

**LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM
(A DEPARTMENT OF THE MUNICIPALITY OF
THE CITY OF LOS ANGELES, CALIFORNIA)**

ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2018

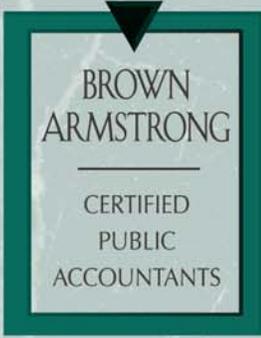
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BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

Board of Administration
Los Angeles City Employees' Retirement System
Los Angeles, California

Report on the Financial Statements

We have audited the accompanying Retirement Plan and Postemployment Health Care Plan Statement of Fiduciary Net Position of the Los Angeles City Employees' Retirement System (LACERS), a department of the Municipality of the City of Los Angeles, California, as of June 30, 2018, and the related Retirement Plan and Postemployment Health Care Plan Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise LACERS basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of 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 LACERS 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 LACERS internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Retirement Plan and Postemployment Health Care Plan of LACERS as of June 30, 2018, and the changes in fiduciary net position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the GASB 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 of LACERS that collectively comprise LACERS basic financial statements. The supplemental schedules, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

Report on Summarized Comparative Information

We have previously audited LACERS June 30, 2017 financial statements, and our report dated November 21, 2017, expressed an unmodified opinion on those audited financial statements. 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 Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 27, 2018, on our consideration of LACERS internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering LACERS internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

*Brown Armstrong
Accountancy Corporation*

Bakersfield, California
November 27, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS

Management's Discussion and Analysis

Financial Highlights

- The Los Angeles City Employees' Retirement System (LACERS, the Plan, or the System) fiduciary net position as of June 30, 2018 was \$16,989,616,000, an increase of \$1,300,046,000 or 8.3% over the prior fiscal year.
- The total additions to the fiduciary net position of LACERS, from employer contributions made by the City of Los Angeles (the City), Member contributions, and net investment income, were \$2,306,348,000, a 12.4% decrease from the prior fiscal year.
- The employer contributions to the Retirement Plan represented 100% of the Actuarially Determined Contribution of the employer as defined by the Governmental Accounting Standards Board (GASB) Statements No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*, and No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*.
- The employer contributions to the Postemployment Health Care Plan represented 100% of the Actuarially Determined Contribution of the employer as defined by GASB Statements No. 74, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans*, and No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.
- Net investment income for this fiscal year was \$1,518,879,000, representing an 18.1% decrease compared with an investment income of \$1,854,901,000 for the previous reporting period.
- The total deductions from the fiduciary net position were \$1,006,302,000, a 6.1% increase from the prior fiscal year, for the payment of retirement and postemployment health care benefits, refunds of Member contributions, and administrative expenses.
- The System's Net Pension Liability (NPL) for the retirement benefits was \$5,709,348,000 as of June 30, 2018. NPL, an important measure required by GASB Statement No. 67 to disclose in the financial notes of a pension plan, is the difference between the Total Pension Liability (TPL) and the Plan fiduciary net position. As the Plan fiduciary net position is equal to the market value of the System's assets, NPL is determined on a market value basis, and it fully reflects the Plan's investment performance (9.2% rate of return, gross of fees) of this fiscal year. Compared with the previous fiscal year, the NPL increased by \$431,676,000.

- The System's Net Other Postemployment Benefits (OPEB) Plan Liability for the postemployment health care benefits was \$580,456,000 as of June 30, 2018. Net OPEB Liability (NOL) is an important measure required by GASB Statement No. 74. NOL is determined on a market value basis, and is the difference between the Total OPEB Liability (TOL) and the Plan fiduciary net position (market value of the System's assets). NOL reflects the Plan's investment performance (9.2% rate of return, gross of fees) for this fiscal year. As compared with the previous fiscal year, the NOL increased by \$13,512,000.
- The Plan fiduciary net position as a percentage of TPL for the Retirement Plan, another required disclosure of GASB Statement No. 67, was 71.4%, which is the same as the funded ratio on a market value basis reported in the actuarial valuation for the retirement benefits.
- The Plan fiduciary net position as a percentage of TOL for the Postemployment Health Care Plan, another required disclosure of GASB Statement No. 74, was 82.2%, which is the same as the funded ratio on a market value basis reported in the actuarial valuation for the postemployment health care benefits.

Overview of the Financial Statements

The following discussion and analysis are intended to serve as an introduction to LACERS financial statements and the accompanying notes thereto. The required supplementary information and supplemental schedules provide additional financial data on LACERS operations.

Financial Statements

There are two financial statements presented by LACERS. The Statement of Fiduciary Net Position on page 12 gives a snapshot of the account balances at year-end and shows the amount of the fiduciary net position (the difference between the assets plus deferred outflows of resources, and liabilities plus deferred inflows of resources) available to pay future benefits. Over time, increases or decreases in fiduciary net position may serve as a useful indicator of whether the fiduciary net position of LACERS is improving or deteriorating. The Statement of Changes in Fiduciary Net Position on page 13 provides a view of current year additions to, and deductions from, the fiduciary net position.

Management's Discussion and Analysis

Overview of the Financial Statements (Continued)

Notes to the Basic Financial Statements

The notes to the basic financial statements (Notes) provide additional information that is essential for a full understanding of the data provided in the financial statements. The notes to the basic financial statements can be found on pages 14 - 35 of this report.

Required Supplementary Information

In addition to the Management's Discussion and Analysis, other required supplementary information consists of the Schedule of Net Pension Liability, Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Contribution History, and Schedule of Investment Returns for the Retirement Plan, and the Schedule of Net OPEB Liability, Schedule of Changes in Net OPEB Liability and Related Ratios, Schedule of Contribution History, and Schedule of Investment Returns for the Postemployment Health Care Plan. These schedules and notes primarily present multi-year information as required by the applicable financial reporting standards of GASB Statements No. 67 and No. 74. This required supplementary information can be found on pages 36 - 44 of this report.

Supplemental Schedules

The supplemental schedules, including a Schedule of Administrative Expenses and a Schedule of Investment Fees and Expenses, are presented to provide additional financial information on LACERS operations for the current year. These can be found on pages 45 and 46 of this report.

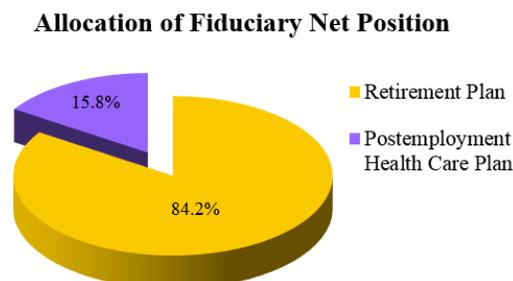
Management's Discussion and Analysis

Financial Analysis

Allocation of Fiduciary Net Position

Fiduciary net position may serve as a useful indicator of a plan's financial position. The total fiduciary net position is allocated between the Retirement Plan and Postemployment Health Care Plan, as required by the existing reporting standards. The following information provides a brief description of the asset allocation between the Retirement Plan and the Postemployment Health Care Plan as of June 30, 2018 (dollars in thousands):

	Fiduciary Net Position	Percent
Retirement Plan	\$14,313,245	84.2%
Postemployment Health Care Plan	2,676,371	15.8
Fiduciary Net Position	<u>\$16,989,616</u>	<u>100.0%</u>



Fiduciary Net Position

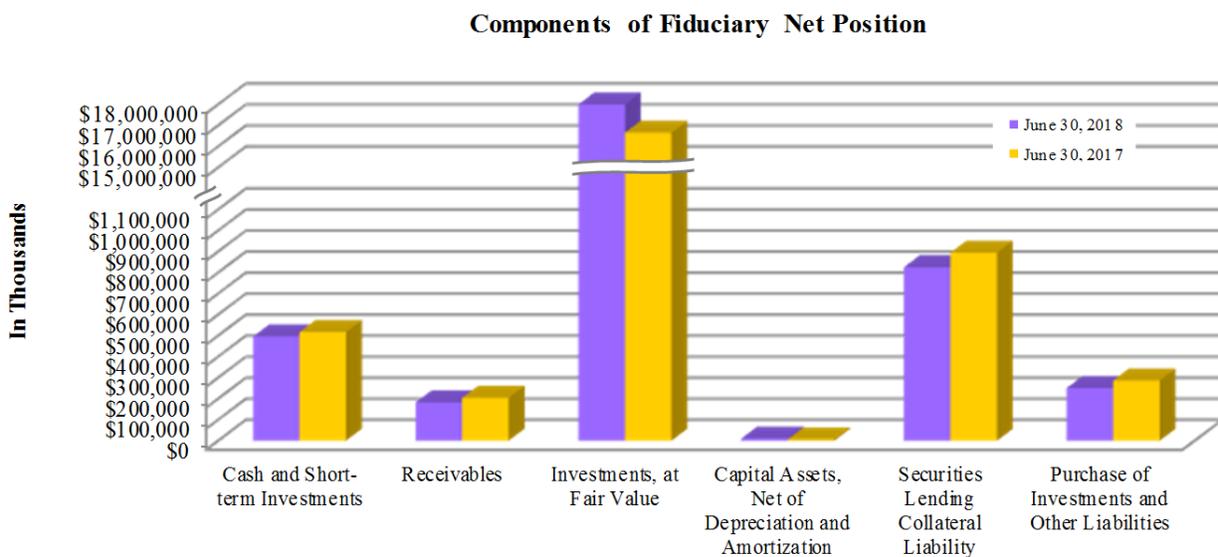
The following table and graph detail the components of the fiduciary net position of LACERS as of June 30, 2018 and 2017 (dollars in thousands):

	June 30, 2018	June 30, 2017	Change	
Cash and Short-Term Investments	\$ 470,390	\$ 491,514	\$ (21,124)	(4.3) %
Receivables	157,483	178,907	(21,424)	(12.0)
Investments, at Fair Value	17,357,845	16,122,440	1,235,405	7.7
Capital Assets, Net of Depreciation and Amortization	<u>9,185</u>	<u>6,490</u>	<u>2,695</u>	41.5
Total Assets	<u>17,994,903</u>	<u>16,799,351</u>	<u>1,195,552</u>	7.1
Securities Lending Collateral Liability	795,076	863,691	(68,615)	(7.9)
Purchase of Investments and Other Liabilities	<u>210,211</u>	<u>246,090</u>	<u>(35,879)</u>	(14.6)
Total Liabilities	<u>1,005,287</u>	<u>1,109,781</u>	<u>(104,494)</u>	(9.4)
Fiduciary Net Position Restricted for Pension Benefits and Postemployment Health Care Benefits	<u>\$ 16,989,616</u>	<u>\$ 15,689,570</u>	<u>\$ 1,300,046</u>	8.3 %

Management's Discussion and Analysis

Financial Analysis (Continued)

Fiduciary Net Position (Continued)



The majority of LACERS fiduciary net position is contained in its investment portfolio, which consists of cash and short-term investments, receivables, fixed income, equities, and other asset classes. Fiduciary net position increased by \$1,300,046,000, or 8.3%, during this fiscal year.

