investment expense, which is above the assumed actuarial rate of return of 6.5 percent per annum.

TOTAL FUND PERFORMANCE

As required by the SCERS Investment Policy, the Board retained a third-party firm, namely Segal Marco Advisors (formerly Rogerscasey) to calculate total investment return and measure investment performance. Segal Marco is an independent fund evaluation and performance measurement service that calculates and reports the investment results of over 2,500 managed pension investment portfolios in the U.S. Segal Marco calculates the investment results of the managed portfolios and compares such results to the database of predetermined industry benchmarks.

Table 1 below shows investment return results of SCERS for the specified periods ended June 30, 2018:

Table 1

SCERS Total Rate of Return
TOTAL PLAN ASSETS
For the periods ended June 30, 2018

Annualized Compound Returns	1 Yr.	3 Yrs.	10 Yrs.
SCERS – All Funds	7.68%	6.96%	6.21%
Custom Index – Target	5.38%	5.96%	5.81%
Actuarial Assumption	6.50%	6.50%	6.50%

For the fiscal year ended June 30, 2018, the total return of the System's invested assets resulted in a 7.68% overall return. The indicated Custom Index – Target is a blended return amount based on the actual market performance of Segal Marco benchmarks representing each of the investment asset classes utilized by the System pursuant to the Board's established asset allocation. The System's investment returns exceeded the market-based benchmarks utilized by Segal Marco for each of the 1-year, 3-year and 10-year time frames. Accordingly, System investments took advantage of the returns the various asset classes provided to the investing marketplace, plus added additional returns for each time period. While the System outperformed the benchmarks, the 10 yr portfolio and benchmark returns fell short of the 6.5% actuarial rate of return assumptions. Consistent with the "prudent person" standard set forth in the SCERS investment policy, the Board and its investment staff did not attempt to boost performance to the actuarial rate of return by going into riskier investments that would inject more volatile, non-transparent and/or illiquid assets into the portfolio. Rather, driven by the System's status as a "closed" fund virtually devoid of present and future member cash contributions, the System's investment policy points to a relatively conservative investment scheme that stresses the importance of preservation of capital and generation of cash flows from such assets.

Preservation of the SCERS' assets is challenged by the required cash payments of retiree benefits paid from such assets. As the number of active members and their contributions have been in constant decline, the number of retirees and hence the amount of cash needed for benefits payments has stabilized and is declining over time. The preservation of the System's assets at the same time the liabilities of the plan decline (declining retiree benefits being paid) will facilitate improving funding ratios over time. Increasing the funding ratio overtime will further decrease the need to incur risk in the portfolio as the System works towards an endgame of meeting the benefit payments of a dwindling retiree pool in an orderly, non-volatile manner.

To best manage the long-term competing factors of capital preservation and cash generation, the Board historically has placed emphasis on income-generating investments. Such investments include allocations to interest-bearing fixed income instruments as well as dividend-paying equity securities. The emphasis on interest-bearing fixed income investments reached as high as 70% of plan assets in 1995, all with the goal of generating cash yields close to the actuarial return assumption of 6.5%. Such fixed income investments are within the Fixed Fund maintained by the System.

Long term interest rates continued to fall from their high levels in the early 1980's, including consistent declines since then through 2008-2009 financial crisis that resulted in historic low rates. As the yield on long maturity bonds fell below the actuarial return assumption, the Board started to allocate funds to dividend-paying equities. At first, these dividend-paying equity holdings were lumped together with interest-bearing

fixed income securities, all within the Fixed Fund. While the dividend-paying stocks have certain bond-like attributes, such as a consistent, steady stream of periodic income, they behave sufficiently different to warrant analyzing and managing such holdings separately from bond holdings. From and after 2008, such stocks were recorded in their own portfolio within the System known as the Equity Income Fund. The Equity Income Fund's cash dividends, as well as the interest earned on Fixed Fund holdings, constitute an important portion of the return on the System's assets. In addition, Equity Income stock holdings may also contribute capital returns in the form of higher share values.

For the fiscal year, approximately 60% of the System's assets were allocated to the Fixed Fund (35%) and Equity Income Fund (25%). The overweight to income-generating investments reflects the Board's prudent approach to maintain the actuarial soundness of the System and the ability to pay retiree benefits. Moreover, the volatility of the Fixed Fund and Equity Income Fund is less than what is experienced in the other growth equity portions of the SCERS portfolio. In overweighting the portfolio to these two Funds, the Board seeks more consistent cash revenue and total returns while minimizing undue volatility in City contributions which may take place as a result of wide swings in portfolio value from greater weightings to the more growth-oriented equity allocations.

Fixed Income Performance

Based on the Board's asset allocation for FY2018, 35% of SCERS assets were allocated to fixed income investments within the Fixed Fund. During the year, such fixed income investments included corporate, municipal and mortgage-backed bonds, plus short-term, cash-equivalent investments. In addition, the Fund includes a real estate first trust deed funded by the System. All told, the Fixed Fund's investments are debt securities whose primary source of portfolio return is interest income, with increases in value of the holdings a secondary source of return.

Table 2 reflects SCERS' performance of the Fixed Fund for various periods ending June 30, 2018:

Table 2

SCERS Total Rate of Return
FIXED INCOME
For the periods ended June 30, 2018

Annualized Compound Returns	1 Yr.	3 Yrs.	10 Yrs.
SCERS Fixed Fund	2.24%	3.75%	6.46%
Fixed Portfolio Index*	-.40%	1.72%	3.72%

*Fixed Portfolio Index = 100% Barclays US Aggregate from March 2008 to present; prior to March 2008, 100% Barclays US Intermediate Aggregate.

The Fixed Fund produced a total rate of return of 2.24% for the one-year period ending June 30, 2018, a rate substantially greater than the Fund's market-based benchmark, the Barclays US Aggregate Bond Index that turned in negative returns at -.40%. This continues a long history of outperformance as reflected by the returns for the 3 and 10-year timeframes. Over the past 10 years, the Fixed Fund has returned 6.46% annually which exceeds the benchmark return of 3.72% and, more importantly, matches the assumed actuarial rate of return of 6.5%. Hence, the Fixed Fund has been a key contributor to the performance of the entire Plan. The Fixed

Fund's outperformance is due primarily to its heavy weighting in high-quality, high coupon corporate and municipal securities.

This year's fixed fund return at 2.24% is an increase over the previous years' return of 1.43%. This increase in returns occurred even in light of a rising interest rate environment that started in the Fall of 2014 (termination of the Federal Reserve (Fed) bond purchase program) and continued with the Fed's initial hiking of the Federal Funds rate in December 2015. The hike program grew in momentum with six 0.25% Federal Fund rate hikes since the initial hike through FY2018 (bond prices move in inversely to interest rates as higher rates result in lower bond values). The recent rate increases in the short-term Federal Funds rate, coupled with a strengthening labor market and economy, resulted in rate increases across all maturities on the yield curve. However, the Fixed Fund portfolio is weighted towards the longer end of the treasury curve and as such did not experience significant underperformance as did those securities tied to the front end of the treasury curve. Also important, the high coupons of the portfolio's holdings continued to contribute in excess of $4.66 million dollars in cash interest payments.

Equity Investment Performance

Equity investment is a broad term used to describe investments in ownership interests in the issuing corporation. Common stocks represent corporate ownership interests. Stocks are typically purchased with the desire to capitalize on the growth of the issuing corporation. Also, many corporations pay dividends to holders of their common stock which provides shareholders with cash income. Common stocks can be purchased individually so the shareholders can target specific companies for growth and/or income purposes. Common stocks may also be purchased in groups through exchange traded funds (ETF's). ETF's can hold stocks of companies included in indexes (e.g. S&P 500 and Russell 2000) or which participate in various economic sectors (e.g. technology, financial and energy sectors) or focus on different investment themes (e.g. growth and value stocks). ETF's provide investors with effective tools to provide exposure into broad swaths of the market or in to specific sectors of the economy. This is as opposed to requiring investors to identify stocks of individual companies to achieve the same exposure, all while incurring the risk that such selected individual companies fail to perform in-line with the index or sector (known as "single company risk"). While an ETF represents a collection of stocks, each ETF trades like stocks of individual companies on the major exchanges. SCERS equity portfolios are invested in both single company stocks and ETF's.

By Board policy for the fiscal year ending June 30, 2018, 65% of SCERS assets were to be allocated to equity investments, both domestic and international and including both growth and income objectives.

Table 3 shows the performance of SCERS' equity investments, both domestic and international:

Table 3

SCERS Total Rate of Return
DOMESTIC EQUITY INVESTMENTS
For the periods ended June 30, 2018

Annualized Compound Returns	1 Yr.	3 Yrs.	10 Yrs.
SCERS Domestic Equities	11.52%	9.69%	6.29%
Domestic Equity Index	12.68%	9.41%	8.03%
Individual SCERS Domestic Equity Portfolios			
Large Cap Growth Fund	14.11%	10.35%	5.77%
Large Cap Index**	12.17%	9.63%	7.82%
Equity Income Fund	8.11%	9.23%	7.87%
Equity Income Index***	4.18%	10.00%	7.50%

**Large Cap Index = Dec 1992 – June 2007 = 100% Russell 1000 Growth, June 2007 to present = 100% S&P 500
***Equity Income Index = Apr 1986 – Feb 1992 = 100% Fixed Portfolio, Mar 1992 to present = 100% Dow Jones Select Dividend Index

Table 3

SCERS Total Rate of Return
INTERNATIONAL EQUITY INVESTMENTS
For the periods ended June 30, 2018

Annualized Compound Returns	1 Yr.	3 Yrs.	10 Yrs.
SCERS International Fund	6.87%	3.28%	-1.69%
International Equity Index*	4.58%	2.37%	-.18%

*International Index = Feb 2006 – Jun 2007 = 33% Nikkei, 67% MSCI EAFE, Jul 2007 to present = 100% MSCI ACWI ex US

Per Table 3, the performance of the overall SCERS domestic equity portfolio was 11.52% for the one-year period as compared to the 12.68% return by the benchmark (Russell 3000 which represents the stocks of approximately 98% of US publicly traded corporations). While the double-digit percentage return of the domestic equity portfolios fell just short of the broad market benchmark, these portfolios (and the benchmark) significantly outperformed the Plan's actuarial rate of return of 6.5%. The above average performance of the portfolios and the market benchmark is commensurate with surging US economic growth and growing evidence of a global synchronized recovery in the world's economies.

The two domestic stock portfolios, Large Cap Fund and Equity Income Fund, and the International Fund showed above actuarial returns with 14.11%, 8.11% and 6.87%, returns respectively.

The Plan's largest equity portfolio is the Large Cap Growth Fund which is benchmarked to the S&P500 Index. The double-digit returns of the Fund far exceeded the historical average domestic stock return of between 9% and 10% and clearly outperformed the benchmark S&P500 return of 12.17%. The domestic market surged until the winter of FY2018 as the country was faced with improving job growth and a tax cut to incentivize corporations to invest in the economy. In January of 2018 the markets began to experience increased volatility as political infighting and a threatened trade tariff with China began to materialize. By the end of Fiscal year 2018 the market had stabilized and recovered and turned in impressive year over year returns ending June 20, 2018.

The second largest equity portfolio is the Equity Income Fund. As stated above, the purpose of this Fund is primarily to boost the dividend cash income of the Plan to provide a source of benefit payments. Like the Large Cap Growth Fund, the Equity Income Fund experienced a steady rise in FY 2018 and turned in a return that also outperformed the actuarial assumption for the year. When the winter volatility began in the markets, investors favored these value assets as a "hiding place" until the volatility in the markets began to stabilize. As intended, the assets in this portfolio offer diversification away from the growth portfolio. The Fund's total return was 8.11% which far exceeded the benchmark, and, most importantly, outperformed the actuarial rate of return of 6.5% by a wide margin. The Equity Income Fund helps to fulfill the Board's objective of enhancing cash income to help pay benefits. The Fund's dollar contribution from dividends was $2.11 million for the year, providing much needed cash into the System as intended.

The International Fund holds equities issued by foreign corporations. It is the smallest of the three equity portfolios. While almost half of the world's investable equities are issued by foreign companies, the Board has kept the portfolio's weighting low (5% for the year ending June 30, 2018) due to global economic and political uncertainties as well as geo-political strife. The lower weighting to international stocks was reflective of the past ten years when international stocks were either in bear markets or otherwise vastly underperformed the domestic stock market. However, foreign markets started to improve in late FY2016 and our international portfolio turned in an impressive 6.87% return for the Fiscal Year ending 2018. While the international component of the portfolio does not contribute cashflow into the system, it offers prudent diversification away from the domestic assets which comprise the majority of the Fund's assets.

In 2014, the Board authorized an options program primarily involving the writing of call options on existing equity holdings. The purpose of the options program is to increase cash income to the Fund and provide a hedge against the decline in its investments. Since its inception, the call-write program has had a neutral impact on the returns and cash generation of the Fund.

INDEPENDENT AUDIT

SCERS receives an independent audit of the basic financial statements. Vavrinek, Trine, Day & Co., LLP conducted the audit for the fiscal year ended June 30, 2018 and issued an unmodified or "clean" opinion. The Independent Auditors' Report can be found on page 1 of this report. The City is responsible for establishing and maintaining internal controls designed to ensure the protection of assets from loss, theft, or misuse, and for ensuring the accounting information generated is adequate to prepare financial statements in conformity with accounting principles generally accepted in the U.S. The design of the internal controls is to provide reasonable assurance, although not absolute assurance, of achieving these objectives. The accuracy and completeness of the data outlined in this report is the sole responsibility of the management of SCERS.

SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM

A Component Unit of the City of Sacramento
Letter to the Members of the Sacramento City Employees'
Retirement System and the Sacramento City Council
Fiscal Year Ended June 30, 2018

ACTUARIAL VALUATION

The actuarial valuation and GASB 67 & 68 reports for SCERS as of June 30, 2018 are presented in this document. Very briefly, these reports identify a Net Pension Liability (NPL) of $38.06 million as of June 30, 2018. This amount represents a 21.2% decrease in NPL over the prior fiscal year.