Net Increase (Decrease) in Fiduciary Net Position

The increase in fiduciary net position during the reporting period was the net effect of factors that either added to or deducted from the fiduciary net position. The following table summarizes the changes in fiduciary net position during the report year, as compared with the prior year (dollars in thousands):

	June 30, 2018	June 30, 2017	Change	
Additions	\$ 2,306,348	\$ 2,633,394	\$ (327,047)	(12.4) %
Deductions	1,006,302	948,883	57,419	6.1
Net Increase in Fiduciary Net Position	1,300,046	1,684,511	(384,466)	(22.8)
Fiduciary Net Position, Beginning of Year	15,689,570	14,005,059	1,684,511	12.0
Fiduciary Net Position, End of Year	<u>\$ 16,989,616</u>	<u>\$ 15,689,570</u>	<u>\$ 1,300,046</u>	8.3 %

Management’s Discussion and Analysis

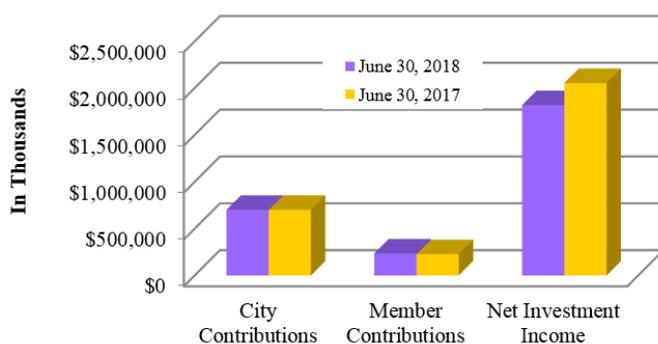
Financial Analysis (Continued)

Net Increase (Decrease) in Fiduciary Net Position – Additions to Fiduciary Net Position

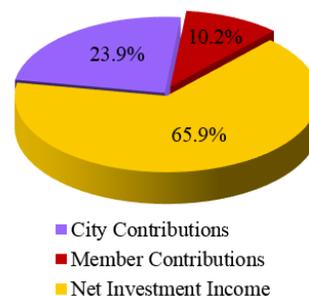
The following table and graph represent the components that make up the additions to fiduciary net position for LACERS for the fiscal years ended June 30, 2018 and 2017 (dollars in thousands):

	June 30, 2018	June 30, 2017	Change
City Contributions	\$ 551,247	\$ 550,961	0.1 %
Member Contributions	236,222	227,532	3.8
Net Investment Income	1,518,879	1,854,901	(18.1)
Additions to Fiduciary Net Position	\$ 2,306,348	\$ 2,633,394	(12.4) %

Additions to Fiduciary Net Position



**Allocation of Total Additions
June 30, 2018**



The additions to LACERS fiduciary net position include three main items that constitute the funding sources of LACERS benefits: City Contributions, Member Contributions, and Net Investment Income.

City contributions to the Retirement Plan, the Postemployment Health Care Plan, and the Family Death Benefit Plan were \$551,247,000 during the fiscal year. The total increase of \$286,000 (or 0.1%) over the prior fiscal year was due to a higher payroll base (approximately 4.3% increase in payroll). The total City contributions include a true-up credit adjustment, a reduction from the advance payment of \$23,746,000 to reconcile the difference of the City’s contributions based on projected payroll against actual payroll. This true-up amount, which included accrued interest at 7.25%, was recognized as liability as of the end of the reporting period. After reflecting the true-up adjustment, the aggregate employer contribution rate for this fiscal year was 26.79% (21.88% for the Retirement Plan and 4.91% for the Postemployment Health Care Plan), which is 1.13% lower than the prior fiscal year at 27.92%. The actual contribution to the Retirement Plan in the amount of \$450,195,000 was equal to 100% of the Actuarially Determined Contribution (ADC) of the employer, as defined by GASB Statement No. 67. The actual contribution to the Postemployment Health Care Plan in the amount of \$100,909,000 was equal to 100% of the Actuarially Determined Contribution of the employer, as defined by GASB Statement No. 74.

Management's Discussion and Analysis

Financial Analysis (Continued)

Net Increase (Decrease) in Fiduciary Net Position – Additions to Fiduciary Net Position (Continued)

In fiscal year 2017-18, Member contributions were \$236,222,000, which was \$8,690,000 or 3.8% greater than the prior year. The primary cause of the increased contributions was the increase in number of Members and their salaries during the fiscal year.

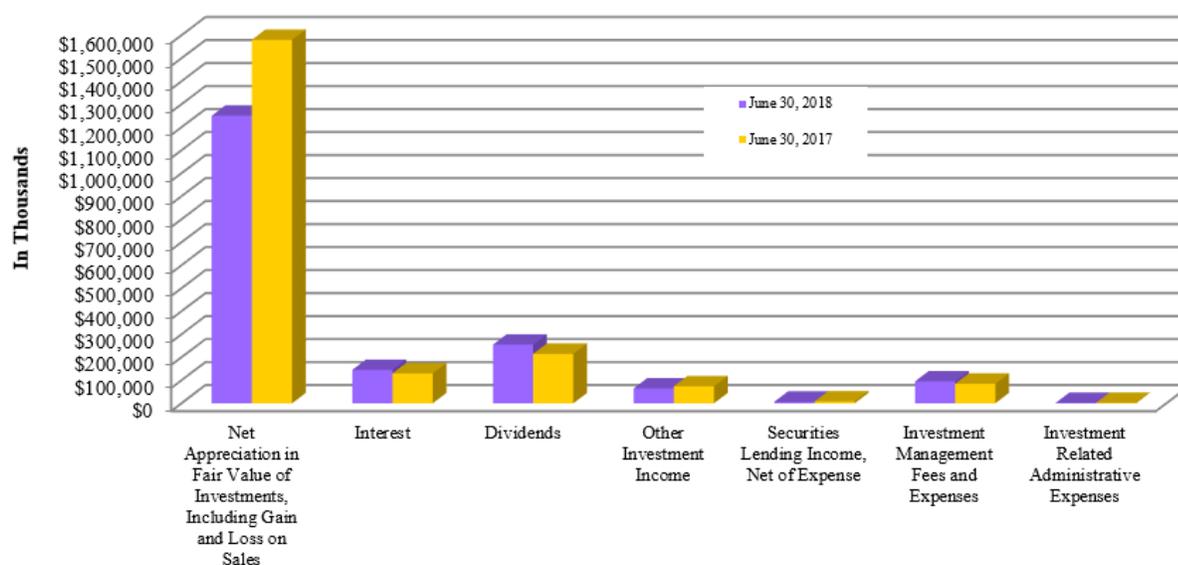
The net investment income was \$1,518,879,000, which included \$1,206,714,000 of net appreciation in the fair value of investments. This is discussed in more detail in the next section.

Investment Income

The following table and graph present the detail of investment income, net of investment management fees and expenses for the fiscal years ended June 30, 2018 and 2017 (dollars in thousands):

	June 30, 2018	June 30, 2017	Change
Net Appreciation in Fair Value of Investments, Including Gain and Loss on Sales	\$ 1,206,714	\$ 1,556,934	(22.5) %
Interest	107,942	102,138	5.7
Dividends	220,106	195,794	12.4
Other Investment Income	55,094	64,037	(14.0)
Securities Lending Income, Net of Expense	6,959	7,842	(11.3)
Sub-Total	1,596,815	1,926,745	(17.1)
Less: Investment Management Fees and Expenses	(76,213)	(69,969)	8.9
Investment Related Administrative Expenses	(1,723)	(1,875)	(8.1)
Net Investment Income	<u>\$ 1,518,879</u>	<u>\$ 1,854,901</u>	(18.1) %

Investment Income and Expenses



Management's Discussion and Analysis

Financial Analysis (Continued)

Investment Income (Continued)

The net investment income for the current fiscal year was \$1,518,879,000, as compared with the income of \$1,854,901,000 for the previous fiscal year (18.1% decrease). The primary cause of the decrease of investment income was a lower net appreciation, including gain and loss on sales, in the fair value of the investments of \$1,206,714,000 as compared with the previous fiscal year's amount of \$1,556,934,000. Major U.S. and non-U.S. equity indices achieved strong returns during the fiscal year. The Russell 3000 Index, which tracks U.S. broad market equities, returned 14.8%; the Standard & Poor's 500 Index, a gauge of U.S. large capitalization equities, returned 14.4%. In the non-U.S. markets, the MSCI World Ex-U.S. Index, which tracks non-U.S. equities in developed markets, returned 7.3%; MSCI Emerging Markets Index returned 8.2%. With the passage of Assembly Bill No. 2833 in January 2017, private equity and real estate funds have provided more detailed disclosure on fees, expenses, and carried interest. The net appreciation as reported reflects a deduction for carried interest in the amount of \$48,196,000, which represents a profit share that the general partners of these funds received as a compensation after the performance of the funds achieved agreed-upon return level.

Interest income derived from bonds and other fixed income securities increased by \$5,804,000 (5.7%), which was attributed primarily to an increase in

LACERS fixed income holdings relative to the previous fiscal year.

Dividend income derived from equities increased by \$24,312,000 (12.4%) due to an increase in public equity holdings relative to the previous fiscal year.

Other investment income, primarily derived from private equity and private real estate partnership investments, decreased by \$8,943,000 (14.0%) to \$55,094,000 in the current fiscal year. This decrease was attributed to a slowdown of partnership distributions during the current fiscal year.

LACERS earns additional investment income by lending the securities to borrowers through its custodian bank. The borrowers provide cash or non-cash collateral to LACERS custodian bank. To earn income for LACERS, the custodian bank invests the cash collateral pledged by borrowers on behalf of LACERS in short-term fixed-income securities. LACERS also generates income from fees paid by borrowers that pledge non-cash collateral. In the reporting year, LACERS securities lending income (net of expense) decreased by \$883,000 (11.3%) from a year ago due to lower borrower demand for securities held in the LACERS portfolio.

Investment management fees, expenses, and investment related administrative expenses increased by \$6,092,000 (8.5%) from the prior fiscal year. This increase corresponded with the increase in the fair value of LACERS investments over the fiscal year.

Net Increase (Decrease) in Fiduciary Net Position – Deductions from Fiduciary Net Position

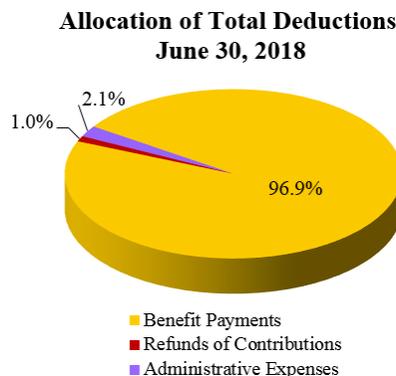
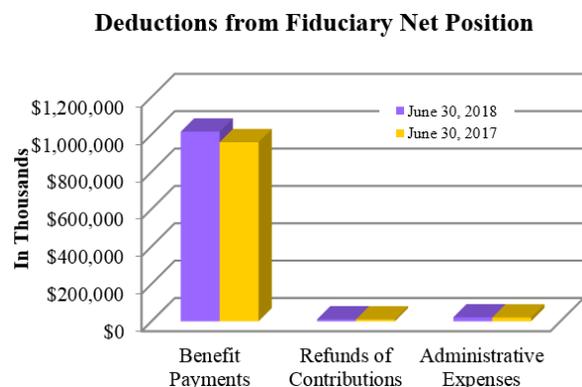
The following table and graphs provide information related to the deductions from fiduciary net position for the fiscal years ended June 30, 2018 and 2017 (dollars in thousands):

	June 30, 2018	June 30, 2017	Change
Benefit Payments	\$ 975,112	\$ 918,837	6.1%
Refunds of Contributions	10,412	9,803	6.2
Administrative Expenses	20,778	20,243	2.6
Deductions from Fiduciary Net Position	\$ 1,006,302	\$ 948,883	6.1%

Management's Discussion and Analysis

Financial Analysis (Continued)

Net Increase (Decrease) in Fiduciary Net Position – Deductions from Fiduciary Net Position (Continued)



LACERS deductions from fiduciary net position in the reporting period can be summarized as Benefit Payments, Refunds of Contributions, and Administrative Expenses. These deductions represent the types of benefit delivery operations undertaken by LACERS and the costs associated with them. Total deductions increased by \$57,419,000 or 6.1% from the prior fiscal year.

Compared to the prior fiscal year, benefit payments increased by \$56,275,000 or 6.1%. The benefit payments for the Retirement Plan increased by \$47,811,000 (6.0%) mainly due to the annual cost of living adjustments (COLA) (approximately 1.9% increase on average with a maximum of 3.0%); an increased number of retirees and beneficiaries; the average retirement allowance of newly retired Members being higher than those of the deceased Members who were removed from the retirement payroll; and a \$1,335,000 one-time payment to the Los Angeles Fire and Police Pension System (LAFPP) representing Retirement Plan benefits of 42 Airport Peace Officers who opted to transfer to LAFPP in January 2018 (refer to Note 2 – Retirement Plan Description on pages 16 - 17). Payments for Postemployment Health Care Plan benefits also increased by \$8,465,000 (7.1%). This increase was mainly due to the increase of the maximum health insurance subsidy from \$1,737 to \$1,791 per month based on the higher renewed medical premium rates for the calendar year 2018; the higher basic Medicare Part B premium reimbursement for the eligible Members; the increased number of retired Members and their dependents eligible for medical subsidy; and a \$517,000 one-time payment to LAFPP for the Postemployment Health Care Plan benefits of 42 Airport Peace Officers who opted to transfer to LAFPP. However, the increase caused by these

factors was lessened by the one-time defrayal of \$4,010,000 from a postemployment health care provider for the return of excess premium stabilization reserves during this reporting period.

The refunds of Member contributions increased by \$609,000 (6.2%) from the prior fiscal year's \$9,803,000 mainly due to the refunds of \$1,170,000 Member contributions of 42 Airport Peace Officers who transferred to the LAFPP (refer to Note 2 – Retirement Plan Description on pages 16 - 17).

LACERS administrative expenses increased by \$535,000 or 2.6% from the prior fiscal year. This increase was primarily due to salary factors such as granted COLA increases and LACERS share of employer contributions to employee retirement and OPEB benefits. In addition, due to the amortization of capitalized costs of the LACERS Pension Administration System, much higher depreciation expenses were reported in this year's administrative expenses.

Requests for Information

This financial report is designed to provide a general overview of LACERS finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

LACERS
Fiscal Management Section
PO Box 512218
Los Angeles, CA 90051-0218

BASIC FINANCIAL STATEMENTS

Statement of Fiduciary Net Position
Retirement Plan and Postemployment Health Care Plan
As of June 30, 2018 with Comparative Totals
(In Thousands)

	<u>Retirement Plan</u>	<u>Postemployment Health Care Plan</u>	<u>2018 Total</u>	<u>2017 Total</u>
Assets				
Cash and Short-Term Investments	\$ 396,290	\$ 74,100	\$ 470,390	\$ 491,514
Receivables				
Accrued Investment Income	48,220	9,017	57,237	52,777
Proceeds from Sales of Investments	72,672	13,589	86,261	112,601
Other	11,782	2,203	13,985	13,529
Total Receivables	<u>132,674</u>	<u>24,809</u>	<u>157,483</u>	<u>178,907</u>
Investments, at Fair Value				
U.S. Government Obligations	988,611	184,856	1,173,467	946,935
Municipal Bonds	2,129	398	2,527	4,280
Domestic Corporate Bonds	700,560	130,995	831,555	921,082
International Bonds	460,764	86,156	546,920	561,188
Other Fixed Income	871,072	162,878	1,033,950	868,775
Bank Loans	4,547	850	5,397	6,361
Opportunistic Debts	92,614	17,317	109,931	90,404
Domestic Stocks	3,963,597	741,136	4,704,733	4,216,604
International Stocks	4,278,603	800,038	5,078,641	4,803,077
Mortgages	357,725	66,889	424,614	390,496
Government Agencies	34,593	6,469	41,062	33,690
Derivative Instruments	843	157	1,000	2,360
Real Estate	675,353	126,281	801,634	834,848
Private Equity	1,522,628	284,710	1,807,338	1,578,649
Securities Lending Collateral	669,828	125,248	795,076	863,691
Total Investments	<u>14,623,467</u>	<u>2,734,378</u>	<u>17,357,845</u>	<u>16,122,440</u>
Capital Assets				
Furniture, Computer Hardware and Software (Net of Depreciation and Amortization)	7,738	1,447	9,185	6,490
Total Assets	<u>15,160,169</u>	<u>2,834,734</u>	<u>17,994,903</u>	<u>16,799,351</u>
Liabilities				
Accounts Payable and Accrued Expenses	34,513	6,454	40,967	37,588
Accrued Investment Expenses	8,808	1,647	10,455	10,779
Purchases of Investments	133,775	25,014	158,789	197,723
Securities Lending Collateral	669,828	125,248	795,076	863,691
Total Liabilities	<u>846,924</u>	<u>158,363</u>	<u>1,005,287</u>	<u>1,109,781</u>
Fiduciary Net Position Restricted for Pension Benefits and Postemployment Health Care Benefits	<u>\$ 14,313,245</u>	<u>\$ 2,676,371</u>	<u>\$ 16,989,616</u>	<u>\$ 15,689,570</u>

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Fiduciary Net Position
Retirement Plan and Postemployment Health Care Plan
For the Fiscal Year Ended June 30, 2018 with Comparative Totals
(In Thousands)

	Retirement Plan	Postemployment Health Care Plan	2018 Total	2017 Total
Additions				
Contributions				
City Contributions	\$ 450,338	\$ 100,909	\$ 551,247	\$ 550,961
Member Contributions	236,222	-	236,222	227,532
Total Contributions	686,560	100,909	787,469	778,493
Investment Income				
Net Appreciation in Fair Value of				
Investments, Including Gain and Loss on Sales	986,069	220,645	1,206,714	1,556,934
Interest	90,593	17,349	107,942	102,138
Dividends	184,730	35,376	220,106	195,794
Other Investment Income	46,239	8,855	55,094	64,037
Securities Lending Income	6,870	1,315	8,185	9,225
Less: Securities Lending Expense	(1,002)	(224)	(1,226)	(1,383)
Sub-Total	1,313,499	283,316	1,596,815	1,926,745
Less: Investment Management Fees and Expenses	(62,277)	(13,936)	(76,213)	(69,969)
Investment Related Administrative Expenses	(1,408)	(315)	(1,723)	(1,875)
Net Investment Income	1,249,814	269,065	1,518,879	1,854,901
Total Additions	1,936,374	369,974	2,306,348	2,633,394
Deductions				
Benefit Payments	847,031	128,081	975,112	918,837
Refunds of Contributions	10,412	-	10,412	9,803
Administrative Expenses	16,394	4,384	20,778	20,243
Total Deductions	873,837	132,465	1,006,302	948,883
Net Increase in Fiduciary Net Position	1,062,537	237,509	1,300,046	1,684,511
Fiduciary Net Position Restricted for Pension Benefits and Postemployment Health Care Benefits				
Beginning of Year	13,250,708	2,438,862	15,689,570	14,005,059
End of Year	\$ 14,313,245	\$ 2,676,371	\$ 16,989,616	\$ 15,689,570

The accompanying notes are an integral part of these financial statements.

Notes to the Basic Financial Statements

1. Description of LACERS and Significant Accounting Policies

General Description

The Los Angeles City Employees' Retirement System (LACERS, the Plan, or the System) is under the exclusive management and control of its Board of Administration (the Board), whose authority is granted by statute in Article XVI, Section 17 of the California State Constitution, and Article XI of the Los Angeles City Charter. The Board has seven members. Four members, one of whom shall be a retired Member of the System, shall be appointed by the Mayor subject to the approval of the City Council. Two members shall be active employee Members of the System elected by active employee Members. One shall be a retired Member of the System elected by retired Members of the System. Elected Board members serve five-year terms in office, with no term limits. The System is a Department of the Municipality of the City of Los Angeles (the City). The System's financial statements are included in the City of Los Angeles Annual Financial Report as a pension trust fund.

The System operates a single-employer defined benefit plan (the Retirement Plan) and a single-employer Postemployment Health Care Plan. Benefits and benefit changes are established by ordinance and approved by the City Council and the Mayor. A description of each plan is located in Note 2 and Note 3 on pages 16 - 25 of this report. All Notes to the Basic Financial Statements apply to both plans unless indicated otherwise.

Members who entered the System prior to February 21, 2016 are Tier 1 Members of LACERS. On or after February 21, 2016, new Members become Members of LACERS Tier 3 (refer to Note 2 – Retirement Plan Description on pages 17 - 18, and Note 3 – Postemployment Health Care Plan Description on page 21 for each tier's eligibility requirements and benefits provided).

Basis of Accounting and Presentation

The financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America (US GAAP) as outlined by the Governmental Accounting Standards Board (GASB). The financial statements are maintained on the accrual basis of accounting. Contributions from the employer and Members were recognized when due pursuant to formal commitments and contractual requirements. Benefits, refunds, and other expenses are recognized when due and payable. The accompanying financial statements

include information from the prior year summarized for comparative purpose only. Such information does not include sufficient detail to constitute a presentation in accordance with US GAAP.

Investments

Investment Policies

Funds of the System are invested pursuant to the System's investment policy, established by the Board, in compliance with Article XI Section 1106(d) of the City Charter. The System has a long-term investment horizon, and utilizes an asset allocation that encompasses a strategic, long run perspective of capital markets. The System's investment portfolio is composed of domestic and international equities, domestic and international bonds, bank loans, derivative instruments, real assets, private equity, and short-term investments. During the reporting period, there were no significant investment policy changes.

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

Asset Class	Target Allocation
Domestic and International Equities	46.00%
Domestic and International Bonds	13.75
Private Equity	14.00
Real Assets	13.00
Short-Term Investments	1.00
Credit Opportunities	12.25
Total	100.00%

Fair Value of Investments

Securities traded on national or international exchanges are valued at the last reported sales price at the current exchange rates. Short-term investments, bonds, bank loans, stocks, and private equities are reported at fair value. The fair values of real estate investment funds are provided by the individual real estate fund managers based on periodic appraisals, in the form of either annual in-house appraisals or longer-term appraisals by outside professionals, in accordance with industry practice. The fair value determined as such is also reviewed and evaluated by the Board's real estate consultant. The private equity funds ("partnership investment"), which are managed by third party investment managers, are valued on a quarterly and/or annual basis at their net asset value as reported by the investment managers under US GAAP. US GAAP requires that assets be reported at fair value in accordance with Accounting Standards Codification Topic 820 – *Fair Value Measurement and Disclosures*. The fair values of derivative instruments are determined using available market

Notes to the Basic Financial Statements

1. Description of LACERS and Significant Accounting Policies (Continued)

Investments (Continued)

information. Debt rewrites are valued based on yields currently available on comparable securities of issuers with similar credit ratings. LACERS investment strategy, as it relates to the debt portfolio, is mainly to achieve market appreciation and not to hold bonds to their maturities.

The provisions of the GASB Statement No. 72, *Fair Value Measurement and Application*, require investments to be measured at fair value as well as to classify the inputs used to determine fair value based on a three-level fair value hierarchy. This information is presented in Note 6 on pages 30 - 32.

Investment transactions are accounted for on the date the securities are purchased or sold (trade date). Unsettled investment trades as of fiscal year-end are reported in the financial statements on an accrual basis. The corresponding proceeds due from sales are reported on the Statement of Fiduciary Net Position under Receivables and labeled as Proceeds from Sales of Investments, and amounts payable for purchases are reported under (Current) Liabilities and labeled as Purchases of Investments. Dividend income is recorded on the ex-dividend date. Interest income is reported at the stated interest rate as earned, and any premiums or discounts on debt securities are not amortized. The calculation of realized gains and losses is independent of the calculation of the net change in the fair value of LACERS pension plan investment. Realized gains and losses on investments that had been held in more than one reporting period and sold in the current period were included as a change in the fair value reported in the prior period(s) and the current period.