PROFESSIONAL SERVICES

SCERS engages the following consultants to assist in the management and investment of assets:

Firm	Duties
Segal Marco	Performance evaluation
Bartel Associates	Actuarial evaluation and asset allocation (Since 6/30/06)
JPMorgan	Custody and master trust (since 8/1/2017)

BOARD MEETINGS

For the fiscal year ending June 30, 2018, regular meetings of the Board were held in City Treasurer's Conference Room 2nd Floor, 915 "I" Street, at 1:30 p.m., on August 10, 2017, October 26, 2017, November 27, 2017, February 1, 2018 and May 3, 2018. The Board's meetings were open to the public and attendees were afforded the opportunity to provide input on any matter on the meeting agenda or not on the agenda that may be related to the Board's activities.

John Colville, City Treasurer
Administration, Investment and
Fiscal Management Board

POLICY STATEMENT

As a matter of policy, the Administration, Investment and Fiscal Management Board has determined the following schedules shall be included as addenda to the Annual Financial Report of the Sacramento City Employees' Retirement System:

1. A letter of transmittal to the City Council from the Board Chair;
2. An independent auditors' report;
3. A statement of the System's financial position;
4. A summary schedule of changes in the investment position during the year by security type;
5. A detailed listing of investments (by security) as of the end of the fiscal year;
6. A statement from the Actuary showing the estimated position of the Fund based on latest actuarial projections; and
7. The policy statement of the Board. The Board shall notify recognized employee organizations and the City Council of any changes in the policy statement that are to be made.

Adopted May 1978

INDEPENDENT AUDITORS' REPORT

Administration, Investment and Fiscal Management Board
Sacramento City Employees' Retirement System
Sacramento, California

Honorable Mayor and City Council
City of Sacramento
Sacramento, California

We have audited the accompanying financial statements of the Sacramento City Employees' Retirement System (SCERS), a component unit of the City of Sacramento, California (City), as of and for the year ended June 30, 2018, and the related notes to the financial statements.

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.

Auditors' Responsibility

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

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

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

Opinion

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

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Report on Summarized Comparative Information

We have previously audited SCERS' financial statements for the fiscal year ended June 30, 2017, and we expressed an unmodified audit opinion on those audited financial statements in our reported dated December 22, 2017. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3-6 and the schedules of changes in the net pension liability and related ratios, schedule of employer contributions, and schedule of investment returns on pages 19-22 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that comprise the SCERS' basic financial statements. The introductory section, listing of investments, and actuarial section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The listing of investments is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such 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 generally accepted in the United States of America. In our opinion, listing of investments are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

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

Vavrinek, Trine, Day & Co. LLP

Sacramento, California
December 20, 2018

The management of the Sacramento City Employees' Retirement System (SCERS) is pleased to provide this overview and analysis of the financial activities of SCERS for the fiscal year ended June 30, 2018. We encourage readers to consider the information presented here in conjunction with the Financial Statements and Supplemental Schedules that follow this discussion.

Financial Highlights

- SCERS held $286.6 million of net position restricted for pension benefits as of June 30, 2018 and $288.5 million as of June 30, 2017. SCERS' entire net position balance is restricted for its ongoing obligation to plan participants and their beneficiaries.
- SCERS' funding objective is to maintain sufficient net position through investments and contributions to meet long-term obligations for benefits. As of June 30, 2018, SCERS had a funded status of 88.3% which means for every dollar of total pension liability, SCERS had approximately $0.88 of assets available to pay those benefits. This figure is based on the most recent actuarial valuation as of June 30, 2018. As of June 30, 2017, SCERS had a funded status 85.6%.
- SCERS' employer contribution was $8.6 million for the fiscal year ended June 30, 2018, consistent with the employer contribution of $8.6 million for 2017.
- For the fiscal year ended June 30, 2018, SCERS' net income from investment activity was $21 million, compared to net investment income of $26.8 million in the prior year. The decrease in investment income was due to a decrease in appreciation in the fair value of investments, from $18 million in 2017 to $13.3 million in 2018.

Overview of Financial Statements

The following discussion and analysis are intended to serve as an introduction to SCERS' financial statements, which are comprised of the following components:

1. ***Statement of Plan Net Position*** is a snapshot of account balances as of June 30, 2018 with comparative amounts for 2017. It indicates the total assets and the total liabilities as well as the net position available for future payment of retirement benefits and investment expenses.
2. ***Statement of Changes in Plan Net Position*** provides a view of additions and deductions to SCERS' net position during each of the fiscal years.
3. ***Notes to Financial Statements*** and ***Required Supplementary Information*** provide additional information that is essential to a full understanding of the data provided in the basic financial statements.

The statement of plan net position and the statement of changes in plan net position report information about SCERS' financial activities, prepared using the accrual basis of accounting. Contributions to SCERS are recognized when due, and benefits and refunds are recognized when due and payable. Investments are reported at fair value, except mortgage loans, which are reported at amortized cost. The estimated fair value of investments is the quoted market price. Purchases and sales of investments are recorded on a trade date basis.

Financial Analysis

SCERS' net position may serve as a useful indicator of SCERS' financial position over time. As mentioned earlier, SCERS' entire net position balance is restricted for SCERS' ongoing obligation to plan participants and their beneficiaries. Net position as of June 30, 2018 and 2017 is as follows:

NET POSITION SUMMARY
As of June 30, 2018 and 2017
(in thousands)

	2018	2017	Change	Percent
Cash and cash equivalents	$ 4,149	$ 8,601	$ (4,452)	-52%
Receivables	1,481	1,600	(119)	-7%
Investments at fair value	282,124	279,213	2,911	1%
Total assets	287,754	289,414	(1,660)	-1%
Total liabilities	1,145	904	241	27%
Net position restricted for pension benefits	$ 286,609	$ 288,510	$ (1,901)	-1%

SCERS' net position restricted for pension benefits decreased in 2018, as benefit payments exceeded contributions and investment income. The decrease in cash can be mainly attributed to the purchase of investments and the net decrease in plan net position. Although net position decreased, total pension liability also decreased and funded status of the plan improved from 85.6% to 88.3% in 2018.

The following table summarized additions and deductions for 2018 and 2017:

HIGHLIGHTS OF CHANGES IN NET POSITION
Fiscal years ended June 30, 2018 and 2017
(in thousands)

	2018	2017	Change	Percent
Additions:				
Employer contributions	$ 8,645	$ 8,645	$ -	0%
Employee contributions	55	63	(8)	-13%
Net appreciation in the fair value of investments	13,305	17,997	(4,692)	26%
Interest	4,378	4,639	(261)	-6%
Dividends	4,444	5,350	(906)	-17%
Investment expenses	(1,145)	(1,183)	38	-3%
Total additions	29,682	35,511	(5,829)	-16%
Deductions:				
Benefit payments	31,583	32,171	(588)	-2%
Total deductions	31,583	32,171	(588)	-2%
Net increase/(decrease) in net position	(1,901)	3,340	(5,241)	-157%
Net position restricted for pension benefits:				
Beginning of fiscal year	288,510	285,170	3,340	1%
End of fiscal year	$ 286,609	$ 288,510	$ (1,901)	-1%

- Required employer contributions remained unchanged for the fiscal year ended June 30, 2018, due to improved performance of the investment portfolio over the past several years.
- Employee contributions for the fiscal year ended June 30, 2018 decreased slightly from 2017 due to retirement of active members. Contributions are expected to decline as the system is closed to new members and the number of active members decreases with each passing year.
- Net appreciation in fair value of investments decreased by $4.7 million in 2018. The $13.3 million gain during the fiscal year ended June 30, 2018 consists of $43.7K of unrealized gains and $13.26 million of realized gains, compared to $4.9 million of unrealized gains and $13.1 million of realized gains for the fiscal year ended June 30, 2017.
- Benefit payments to plan participants decreased due to a decline in the number of participants receiving benefits. The decrease was slightly offset by the annual cost of living adjustment made to the benefit amount. As the plan has been closed since 1980, the number of participants receiving benefits declines each year.

Changes in Funded Ratio

SCERS funded ratio for the years ended June 30, 2017 and 2018 were 85.6% and 88.3%, respectively. The increase between June 30, 2017 and June 30, 2018 is largely due to investment gains.

Currently Known Facts and Events

The overall risk profile of SCERS has remained unchanged since June 30, 2018, and the volatility of the investment portfolio remains in line with the overall financial markets. The global capital markets are highly dynamic and the value of SCERS investments changes every day.

Requests for Information

This financial report is designed to provide a general overview of SCERS' finances and to demonstrate SCERS' accountability for the money it receives and distributes. If you have questions about this report, or need additional financial information, contact the City of Sacramento Department of Finance, Accounting Division, 915 I Street, 4th floor, Sacramento, CA, 95814.

SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM
Statement of Plan Net Position
June 30, 2018
With Comparative Totals for June 30, 2017
(Amounts Expressed in Thousands)

	2018	2017
Assets		
Cash and cash equivalents	$ 4,149	$ 8,601
Receivables:		
Interest and dividends	1,481	1,600
Total receivables	1,481	1,600
Investments:		
U.S. agencies	973	1,182
Corporate bonds	29,338	37,148
Equities	33,029	124,268
Exchange traded funds	166,072	61,981
Municipal bonds	51,185	52,903
Mortgage loans	1,527	1,731
Total investments	282,124	279,213
Total assets	287,754	289,414
Liabilities		
Benefits payable	1,134	885
Accounts payable	11	19
Total liabilities	1,145	904
Net position restricted for pensions	$ 286,609	$ 288,510

See accompanying notes to basic financial statements.

SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM
Statement of Changes in Plan Net Position
Fiscal Year Ended June 30, 2018
With Comparative Totals as of June 30, 2017
(Amounts Expressed in Thousands)

	2018	2017
Additions		
Contributions:		
Employer	$ 8,645	$ 8,645
Employees	55	63
Total contributions	8,700	8,708
Investment income:		
From investment activities:		
Net appreciation in fair value of investments	13,305	17,997
Interest	4,378	4,639
Dividends	4,444	5,350
Total investment income	22,127	27,986
Less investment expense:		
Banking, interest, fiscal agent & other	57	102
Professional services	1,088	1,081
Total investment expense	1,145	1,183
Net income from investing activities	20,982	26,803
Total net additions	29,682	35,511
Deductions		
Benefit payments	31,583	32,171
Total deductions	31,583	32,171
Net increase/(decrease) in plan net position	(1,901)	3,340
Net position restricted for pensions		
Beginning of fiscal year	288,510	285,170
End of fiscal year	$ 286,609	$ 288,510

See accompanying notes to basic financial statements.

Note A – Plan Description

The City of Sacramento, California, (City) sponsors and administers a defined benefit contributory pension system known as the Sacramento City Employees' Retirement System (SCERS). The fiscal management of SCERS is vested in the five-member Administration, Investment, and Fiscal Management Board (Board), consisting of the City Manager, Director of Finance, City Treasurer and two public members who are appointed by the City Council. Because of this relationship with the City, SCERS is reported as a component unit of the City.

SCERS is a single-employer system and an integral part of the City. The accompanying financial statements are included as a pension trust fund in the basic financial statements of the City. The system covers all City employees hired before January 29, 1977 and is closed to new members. Employee contribution rates are generally frozen (with minor exceptions) and the City is responsible for any actuarially determined unfunded obligation of the plan. SCERS is comprised of the individual plans listed below. The City Charter establishes plan membership, contributions, and benefit provisions. Any changes must be approved by the electorate of the City.

1. Charter Section 399 Plan – This defined benefit plan was established effective January 1, 1977 to provide retirement, disability and death benefits. Active members contribute at a rate based upon entry age and type of employment.
2. Equal Shares Plan – This defined benefit plan was established July 1, 1970 to provide retirement, disability and death benefits to all City employees electing coverage at that date and to all employees who were hired from that date through January 1, 1977.
3. Charter Section 175 Plans – These defined benefits were established in 1953 and provide for retirement, disability and death benefits at a lower amount than the successor Equal Shares Plan.

Plan membership at June 30, 2018 consisted of the following:

	Section 399	Equal Shares	Section 175	Total
Inactive members or beneficiaries receiving benefits	902	51	56	1,009
Inactive members entitled to but not yet receiving benefit	8		1	9
Active plan members	11	-	-	11
Total plan members	921	51	57	1,029

Cost-of-Living Adjustment – This adjustment, established in 1969, provides for annual retirement benefit increases of up to 3% of normal benefits based on a corresponding rise in the consumer price index. Cost-of-living benefits are payable to retirees and beneficiaries of all of the above plans after one year of retirement. The cost-of-living adjustment was 3% for fiscal year 2018. Members contribute to this adjustment at a rate of 1% of their normal retirement contributions. The City is required to fund all costs in excess of members' contributions and investment earnings.

Note A – Plan Description (Continued)

SCERS reports the assets and activities of all plans in one trust fund. All assets accumulated for the payment of benefits may be used to pay benefits to any of the plan members or beneficiaries.

As benefits fully vest after five years of service and admission to the plan was restricted in 1976 and closed in 1980, all accumulated benefits at June 30, 2018 are fully vested.

As the plans included in SCERS are closed to new members, the number of active members in the system is declining. Member contributions have declined as members retire. During the fiscal year ended June 30, 2018 active member contributions ranged from 6% to 10% of payroll. At June 30, 2018, active members' accumulated contributions, including interest, totaled approximately $3,641. For the fiscal year ended June 30, 2018, interest was credited to members' contributions at the rate of 7.75%. Members have an option to withdraw their accumulated contributions, including interest, upon termination of their employment with the City.

Note B – Summary of Significant Accounting Policies

Basis of Accounting

SCERS' financial statements are prepared using the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are due. Employer contributions to each plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Investments

SCERS' investments are recorded at fair value, except mortgage loans, which are recorded at amortized cost. Investments reported at fair value are based on quoted market prices. The mortgage loans are collateralized loans whose market value is unknown. Purchases and sales of investments are recorded on a trade date basis.

Administrative Costs

The City charter requires all costs of administration, excluding investment activity, to be paid by the City. These costs are, therefore, excluded from the accompanying financial statements.