For the future contracts, an initial margin is required to open a position and maintain the collateral requirement until the position is closed. LACERS reports the collateral for the future contracts in the short-term investments.

Concentrations

The investment portfolio as of June 30, 2018, contained no concentration of investments in any one entity that represented 5% or more of the total investment portfolio.

Rate of Return on Investments

For the fiscal year ended June 30, 2018, the aggregate annual money-weighted rate of return for the Retirement Plan and the Postemployment Health Care Plan on LACERS investments, net of investment expenses, was 9.55%.

The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. Separate schedules for the money-weighted rate of return for Retirement Plan and Postemployment Health Care Plan are presented in the Required Supplementary Information (RSI) on pages 39 and 44, respectively.

Receivables

As of June 30, 2018, LACERS held no long-term contracts for contributions receivable from the City.

Capital Assets

Prior to July 1, 2001, purchases of capital assets, consisting primarily of office furniture and computer equipment, were recorded and expensed in the year acquired. Effective July 1, 2001, these purchases were capitalized upon acquisition if the cost of purchase was \$5,000 or more, and depreciated over five years using the straight-line method.

In order to comply with the requirements of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, certain costs for developing LACERS new Pension Administration System (PAS), a customized software solution critical to LACERS core operations, had been capitalized. The total capitalized cost for the PAS project up to its completion in February 2018 was \$9,098,000, and it will be amortized over 15 years using the straight-line method.

Administrative Expenses

All administrative expenses are funded from LACERS fiduciary net position, which represents accumulated investment earnings and contributions from the City and the Members net of payments.

Reserves

As provided in the Los Angeles City Charter, LACERS is maintained on a reserve basis, determined in accordance with recognized actuarial methods. The Los Angeles City Charter establishes reserves for the following:

Reserves for the Retirement Plan

Member Contributions (Mandatory) – To provide for individual accounts of Members consisting of Active Member mandatory contributions to the Retirement Plan and interest credited to Members' accounts, less refunds of Members contributions and transfers to the Annuity reserve.

Notes to the Basic Financial Statements

1. Description of LACERS and Significant Accounting Policies (Continued)

Reserves (Continued)

Reserves for the Retirement Plan (Continued)

Member Contributions (Voluntary) – To provide for individual accounts of Members participating in the larger annuity program of Active Member voluntary contributions and interest/investment return credited to Members' accounts, less refunds of Member contributions (voluntary) and transfers to the Larger Annuity reserve.

Basic Pensions – To provide for the City's guaranteed portion of retirement benefits consisting of City contributions; investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to retired Members.

Annuity – To provide for the Members' share of retirement benefits consisting of Members' mandatory contribution balances transferred at retirement; investment earnings (losses) excluding net appreciation (depreciation) in fair value of investments; less payments to retired Members.

Larger Annuity – To provide for the Larger Annuity benefit consisting of Members' voluntary contribution balances transferred at retirement including Internal Revenue Service (IRS) Section 457 deferred compensation and other rollovers; investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to participating retired Members.

Family Death Benefit Plan (FDBP) – To pay benefits under the Family Death Benefit Plan administered by LACERS consisting of Active Member voluntary contributions; matching City contributions; and investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to beneficiaries.

Reserve for the Postemployment Health Care Plan

To provide health care benefits for retirees consisting of City contributions; investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to insurance providers and reimbursements to retired Members.

Reserve balances as of June 30, 2018, were as follows (in thousands):

Reserves for the Retirement Plan		
Member Contributions:		
- Mandatory	\$	2,391,394
- Voluntary		6,986
Basic Pensions		11,311,879
Annuity		531,958
Larger Annuity		54,407
FDBP		<u>16,621</u>
		\$ 14,313,245
Reserve for the Postemployment Health Care Plan		
		<u>2,676,371</u>
Total Reserves		<u>\$ 16,989,616</u>

Estimates

The preparation of the financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting years. Actual results could differ from those estimates.

2. Retirement Plan Description

Plan Administration and Membership

LACERS administers a defined benefit pension plan that provides for service and disability retirement benefits, as well as death benefits.

The Retirement Plan covers all full-time personnel and department-certified part-time employees of the City, except for sworn employees of the Fire and Police departments, Department of Water and Power employees, elected officials who elected to participate in an alternative Defined Contribution Plan, certain Port Police officers of the Harbor, and certain Airport Peace Officers of the Airports who elected to opt out of LACERS. Upon transferring all active Tier 2 Members to Tier 1 as of February 21, 2016, Membership to Tier 1 is now closed to new entrants unless a Member meets one of the exceptions allowed in the Ordinance (No. 184134). Eligible employees hired on or after February 21, 2016 become Members of Tier 3.

Notes to the Basic Financial Statements

2. Retirement Plan Description (Continued)

Plan Administration and Membership (Continued)

As of June 30, 2018, the components of LACERS membership in both tiers (Tier 1 and Tier 3) were as follows:

Active:	
Vested	18,460
Non-vested	7,582
	<hr/>
	26,042
Inactive:	
Non-vested	5,158
Terminated Entitled to Benefits, Not Yet Receiving Benefits	2,870
Retired	19,379
	<hr/>
Total	53,449
	<hr/>

Members of LACERS have a vested right to their own contributions and accumulated interest posted to their accounts. Generally, after five years of employment, Members are eligible for future retirement benefits, which increase with length of service. If a Member who has five or more years of continuous City service terminates employment, the Member has the option of receiving retirement benefits when eligible or having his or her contributions and accumulated interest refunded. Benefits are based upon age, length of service, and compensation.

Eligibility Requirement and Benefits Provided

Tier 1

Plan Members are eligible to retire with unreduced benefits if they have 10 or more years of continuous City service at age 60, or at least 30 years of City service at age 55, or with any years of City service at age 70 or older. Plan Members also are eligible to retire with age-based reduced benefits after reaching age 55 with 10 or more years of continuous City service, or at any age with 30 or more years of City service. Full (unreduced) retirement benefits are determined as 2.16% of the Member's average monthly pensionable salary during the Member's last 12 months of service, or during any other 12 consecutive months of service designated by the Member, multiplied by the Member's years of service credit. Plan Members with five years of continuous service are eligible for disability retirement, and the benefits are determined as 1/70 of the Member's final average monthly salary for each year of service or 1/3 of the Member's final average monthly salary, if greater. Upon an active Member's death, a refund of the Member's contributions and, depending on the Member's years of service, a

limited pension benefit equal to 50% of monthly salary may be paid up to 12 months. Or, if such Member was eligible to retire, survivor benefits may be paid to an eligible spouse or qualified domestic partner. Upon a retired Member's death, a \$2,500 funeral allowance is paid, and a modified or unmodified allowance is continued to an eligible spouse or qualified domestic partner.

Tier 1 – Enhanced Benefits

In November 2016, voters approved a ballot measure resulting in approximately 550 sworn Airport peace officers provided an election to opt-out of the LACERS Plan and transfer to the Los Angeles Fire and Police Pension (LAFPP) Plan as its Tier 6 Members.

On March 28, 2017, the City Council adopted an ordinance (No. 184853) to amend the Los Angeles Administrative Code (LAAC) authorizing certain sworn Airport Peace Officers (APO) at LACERS to elect to transfer into Tier 6 of LAFPP Plan or to remain in LACERS Plan with enhanced benefits. All new APO hired after that date would be enrolled in LAFPP Tier 6. Under the ordinance, APO Members who elect to remain in LACERS would be Tier 1 Members, and be eligible for enhanced benefits including more favorable disability benefits, death benefits, and a higher retirement factor of 2.30% (versus 2.16% for all other Tier 1 Members), contingent upon a mandatory additional contribution payment of \$5,700 required by LAAC Section 4.1002(e)(2) to LACERS before January 8, 2019, or prior to the Member's retirement date, whichever is earlier.

On January 7, 2018, the enhanced benefits became effective, with 503 APO Members electing to remain Members of LACERS and 42 APO Members transferring to LAFPP. As of June 30, 2018, 116 APO Members paid their mandatory additional contribution of \$5,700, inclusive of 31 APO Members who retired with the enhanced benefits.

Tier 3

Plan Members are eligible to retire with unreduced benefits if they have at least 10 or more years of City service at age 60 or at least 30 years of City service at age 55, provided that five years of service must be continuous. Full unreduced retirement benefits at age 60 with 10 years of City service are determined with a 1.5% retirement factor. Plan Members also are eligible to retire with an age-based reduced benefit before reaching age 60 with 30 or more years of City service with a retirement factor of 2.0%. If the Member is age 55 or older with 30 years of service at the time of retirement, his or her retirement

Notes to the Basic Financial Statements

2. Retirement Plan Description (Continued)

Eligibility Requirement and Benefits Provided (Continued)

allowance will not be subject to reduction on account of age. However, if the Member is younger than age 55 with 30 years of service at the time of retirement, his or her retirement allowance will be reduced by the applicable early retirement reduction factor. In addition, the System also provides Tier 3 Members enhanced retirement benefits with a 2.0% retirement factor if the Member retires at age 63 with at least 10 years of service, or a retirement factor of 2.1% if the Member retires at age 63 with 30 years of service. Tier 3 retirement benefits are determined by multiplying the Member's retirement factor (1.5% - 2.1%), with the Member's Final Average Compensation (FAC) based on the Member's pensionable salary for the last 36 months or any other 36 consecutive months designated by the Member, and by the Member's years of service credit (SC) as follows:

Age at Retirement	Required Years of Service	Retirement Benefit ⁽¹⁾
Under 55	30 Years	2.0% x FAC x Yrs. of SC ⁽²⁾
55 and Over	30 Years	2.0% x FAC x Yrs. of SC
60 and Over	10 Years	1.5% x FAC x Yrs. of SC
63 and Over	10 Years	2.0% x FAC x Yrs. of SC
63 and Over	30 Years	2.1% x FAC x Yrs. of SC

(1) Retirement allowance may not exceed 80% of final compensation except when benefit is based solely on the annuity component funded by the Member's contributions.

(2) A reduction factor will be applied based on age at retirement.

Plan Members with five years of continuous service are eligible for disability retirement, and the benefits are determined as 1/70 of the Member's final average monthly salary for each year of service or 1/3 of the Member's final average monthly salary, if greater. Upon an active Member's death, a refund of the Member's contributions and, depending on the Member's years of service, a limited pension benefit equal to 50% of monthly salary may be paid up to 12 months. Or, if such Member was eligible to retire, survivor benefits may be paid to an eligible spouse or qualified domestic partner. Upon a retired Member's death, a \$2,500 funeral allowance is paid, and a modified or unmodified allowance is continued to an eligible spouse or qualified domestic partner.

There were no Tier 3 Members who retired during this reporting period.

Cost of Living Adjustment

Retirement allowances are indexed annually for inflation. The Board has authority to determine, no later than May 1st of each year, the average annual percentage change in the Consumer Price Index (CPI) for the purpose of providing a Cost of Living Adjustment (COLA) to the benefits of eligible Members and beneficiaries in July. The adjustment is based on the prior year's change of Los Angeles area CPI subject to a maximum of 3.0% for Tier 1 Members or 2.0% for Tier 3 Members. For Tier 1 Members, the COLA percentage greater than 3.0% is banked for future use.

Employer Contributions

The Los Angeles City Charter Sections 1158 and 1160 provide for periodic actuarially-determined employer contribution rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate the required assets to pay benefits when due. For the fiscal year ended June 30, 2018, the actuarially-determined aggregate employer contribution rate to the Retirement Plan by the City was 22.21% of projected payroll, based on the June 30, 2016 actuarial valuation. Upon closing the fiscal year 2017-18, LACERS re-calculated the employer contribution rate using actual payroll incurred during the fiscal year, which was smaller than projected covered payroll used by the City to make the advance payment on July 15, 2017. As a result, employer contributions received for the Retirement Plan were \$19,980,000 more than required, and this amount was credited to the employer toward employer contributions for fiscal year 2018-19. Based on actual payroll, the effective rate of employer contribution for Retirement Plan was 21.88% for fiscal year 2017-18.