Use of Estimates

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

Note C – Cash and Investments

Cash and Cash Equivalents

SCERS participates in the City of Sacramento's investment pool, which is not rated by a nationally recognized statistical rating organization. The City Treasurer is granted authority for managing the pool by City Charter, City Council ordinances and resolutions. The City Treasurer reports investment activity quarterly to the City Council and quarterly the investment policy is reaffirmed by the City Council. The pool is accounted for on an amortized cost basis during the year. The value of the pool shares that may be withdrawn at any time is determined on an amortized cost basis, which is different than the fair value of SCERS' position in the pool. Information regarding the investments within the City's pool, including the related risks, can be found in the City's Comprehensive Annual Financial Report (CAFR). The City's investment pool is not rated and has a weighted average maturity of 1.92 years as of June 30, 2018.

Investments

The City Charter vests the Board with the authority to administer and invest the funds of the System consistent with charter provisions. The Board is mandated to adopt general investment standards that the City Council shall either approve or disapprove. These standards are set forth in an Investment Policy document that is annually reviewed by the Board and approved by the City Council. The Investment Policy sets forth the type of investments the System may hold and directs the Board to determine how the System funds may be allocated to different general asset classes. The Board sets the asset allocations by resolution effective for each fiscal year. The Board and its investment managers are required to conform their investment practices to the terms of the Investment Policy and related Board resolutions.

On May 1, 2017, the Board adopted the following asset allocation policy for fiscal year 2018:

Asset Class	Target Allocation
Fixed Income	35%
Large Cap Growth	35%
Equity Income	25%
International	5%
Total	100%

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that SCERS manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturing evenly over time as necessary to provide the cash flow and liquidity needed for operations.

Note C – Cash and Investments (Continued)

Interest Rate Risk (Continued)

Information about the sensitivity of the fair values of SCERS' investments to market interest rate fluctuations is provided by the following table that shows the distribution of SCERS' investments by maturity. The remaining maturity of the SCERS' investments included in the tables below is based on the stated maturity dates of the individual investments, except in the case of variable rate investments where the maturity date below is the next reset date. Variable rate securities are investments with terms that provide for the adjustment of interest rates on specified dates based on predefined mathematical formulas. The fair value of such investments can reasonably be expected to be affected at each interest rate reset date.

At June 30, 2018, SCERS' investments have maturities as follows:

		Remaining Maturity in Years				
Investment Type	No Maturity	Under 1	1-5	Over 5/ 10 or less	Over 10	Total
Cash and short-term investments:						
City of Sacramento Investment Pool	$ -	$ 4,149	$ -	$ -	$ -	$ 4,149
Investments:						
Corporate bonds/notes	-	7,056	5,363	2,930	13,989	29,338
Equities	33,029	-	-	-	-	33,029
Exchange traded funds	166,072	-	-	-	-	166,072
Mortgage loans	-	-	-	1,527	-	1,527
Municipal bonds/notes	-	-	1,495	11,132	38,558	51,185
U.S. agency securities	-	-	20	21	932	973
Total Investments	199,101	7,056	6,878	15,610	53,479	282,124
Total Cash and Investments	$ 199,101	$ 11,205	$ 6,878	$ 15,610	$ 53,479	$ 286,273

Investments in callable securities are investments that, although having clearly defined maturities, allow for the issuer to redeem or call such securities earlier than their respective maturity dates. The investor must then replace the called securities with investments that may have lower yields than the original securities.

The fair values of the callable securities held at June 30, 2018 by investment type are as follows:

Investment Type	Total
Corporate bonds/notes	$ 16,842
Municipal bonds/notes	15,778

Note C – Cash and Investments (Continued)

Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. As of June 30, 2018, SCERS held a bond that is currently in default of the semi-annual interest payments. The bond issuer Lehman Brothers filed for Chapter 11 bankruptcy protection on September 15, 2008. The bond has a maturity date of December 29, 2099 and a fair value of $76 as of June 30, 2018.

At June 30, 2018, SCERS' investments and credit ratings are as follows:

Investment Type	S & P	Moody	Total
City of Sacramento Investment Pool	not rated	not rated	$ 4,149
Corporate bonds/notes	A	A	15,142
	AA	Aa	4,960
	BBB	A	2,732
	BBB	Baa	6,428
	not rated	withdrawn	76
Equities (exempt from disclosure)	N/A	N/A	33,029
Exchange traded funds (exempt from disclosure)	N/A	N/A	166,072
Mortgage loans	not rated	not rated	1,527
Municipal bonds/notes	A	A	5,883
	A	Baa	3,317
	A	not rated	5,522
	AA	A	8,625
	AA	Aa	18,424
	AA	Aaa	2,760
	AA	not rated	5,369
	not rated	Aa	1,285
U.S. agency securities	AAA	Aaa	88
	N/A	N/A	885
Total Cash and Investments			$ 286,273

Note C – Cash and Investments (Continued)

Concentration of Credit Risk

As of June 30, 2018, SCERS held the following investments in individual issuers exceeding 5% of total investments (other than U.S. Treasury securities, mutual funds, and external investment pools):

iShares Russell 1000 Value Index (ETF)	$ 31,195
iShares MSCI ACWI (ETF)	15,690

Money-weighted rate of return

For the year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense was 7.96%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Fair Value Measurement and Application

SCERS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy 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 described as follows:

Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the SCERS has the ability to access.

Level 2 – Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability; and
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Unobservable inputs reflect the SCERS' own assumptions about the inputs market participants would use in pricing the asset or liability (including assumptions about risk).

Note C – Cash and Investments (Continued)

Fair Value Measurement and Application (Continued)

Unobservable inputs are developed based on the best information available in the circumstances and may include SCERS' own data.

The asset's level within the hierarchy is based on the lowest level of input that is significant to the fair value measurement. Valuation techniques used, need to maximize the use of observable inputs and minimize the use of unobservable inputs. The determination of what constitutes observable requires judgment by the SCERS' management. SCERS management considers observable data to be that market data, which is readily available, regularly distributed or updated, reliable, and verifiable, not proprietary, and provided by multiple independent sources that are actively involved in the relevant market. The categorization of an investment within the hierarchy is based upon the relative observability of the inputs to its fair value measurement and does not necessarily correspond to SCERS management's perceived risk of that investment.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The SCERS' assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

SCERS' treasury pools asset market prices are derived from closing bid prices as of the end of business day as supplied by Interactive Data Corporation. Where prices are not available from generally recognized sources, the securities are priced using a yield-based matrix system to arrive at an estimated market value. Prices that fall between data points are interpolated.

The following is a description of the valuation methods and assumptions used by SCERS to estimate the fair value of its investments:

- When available, quoted process are used to determine fair value. When quoted prices in active markets are available, investments are classified within Level 1 of the fair value hierarchy.
- For investments classified within Level 2 of the fair value hierarchy, SCERS' custodians generally use a multi-dimensional relational model. Inputs to their pricing models are based on observable market inputs in active markets. The inputs to the pricing models are typically benchmark yields, reported trades, broker-dealer quotes, issuer spreads and benchmark securities, among others.
- SCERS held one type of investment that is measured using Level 3 inputs, Mortgage Loans. The Mortgage Loan is reported using the income approach. The value of the Mortgage Loan on the books is materially close to the Discounted Cash Flow, therefore the book value is reported.

Note C – Cash and Investments (Continued)

Fair Value Measurement and Application (Continued)

There have been no changes in the methods and assumptions used at June 30, 2018. The methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. SCERS management believes its valuation methods are appropriate and consistent with other market participants. The use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

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

		Fair Value Measurements on a Recurring Basis Using		
Investments by Fair Value Level	Balance at June 30, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Corporate bonds/notes	$ 29,338	$ -	$ 29,338	$ -
Equities	33,029	33,029	-	-
Exchange traded funds	166,072	166,072	-	-
Mortgage loans	1,527	-	-	1,527
Municipal bonds/notes	51,185	-	51,185	-
U.S. agency securities	973	-	973	-
Total Investments by Fair Value Level	282,124	$ 199,101	$ 81,496	$ 1,527
Investments at Fair Value not Subject to Fair Value Hierarchy				
City of Sacramento Investment Pool	4,149			
Total Cash and Investments	$ 286,273			

Deposits and withdrawals in the City of Sacramento Investment Pool are made on the basis of $1 and not fair value. Accordingly, the measurement of fair value of SCERS' investment in the investment pool is based on uncategorized inputs not defined as Level 1, Level 2, or Level 3.

Note D – Related Party Transactions

At June 30, 2018, SCERS held revenue bonds issued by the Sacramento City Financing Authority (SCFA) in the amount of $5,522. SCFA is a blended component unit of the City of Sacramento because its Board is comprised of all City Council members, and there is a financial benefit/burden relationship between the City and SCFA. These bonds are measured at fair value using level 2 inputs.

Note E – Funding Policy

The City's funding policy provides for actuarially determined contributions under the entry age normal method, which are discounted and adjusted annually to ensure that sufficient assets will be available to pay benefits when due. The City Council established and may amend the obligations of the plan members and the City to contribute to the plan. For the fiscal year ended June 30, 2018, the City's annual required and actual contribution was $8,645.

Note F – Net Pension Liability of the City

The components of the net pension liability of the City at June 30, 2018 is shown below (dollars in millions). The total pension liability is based on an actuarial valuation as of June 30, 2018.

	June 30, 2018
Total pension liability	$ 324,669
Plan fiduciary net position	(286,609)
City's net pension liability	$ 38,060
Plan fiduciary net position as a percentage of the total pension liability	88.3%

Actuarial assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement.

Inflation	2.75%
Salary increases	2.75% CPI plus 0.5% merit, average
Discount rate	6.50%

Mortality rates for service retirements and beneficiaries were based on CalPERS 1997-2015 Mortality Table projected for future mortality improvement utilizing Society of Actuaries Scale MP-2017. Mortality rates for disability retirements were based on CalPERS 1997-2015 Mortality Table for non-work Disabled Retirees for Miscellaneous and CalPERS 1997-2015 Mortality Table for work-related Disabled Retirees for Safety. Both tables were projected for future mortality improvement utilizing Society of Actuaries Scale MP-2017.

Note F – Net Pension Liability of the City (Continued)

Discount rate

The Discount Rate was set equal to the long-term expected rate of return. The long-term expected rate of return was used since current assets, future City contributions, and future member contributions are projected to be sufficient to cover all future benefit payments and expenses. This "crossover test" was performed in accordance with the requirements specified in GASB Statement 67, including a projection that Plan's funding policy will remain unchanged.

The 6.5% long-term expected rate of return was derived based on the inflation assumption of 2.75% and a long-term asset allocation of 70% equities and 30% fixed income. The geometric real rates of return were assumed to be 4.36% for large cap equities, 4.93% for international equities, and 1.47% for fixed income. The sensitivity of the discount rate to a 1% change is shown below.

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability of the City, calculated using the discount rate of 6.5%, as well as what the City's net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (5.5%) or 1 percentage-point higher (7.5%) than the current rate:

	1% decrease (5.5%)	Current Discount Rate (6.5%)	1% increase (7.5%)
SCERS net pension liability	$ 65,476	$ 38,060	$ 14,329

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. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. Actuarial calculations reflect a long- term perspective and are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation.

REQUIRED SUPPLEMENTARY INFORMATION

Sacramento City Employees' Retirement System
Schedule of Changes in Net Pension Liability and Related Ratios
Last Ten Fiscal Years

(in thousands)

	2018	2017	2016	2015	2014
Total pension liability					
Service cost	$ 92	$ 96	$ 103	$ 131	176
Interest	20,877	22,759	23,416	23,134	23,779
Differences between expected and actual experience	(2,457)	(3,701)	(1,173)	(8,783)	-
Changes of assumptions	862	(16,246)	-	23,117	-
Benefit payments, including refunds of member contributions	(31,583)	(32,171)	(32,683)	(33,791)	(33,688)
Net change in total pension liability	(12,209)	(29,263)	(10,337)	3,808	(9,733)
Total pension liability -- beginning	336,878	366,141	376,478	372,670	382,403
Total pension liability -- ending (a)	$ 324,669	$ 336,878	$ 366,141	$ 376,478	372,670
Plan fiduciary net position					
Contributions -- employer	$ 8,645	$ 8,645	$ 8,645	$ 9,183	9,649
Contributions -- member	55	63	146	82	161
Net investment income	20,982	26,803	7,799	13,375	40,317
Benefits payments, including refunds of member contributions	(31,583)	(32,171)	(32,683)	(33,791)	(33,688)
Net change in fiduciary net position	(1,901)	3,340	(16,093)	(11,151)	16,439
Plan fiduciary net position -- beginning	288,510	285,170	301,263	312,414	295,975
Plan fiduciary net position -- ending (b)	$ 286,609	$ 288,510	$ 285,170	$ 301,263	312,414
Net pension liability -- ending (a) - (b)	$ 38,060	$ 48,368	$ 80,971	$ 75,215	60,256
Plan fiduciary net position as a percentage of the total pension liability	88.28%	85.64%	77.89%	80.02%	83.83%
Covered payroll	$ 921	$ 1,049	$ 1,020	$ 1,180	$ 2,279
Net pension liability as a percentage of covered payroll	4132.46%	4610.87%	7938.33%	6374.15%	2643.97%

Notes to Schedule:

The information in this schedule is prepared in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*, which SCERS implemented for the fiscal year ended June 30, 2014. Data

Sacramento City Employees' Retirement System
Schedule of Employer Contributions
Last Ten Fiscal Years

(in thousands)

	Fiscal Year				
	2018	2017	2016	2015	2014
Actuarially determined contributions	$ 8,645	$ 8,645	$ 8,645	$ 9,183	$ 9,649
Contributions in relation to the actuarially determined contribution	$ 8,645	$ 8,645	$ 8,645	9,183	9,649
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered payroll	921	1,049	1,020	$ 1,180	$ 2,279
Contributions as a percentage of covered payroll	939%	824%	848%	778%	423%

Notes to Schedule

The actuarial valuation was rolled forward from 6/30/2013 to 6/30/2014. As a result, the covered payroll used to calculate the contributions as a percentage of covered payroll is the same for both years.

Valuation date:
Actuarialy determined contributions are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported

Methods and assumptions used to determine contribution rate for fiscal year 2018:

Actuarial cost method	Entry age normal
Amortization method	Level dollar payments over 14 years, open period
Asset valuation method	3 year smoothed market value
Inflation	3%
Salary increases	3% CPI plus 0.5% merit
Investment rate of return	6.50%
Retirement age	Deferred vested members covered under Section 399 are assumed to retire at age 62; those covered under 175 are assumed to retire at age 65
Mortality	CalPERS 1997-2011 Mortality Tables with Scale MP-2014

Sacramento City Employees' Retirement System
Schedule of Employer Contributions
Last Ten Fiscal Years

(in thousands)

	Fiscal Year				
	2013	2012	2011	2010	2009
Actuarially determined contributions	$ 10,573	$ 10,361	$ 10,547	$ 3,431	$ 3,159
Contributions in relation to the actuarially determined contribution	10,573	10,361	10,547	3,431	3,159
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 2,279	$ 2,959	$ 4,132	$ 5,302	$ 5,749
Contributions as a percentage of covered payroll	464%	350%	255%	65%	55%

Notes to Schedule

The actuarial valuation was rolled forward from 6/30/2013 to 6/30/2014. As a result, the covered employee payroll used to calculate the contributions as a percentage of covered payroll is the same for both years.

Valuation date:
Actuarialy determined contributions are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported

Sacramento City Employees' Retirement System
Schedule of Investment Returns
Last Ten Fiscal Years

(in thousands)

	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	7.96%	10.22%	3.05%	4.86%	14.56%

Notes to Schedule:

The information in this schedule is prepared in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*, which SCERS implemented for the fiscal year ended June 30, 2014. Data is not available for the years prior to implementation so only five fiscal years are presented.

ADDITIONAL INFORMATION

SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM
LISTING OF INVESTMENTS
JUNE 30, 2018

Investments	Maturity Date	Quantity	Amortized Cost	Market Value
US GOVERNMENT OBLIGATION				
Gnma Pool #320296	3/15/2022	9,304	9,136	9,327
Gnma Pool #329837	11/15/2022	10,460	10,300	10,903
Gnma Pool #450066	12/15/2026	3,291	3,269	3,298
Gnma Pool #439515	3/15/2027	16,589	16,268	17,112
Gnma Pool #648348	10/15/2035	249,612	248,754	271,599
Gnma Pool #550718	11/15/2035	537,163	522,727	572,191
Fannie Mae Pool #256393	9/1/2036	80,357	80,093	88,395
Sub-total			**890,546**	**972,824**
CORPORATE BONDS				
Apple Inc	2/9/2027	3,000,000	3,000,000	2,929,500
Barclays Bank Plc	2/17/2032	5,000,000	5,000,000	4,752,750
Chevron Corporation	3/3/2019	2,000,000	2,045,507	2,030,540
Citigroup Inc	7/22/2036	5,000,000	5,000,000	4,423,800
Goldman Sachs Group Inc	8/31/2036	3,000,000	2,982,973	2,732,250
Lehman Bros Hldg Inc Escrow	12/29/2099	2,500,000	1,455,705	76,250
Lloyds Tsb Bk Plc	1/21/2021	5,000,000	5,084,170	5,363,300
Metlife Inc	8/15/2018	5,000,000	5,000,215	5,025,700
Verizon Communications Inc	3/15/2034	2,000,000	2,232,467	2,003,660
Sub-total			**31,801,038**	**29,337,750**
EQUITIES - LARGE CAP GROWTH				
Alphabet, Inc. Cl C Capital Stock		1,000	491,152	1,115,650
Amazon.com Inc.		1,400	692,714	2,379,720
Apple Inc.		5,500	504,047	1,018,105
Boeing Co Com		3,500	478,340	1,174,285
Facebook Inc Cl A		5,500	378,985	1,068,760
Home Depot Inc		5,000	455,328	975,500
MasterCard Incorporated		3,500	319,033	687,820
Paypal Hldgs Inc Com		10,000	737,164	832,700
Visa Inc Com Cl A		4,500	208,025	596,025
Sub-total			**4,264,790**	**9,848,565**
EQUITIES - FIXED ALTERNATIVE EQUITIES				
Bank Of America Corp		60,000	916,178	1,691,400
Chevron Corporation		12,000	1,346,621	1,517,160
Cisco Sys Inc Com		37,000	966,168	1,592,110
Citigroup Inc		19,000	877,806	1,271,480
Dowdupont Inc Com		15,000	948,323	988,800
General Mtrs Co Com		27,000	870,518	1,063,800
Home Depot Inc		7,000	1,029,646	1,365,700
Honeywell		7,000	867,264	1,008,350
Intel Corp		29,000	1,091,585	1,441,590
International Bus Mach		13,000	1,936,869	1,816,100
Johnson & Johnson		8,000	1,019,936	970,720
Jpmorgan Chase & Co		14,000	944,392	1,458,800
Lilly Eli & Co		16,000	1,169,411	1,365,280
Lockheed Martin Corp		3,000	406,415	886,290
Merck & Co Inc (new)		20,000	1,042,959	1,214,000
Pfizer Inc		38,000	933,969	1,378,640
Union Pac Corp Com		9,000	985,804	1,275,120
United Technologies		7,000	811,149	875,210
Sub-total			**18,165,012**	**23,180,550**
EXCHANGE TRADED FUNDS				
Alps Etf Tr Alerian Mlp		100,000	1,170,033	1,010,000
Invesco Preferred ETF		100,000	1,497,793	1,456,000

Invesco QQQ Trust Series 1 ETF		2,000	310,215	343,300
Ishares Inc Core Msci Emkt		68,800	3,827,727	3,612,688
Ishares Msci Acwi Us Etf		332,000	14,614,742	15,690,320
Ishares MSCI Eafe ETF		49,500	3,550,518	3,315,015
Ishares Russell 2000 ETF		15,000	1,667,104	2,456,550
Ishares Tr Nasdq Bio Indx		25,500	2,402,888	2,800,410
Ishares Tr Russell 1000 Val		257,000	29,060,074	31,194,660
Ishares Tr Transp Ave Idx		18,000	2,771,844	3,352,140
Ishares Tr U.S. Real Es Etf		10,000	786,336	805,800
Ishares Tr Us Pfd Stk Idx		40,000	1,562,803	1,508,400
Ishares Tr Us Telecom Etf		40,000	1,204,984	1,102,800
Ishares US Basic Materials ETF		13,000	972,980	1,287,130
Ishares Us Home Cons Etf		40,000	1,067,511	1,526,000
Ishares US Technology ETF		20,000	1,463,683	3,565,400
Select Sector Spdr Tr Rl Est Sel Sec		51,000	1,633,293	1,668,210
Select Sector Spdr Tr Sbi Cons Discr		73,000	5,004,540	7,978,900
Select Sector Spdr Tr Sbi Cons Stpls		167,700	8,434,353	8,641,581
Select Sector Spdr Tr Sbi Healthcare		100,200	7,471,288	8,362,692
Select Sector Spdr Tr Sbi Int-Energy		106,400	6,937,490	8,080,016
Select Sector Spdr Tr Sbi Int-Finl		297,000	6,088,078	7,897,230
Select Sector Spdr Tr Sbi Int-Inds		79,000	4,963,017	5,658,770
Select Sector Spdr Tr Sbi Int-Utils		51,500	2,282,104	2,675,940
Select Sector Spdr Tr Sbi Materials		12,000	700,781	696,840
Select Sector Spdr Tr Technology		169,000	8,285,527	11,740,430
Spdr Bbg Barc ST High Yield Bond ETF		6,900	188,811	188,301
Spdr Series Trust Kbw Regn Bk Etf		106,000	4,811,458	6,466,000
Spdr Series Trust S&p Biotech		24,000	2,118,344	2,284,560
Spdr Series Trust S&p Bk Etf		52,200	1,744,271	2,461,752
Spdr Series Trust S&p Retail Etf		44,000	1,895,086	2,136,640
Spdr Tr Unit Ser 1		38,000	8,736,562	10,308,640
Vaneck Vectors Etf Tr Semiconductor Et		37,000	1,968,187	3,798,790
Sub-total			**141,194,425**	**166,071,905**
MUNICIPAL BONDS				
Bay Area Toll Auth Calif Toll Toll Brid	4/1/2030	1,000,000	1,014,920	1,190,140
California St Go Bds	11/1/2026	2,000,000	2,000,000	2,489,500
California St Go Bds	3/1/2036	5,000,000	5,249,384	5,393,400
Houston Tex Arpt Sys Rev Arpt Sys	1/1/2028	5,000,000	4,726,742	5,882,800
Millbrae Calif Sch Dist	7/1/2020	500,000	521,265	523,770
Moreland Calif Sch Dist	8/1/2030	1,235,000	1,235,000	1,284,622
Pasadena Calif Wtr Rev	6/1/2031	3,000,000	2,965,158	3,068,670
Pasadena Calif Wtr Rev	6/1/2033	2,000,000	1,976,370	2,046,940
Riverside Cnty Calif Redev Agy Tax Alloc	10/1/2037	3,000,000	3,010,556	3,317,340
Sacramento Calif Pub Fing Auth	4/1/2050	5,000,000	5,299,285	5,522,000
San Francisco Calif City & Cnt Tax Alloc	8/1/2039	5,000,000	5,142,552	7,434,950
Union City Calif Cmnty Redev A	10/1/2030	250,000	245,557	253,585
Univ Calif Regts Med Ctr Poole	5/15/2031	2,350,000	2,456,448	2,838,189
University Calif Revs For Prev	5/15/2021	1,000,000	1,000,000	970,850
University Calif Revs For Prev	5/15/2031	5,755,000	6,361,957	6,208,321
Vermont State Build America Bonds	8/15/2027	2,700,000	2,676,797	2,760,183
Sub-total			**45,881,992**	**51,185,261**
MORTGAGE LOANS				
Walgreens Drugs/Adahi, Inc	5/1/2024	1,526,351	1,526,351	1,526,351
Sub-total			**1,526,351**	**1,526,351**
Total			**243,724,153**	**282,123,206**

APPENDIX A



BARTEL ASSOCIATES, LLC

City of Sacramento

Sacramento City Employees' Retirement System

June 30, 2018
Actuarial Valuation

November 21, 2018

BARTEL ASSOCIATES, LLC

ACTUARIAL VALUATION

CITY OF SACRAMENTO
SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM (SCERS)
DEFINED BENEFIT PLAN

We are pleased to present the results of our June 30, 2018 actuarial valuation of the Sacramento City Employees' Retirement System (SCERS).

The purpose of this valuation is to:

- Determine the System's June 30, 2018 Funded Status, and
- Calculate the fiscal year 2019/20 Actuarially Determined Contribution (ADC).

The information in this report may not be appropriate for purposes other than System funding but may be useful to the City for the System's financial management. Future valuations may differ significantly if the System's experience differs from our assumptions or if there are changes in plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on the System's benefit provisions summarized in Section 9, employee data, and on the System's financial information, all furnished by the City. We reviewed the financial and employee data for reasonableness, including comparing to prior year data, but did not perform an audit.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries, meeting Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

Mary Elizabeth Redding, FSA, MAAA, EA
Vice President

Deanna Van Valer, ASA, MAAA, EA
Assistant Vice President

Katherine Moore, ASA, MAAA
Associate Actuary

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SECTION 1
EXECUTIVE SUMMARY

Following are the valuation results. See notes following the table for a description of terms. Results from the June 30, 2017 valuation are provided for comparative purposes.

	--------amounts in $000's---------		
	June 30, 2017	**June 30, 2018**	**% change**
■ **Participant Counts**			
• Actives	16	11	-31.3%
• Terminated Vesteds & Reciprocals	10	9	-10.0%
• Service Retirees	608	581	-4.4%
• Disableds	124	116	-6.5%
• Beneficiaries	327	312	-4.6%
• Total	1,085	1,029	-5.2%
■ **Actuarial Liabilities**			
• Present Value of Projected Benefits	$ 337,099	$ 324,825	-3.6%
• Actuarial Accrued Liability	336,878	324,669	-3.6%
■ **Assets**			
• Market Value of Assets	288,509	286,609	-0.7%
• Approximate Annual Rate of Return	9.8%	7.6%	
• Actuarial Value of Assets	283,567	281,126	-0.9%
• Approximate Annual Rate of Return	7.4%	7.5%	
■ **Plan Funded Status**			
• Actuarial Accrued Liability	336,878	324,669	-3.6%
• Actuarial Value of Plan Assets	283,567	281,126	-0.9%
• Unfunded Actuarial Accrued Liability	53,311	43,543	-18.3%
• Funded Ratio	84.2%	86.6%	2.9%
• Funded Ratio, Market Value Basis	85.6%	88.3%	3.2%
■ **Maturity Ratios**			
• Inactive AAL/Total AAL	98.0%	98.5%	
• Inactive Count/Total Count	98.5%	98.9%	
	2018/19	**2019/20**	**% change**
■ **Annual Cost**[1]	5,268	4,410	-16.3%
■ **Annual Cost (% Proj. Plan Payroll)**[1]	734.6%	876.6%	
■ **Annual Cost (% Proj. City Payroll)**	1.7%	1.4%	

1 See page 11 for details.

SECTION 1
EXECUTIVE SUMMARY

Purpose of Actuarial Valuation

The actual costs of a defined benefit plan are determined entirely by the amount of the benefit promise, the actual salaries and service of the plan participants, and how long they and their beneficiaries live to receive payments. An actuarial valuation is a mathematical model which attempts to quantify this actual cost by setting assumptions that, it is hoped, duplicate reality as closely as possible. In addition, the actuarial methodology provides a reasonable plan, or method, towards funding the expected plan costs. This information assists the plan trustees so they can make informed decisions regarding plan investments and how much in contributions will be required from the employer to eventually fully pay the plan's costs.

Summary Information & Results

The Sacramento City Employees' Retirement System (SCERS) is a closed defined benefit pension plan. It has not accepted new members since January 28, 1977, and only 11 active members (out of a total plan membership of 1,029) remain.

Since the last valuation, the plan experienced overall gains on liabilities and market assets. Plan liabilities decreased more than expected, by $2.1 million. This was mostly due to retirees and beneficiaries not living as long as expected, but was offset by a greater COLA than expected. Market value return on assets was greater than expected, about 7.6% for the year, which combined with contributions greater than expected resulted in a gain of $3.5 million on the actuarial (smoothed) value of assets.