Member Contributions

Tier 1

The current contribution rate for Tier 1 Members is 11% of their pensionable salary including: 1) a 1% increase in the Member contribution rate pursuant to 2009 Early Retirement Incentive Program (ERIP) ordinance for all employees for a period of 15 years (or until the ERIP Cost obligation is fully recovered, whichever comes first); and 2) 4% additional contributions in exchange for a vested right to future increases in the maximum retiree medical subsidy pursuant to a 2011 City Council ordinance.

Notes to the Basic Financial Statements

2. Retirement Plan Description (Continued)

Member Contributions (Continued)

Tier 3

The contribution rate for Tier 3 Members is 11% of their pensionable salary including 4% additional contributions in exchange for a vested right to future increases in the maximum retiree medical subsidy. Unlike Tier 1, Tier 3 Members do not pay ERIP contribution, therefore, Tier 3 Members' contribution rate will not drop down when Tier 1 Members cease to pay the 1% ERIP contribution.

Net Pension Liability

In calculating the Plan's net pension liability, the total pension liability and the Plan fiduciary net position exclude amounts associated with Family Death and Larger Annuity Benefits. As of June 30, 2018, the components of the net pension liability were as follows (in thousands):

Total Pension Liability	\$ 19,944,578
Plan Fiduciary Net Position ⁽¹⁾	<u>14,235,230</u>
Plan's Net Pension Liability	<u>\$ 5,709,348</u>

Plan Fiduciary Net Position as a percentage of the Total Pension Liability	71.4%
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(1) Plan fiduciary net position was \$14,313,245,000 as of June 30, 2018 without excluding amounts associated with Family Death and Larger Annuity Benefits.

Significant Assumptions

Projections of benefits for financial reporting purposes are based on the types of benefits provided to active, inactive, and retired Members at the time of each valuation, including expected future COLAs. The attribution method and significant assumptions used in the valuation year of June 30, 2018, are summarized below:

Valuation Date	June 30, 2018
Actuarial Cost Method	Entry Age Method – assuming a closed group (individual basis).
Amortization Method	Level Percent of Payroll
Actuarial Assumptions:	
Date of Experience Study	June 30, 2017 (July 1, 2014 through June 30, 2017)
Long-Term Expected Rate of Return	7.25%
Inflation	3.00%
Real Across-the-Board Salary Increase	0.50%
Projected Salary Increases	Ranges from 3.90% to 10.00% based on years of service, including inflation assumption at 3.00% and the real across-the-board salary increase assumption of 0.50%.
Annual COLAs	3.00% maximum for Tier 1 and 2.00% maximum for Tier 3.
Mortality Table for Retirees and Beneficiaries	Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.
Mortality Table for Disabled Retirees	Headcount-Weighted RP-2014 Disabled Retiree Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.
Percent Married / Domestic Partner	76% of male participants and 50% of female participants are assumed to be married or have a qualified domestic partner.
Spouse Age Difference	Male retirees are assumed to be three years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.

Notes to the Basic Financial Statements

2. Retirement Plan Description (Continued)

Net Pension Liability (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.25% as of June 30, 2018 and June 30, 2017.

The projection of cash flows used to determine the discount rate assumed plan Member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the actuarially-determined contribution rates. For this purpose, only employee and employer contributions that are intended to fund benefits for current plan Members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included.

Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make "all" projected future benefit payments for current plan Members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability as of both June 30, 2018 and June 30, 2017.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, are summarized in the following table. These values were used in the derivation of the long-term expected investment rate of return assumption for the actuarial valuation as of June 30, 2018.

Asset Class	Target Allocation	Arithmetic Long-Term Expected Real Rate of Return
U.S. Large Cap Equity	14.00%	5.3%
U.S. Small Cap Equity	5.00	6.1
Developed Int'l Large Cap Equity	17.00	6.7
Developed Int'l Small Cap Equity	3.00	7.1
Emerging Market Equity	7.00	8.9
Core Bonds	13.75	1.0
High Yield Bonds	2.00	3.1
Bank Loans	2.00	3.0
Emerging Market Debt	4.50	3.4
Private Debt	3.75	5.5
Private Real Estate	7.00	4.7
Real Estate Investment Trust (REIT)	0.50	5.9
Treasury Inflation Protected Securities (TIPS)	3.50	1.0
Commodities	1.00	3.4
Public Real Assets	1.00	4.8
Private Equity	14.00	9.0
Cash	1.00	0.0
Total	100.00%	

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

The following presents the net pension liability of LACERS as of June 30, 2018, calculated using the discount rate of 7.25%, as well as what LACERS net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate (dollar in thousands):

1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
\$8,449,879	\$5,709,348	\$3,451,003

Notes to the Basic Financial Statements

3. Postemployment Health Care Plan Description

Plan Administration and Membership

LACERS administers, and provides single-employer postemployment healthcare benefits to eligible retirees and their eligible spouses/domestic partners who participate in the Retirement Plan regardless of their membership tiers. These benefits consist of subsidies which may also apply to the coverage of other eligible dependent(s).

As of June 30, 2018, the components of Membership, excluding non-participating retirees and surviving spouses of LACERS postemployment healthcare benefits were as follows:

Retired Members/Surviving Spouses ⁽¹⁾	15,144
Vested terminated Members entitled to, but not yet receiving benefits ⁽²⁾	1,401
Active Members	<u>26,042</u>
Total	<u><u>42,587</u></u>

- (1) Total participants including married dependents and dependent children currently receiving benefits are 20,288.
- (2) Includes terminated Members due a refund of employee contributions.

Eligibility Requirement and Benefits Provided

To be eligible for LACERS postemployment healthcare benefits, Member must: 1) be at least age 55; 2) have at least 10 whole years of service with LACERS; and 3) be enrolled in a System-sponsored medical or dental plan or are a participant in the Medical Premium Reimbursement Program (MPRP). Retirees and surviving spouses/domestic partners can choose from the health plans that are available, which include medical, dental, and vision benefits, or participate in the MPRP if he/she resides in an area not covered by the available medical plans. Retirees and surviving spouses/domestic partners receive medical subsidies based on service years and service credit. The dental subsidies are provided to the retirees only, based on service years and service credit.

The maximum subsidies are set annually by the Board. Effective February 21, 2016, healthcare benefit eligibility requirements have changed for the Members who have periods of part-time service. Such Members are now eligible to participate in the

LACERS retiree medical programs with a 10 whole years of service, even if some or all of that service was part-time, provided that the Member meets the eligibility requirements. Both Tier 1 and Tier 3 Members will be eligible for 40% of maximum medical plan premium subsidy for 1 – 10 whole years of service credit, and eligible Members earn 4% per year of service credit for their annual medical subsidy accrual after 10 years of service. Eligible spouses/domestic partners of Plan Members are entitled to the System's postemployment healthcare benefits after the retired Member's death. During the 2011 fiscal year, the City adopted an ordinance ("Subsidy Cap Ordinance") to limit the maximum medical subsidy at \$1,190 for those Members who retire on or after July 1, 2011; however, Members who at any time prior to retirement made additional contributions are exempted from the subsidy cap and obtain a vested right to future increases in the maximum medical subsidy at an amount not less than the dollar increase in the Kaiser two-party non-Medicare Part A and Part B premium. As of June 30, 2018, all active Tier 1 and Tier 3 Members were making the additional contributions, and therefore will not be subject to the medical subsidy cap (refer to Member Contributions of Note 2 – Retirement Plan Description on page 18).

Employer Contributions

The Los Angeles City Charter Sections 1158 and 1160 require periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate the required assets to pay benefits when due. The required contribution rate for the Postemployment Health Care Plan for the fiscal year ended June 30, 2018, was 4.92% of projected payroll, based on the June 30, 2016 actuarial valuation.

Upon closing the fiscal year 2017-18, LACERS recalculated employer contribution rate using actual payroll incurred during the fiscal year which was smaller than projected covered payroll used by the City to make the advance payment on July 15, 2017. As a result, employer contributions for Postemployment Health Care Plan were \$3,766,000 more than required, and this amount was returned to the employer as a credit toward employer contribution for fiscal year 2018-19. Based on the actual payroll, the effective rate of employer contribution for Postemployment Health Care Plan was 4.90%.

Notes to the Basic Financial Statements

3. Postemployment Health Care Plan Description (Continued)

Net OPEB Liability

As of June 30, 2018, the components of the net OPEB liability were as follows (in thousands):

Total OPEB Liability	\$ 3,256,827
Plan Fiduciary Net Position	<u>(2,676,371)</u>
Plan's Net OPEB Liability	<u>\$ 580,456</u>

Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	82.2%
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Significant Assumptions

The total OPEB liability as of June 30, 2018 was determined by actuarial valuation as of June 30, 2018. The attribution method and significant assumptions used to measure the total OPEB liability, including assumptions about inflation, and healthcare cost trend rates in the valuation year of June 30, 2018, are summarized below:

Valuation Date	June 30, 2018
Actuarial Cost Method	Entry Age Cost Method – level percent of salary.
Amortization Method:	Level Percent of Payroll – assuming a 3.50% increase in total covered payroll.
Actuarial Assumptions:	
Date of Experience Study	June 30, 2017 (July 1, 2014 through June 30, 2017)
Long-Term Expected Rate of Return	7.25%
Inflation	3.00%
Salary Increase	Range from 3.90% to 10.00% based on years of service, including inflation assumption at 3.00%.
Mortality Table for Retirees and Beneficiaries	Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.
Mortality Table for Disabled Retirees	Headcount-Weighted RP-2014 Disabled Retiree Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.
Marital Status	60% of male and 35% of female retirees who receive a subsidy are assumed to be married or have a qualified domestic partner and elect dependent coverage.
Spouse Age Difference	Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.
Surviving Spouse Coverage	With regard to Members who are currently alive, 100% of eligible spouses or domestic partners are assumed to elect continued health coverage after the Member's death.
Participation	50% of inactive Members are assumed to receive a subsidy for a City approved health carrier. 100% of retirees becoming eligible for Medicare are assumed to be covered by both Parts A and B.

Notes to the Basic Financial Statements

3. Postemployment Health Care Plan Description (Continued)

Net OPEB Liability (Continued)

Significant Assumptions (Continued)

Healthcare Cost Trend Rates

Medical Premium Trend Rates to be applied in the following fiscal years, to all health plans. Trend Rate is to be applied to the premium for shown fiscal year to calculate next fiscal year's projected premium.

Medical Premium Trend Rates to be applied to fiscal year 2018-2019 and later years are:

First Fiscal Year (July 1, 2018 through June 30, 2019)		
Carrier	Under Age 65	Age 65 & Over
Kaiser HMO	3.50%	4.29%
Anthem Blue Cross HMO	(1.75%)	N/A
Anthem Blue Cross PPO	3.50%	3.25%
UHC Medicare HMO	N/A	3.25%

Fiscal Year 2019 - 2020 and later	
Fiscal Year	Trend (Approx.)
2019 - 2020	6.87%
2020 - 2021	6.62%
2021 - 2022	6.37%
2022 - 2023	6.12%
2023 - 2024	5.87%
2024 - 2025	5.62%
2025 - 2026	5.37%
2026 - 2027	5.12%
2027 - 2028	4.87%
2028 - 2029	4.62%
2029 - 2030 and later	4.50%

Dental Premium Trend to be applied is 4.00% for all years.