A few assumptions were changed since the prior valuation.

- The mortality improvement projection was updated to the Society of Actuaries most recent table, MP-2017. This decreased liabilities $3.2 million.
- The mortality tables were updated to use the CalPERS 1997-2015 Experience Study. The prior valuation used the tables from the CalPERS 1997-2011 Experience Study. This increased liabilities $4.0 million.

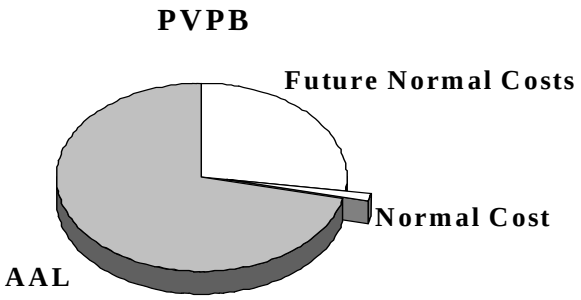
After the assumption changes, the July 1, 2018 total plan unfunded actuarial accrued liability (UAAL) is $43.5 million, as compared to expected UAAL of $48.3 million.

The plan's funded ratio on an actuarial value of assets basis is 86.6%, an increase from 84.2% in the prior valuation. The plan's funded ratio using market value of assets basis is 88.3%, an increase from 85.6% in the prior valuation.

The amortization period remains at a rolling 13-year period for the 2019/20 recommended contribution. The 3-year asset smoothing method provides some smoothing of contribution volatility. The City's contribution has decreased from $5.268 million for fiscal year 2018/19 to $4.410 million for fiscal year 2019/20. The prior valuation projected a 2019/20 contribution of $4.851 million. The 2019/20 contribution is less than projected due to experience gains.

Definitions

The Present Value of Projected Benefits (PVPB) is the present value of all future benefits for current plan participants. The Actuarial Accrued Liability (AAL) represents the portion of the PVPB attributable to past service. The AAL is recognized over service through the date a participant is expected to commence benefits. Therefore, the AAL is equal to the PVPB for current retirees. The Normal Cost is the portion of the PVPB allocated or earned during the year following the valuation date.



SECTION 2
LIABILITY INFORMATION & FUNDED STATUS

A comparison of the Present Value of Benefits, Actuarial Accrued Liability, Employer Normal Cost, and the Funded Ratio for the current and prior valuations follows. (Note that numbers throughout the report may not add due to rounding.)

(amounts in $000's)

	June 30, 2017	June 30, 2018
Present Value of Projected Benefits		
■ Active Employees	$ 6,992	$ 5,072
■ Vested Terminated & Reciprocals	1,577	1,226
■ Service Retirees	237,452	231,861
■ Disabled Participants	36,722	34,891
■ Beneficiaries	54,356	51,774
■ Total	337,099	324,825
Actuarial Accrued Liability		
■ Active Employees	$ 6,771	$ 4,916
■ Vested Terminated & Reciprocals	1,577	1,226
■ Service Retirees	237,452	231,861
■ Disabled Participants	36,722	34,891
■ Beneficiaries	54,356	51,774
■ Total	336,878	324,669

	2017/18	2018/19
Normal Cost		
■ Employer Normal Cost (beginning of year)	$ 36	$ 21

	June 30, 2017	June 30, 2018
Plan Funded Status		
■ Total Actuarial Accrued Liability	$ 336,878	$ 324,669
■ Actuarial Value of Plan Assets	283,567	281,126
■ Unfunded Actuarial Accrued Liability	53,311	43,543
■ Funded Ratio	84.2%	86.6%
■ Market Value of Assets	288,509	286,609
■ Funded Ratio – Market Value Basis	85.6%	88.3%

SECTION 2
LIABILITY INFORMATION & FUNDED STATUS

Details of the June 30, 2018 Present Value of Benefits, Actuarial Accrued Liability and Employer Normal Cost by employee category:

(amounts in $000's)

	Safety	Miscellaneous	Total
Present Value of Projected Benefits			
■ Active Employees	$ -	$ 5,072	$ 5,072
■ Vested Terminated & Reciprocals	-	1,226	1,226
■ Service Retirees	19,634	212,227	231,861
■ Disabled Participants	15,261	19,631	34,891
■ Beneficiaries	16,489	35,285	51,774
■ Total	51,384	273,441	324,825
Actuarial Accrued Liability			
■ Active Employees	-	4,916	4,916
■ Vested Terminated & Reciprocals	-	1,226	1,226
■ Service Retirees	19,634	212,227	231,861
■ Disabled Participants	15,261	19,631	34,891
■ Beneficiaries	16,489	35,285	51,774
■ Total	51,384	273,285	324,669

	Safety	Miscellaneous	Total
Normal Cost			
■ Employer Normal Cost (on June 30, 2018)	$ -	$ 21	$ 21

SECTION 2
LIABILITY INFORMATION & FUNDED STATUS

Details of the June 30, 2018 Present Value of Benefits, Actuarial Accrued Liability and Employer Normal Cost by benefit section:

(amounts in $000's)

	Section 175	Sections 302 & 399	Total
Present Value of Projected Benefits			
■ Active Employees	$ -	$ 5,072	$ 5,072
■ Vested Terminated & Reciprocals	69	1,157	1,226
■ Service Retirees	6,455	225,406	231,861
■ Disabled Participants	1,201	33,690	34,891
■ Beneficiaries	4,184	47,590	51,774
■ Total	11,909	312,916	324,825
Actuarial Accrued Liability			
■ Active Employees	-	4,916	4,916
■ Vested Terminated & Reciprocals	69	1,157	1,226
■ Service Retirees	6,455	225,406	231,861
■ Disabled Participants	1,201	33,690	34,891
■ Beneficiaries	4,184	47,590	51,774
■ Total	11,909	312,760	324,669

	Section 175	Sections 302 & 399	Total
Normal Cost			
■ Employer Normal Cost (on 6/30/18)	$ -	$ 21	$ 21

SECTION 3
ASSET INFORMATION

Assets for SCERS are held in trust. Trust monies may be used to pay benefits to plan participants and their beneficiaries. The trust is managed under the direction of the Administration, Investment, and Fiscal Management Board. Asset information is provided by the City of Sacramento, and has not yet been audited.

Asset Reconciliation – Market Value of Assets

Following reconciles the June 30, 2016 through June 30, 2017 and the June 30, 2017 through June 30, 2018 market value of assets. Numbers may not add due to rounding.

(amounts in $000's)

	2016/17[2]		2017/18	
■ Beginning of Year Balance:		$ 285,170		$ 288,510
• Member Contributions	$ 63		$ 55	
• City Contributions	8,645		8,645	
• Investment Income	27,986		22,127	
■ Total Additions		36,694		30,827
• Benefit Payments	32,171		31,583	
• Member Refunds	-		-	
• Investment Expenses	1,183		1,145	
■ Total Deductions		33,354		32,728
■ Net Assets at End of Year		288,510		286,609
■ Approximate Return on Assets		9.8%		7.6%

[2] Slightly adjusted from the data received for the prior valuation resulting in a change from an ending balance of $288,509 to $288,510.

SECTION 3
ASSET INFORMATION

Asset Allocation – Market Value of Assets

The July 1, 2018 trust asset allocation is provided by the City of Sacramento and based on an allocation strategy of 30% fixed income and 70% equity. Details are shown below.

(amounts in $000's)

		Market Value	Percentage
■ Cash & Short Term Investments		$ 4,149	1.4%
■ Receivables		1,481	0.5%
■ Investments			
• US Agencies	$ 973		0.3%
• Corporate Bonds	29,338		10.2%
• Equities	33,029		11.5%
• Exchange Traded Funds	166,072		57.9%
• Mortgage Loans	1,527		0.5%
• Municipal Bonds	51,185		17.9%
■ Total Investments		282,124	
■ Total Assets		287,754	
■ Other Liabilities Payable		(1,145)	-0.4%
■ Net Pension Benefit Trust Assets		286,609	100.0%

Target Allocation by Asset Class

The Administration, Investment and Fiscal Management Board of the Sacramento City Employees' Retirement System most recently adopted a new asset allocation May 3, 2018, as shown below. The fund is rebalanced each year.

	Prior Allocation		Current Allocation	
■ Fixed Bonds/Real Estate	35.0%		30.0%	
Total Fixed		35.0%		30.0%
■ Large Cap Growth	35.0%		35.0%	
■ Equity Income	25.0%		27.5%	
■ International Equities	5.0%		7.5%	
Total Equity		65.0%		70.0%
Total Fixed & Equity		100.0%		100.0%

Discount Rate Development

Bartel Associates modeled the nominal rate of return for the fund, based upon our current capital market assumptions, which include mean returns, standard deviation of returns, and correlation coefficients, as well as our assumed inflation rate. Our modeling showed a 50% likelihood that returns would average (geometric average) at least 6.75% per year and a 55% likelihood that they would average at least 6.39% per year. After adjusting for expenses and rounding, we recommend a 6.50% discount rate for the valuation:

Confidence Level	**50%**	**55%**	**60%**
■ Inflation Adjusted Return	6.75%	6.39%	6.06%
■ Investment Expenses[3]	0.10%	0.10%	0.10%
■ Net Return after Expenses	6.65%	6.29%	5.96%
■ **Discount Rate Assumption**	**6.50%**		

3 Based on average investment expenses for a typical passive investment strategy. This is not plan specific.

SECTION 3
ASSET INFORMATION

Development of Actuarial Value of Assets

The Actuarial Value of Assets is based upon a three year smoothing of market assets. This method reduces volatility in contribution rates, and also reduces volatility in the size of the actuarial gains and losses due to asset returns. Because the plan is frozen to new membership and the membership is primarily composed of retirees and beneficiaries, it is important from a cash flow perspective that asset values used in calculating contribution rates not stray too far from market value. For this reason, a corridor of 15% around the market value is imposed upon the actuarial value.

(amounts in $000's)

	2017/18
■ **Actuarial Value of Assets, Beginning of Year**	$ 283,567
• Contributions	8,700
• Expected Earnings	17,700
• Benefit Payments	(31,583)
■ Expected Actuarial Value of Assets, End of Year	278,384
■ Market Value of Assets, End of Year	286,609
■ Difference between MVA & Expected AVA	8,225
■ **Preliminary Actuarial Value of Assets, End of Year** *(Expected AVA+ 1/3 Difference)*	281,126
■ Actuarial Value of Assets Corridor	
• Cap: 115% of Market Value	329,600
• Min: 85% of Market Value	243,618
■ **Actuarial Value of Assets, End of Year** *(No greater than Cap, not less than Min)*	281,126
■ Approximate Annual Rate of Return	7.5%

SECTION 4
CONTRIBUTION DEVELOPMENT

Actuarially Determined Contribution
Following is the development of the 2019/20 Actuarially Determined Contribution. The 2018/19 Actuarially Determined Contribution was calculated in the June 30, 2017 actuarial valuation and is shown for comparison.

(amounts in $000's)

Contribution Year	2018/19	2019/20
■ Actuarially Determined Contribution		
• Employer Normal Cost	$ 25	$ 14
• UAAL Amortization[4]	5,243	4,396
• Total Cost	5,268	4,410
■ Projected Plan Payroll	717	503
■ Actuarially Determined Contribution (as a percent of plan payroll)		
• Employer Normal Cost	3.5%	2.9%
• UAAL Amortization	731.1%	873.7%
• Total Contribution	734.6%	876.6%
■ Projected Total City Payroll	306,862	324,035
■ Actuarially Determined Contribution (as a percent of total City payroll)		
• Employer Normal Cost	0.0%	0.0%
• UAAL Amortization	1.7%	1.4%
• Total Contribution	1.7%	1.4%

4 The Unfunded Actuarial Accrued Liability (UAAL) as of the beginning of the contribution year is being amortized as a level dollar amount over a rolling 13-year period for 2018/19 and 2019/20. As the plan continues to mature, this amortization period will be monitored.

SECTION 5
SCHEDULE OF FUTURE CONTRIBUTIONS

Below are the historic and projected contributions and benefit payments. City contributions for years ending 6/30/2021 and later are estimated assuming 6/30/19 and subsequent market value of assets earn 6.50% and assuming the Actuarially Determined Contribution is contributed each year. These contributions are designed to achieve 100% funding of the system.

Year Ending[5]	Member Contributions	City Contributions	Benefit Payments
6/30/1992	$1,818,000	$2,984,000	$22,000,000
6/30/1993	1,672,000	857,000	23,042,000
6/30/1994	1,432,000	0	24,165,000
6/30/1995	1,320,000	0	24,565,000
6/30/1996	1,228,000	0	25,027,000
6/30/1997	1,080,000	0	23,274,000
6/30/1998	1,090,000	0	23,825,000
6/30/1999	1,136,000	0	24,249,000
6/30/2000	1,079,000	0[6]	24,901,000
6/30/2001	989,000	0	25,087,000
6/30/2002	1,011,000	0	25,588,000
6/30/2003	978,000	0	26,619,000
6/30/2004	1,056,000	0	26,772,000
6/30/2005	809,000	0	27,524,000
6/30/2006	789,000	0	28,749,000
6/30/2007	699,000	0	29,604,000
6/30/2008	596,000	3,534,000	29,896,000
6/30/2009	607,000	3,159,000	30,707,000
6/30/2010	377,000	3,431,000	31,719,000
6/30/2011	342,000	10,547,000	33,003,000
6/30/2012	332,000	10,361,000	33,057,000
6/30/2013	219,000	10,573,000	33,237,000
6/30/2014	161,000	9,649,000	33,688,000
6/30/2015	82,000	9,183,000	33,791,000
6/30/2016	69,000	8,645,000	32,683,000
6/30/2017	63,000	8,645,000	32,171,000
6/30/2018	55,000	8,645,000	31,583,000
6/30/2019	*39,000*	5,268,000	*31,158,000*
6/30/2020	*26,000*	*4,410,000*	*30,900,000*
6/30/2021	*18,000*	*4,025,000*	*30,482,000*
6/30/2022	*11,000*	*3,705,000*	*29,950,000*
6/30/2023	*7,000*	*3,435,000*	*29,362,000*

5 Information prior to 6/30/2006 valuation is taken from prior actuary's valuation report. Member contributions and benefit payments for years ending 6/30/2019 and later are estimated.

6 Shown as a negative 1.367 million by prior actuary.

SECTION 6
ACTUARIAL (GAIN)/LOSS ANALYSIS

The gain/loss analysis of plan assets, actuarial liability, and unfunded actuarial liability for the one year period between valuation dates:

(amounts in $000's)

	Actuarial Accrued Liability (Gain)/Loss	Actuarial Value of Assets Gain/(Loss)	Unfunded Actuarial Accrued Liability (Gain)/Loss
June 30, 2017 Actual Value	$ 336,878	$ 283,567	$ 53,311
June 30, 2018 Expected Value	325,895	277,612	48,282
COLA greater than expected	1,243		
Demographic (Gain)/Loss[7]	(3,330)		
Investment Gain		3,138	
Contributions greater than expected		376	
Total (Gain)/Loss			(5,601)
June 30, 2018 Prior to Changes in Assumptions	323,807	281,126	42,681
Change in Mortality Improvement Assumption	(3,158)		
Change in Mortality Tables	4,020		
Total (Gain)/Loss from Assumption Changes			862
June 30, 2018 Actual Value	324,669	281,126	43,543

7 Primarily due to more retiree and beneficiary deaths than expected.

SECTION 7
SENSITIVITY ANALYSIS

The Plan's June 30, 2018 funded status and 2019/20 fiscal year contribution are shown below at 5.50%, 6.50%, 6.75% and 7.50% discount rates.

(amounts in $000's)

Discount Rate	5.50%	Current 6.50%	6.75%	7.50%
■ Present Value of Projected Benefits	$ 352,293	$ 324,825	$ 318,563	$ 301,056
■ Funded Status				
• Actuarial Accrued Liability	352,085	324,669	318,418	300,938
• Actuarial Value of Assets	281,126	281,126	281,126	281,126
• Unfunded Actuarial Accrued Liability	70,959	43,543	37,292	19,812
■ Funded Ratio	79.8%	86.6%	88.3%	93.4%
■ 2019/20 Actuarially Determined Contribution				
• Employer Normal Cost	29	14	12	4
• UAAL Amortization[8]	7,215	4,396	3,703	1,647
• Total Contribution	7,244	4,410	3,715	1,651
• Total Employer Contribution (as a percent of Plan payroll)	1439.8%	876.6%	738.3%	328.2%
• Total Employer Contribution (as a percent of total City payroll)	2.2%	1.4%	1.1%	0.5%

The Plan's 2019/20 fiscal year contribution would increase if the amortization period of the Unfunded Actuarial Accrued Liability were shorter. Shown below are results based on the current 13-year period, as well as for 14, 12 and 10 year periods.

(amounts in $000's)

Amortization Years	14	Current 13	12	10
■ 2019/20 Actuarially Determined Contribution				
• Employer Normal Cost	$ 14	$ 14	$ 14	$ 14
• UAAL Amortization	4,194	4,396	4,634	5,259
• Total Employer Contribution	4,208	4,410	4,648	5,273
• Total Employer Contribution (as a percent of Plan payroll)	836.5%	876.6%	923.8%	1048.1%
• Total Employer Contribution (as a percent of total City payroll)	1.3%	1.4%	1.4%	1.6%

8 13-year period

SECTION 8
HEADCOUNT AND BENEFIT PAYMENT PROJECTION

Headcount and Benefit Payment Projection

Fiscal Year Ending June 30,	Active Count	Term Vested Count	Retiree Count	Annual Benefit Payments (000's)
2019	11	9	1,009	$ 31,158
2020	7	9	982	30,900
2021	5	9	952	30,482
2022	3	9	917	29,950
2023	2	9	882	29,362
2024	1	9	845	28,692
2025	0	9	808	27,968
2026	0	9	770	27,198
2027	0	9	732	26,390
2028	0	9	694	25,550
2029	0	8	657	24,682
2030	0	8	620	23,786
2031	0	8	584	22,864
2032	0	8	548	21,917
2033	0	8	513	20,943
2034	0	8	479	19,943
2035	0	7	445	18,917
2036	0	7	413	17,868
2037	0	7	381	16,797
2038	0	7	350	15,709
2039	0	6	320	14,610
2040	0	6	291	13,506
2041	0	5	263	12,406
2042	0	5	236	11,318
2043	0	4	210	10,251
2044	0	4	186	9,215
2045	0	4	164	8,217
2046	0	3	143	7,268
2047	0	3	124	6,375
2048	0	2	107	5,544

SECTION 8
HEADCOUNT AND BENEFIT PAYMENT PROJECTION

Fiscal Year Ending June 30,	Active Count	Term Vested Count	Retiree Count	Annual Benefit Payments (000's)
2049	0	2	91	$ 4,781
2050	0	1	77	4,088
2051	0	1	65	3,467
2052	0	1	54	2,915
2053	0	1	44	2,434
2054	0	1	36	2,018
2055	0	0	30	1,665
2056	0	0	24	1,369
2057	0	0	19	1,126
2058	0	0	15	928
2059	0	0	12	769
2060	0	0	10	643
2061	0	0	8	544
2062	0	0	6	467
2063	0	0	5	407
2064	0	0	4	362
2065	0	0	4	327
2066	0	0	3	299
2067	0	0	3	276
2068	0	0	2	256

SECTION 9
PLAN PROVISIONS

A. Plan Effective Date

Originally established effective April 1, 1935.

B. Plan Year

July 1 to June 30.

C. Participation

The plan is closed with no new members since January 28, 1977.

D. Eligibility to Retire

Section 175: Age 70, or age 55 and 20 years of service.

Sections 302 and 399: Age 70, or age 50 and 5 years of service.

E. Vesting

100% vesting with five years of participation.

F. Average Monthly Compensation

Average monthly salary for the 36 months prior to termination.

G. Employee Contributions

Each participant contributes a certain percentage based on his or her age at entry into the plan.

H. Service Retirement Benefit

Section 175:

Average Monthly Compensation times years of service times Benefit Factor. For retirement after age 65 with 20 years of service, benefit is a minimum of $60 per month.

Sections 302 and 399:

Average Monthly Compensation times years of service times Benefit Factor, but no larger than 75% of final average earnings.

Benefit Factors at sample ages:

Retirement Age	Section 175	Sections 302 and 399
50	n/a	1.10%
55	1.10%	1.75%
60	1.67%	2.40%
65	2.44%	2.40%

I. Vested Termination Benefit

Return of employee contributions with interest, or if the value is greater than $500, the member may choose to leave the contributions in the system. The member may become eligible in the future for retirement, disability or death benefits.

J. Non-Industrial (Ordinary) Disability Benefit

Eligibility is ten years of service.

Section 175:

With 16 2/3 years of service: 1½% of final average salary times years of service to disability.

Less than 16 2/3 years of service: Minimum of 1½% of final average salary times years of service would have earned to age 60, or 25% of final average earnings.

Sections 302 and 399:

Not Eligible for Retirement: Lesser of 1½% of Final Average Earnings times years of service or final average earnings times benefit factor at age 50 times years of service at age 50, minimum of 25% of final average earnings.

Eligible for Retirement: Maximum of retirement allowance or 25% of final average earnings.

K. Industrial Disability Benefit

Sections 302 and 399:

Not Eligible for Retirement: 50% of final average earnings.

Eligible for retirement: Maximum of retirement allowance or 50% of final average earnings.

L. Death Benefit – Pre Retirement Eligibility

Return of employee contributions with interest, plus 1/12 of salary in the year preceding death multiplied by the smaller of 6 or years of service.

M. Death Benefit – Post Retirement Eligibility

50% of the member's benefit as if the member retired at the time of death, paid as a lifetime benefit to the spouse.

N. Death Benefit – Post Retirement Death

$500 paid to the member's estate upon death.

O. Social Security Reduction at age 62

For members participating in Social Security, their benefit will be reduced at the later of age 62 or actual retirement age. The amount of the reduction is one half of the PIA from Social Security, multiplied by the ratio of the sum of salary earned from the City to the sum of salary from all sources used in the calculation of the Social Security amount. The member's benefit under the System plus the amount received from Social Security cannot be less than the member's benefit under the System calculated with no reductions as of his retirement age. The City applies this offset to service retirees, not to disabled retirees.

P. Reduction Account

A member can choose to reduce his normal contributions to the System by an amount equal to the taxes paid for Social Security coverage. At the time of retirement, the regular retirement benefit will be reduced by the actuarial equivalent of the accumulated value of the reduction of contributions.

Q. Cost of Living

Benefits will be increased each July 1 by the change in the CPI for the San Francisco/Oakland area for the preceding calendar year limited to 3% (with COLA bank).

R. Benefit Forms

Section 175:

Lifetime benefit to the member, which may be actuarially reduced to provide a continuance to a beneficiary.

Section 302 and 399:

Lifetime benefit to the member, with an automatic 50% continuance to the spouse.

SECTION 10
METHODS AND ASSUMPTIONS

Actuarial Methods

The actuarial cost method used for this valuation is the Entry Age Normal (EAN) method. The Present Value of Projected Benefits (PVPB) is the present value of all future benefits for current plan participants. The Actuarial Accrued Liability (AAL) represents the portion of the PVPB attributable to past service. The AAL is recognized over service through the date a participant is expected to commence benefits.

The current unfunded AAL is amortized over a 13 year rolling period as a level dollar amount. Because the plan is closed the amortization period should be regularly reviewed. The Board has regularly reduced the amortization period in the recent past. Under current Board policy, when the average future life expectancy of the plan participants drops below 5 years, the amortization period will be reduced to no more than 5 years.

Plan funded status based on excess of

1) Value of Normal Retirement Benefit in excess of employee contributions over
2) Actuarial Value of Assets

The contribution generated by the current valuation will be payable for the City's fiscal year beginning one year later (2019/20). The June 30, 2017 valuation generated a contribution for fiscal year 2018/19.

The Actuarial Value of Assets is a 3-year smoothed market value. Gains and losses will be recognized over a three year period. For June 30, 2006, the first year of this method, the Actuarial Asset Value was set equal to the Market Value. The Actuarial Value of Assets will be limited by a 15% corridor. The Actuarial Value of Assets will be no greater than 115% of Market Value of Assets and no less than 85% of Market Value of Assets.

Data

The City provided participant data as of 7/1/2018. We reviewed the data, but did not perform an audit.

Basis for Assumptions

Mortality assumptions are based on CalPERS 1997-2015 experience study, since that study is based on populations similar to this plan. Mortality improvement is the Society of Actuaries Scale MP-2017. Inflation is based on our estimate for the plan's very long time horizon. The salary merit assumption is based on our expectation of overall payroll growth, due to the current age of remaining employees.

Retirement and disablement rates are insignificant due to the age of the remaining participants and are based on rates used historically.

The Social Security offset, marriage, retirement age for deferred vesteds, and reciprocal assumptions are based in part on plan experience. Due to the small number and age of remaining employees and deferred vested, these assumptions, with the exception of the Social Security offset, are not significant.

SECTION 10
METHODS AND ASSUMPTIONS

Actuarial Assumptions

Assumptions used in the valuation are as follows:

- **Discount Rate**

  6.50% net of investment expenses[9]. See page 9 for derivation.

- **Inflation**

  2.75%

- **Salary Scale**

  2.75% CPI

  0.50% Merit

- **Social Security Wage Base**

  3.00%

- **Termination**

  None assumed. All active employees are retirement-eligible.

- **Retirement**

  Rates vary based on age. Sample rates follow:

Age	Non Sec 175
55	6%
60	26%
65	40%
70	100%

- **Disability**

  Rates vary based on age, gender and if the disability is job-related or not. Sample rates follow:

	Job Related		Ordinary	
	Male	Female	Male	Female
59	.00612	.00336	.01683	.00924
60	.00639	.00351	.01761	.00969
61	.00000	.00000	.00000	.00000

9 Administrative expenses are not paid from plan assets.

- **Healthy Mortality**
  CalPERS 1997-2015 Pre-Retirement Mortality table for males and females and CalPERS 1997-2015 Post-Retirement Mortality table for males and females. Sample rates are as follows:

	Pre-Retirement		Post-Retirement	
Age	Male	Female	Male	Female
50	0.12%	0.08%	0.44%	0.39%
60	0.26%	0.17%	0.75%	0.52%
70	0.62%	0.39%	1.50%	1.06%
80	1.66%	0.94%	4.64%	3.49%
90	n/a	n/a	14.94%	11.38%
100	n/a	n/a	35.37%	30.62%

  Prior valuation used mortality tables from CalPERS 1997-2011 Experience Study.

- **Post-Retirement Disabled Mortality**
  For Miscellaneous retirees, CalPERS 1997-2015 Non-Work-Related Disability table for males and females. For Safety retirees, CalPERS 1997-2015 Work-Related Disability table for males and females. Sample rates are as follows:

	Non-Work-Related		Work-Related	
Age	Male	Female	Male	Female
50	1.40%	1.23%	0.44%	0.39%
60	2.42%	1.52%	0.75%	0.52%
70	3.77%	2.50%	1.80%	1.27%
80	7.32%	5.38%	5.57%	4.18%
90	16.74%	14.92%	16.43%	12.52%
100	35.37%	35.05%	35.37%	30.62%

  Prior valuation used mortality tables from CalPERS 1997-2011 Experience Study.

- **Mortality Improvement Projection**

  Post-retirement mortality projected fully generational with Society of Actuaries Scale MP-2017.

  Prior valuation used mortality projected fully generational with Society of Actuaries Scale MP-2016.

- **Social Security Offset**

  Monthly benefits for current retirees and vested terminated assumed to decrease at the later of age 62 or actual retirement, based on the average expected offset of future retirees.

- **Marriage**

  85% of male employees and 60% of female employees are assumed to be married. Wives are assumed to be four years younger than husbands.

- **Retirement Age**

  Deferred vested members covered under Section 399 are assumed to retire at age 62; those covered under Section 175 are assumed to retire at age 65.