Medicare Part B Premium Trend for the 2018-19 fiscal year will be calculated based on the actual increase in premium from 2018 to 2019. 4.00% for years following the 2019 calendar year.

Notes to the Basic Financial Statements

3. Postemployment Health Care Plan Description (Continued)

Net OPEB Liability (Continued)

Discount Rate

The discount rate used to measure the total OPEB liability was 7.25% as of June 30, 2018 and June 30, 2017. As contributions that are required to be made by the City to amortize the Unfunded Actuarial Accrued Liability in the funding valuation are determined on an actuarial basis, the future Actuarially Determined Contributions (ADC) and current Plan assets, when projected in accordance with the method prescribed by GASB Statement No. 74, are expected to be sufficient to make all benefit payments to current plan Members.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, are summarized in the following table. These values were used in the derivation of the long-term expected investment rate of return assumption for the actuarial valuation as of June 30, 2018.

Asset Class	Target Allocation	Arithmetic Long-Term Expected Real Rate of Return
U.S. Large Cap Equity	14.00%	5.3%
U.S. Small Cap Equity	5.00	6.1
Developed Int'l Large Cap Equity	17.00	6.7
Developed Int'l Small Cap Equity	3.00	7.1
Emerging Market Equity	7.00	8.9
Core Bonds	13.75	1.0
High Yield Bonds	2.00	3.1
Bank Loans	2.00	3.0
Emerging Market Debt	4.50	3.4
Private Debt	3.75	5.5
Private Real Estate	7.00	4.7
Real Estate Investment Trust (REIT)	0.50	5.9
Treasury Inflation Protected Securities (TIPS)	3.50	1.0
Commodities	1.00	3.4
Public Real Assets	1.00	4.8
Private Equity	14.00	9.0
Cash	1.00	0.0
Total	100.00%	

Notes to the Basic Financial Statements

3. Postemployment Health Care Plan Description (Continued)

Net OPEB Liability (Continued)

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability of LACERS as of June 30, 2018, calculated using the discount rate of 7.25%, as well as what LACERS net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate (dollar in thousands):

1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
\$ 1,048,382	\$ 580,456	\$ 198,029

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB liability of LACERS as of June 30, 2018, as well as what LACERS net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower or one percentage point higher than the current rates (dollar in thousands):

1% Decrease	Current Healthcare Cost Trend Rates ⁽¹⁾	1% Increase
\$ 144,918	\$ 580,456	\$1,151,433

(1) Current healthcare cost trend rates: 6.87% graded down to 4.50% over 10 years for Non-Medicare medical plan costs, and 6.37% graded down to 4.50% over eight years for Medicare medical plan costs. The 2020-2021 premium increases include additional estimated increases of 1.00% (non-Medicare) and 0.50% (Medicare) from the impact of the Health Insurance Tax (HIT). 4.00% for all years for Dental and Medicare part B subsidy cost.

4. Contributions Required and Contributions Made

LACERS switched to the Entry Age cost method beginning from the June 30, 2012 actuarial valuation to determine the required annual contribution amount for the Retirement Plan and the Postemployment Health Care Plan. The required annual contribution amount is composed of two components: normal cost, which is the cost of the portion of the benefit that is allocated to a given year, and the payment to

amortize the Unfunded Actuarial Accrued Liability (UAAL) which is the difference between LACERS actuarial liabilities and actuarial assets. The components of the UAAL are amortized as a level percent of pay. Based on LACERS funding policy, increases or decreases in the UAAL due to assumption changes are amortized over 20 years, except that healthcare cost trend and premium assumption changes are amortized over 15 years. Plan changes and experience gains and losses are amortized over 15 years, subject to adjustments to comply with GASB requirements on maximum amortization period of 30 years for all layers combined. The amortization periods are “closed” as each layer of the UAAL is systematically amortized over a “fixed” period.

The total contributions to LACERS for the year ended June 30, 2018, in the amount of \$787,469,000 (\$686,560,000 for the Retirement Plan and \$100,909,000 for the Postemployment Health Care Plan), consisted of the following (in thousands):

	Retirement Plan	Postemployment Health Care Plan
City Contributions:		
Required Contributions	\$ 450,195	\$ 100,909
FDBP	143	-
Total City Contributions	450,338	100,909
Member Contributions	236,222	-
Total Contributions	<u>\$ 686,560</u>	<u>\$ 100,909</u>

The City contributions made for the Retirement Plan under the Required Contributions category in the amount of \$450,195,000 were equal to 100% of the actuarially determined contribution of the employer. The City contributions made for the Postemployment Health Care Plan, in the amount of \$100,909,000, represents 100% of the actuarially determined contribution of the employer as defined by GASB Statement No. 74. Member contributions in the amount of \$236,222,000 were made toward the Retirement Plan and the voluntary Family Death Benefit Plan.

5. Historical Trend Information

Historical trend information, designed to provide information about LACERS progress made in accumulating sufficient assets to pay benefits when due, is presented on pages 36 - 39 for the Retirement Plan and pages 40 - 44 for the Postemployment Health Care Plan.

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments

The Board has the responsibility for the investment of LACERS funds, and should discharge its duties with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims, as prescribed by Article XI Section 1106(c) of the City Charter.

LACERS considers investments with a maturity of 12 months or less to be short-term investments. The carrying value of cash and short-term investments at June 30, 2018, for the Retirement Plan and Postemployment Health Care Plan included approximately \$2,509,000 held in LACERS general operating accounts with the City Treasurer and short-term investments funds (STIF) of \$467,881,000 for a total of \$470,390,000. The amounts held by the City Treasurer are pooled with the monies of other City agencies and invested by the City Treasurer's office. These assets are not individually identifiable. At June 30, 2018, short-term investments included collective STIF of \$86,079,000, international STIF of \$133,360,000, and future contracts initial margin and collaterals of \$248,443,000.

The fair value of derivative instruments, including equity index, commodity, currency, and interest rate future contracts, currency forward contracts and options, and rights and warrants, are recorded in the Statement of Fiduciary Net Position with a net positive value of \$1,000,000. The changes in fair value of the derivative instruments during the fiscal year are recorded in the Statement of Changes in Fiduciary Net Position as Investment Income. LACERS enters into derivative contracts for investment purposes and to manage risks associated with its investment portfolio. For financial reporting purposes, all of LACERS derivatives for the current and previous fiscal years are classified as investment derivatives.

The notional amount and the fair value of derivative instruments as of June 30, 2018, are as follows (in thousands):

Derivative Type	Notional Amount	Fair Value	Change in Fair Value
Future Contracts -			
Commodities	\$ 180,587	\$ 1,057	\$ (1,104)
Equity Index	16,278	111	243
Foreign Exchange	(25,500)	(299)	(300)
Interest Rate	(5,064)	(173)	(181)
Currency Forward			
Contracts	234,346	(65)	(4)
Currency Options	N/A	198	(71)
Right / Warrants	N/A	171	57
Total Value		\$ 1,000	\$ (1,360)

Credit Risk – Investments

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. LACERS seeks to maintain a diversified portfolio of fixed income instruments in order to obtain the highest total return for the fund at an acceptable level of risk within this asset class. The credit quality ratings of investments in fixed income securities by Standard and Poor's (S&P), a nationally-recognized statistical rating organization, as of June 30, 2018, are as follows (dollars in thousands):

S & P Ratings	Fair Value	Percentage
AAA	\$ 84,057	2.86%
AA	1,447,300	49.25
A	147,895	5.03
BBB	488,161	16.61
BB	245,712	8.36
B	337,064	11.47
CCC	34,995	1.19
CC	-	0.00
C	1,079	0.04
D	607	0.02
Not Rated	152,102	5.18
	2,938,972	100.00%
U.S. Government		
Guaranteed Securities ⁽¹⁾	1,230,277	
Total Fixed Income		
Securities ⁽²⁾	\$ 4,169,249	

(1) Consists of U.S. Government Bonds and GNMA Mortgage-Backed Securities which had the AA+ rating.

(2) Derivatives instrument of \$(173) are included.

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments (Continued)

Credit Risk – Derivatives

Derivatives are subject to credit risk that the counterparty to a contract will default. LACERS is exposed to credit risk on reported assets of the investment derivatives that are traded over the counter. The credit risk of exchange traded derivatives for future contracts is considered minimal because the exchange clearing house is the counterparty and guarantees the performance.

LACERS permits investment managers, under the terms of individual guidelines, to use derivative instruments as set forth in each manager's investment guidelines to control portfolio risk. It is the responsibility of these investment managers to actively monitor counterparties on their financial safety and ensure compliance with the investment restrictions. LACERS has no general investment policy with respect to netting arrangements or collateral requirements. However, these individual investment managers have set up the arrangements with the counterparties to net off the positive and negative contracts with the same counterparty in case of the counterparty's default.

As of June 30, 2018, without respect to netting arrangements, LACERS maximum loss on derivative instruments subject to credit risk, namely currency forward contracts, is \$2,839,000. All counterparties of these investment derivatives had the credit rating of "A" or "AA" assigned by Standard & Poor's.

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a financial institution's failure of depository financial institution, LACERS would not be able to recover its deposits or would not be able to recover collateral securities that are in the possession of an outside party. Deposits are exposed to custodial credit risk if they are not insured or not collateralized. As of June 30, 2018, LACERS has exposure to such risk in the amount of \$31,308,000 or 0.52% of the fair value of total international investments. The amount represents non-invested cash denominated in foreign currencies, managed by 11 different investment managers, and held outside of LACERS custodial bank. LACERS policy requires each individual publicly traded equities investment manager to hold no more than 10% of their portfolios in the form of cash. LACERS is in compliance with the policy.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, LACERS would not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not insured, are not registered in LACERS name, and are held by the counterparty, or the counterparty's trust department or agent but not in LACERS name. As of June 30, 2018, LACERS investments were not exposed to custodial credit risk because all securities were registered in the name of the System.

Concentration of Credit Risk

The investment portfolio as of June 30, 2018, contained no concentration of investments in any one entity that represented 5% or more of the total investment portfolio.

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments (Continued)

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. One of the ways LACERS manages its exposure to interest rate risk is by requiring the fixed income investment managers to maintain their portfolio effective duration within a specified range of the BC U.S. High Yield 2% Capped Index, the BC Intermediate Government Credit Index, the BC Aggregate Bond Index, or the J.P. Morgan EMBI Global Diversified Index, depending on the Board's mandates. The effective duration is a measure, in years, of interest-rate sensitivity in debt investments. The longer the effective duration, the greater the sensitivity to interest rate changes. Information about the sensitivity of the fair values of LACERS investments to market interest rate fluctuations as of June 30, 2018 is provided by the following table that shows the weighted average effective duration of LACERS fixed income securities by investment type (dollars in thousands):

Investment Type	Fair Value	Weighted Average Duration (in Years)
Asset-Backed Securities	\$ 85,268	1.12
Bank Loans	5,397	0.23
Commercial Mortgage-Backed Securities	46,791	4.66
Corporate Bonds	1,031,566	5.48
Government Agencies	71,807	4.58
Government Bonds	801,489	6.74
Government Mortgage-Backed Securities	377,823	4.81
Index Linked Government Bonds	596,477	7.17
Municipal/Provincial Bonds	7,360	2.89
Non-Government Backed Collateralized Mortgage Obligations (C.M.O.s)	1,563	1.03
Opportunistic Debts	109,931	0.19
Other Fixed Income (Funds)	1,033,950	6.02
Derivative Instruments	(173)	12.60
Total Fixed Income Securities	<u>\$ 4,169,249</u>	

Highly-Sensitive Investments

Highly-sensitive investments are certain debt investments whose terms may cause their fair value to be highly-sensitive to market interest rate changes. Terms include embedded options, coupon multipliers, benchmark indexes, and reset dates. LACERS asset-backed investments have embedded prepayment options that will typically cause prepayments by the obligees of the underlying investments when interest rates fall. Prepayments eliminate the stream of future interest payments and, therefore, diminish the fair value of the asset-backed investment. The following table shows the fair value of LACERS asset-backed investments by investment type (in thousands):

Investment Type	Fair Value
Asset-Backed Securities	\$ 85,268
Commercial Mortgage-Backed Securities	46,791
Government Agencies	71,807
Government Mortgage-Backed Securities	377,823
Non-Government Backed C.M.O.s	<u>1,563</u>
Total Asset-Backed Investments	<u>\$ 583,252</u>

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. LACERS Asset Allocation policy sets a target of 27% of the total portfolio for non-U.S. investments in equities. In addition, fixed income, real estate, and private equity managers may hold non-U.S. investments depending on their individual mandates. Forward currency contracts are permitted primarily to reduce the foreign currency risk.