- **Reciprocal Members**

  All remaining deferred vested members are assumed to have reciprocity with other retirement systems, and their pay is assumed to increase with salary scale after separation from the City.

SECTION 11
PARTICIPANT DATA

Data Summary

Following summarizes participant demographic information for the June 30, 2017 and June 30, 2018 actuarial valuations.

	June 30, 2017	June 30, 2018
■ **Participant Counts**		
• Actives	16	11
• Terminated Vesteds	7	6
• Reciprocals	3	3
• Service Retirees	608	581
• Disableds	124	116
• Beneficiaries[10]	327	312
• Total	1,085	1,029
■ **Actives**		
• Average Age	63.2	64.2
• Average Service	34.9	36.3
• Salary		
➢ Total	$ 1,049,044	$ 744,615
➢ Average	65,565	67,692
• Overall City Payroll	287,848,000	303,957,000
■ **Terminated Vesteds & Reciprocals**		
• Average Age	67.0	68.3
■ **Retirees, Disableds & Beneficiaries**		
• Average Age	77.8	78.2
• Average Monthly Benefit	$ 2,537	$ 2,599
• Life expectancy	12.3	12.1

[10] The June 30, 2018 valuation includes one former spouse of a deceased retiree whom the City has not been able to contact and is not yet receiving benefits.

SECTION 11
PARTICIPANT DATA

June 30, 2018 Participant Data

Following summarizes participant demographic information for the June 30, 2018 actuarial valuation, broken out by employee category and benefit section.

	Safety		Miscellaneous		
	Section 175	Section 302 & 399	Section 175	Section 302 & 399	Total
■ Actives					
• Count	-	-	-	11	11
• Average Age	n/a	n/a	n/a	64.2	64.2
• Average Service	n/a	n/a	n/a	36.3	36.3
• Projected Salary					
➢ Average	$ -	$ -	$ -	$67,692	$67,692
➢ Total (000's)	-	-	-	745	745
■ Vested Terms & Reciprocals					
• Count	-	-	1	8	9
• Average Age	n/a	n/a	67.6	68.3	68.3
■ All Inactives					
• Count	23	161	33	792	1,009
• Average Age	85.9	82.6	82.9	76.9	78.2
• Avg. Monthly Benefit	$2,574	$3,187	$1,742	$2,516	$2,599
■ Service Retirees					
• Count	9	47	16	509	581
• Average Age	88.4	88.0	82.4	76.1	77.4
• Average Retirement Age	54.7	55.1	63.4	59.6	59.2
• Avg. Monthly Benefit	$3,099	$5,095	$2,177	$3,017	$3,163
■ Disabled Retirees					
• Count	3	40	4	69	116
• Average Age	90.4	76.0	82.3	74.2	75.5
• Average Retirement Age	52.1	41.3	50.0	49.0	46.4
• Avg. Monthly Benefit	$2,994	$2,883	$1,329	$2,130	$2,385
■ Beneficiaries					
• Count	11	74	13	214	312
• Average Age	82.5	82.7	83.6	79.6	80.6
• Avg. Monthly Benefit	$2,030	$2,140	$1,333	$1,450	$1,629

SECTION 11
PARTICIPANT DATA

Data Reconciliation
6/30/2017 to 6/30/2018

	Actives	Terminated		Receiving Payments			Total
		Vested	Reciprocal	Disabled	Benefic.	Retirees	
■ **June 30, 2017**	16	7	3	124	327	608	1,085
• New Hires	-	-	-	-	-	-	-
• Disabled	(1)	-	-	1	-	-	-
• Terminated	-	-	-	-	-	-	-
• Deceased	-	(1)	-	(9)	(32)	(31)	(73)
• New Beneficiaries	-	-	-	-	16	-	16
• Retired	(4)	-	-	-	-	4	-
• Adjustment/Cash Out	-	-	-	-	1	-	1
■ **June 30, 2018**	11	6	3	116	312	581	1,029

SECTION 11
PARTICIPANT DATA

Active Age/Service

Following are active counts by age and service groups:

	Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30 & Over**	**Total**
Under 25	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-
60-64	-	-	-	1	-	-	5	6
65 & Over	-	-	-	-	-	-	5	5
Total	-	-	-	1	-	-	10	11

Inactives Age/Status/Monthly Benefit

Following are inactive counts and monthly benefit by age and status.

Safety

Age		Service Retirees	Disability Retirees	Beneficiaries	Total
Under 50	**Count**	-	-	-	-
	Avg. Benefit	-	-	-	-
50-54	**Count**	-	-	-	-
	Avg. Benefit	-	-	-	-
55-59	**Count**	-	-	-	-
	Avg. Benefit	-	-	-	-
60-64	**Count**	-	-	-	-
	Avg. Benefit	-	-	-	-
65-69	**Count**	-	3	2	5
	Avg. Benefit	-	2,903	1,692	2,419
70-74	**Count**	2	16	15	33
	Avg. Benefit	4,192	2,984	1,917	2,572
75-79	**Count**	4	12	13	29
	Avg. Benefit	3,064	2,477	2,219	2,442
80-84	**Count**	5	8	16	29
	Avg. Benefit	4,471	3,138	2,072	2,780
85 & Over	**Count**	45	4	39	88
	Avg. Benefit	4,986	3,257	2,220	3,681
Total	**Count**	56	43	85	184
	Avg. Benefit	4,774	2,891	2,126	3,111

Miscellaneous

Age		Service Retirees	Disability Retirees	Beneficiaries	Total
Under 50	**Count**	-	-	1	1
	Avg. Benefit	-	-	669	669
50-54	**Count**	-	-	2	2
	Avg. Benefit	-	-	1,588	1,588
55-59	**Count**	-	-	3	3
	Avg. Benefit	-	-	1,125	1,125
60-64	**Count**	36	12	14	62
	Avg. Benefit	3,045	2,306	1,075	2,457
65-69	**Count**	84	17	19	120
	Avg. Benefit	3,245	2,308	1,747	2,875
70-74	**Count**	144	12	40	196
	Avg. Benefit	3,124	1,978	1,467	2,716
75-79	**Count**	103	10	27	140
	Avg. Benefit	2,772	2,484	1,589	2,523
80-84	**Count**	72	13	43	128
	Avg. Benefit	3,019	1,666	1,703	2,440
85 & Over	**Count**	86	9	78	173
	Avg. Benefit	2,736	1,684	1,247	2,010
Total	**Count**	525	73	227	825
	Avg. Benefit	2,991	2,086	1,443	2,485

APPENDIX B



BARTEL ASSOCIATES, LLC

City of Sacramento

Sacramento City Employees' Retirement System

June 30, 2018
GASBS 67 & 68 Reporting

November 21, 2018

BARTEL ASSOCIATES, LLC

GASBS 67 & 68 REPORTING

CITY OF SACRAMENTO
SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM (SCERS)
DEFINED BENEFIT PLAN

This report presents reporting and disclosure information for the Sacramento City Employees' Retirement System (SCERS) for the fiscal year ending June 30, 2018 to assist the City in preparing financial statement information in accordance with Governmental Accounting Standards Board Statements No. 67 and 68 (GASBS 67 and 68).

The report provides information intended for reporting under GASBS 67 and 68, but may not be appropriate for other purposes. Information provided in this report may be useful to the City for the System's financial management. Future results may differ significantly if the System's experience differs from our assumptions or if there are changes in plan design, actuarial methods, or actuarial assumptions. The project scope did not include an analysis of this potential variation.

This report is based on our June 30, 2018 actuarial valuation of the System and our report dated October 2018 which contains complete details of that valuation and is to be considered a part of this report.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASBS 67 and 68. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,



Mary Elizabeth Redding, FSA, MAAA, EA
Vice President



Deanna Van Valer, ASA, MAAA, EA
Assistant Vice President



Katherine Moore, ASA, MAAA
Associate Actuary

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SECTION 1
GASBS 67 & 68 APPLICABLE DATES

Applicable Dates and Periods

Fiscal Year End	June 30, 2018	
Reporting Standard	**GASBS 67**	**GASBS 68**
■ Reporting date[1]	June 30, 2018	June 30, 2018
■ Reporting period	FY 2018	FY 2018
■ Measurement date[2]	N/A	June 30, 2018
■ Measurement period	N/A	July 1, 2017 to June 30, 2018
■ Actuarial valuation date[3]	June 30, 2018	June 30, 2018

1 Employer's or plan's fiscal year-end.

2 No earlier than employer's prior fiscal year end.

3 Within 30 months of fiscal year end.

SECTION 2
GASBS 67 AND 68 NOTE DISCLOSURES

Exhibit 1: **Notes to Financial Statements** ***($000's)***

Net Pension Liability/(Asset)

(Amounts in 000's)

	Fiscal Year Ending	
	6/30/18	**6/30/17**
■ Total pension liability (TPL)	$324,669	$336,878
■ Fiduciary net position (FNP)	286,609	288,509
■ Net pension liability (NPL)	38,060	48,369
■ Funded status (FNP/TPL)	88.3%	85.6%

Significant Assumptions and Other Inputs Used to Measure Total Pension Liability at 6/30/18:

■ Discount Rate	■ 6.50%, net of investment expenses
■ Inflation Rate	■ 2.75%
■ Salary Scale	■ 3.25%
■ Mortality Assumption for Service retirements & beneficiaries	■ CalPERS 1997-2015 Post-Retirement Mortality Table projected fully generational with Society of Actuaries Scale MP-2017.
■ Mortality Assumption for Disability retirements	■ CalPERS 1997-2015 Mortality Table for non-work Disabled Retirees for Miscellaneous and CalPERS 1997-2015 Mortality Table for work-related Disabled Retirees for Safety. Both tables were projected fully generational with Society of Actuaries Scale MP-2017.

Changes of assumptions and changes in experience affecting the measurement of the Total Pension Liability since the prior measurement date

Mortality improvement was changed from fully generational projection with Society of Actuaries Scale MP-2016 to fully generational projection with Society of Actuaries Scale MP-2017. Mortality tables were updated from the CalPERS 1997-2011 Experience Study to the CalPERS 1997-2015 Experience Study.

Discount rate

The discount rate was set equal to the long-term expected rate of return. The long-term expected rate of return was used since current assets, future City contributions, and future member contributions are projected to be sufficient to cover all future benefit payments and expenses. This "crossover test" was performed in accordance with the requirements specified in GASB Statement 67, including a projection that the Plan's funding policy will remain unchanged[4]. No administrative expenses were assumed to be paid from Trust assets since the City Charter requires the City to pay all administrative expenses.

The 6.50% long-term expected rate of return was derived based on the inflation assumption of 2.75% and a long-term asset allocation of 70% equities and 30% fixed income. The geometric

4 The current policy includes a change in the amortization period from 13 years to 5 years when the average future life expectancy of plan participants is below 5 years.

real rates of return were assumed to be 4.36% for US large cap equities, 4.93% for international equities and 1.47% for fixed income.

Date of actuarial valuation
The June 30, 2018 Total Pension Liability is based on an actuarial valuation as of June 30, 2018.

Sensitivity of the net pension liability to a 1% change in the discount rate

	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%
Net Pension Liability (NPL)	$65,476	$38,060	$14,329

SECTION 3
GASBS 67 AND 68 REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in Net Pension Liability & Related Ratios[5]
(Amounts in $000's)

Fiscal Year	2017/18
Total Pension Liability	
Service cost	$ 92
Interest	20,877
Changes of benefit terms	0
Differences between expected and actual experience	(2,457)
Changes of assumptions	862
Benefit payments	(31,583)
Net change in Total Pension Liability	(12,209)
Total Pension Liability at beginning of year	336,878
Total Pension Liability at end of year	324,669
Fiduciary Net Position	
Contributions - employer	8,645
Contributions - member	55
Net investment income	20,983
Benefit payments	(31,583)
Administrative expenses	0
Other income	0
Net change in Fiduciary Net Position	(1,900)
Fiduciary Net Position at beginning of year	288,509
Fiduciary Net Position at end of year	286,609
Net Pension Liability (Asset) at end of year	38,060
Fiduciary Net Position as percentage of Total Pension Liability	88.3%
Covered-employee payroll	921
Net Pension Liability as percentage of Covered-employee Payroll	4132.5%

Notes to Schedule of Changes in Net Pension Liability & Related Ratios
The Total Pension Liability as of June 30, 2018 is based on an actuarial valuation as of June 30, 2018.

Changes of Assumptions. In 2017/18, mortality improvement was changed to use Society of Actuaries Scale MP-2017, and mortality rates were updated to the CalPERS 1997-2015 Experience Study.

Differences between actual and expected experience. The largest component for 2017/18 was there were more deaths than expected.

5 GASBS 67 and 68 require this information be reported in the Required Supplementary Information for 10 years or as many years are available upon implementation. Only the current year is shown in this report.

SECTION 3
GASBS 67 AND 68 REQUIRED SUPPLEMENTARY INFORMATION

Employer Actuarially Determined Contribution[6]
(Amounts in $000's)

Fiscal Year	(1) Actuarially Determined Contribution (ADC)	(2) Employer Contributions in relation to the Actuarially Determined Contribution	(3) Contribution Deficiency (Excess) (1)-(2)	(4) Covered-Employee Payroll	(5) Employer Contribution / Covered-Employee Payroll (2)/(4)
2017/18	$ 8,267	$ 8,645	$ (378)	$921	938.7%

Significant Methods and Assumptions Used in Calculation of ADC for 2017/18

Actuarial Assumption	FY 2017/2018
■ Actuarial valuation date	■ June 30, 2016
■ Actuarial cost method	■ Entry Age Normal, level percent of payroll
■ Amortization method	■ Level dollar amount
■ Amortization period	■ 14 years open
■ Asset method	■ Actuarial value of assets ■ Gains/losses recognized over 3 years ■ Corridor of 85% - 115% of market value of assets
■ Inflation	■ 3.00%
■ Discount rate	■ 6.50%, net of investment expenses
■ Salary scale	■ 3.5%
■ Mortality rate table	■ CalPERS' 1997-2011 Experience Study ■ Mortality projected fully generational with Scale MP-2014 modified to converge to ultimate rates in 2022.
■ All other	■ Same as used in determining total pension liability for 2017/18

6 GASBS 67 and 68 require this information be reported in the Required Supplementary Information for 10 years or as many years are available upon implementation. Only the current year is shown in this report.