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments (Continued)

Foreign Currency Risk (Continued)

LACERS non-U.S. currency investment holdings as of June 30, 2018, which represent 28.5% of the fair value of total investments, are as follows (in thousands):

Foreign Currency Type	Cash and Adjustments to Cash	Equity	Fixed Income	Derivative Instruments	Other Investments	Total Fair Value in USD
Australian dollar	\$ 135	\$ 168,808	\$ 7,170	\$ (7)	\$ -	\$ 176,106
Brazilian real	(1,783)	60,803	214	229	-	59,463
British pound sterling	1,228	689,123	-	142	181	690,674
Canadian dollar	2,164	197,732	-	15	-	199,911
Chilean peso	(4,444)	7,748	-	250	-	3,554
Chinese yuan renminbi	(956)	-	-	23	-	(933)
Colombian peso	(1,791)	5,290	-	(4)	-	3,495
Czech koruna	418	3,085	-	82	-	3,585
Danish krone	38	63,142	-	-	-	63,180
Egyptian pound	39	3,325	-	-	-	3,364
Euro	4,009	1,211,417	21,646	755	88,825	1,326,652
Hong Kong dollar	829	423,026	-	21	-	423,876
Hungarian forint	(3,197)	2,199	-	118	-	(880)
Indian rupee	8,064	111,055	-	3	-	119,122
Indonesian rupiah	6,285	17,912	-	15	-	24,212
Israeli new shekel	(4,262)	12,822	-	104	-	8,664
Japanese yen	1,729	830,939	-	97	-	832,765
Malaysian ringgit	628	30,007	1,559	-	-	32,194
Mexican peso	2,504	28,172	523	(66)	-	31,133
New Taiwan dollar	1,568	140,800	-	293	-	142,661
New Zealand dollar	337	10,925	2,502	-	-	13,764
Norwegian krone	491	51,224	2,543	-	-	54,258
Peruvian nuevo sol	1,301	-	-	2	-	1,303
Philippine peso	(3,111)	8,293	-	34	-	5,216
Polish zloty	(1,997)	10,323	-	119	-	8,445
Qatari rial	-	4,904	-	-	-	4,904
Russian ruble	3,168	14,131	-	6	-	17,305
Singapore dollar	(1,613)	69,011	-	1	-	67,399
South African rand	(1,522)	64,309	5,422	15	-	68,224
South Korean won	(2,743)	168,508	-	83	-	165,848
Swedish krona	20	99,079	-	-	-	99,099
Swiss franc	(2,048)	260,613	-	74	-	258,639
Thai baht	(741)	31,239	-	187	-	30,685
Turkish lira	1,594	13,490	-	-	-	15,084
United Arab Emirates dirham	-	1,914	-	-	-	1,914
Total Investments Held in Foreign Currency	\$ 6,341	\$ 4,815,368	\$ 41,579	\$ 2,591	\$ 89,006	\$ 4,954,885

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments (Continued)

Fair Value Measurements

LACERS follows GASB Statement No. 72 (GASB 72), *Fair Value Measurements and Application*. GASB 72 addresses accounting and financial reporting issues related to fair value measurements and disclosures. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in either a government's principal or the most advantageous market at the measurement date.

The System's investments are measured and reported within the fair value hierarchy established by US GAAP. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

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

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

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

Schedule of Investments by Fair Value Hierarchy

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt and equity securities classified in Level 2 or 3 of the fair value hierarchy are valued using a matrix pricing technique based on the availability of the market price, the pricing source and type, and the country of incorporation of the securities. The hierarchy levels are determined based on the level of corroborative information obtained from other market sources to assert that the prices provided represent observable data.

Private equity funds classified in Level 3 of the fair value hierarchy are valued based on the availability of market price of the underlying assets, and using either a discounted cash flow or Comparable Company Analysis with internal assumptions. Real estate funds classified in Level 2 or 3 of the fair value hierarchy are valued based on periodic appraisals in accordance with industry practice.

The exchange traded Future Contracts classified in Level 1 of the fair value hierarchy are valued using a daily settlement when available or as a daily mark to market. The Foreign Exchange Contracts classified in Level 2 of the fair value hierarchy are valued using independent pricing services including London Close mid-evaluation, WM/Reuters Company, Bloomberg, and Thomson Reuters.

Certain investments which do not have a readily determinable fair value have been valued at the Net Asset Value (NAV) per share (or its equivalent) provided that the NAV is calculated and used as a practical expedient to estimate fair value in accordance with US GAAP requirements. These investments are not categorized within the fair value hierarchy but disclosed in the Investments Measured at the NAV on page 31.

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments (Continued)

Fair Value Measurements (Continued)

Schedule of Investments by Fair Value Hierarchy (Continued)

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

	Total	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Investments by Fair Value Level:				
Debt securities:				
Government Bonds	\$ 1,397,966	\$ -	\$ 1,397,966	\$ -
Government Agencies	71,808	-	71,808	-
Municipal/Provincial Bonds	7,360	-	7,360	-
Corporate Bonds	1,118,397	-	1,117,321	1,076
Bank Loans	5,397	-	5,397	-
Government Mortgage Bonds	377,823	-	377,823	-
Commercial Mortgage Bonds	46,791	-	46,791	-
Opportunistic Debts	13,616	-	-	13,616
Total Debt Securities	<u>3,039,158</u>	<u>-</u>	<u>3,024,466</u>	<u>14,692</u>
Equity Securities:				
Common Stock:				
Basic Industries	1,238,136	1,237,912	112	112
Capital Goods Industries	551,108	550,914	-	194
Consumer & Services	2,191,161	2,190,664	-	497
Energy	853,206	853,066	-	140
Financial Services	1,678,531	1,678,497	-	34
Health Care	1,017,635	1,017,540	-	95
Information Technology	1,756,797	1,755,023	-	1,774
Real Estate	435,519	435,460	-	59
Miscellaneous	7,026	5,020	251	1,755
Total Common Stock	<u>9,729,119</u>	<u>9,724,096</u>	<u>363</u>	<u>4,660</u>
Preferred Stock	42,317	42,317	-	-
Stapled Securities	11,938	9,809	2,129	-
Total Equity Securities	<u>9,783,374</u>	<u>9,776,222</u>	<u>2,492</u>	<u>4,660</u>
Private Equity Funds	136,552	-	-	136,552
Real Estate Funds	111,465	-	110,242	1,223
Total Investments by Fair Value Level	<u>\$ 13,070,549</u>	<u>\$ 9,776,222</u>	<u>\$ 3,137,200</u>	<u>\$ 157,127</u>
Investments Measured at the NAV:				
Common Fund Assets	1,033,950			
Private Equity Funds	1,670,786			
Real Estate Funds	690,169			
Opportunistic Debts	96,315			
Total Investments Measured at the NAV	<u>3,491,220</u>			
Total Investments Measured at Fair Value ⁽¹⁾	<u>\$ 16,561,769</u>			
Investment Derivative Instruments:				
Future Contracts (liabilities)	\$ 696	\$ 696	\$ -	\$ -
Foreign Exchange Contracts (liabilities)	(65)	-	(65)	-
Rights/Warrants	369	167	199	3
Total Investment Derivative Instruments	<u>\$ 1,000</u>	<u>\$ 863</u>	<u>\$ 134</u>	<u>\$ 3</u>

(1) Excluded investment derivative instruments of \$1,000,000 which is shown separately.

Notes to the Basic Financial Statements

6. Cash and Short-Term Investments and Investments (Continued)

Fair Value Measurements (Continued)

Investments Measured at the NAV: (in thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Common Fund Assets ⁽¹⁾	\$ 1,033,950	\$ -	Daily	2 days
Private Equity Funds ⁽²⁾	1,670,786	774,191	N/A	N/A
Real Estate Funds ⁽³⁾	690,169	34,629	Daily, Quarterly	1-90 days
Opportunistic Debts ⁽⁴⁾	96,315	-	Monthly	30 days
Total Investments Measured at the NAV	<u>3,491,220</u>	<u>\$ 808,820</u>		

- (1) Common fund assets - This investment type includes one fund that primarily invests in U.S. bonds. The fair value of the investment has been determined using a practical expedient based on the investments' NAV per share (or its equivalent). This investment can be redeemed daily, with a two-day advance redemption notice period.
- (2) Private equity funds - This investment type includes 186 closed-end commingled private equity funds that invest primarily in securities of privately held U.S. and non-U.S. companies. The fair values of these investments have been determined using a practical expedient based on the investments' NAV per share (or its equivalent). These investments are not redeemable. It is expected that these investments will be held for the entire lives of the funds and will not be sold in the secondary market. Distributions from each fund will be received as the underlying assets are liquidated by the fund managers. It is expected that the underlying assets of these funds will be liquidated over the next one to 13 years, depending on the vintage year of each fund.
- (3) Real estate funds - This investment type includes 28 commingled real estate funds that invest primarily in U.S. commercial real estate. The fair values of these investments have been determined using a practical expedient based on the investments' NAV per share (or its equivalent). Seven investments, representing approximately 70.2% of the value of this investment type, are in open-end funds, which may be redeemed according to terms specific to each fund. Redemptions generally are subject to the funds' available cash and redemption queues. There is no intention to redeem any of these seven investments in the near future. Twenty-one investments, representing approximately 29.8% of the value of this investment type, are in closed-end funds and are not redeemable. It is expected that these investments will be held for the entire lives of the funds and will not be sold in the secondary market. Distributions from each fund will be received as underlying assets are liquidated by the fund managers. It is expected that the underlying assets of these funds will be liquidated over the next one to 12 years, depending on the vintage year of each fund.
- (4) Opportunistic debts - This investment type includes two commingled funds: one that invests primarily in senior loans of non-investment grade companies (senior loan fund) and another one invests primarily in the securities and obligations of companies experiencing operational or financial distress (distressed investment fund). The fair values of these investments have been determined using a practical expedient based on the investments' NAV per share (or its equivalent). The senior loan fund, representing approximately 99% of the value of this investment type, can be redeemed monthly. The distressed investment fund, representing approximately 1% of the value of this investment type, is being dissolved and is no longer making new underlying investments. Distributions from this fund will be received as underlying investments are liquidated by the fund manager. It is expected that this fund will be liquidated fully over the next three years.

Notes to the Basic Financial Statements

7. Securities Lending Agreement

Under authority granted by the City Charter, LACERS has entered into various short-term arrangements with its custodian to lend securities to various brokers. There are no restrictions on the amount of securities that may be lent, and the custodian determines which lenders' accounts to lend securities from by using an impartial sequential system that matches loan requests with various lenders' accounts. All lenders are deemed to have relatively equal opportunity to profit from the lending of securities. Therefore, should a collateral deficiency occur beyond the custodian's responsibilities, the deficiency is allocated pro rata among all lenders.