SECTION 4
GASBS 68 ADDITIONAL NOTE DISCLOSURES

Changes in Net Pension Liability/(Asset)

(Amounts in 000's)

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability/ (Asset) (a) – (b)
■ Balances at FYE 6/30/2017	$336,878	$288,509	$48,369
■ Changes for the year:			
• Service cost	92		92
• Interest	20,877		20,877
• Change of assumptions	862		862
• Change of benefit terms	0		0
• Differences between expected and actual experience	(2,457)		(2,457)
• Contributions—employer		8,645	(8,645)
• Contributions—member		55	(55)
• Net investment income		20,983	(20,983)
• Benefit payments, including refunds of member contributions	(31,583)	(31,583)	0
• Administrative expense[7]	0	0	0
■ Net changes	(12,209)	(1,900)	(10,309)
■ Balances at FYE 6/30/2018	324,669	286,609	38,060

Pension Expense for Fiscal Year

(Amounts in 000's)

	2017/18
■ Pension Expense	$ 2,336

[7] No administrative expenses are paid from the trust. As required by City Charter, the City pays all administrative expenses of the plan.

SECTION 4
GASBS 68 ADDITIONAL NOTE DISCLOSURES

Balance of Deferred Outflows of Resources and Inflows of Resources as of June 30, 2018

(Amounts in 000's)

	Deferred Outflows of Resources	Deferred Inflows of Resources
■ Differences between expected and actual experience	$ 0	$ 0
■ Changes of assumptions and other inputs	0	0
■ Net difference between actual and projected earnings on investments	0	(2,163)
■ Employer contributions made subsequent to the Measurement Date	N/A	N/A
■ Total	0	(2,163)

Recognition of Deferred Outflows of Resources and Inflows of Resources in Future Pension Expense

(Amounts in 000's)

Measurement Period Ended June 30:	Net Deferred Outflows/(Inflows) of Resources
2019	$1,027
2020	(198)
2021	(2,399)
2022	(593)
2023	0
Thereafter	0

Recognition of Deferred Outflows and Inflows of Resources

Differences between Actual and Expected Experience
Changes in Assumptions and Other Inputs

The average expected remaining service lifetime (AERSL) for the plan is calculated as 18.0 years of total expected future service divided by 1,029 plan participants, resulting in 0.017 years. Since the AERSL is less than 1.0, a recognition period of 1.0 year is used. Therefore all deferred outflows and inflows of resources for differences between actual and expected experience, and for changes in assumptions and other inputs, are fully recognized immediately. No recognition schedules are maintained for these amounts.

Recognition of Deferred Outflows and Inflows of Resources (cont.)

(Amounts in 000's)

Projected Versus Actual Earnings on Investments

Measurement Period	2014/15	2015/16	2016/17	2017/18	Total
■ Initial amount*	$6,135	$11,007	$(9,028)	$(2,973)	
■ Initial recognition period	5	5	5	5	
■ Amount recognized in pension expense for current and prior fiscal years:					
• 2014/15	1,227	0	0	0	1,227
• 2015/16	1,227	2,201	0	0	3,428
• 2016/17	1,227	2,201	(1,806)	0	1,622
• 2017/18	1,227	2,201	(1,806)	(595)	1,027
■ Amount recognized in pension expense for future fiscal years:					
• 2018/19	1,227	2,201	(1,806)	(595)	1,027
• 2019/20	0	2,203	(1,806)	(595)	(198)
• 2020/21	0	0	(1,804)	(595)	(2,399)
• 2021/22	0	0	0	(593)	(593)
• 2022/23+	0	0	0	0	0
■ Deferred Outflows/(Inflows) as of FYE 6/30/18	1,227	4,404	(5,416)	(2,378)	
■ Net Deferred Outflows/(Inflows) as of FYE 6/30/18					(2,163)

* For 2017/18 Projected earnings = $18,010, actual earnings = $20,983. Difference = ($2,973)

SECTION 5
GASBS 68 SUPPORTING CALCULATIONS

Components of GASBS 68 Pension Expense for Fiscal Year
(Amounts in 000's)

	FY 2017/18
■ Service cost	$ 92
■ Interest on the total pension liability including service cost	20,877
■ Projected earnings on plan investments	(18,010)
■ Member contributions	(55)
■ Administrative expense	0
■ Recognition of deferred outflows and inflows of resources:	
• Difference between expected and actual experience	(2,457)
• Changes in assumptions and other inputs	862
• Difference between actual and projected earnings on investments	1,027
■ Total Pension Expense	2,336

Calculation of Interest on the Total Pension Liability
(Amounts in 000's)

	Dollar Amount	Expected Return	Portion of Year	Interest
■ Beginning Total Pension Liability	$336,878	6.5%	1.0	$21,897
■ Service Cost	92	6.5%	1.0	6
■ Benefit Payments	(31,583)	6.5%	0.5	(1,026)
■ Difference between expected and actual experience	(2,457)	6.5%	0.0	0
■ Changes of assumptions	862	6.5%	0.0	0
■ Interest on Total Pension Liability				20,877

SECTION 5
GASBS 68 SUPPORTING CALCULATIONS

Calculation of Projected Earnings on Pension Plan Investments
(Amounts in 000's)

	Dollar Amount	Expected Return	Portion of Year	Projected Earnings
■ Beginning Fiduciary Net Position	$288,509	6.5%	1.0	$18,753
■ Employer Contributions	8,645	6.5%	0.5	281
■ Member Contributions	55	6.5%	0.5	2
■ Benefit Payments	(31,583)	6.5%	0.5	(1,026)
■ Administrative Expenses	0	6.5%	0.5	0
■ Projected Earnings on Investments				18,010

GASBS 68 Balance Equation
(Amounts in 000's)

	6/30/17	6/30/18	Change
■ Total Pension Liability	$336,878	$324,669	$(12,209)
■ Fiduciary Net Position	288,509	286,609	(1,900)
■ Net Pension Liability/(Asset)	48,369	38,060	(10,309)
■ Deferred inflows of resources	0	2,163	2,163
■ Deferred outflows of resources	(1,837)	-	1,837
■ Employer contributions	N/A	8,645	8,645
■ Net impact on balance sheet	46,532	48,868	2,336
Check:			
■ Pension expense for year			$2,336

Discount Rate "Crossover" Test

Projection of Contributions – amounts in $000's

Year	Payroll	Employer Contributions for Current Employees	Employee Contributions for Current Employees	Contributions from Payroll of Future Employees	Total Contributions
1	$745	$5,268	$39	$0	$5,307
2	503	4,410	26	0	4,437
3	338	4,025	18	0	4,042
4	208	3,705	11	0	3,715
5	142	3,435	7	0	3,442
6	67	3,091	4	0	3,095
7	36	2,992	2	0	2,994
8	19	2,671	1	0	2,672
9	6	2,523	0	0	2,523
10	2	2,383	0	0	2,383
11	2	2,250	0	0	2,250
12	0	2,124	0	0	2,124
13	0	2,005	0	0	2,005
14	0	1,892	0	0	1,892
15	0	1,785	0	0	1,785
16	0	1,685	0	0	1,685
17	0	1,589	0	0	1,589
18	0	1,499	0	0	1,499
19	0	1,414	0	0	1,414
20	0	2,759	0	0	2,759
21	0	2,259	0	0	2,259
22	0	1,847	0	0	1,847
23	0	1,508	0	0	1,508
24	0	1,230	0	0	1,230
25	0	1,001	0	0	1,001
*	*	*	*	*	*
51	0	2	0	0	2
52	0	2	0	0	2
53	0	1	0	0	1
54	0	1	0	0	1
55	0	1	0	0	1
56	0	1	0	0	1
57	0	0	0	0	0
*	*	*	*	*	*
71	0	0	0	0	0
72	0	0	0	0	0
73	0	0	0	0	0
74	0	0	0	0	0
75	0	0	0	0	0

Note: Years 26 to 50, and 58 to 70 omitted.

SECTION 5
GASBS 68 SUPPORTING CALCULATIONS

Discount Rate "Crossover" Test

Projection of Fiduciary Net Position – amounts in $000's

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
1	$286,609	$5,307	$31,158	$0	$17,789	$278,547
2	278,547	4,437	30,900	0	17,245	269,329
3	269,329	4,042	30,482	0	16,647	259,537
4	259,537	3,715	29,950	0	16,017	249,320
5	249,320	3,442	29,362	0	15,363	238,763
6	238,763	3,095	28,692	0	14,688	227,853
7	227,853	2,994	27,968	0	13,999	216,878
8	216,878	2,672	27,198	0	13,300	205,652
9	205,652	2,523	26,390	0	12,592	194,377
10	194,377	2,383	25,550	0	11,882	183,092
11	183,092	2,250	24,682	0	11,172	171,832
12	171,832	2,124	23,786	0	10,465	160,635
13	160,635	2,005	22,864	0	9,763	149,539
14	149,539	1,892	21,917	0	9,069	138,583
15	138,583	1,785	20,943	0	8,385	127,810
16	127,810	1,685	19,943	0	7,714	117,265
17	117,265	1,589	18,917	0	7,059	106,996
18	106,996	1,499	17,868	0	6,423	97,050
19	97,050	1,414	16,797	0	5,808	87,475
20	87,475	2,759	15,709	0	5,265	79,790
21	79,790	2,259	14,610	0	4,785	72,224
22	72,224	1,847	13,506	0	4,316	64,881
23	64,881	1,508	12,406	0	3,863	57,846
24	57,846	1,230	11,318	0	3,432	51,189
25	51,189	1,001	10,251	0	3,027	44,966
*	*	*	*	*	*	*
51	1,502	2	238	0	90	1,356
52	1,356	2	222	0	81	1,217
53	1,217	1	207	0	72	1,083
54	1,083	1	191	0	64	956
55	956	1	176	0	56	836
56	836	1	162	0	49	724
57	724	0	147	0	42	619
*	*	*	*	*	*	*
71	13	0	5	0	1	9
72	9	0	2	0	1	8
73	8	0	1	0	0	7
74	7	0	0	0	0	7
75	7	0	0	0	0	7

Note: Years 26 to 50, and 58 to 70 omitted.

Discount Rate "Crossover" Test

Present Values of Projected Benefit Payments – amounts in $000's

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Benefit Payments	PV of "Unfunded" Benefit Payments	PV of Benefit Payments using 6.50% Discount Rate
1	$286,609	$31,158	$31,158	$0	$29,256	$0	$29,256
2	278,547	30,900	30,900	0	27,243	0	27,243
3	269,329	30,482	30,482	0	25,234	0	25,234
4	259,537	29,950	29,950	0	23,281	0	23,281
5	249,320	29,362	29,362	0	21,431	0	21,431
6	238,763	28,692	28,692	0	19,664	0	19,664
7	227,853	27,968	27,968	0	17,998	0	17,998
8	216,878	27,198	27,198	0	16,434	0	16,434
9	205,652	26,390	26,390	0	14,973	0	14,973
10	194,377	25,550	25,550	0	13,611	0	13,611
11	183,092	24,682	24,682	0	12,346	0	12,346
12	171,832	23,786	23,786	0	11,172	0	11,172
13	160,635	22,864	22,864	0	10,083	0	10,083
14	149,539	21,917	21,917	0	9,076	0	9,076
15	138,583	20,943	20,943	0	8,143	0	8,143
16	127,810	19,943	19,943	0	7,281	0	7,281
17	117,265	18,917	18,917	0	6,485	0	6,485
18	106,996	17,868	17,868	0	5,751	0	5,751
19	97,050	16,797	16,797	0	5,077	0	5,077
20	87,475	15,709	15,709	0	4,458	0	4,458
21	79,790	14,610	14,610	0	3,893	0	3,893
22	72,224	13,506	13,506	0	3,379	0	3,379
23	64,881	12,406	12,406	0	2,915	0	2,915
24	57,846	11,318	11,318	0	2,497	0	2,497
25	51,189	10,251	10,251	0	2,123	0	2,123
*	*	*	*	*	*	*	*
51	1,502	238	238	0	10	0	10
52	1,356	222	222	0	8	0	8
53	1,217	207	207	0	7	0	7
54	1,083	191	191	0	6	0	6
55	956	176	176	0	6	0	6
56	836	162	162	0	5	0	5
57	724	147	147	0	4	0	4
*	*	*	*	*	*	*	*
71	13	5	5	0	0	0	0
72	9	2	2	0	0	0	0
73	8	1	1	0	0	0	0
74	7	0	0	0	0	0	0
75	7	0	0	0	0	0	0
Total					313,475	0	313,475

Note: Years 26 to 50, and 58 to 70 omitted.

VAVRINEK, TRINE, DAY & CO., LLP
Certified Public Accountants

VALUE THE *difference*

Administration, Investment and Fiscal
Management Board
Sacramento City Employees' Retirement System
Sacramento, California

Honorable Mayor and City Council
City of Sacramento
Sacramento, California

We have audited the financial statements of the Sacramento City Employees' Retirement System (SCERS), a component unit of the City of Sacramento, California (City) for the year ended June 30, 2018. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated April 24, 2018. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by SCERS are described in Note B to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2018. We noted no transactions entered into by SCERS during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements, significance to financial statement users, and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimate affecting the SCERS' financial statements were:

> Management's estimates were used in estimating the fair value of investments, and, based on the most recent actuarial valuation as of June 30, 2018, SCERS' independent actuarial firm determined that the total pension liability of $324.7 million exceeded the fiduciary net position of $286.6 million resulting in net pension liability of $38.06 million and a funded status of 88.3%.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

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Management Representations

We have requested certain representations from management that are included in the management representation letter dated December 20, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the SCERS' financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the SCERS' auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the management's discussion and analysis, schedule of changes in net pension liability and related ratios, schedule of employer contributions, and schedule of investment returns accompanying the basic financial statements, which are required supplementary information (RSI). Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the listing of investments which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory and actuarial sections, which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the use of the Administration, Investment and Fiscal Management Board, the City Council, and management of the City and SCERS and is not intended to be, and should not be, used by anyone other than these specified parties.

Vavrinek, Trine, Day & Co. LLP

Sacramento, California
December 20, 2018