Minimum collateralization is 102% of the fair value of the borrowed U.S. securities and 105% for international securities. Collateral consists of cash, government and corporate securities, and commercial bank obligations. Cash collateral is invested in a separate account comprised of money market or high quality short-term investments. It is the responsibility of the custodian to monitor the collateralization on a daily basis. If the collateral is below the minimum collateralization level, additional collateral will be requested from the borrower to meet the requirement. Collateral requested each morning is required to be received on the same day. If the borrower fails to deliver additional collateral, the custodian would notify the borrower that they are in default under the securities lending agreement. If the borrower does not provide the necessary collateral after receiving notification, the legal agreement allows the custodian to close the contract with the borrower and buy-in the securities on behalf of LACERS.

The borrower has all incidents of ownership with respect to borrowed securities and collateral, including the right to vote and transfer or loan borrowed securities to others. LACERS is entitled to receive all distributions, which are made by the issuer of the borrowed securities, directly from the borrower. Under the agreement, the custodian will indemnify LACERS as a result of the custodian's failure to: 1) make a reasoned determination of the creditworthiness of a potential borrower before lending and, during the term of the loan or loans, the borrower files a petition of bankruptcy or similar action; 2) demand adequate collateral; or 3) otherwise maintain the securities lending program in compliance with the Federal Financial Institutions Examination Council Supervisory Policy on Securities Lending.

These agreements provide for the return of the securities and revenue determined by the type of collateral received. The cash collateral values of securities on loan to brokers are shown at their fair values on the Statement of Fiduciary Net Position.

As of June 30, 2018, LACERS had no losses on securities lending transactions resulting from default of a borrower or lending agent. Due to the nature of the securities lending program and the custodian bank's collateralization of loans at amounts greater than the fair value of the loaned securities, it is deemed that there were no material credit risks to LACERS as defined in GASB Statement No. 28 and GASB Statement No. 40 by its participation in the securities lending program. However, similar to any other investment portfolio, there is risk associated with investing cash collateral in securities. The value of the invested collateral may fall below the value of the cash collateral pledged by the borrowers, and may impair LACERS ability to return cash collateral to the borrowers upon the redemption of loans. In this event, LACERS would be required to make up the deficiency in collateral and would incur a loss.

All securities loans can be terminated on demand by either LACERS or the borrower. Because of this nature, their duration did not generally match the duration of the investment made with the cash collateral. LACERS cannot pledge or sell non-cash collateral unless the borrower defaults.

The following table represents the fair value of securities on loan and cash/non-cash collateral received as of June 30, 2018 (in thousands):

Securities on Loan	Fair Value of Securities on Loan	Cash/Non-Cash Collateral Received
U.S. Government and Agency Securities	\$ 426,027	\$ 435,948
Domestic Corporate Fixed Income Securities	137,145	140,723
International Fixed Income Securities	97,385	103,495
Domestic Stocks	426,234	437,096
International Stocks	563,588	600,872
Total	<u>\$ 1,650,379</u>	<u>\$ 1,718,134</u>

Notes to the Basic Financial Statements

7. Securities Lending Agreement (Continued)

As of June 30, 2018, the fair value of the securities on loan was \$1,650,379,000. The fair value of associated collateral was \$1,718,134,000 (\$795,076,000 of cash collateral and \$923,058,000 of non-cash collateral). Non-cash collateral, which LACERS does not have the ability to sell unless the borrower defaults, is not reported in the Statement of Fiduciary Net Position. LACERS income and expenses related to securities lending were \$8,185,000 and \$1,226,000, respectively, for the year ended June 30, 2018.

8. Future and Forward Contracts

LACERS uses derivative financial instruments, primarily to manage portfolio risk. Future and forward contracts are marked to market and are recorded in the Statement of Fiduciary Net Position at fair value. Future contracts have little credit risk, as organized exchanges are the guarantors. Forward agreements are subject to the creditworthiness of the counterparties, which are principally large financial institutions (refer to Note 6 – Credit Risk - Derivatives on page 27).

As of June 30, 2018, LACERS had outstanding commodities, equity index, and interest rate future contracts with an aggregate notional amount of \$191,801,000, and foreign exchange future contract with a negative notional amount of \$25,500,000 due to its short position. In addition, at June 30, 2018, LACERS had outstanding forward purchase commitments with a notional amount of \$234,346,000 and offsetting forward sales commitments with notional amounts of \$234,346,000, which expire through February 2019. LACERS maintains margin collateral on the positions with brokers, consisting of cash and U.S. Treasury Bills. The total collateral margin was \$248,443,000 as of June 30, 2018.

9. Operating Lease

The System leases building facilities under a non-cancelable operating lease that expires in March 2023, at which time a three-year renewal option is available. This lease also contains provisions for the System to pay its prorated share of subsequent increases in operating costs and taxes over the base rate established during the initial year of the lease.

The future minimum lease commitments are as follows as of June 30, 2018:

Fiscal Year 2019	\$ 775,000
Fiscal Year 2020	806,000
Fiscal Year 2021	1,003,000
Fiscal Year 2022	1,043,000
Fiscal Year 2023	813,000

10. Commitments and Contingencies

As of June 30, 2018, LACERS was committed to future purchases of real estate and private equity investments at an aggregate cost of approximately \$1,159,053,000, including agreements for acquisition not yet initiated.

The Patient Protection and Affordable Care Act (PPACA) of 2010 contains a provision that would impose a 40% excise tax on the annual value of high-cost health plans that exceed certain dollar thresholds beginning in 2022 (deferred from year 2020). If there is no change in the law or LACERS plan provisions between now and 2022, and if the current medical cost trend stays substantially the same during the same period, some of LACERS postemployment health care benefits will be subject to the excise tax in 2022 and thereafter. Recently released GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, requires the inclusion of the excise tax in the liability. The Statement No. 75 is effective for fiscal years beginning after June 15, 2017 for employer reporting. The impact of potential excise tax imposed by the Affordable Care Act (ACA) and related statutes on certain health plans in calculating the contribution rates for the employer have been reflected in the valuation for fiscal year June 30, 2018. However, due to the deferred starting date for projected ACA excise tax, the previous year's projected amount was recalculated, and the net impact lowered the Unfunded Actuarial Accrued Liability (UAAL) by 0.02% of pay.

11. Subsequent Events

Date of Management's Review

The potential for subsequent events was evaluated through November 27, 2018, which was the date of management's review.

Establishment of LACERS Health Care Fund

On November 9, 2018, the City Council approved Ordinance No. 185829 to amend Article 1 of Chapter 11, Division 4 of the Los Angeles Administrative Code to establish the LACERS Health Care Fund for

Notes to the Basic Financial Statements

11. Subsequent Events (Continued)

Establishment of LACERS Health Care Fund (Continued)

the sole purpose of funding the retiree healthcare benefits for eligible LACERS retirees and beneficiaries.

The City and the Board of LACERS shall enter into a written trust agreement for the LACERS Health Care Fund sometime on or before July 15, 2019. The LACERS Health Care Fund shall provide an alternative funding mechanism, in addition to or in lieu of the existing 401 (h) account described in LAAC Section 4.1102 for funding benefits under the health and welfare programs. The LACERS Health Care Fund is intended to qualify for federal tax exemption under Section 115 of the Internal Revenue Code. Because health benefits paid out of the LACERS Health Care Fund are not required to be subordinate to the Plan retirement benefits, the LACERS Health Care Fund would not become taxable if the Plan health benefits surpass the 25% threshold. Second, the LACERS Health Care Fund gives LACERS more flexibility to invest premium surpluses to provide for smoothing should healthcare premiums considerably increase in the future. Currently, the Health Care Coverage Account cannot receive full refunds of excess premiums from insurance providers. However, the LACERS Health Care Fund can receive full premium surplus refunds from insurance providers; therefore, the System can invest these funds at a higher rate of return than the insurance providers' reserve account interest rate.

Establishment of Self-Funded LACERS Dental PPO Plan

Effective January 1, 2019, LACERS existing fully-insured Delta Dental PPO Plan will be replaced with LACERS self-funded Delta Dental PPO Plan. Although, Delta will continue to administer the plan for a fee, LACERS will set and collect premiums from enrolled Members and pay billed claims to Delta. With this arrangement, LACERS bears financial risk if claims cost exceed collected premiums. This change does not affect the maximum dental subsidy amount to the eligible retired Members.

REQUIRED SUPPLEMENTARY INFORMATION

Required Supplementary Information

Retirement Plan

The schedules included in the Required Supplementary Information for the Retirement Plan are intended to show information for 10 years. However, the following schedules do not have a full 10-year trend, and therefore, Los Angeles City Employees' Retirement System (LACERS, the Plan, or the System) presented information only for those years for which information is available:

- 1) Schedule of Net Pension Liability
- 2) Schedule of Changes in Net Pension Liability and Related Ratios
- 3) Schedule of Investment Returns

Additional years will be displayed in the future as they become available.

Schedule of Net Pension Liability ⁽¹⁾ For the Fiscal Years Ended June 30 (Dollars in Thousands)

	2018	2017	2016	2015	2014	2013
Total Pension Liability	\$ 19,944,578	\$ 18,458,188	\$ 17,424,996	\$ 16,909,996	\$ 16,248,853	\$ 14,881,663
Plan Fiduciary Net Position	<u>(14,235,230)</u>	<u>(13,180,516)</u>	<u>(11,809,329)</u>	<u>(11,920,570)</u>	<u>(11,791,079)</u>	<u>(10,154,486)</u>
Plan's Net Pension Liability	<u>\$ 5,709,348</u>	<u>\$ 5,277,672</u>	<u>\$ 5,615,667</u>	<u>\$ 4,989,426</u>	<u>\$ 4,457,774</u>	<u>\$ 4,727,177</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	71.4%	71.4%	67.8%	70.5%	72.6%	68.2%

(1) In calculating the Plan's net pension liability, the total pension liability and the Plan fiduciary net position exclude amounts associated with non-pension related benefits (Family Death and Larger Annuity Benefits).

Note to Schedule:

Refer to the notes to the Schedule of Changes in Net Pension Liability and Related Ratios.

Required Supplementary Information
Retirement Plan

Schedule of Changes in Net Pension Liability and Related Ratios ⁽¹⁾
For the Fiscal Years Ended June 30
(Dollars in Thousands)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Total Pension Liability						
Service cost	\$ 352,283	\$ 340,759	\$ 322,574	\$ 322,380	\$ 317,185	\$ 312,372
Interest	1,332,878	1,302,278	1,263,556	1,215,151	1,149,966	1,112,561
Changes of benefit terms	25,173	-	-	-	-	-
Differences of expected and actual experience	144,224	(146,474)	(300,813)	(135,821)	(164,247)	(235,829)
Changes of assumptions	483,717	340,718	-	-	785,439	-
Benefit payments, including refunds of Member contributions	<u>(851,885)</u>	<u>(804,089)</u>	<u>(770,317)</u>	<u>(740,567)</u>	<u>(721,153)</u>	<u>(701,400)</u>
Net change in total pension liability	1,486,390	1,033,192	515,000	661,143	1,367,190	487,704
Total pension liability-beginning	<u>18,458,188</u>	<u>17,424,996</u>	<u>16,909,996</u>	<u>16,248,853</u>	<u>14,881,663</u>	<u>14,393,959</u>
Total pension liability-ending (a)	<u>\$ 19,944,578</u>	<u>\$ 18,458,188</u>	<u>\$ 17,424,996</u>	<u>\$ 16,909,996</u>	<u>\$ 16,248,853</u>	<u>\$ 14,881,663</u>
Plan fiduciary net position						
Contributions-employer	\$ 450,195	\$ 453,356	\$ 440,546	\$ 381,141	\$ 357,649	\$ 346,181
Contributions-Member	230,757	221,829	206,377	202,463	203,975	197,722
Net investment income	1,243,817	1,517,545	29,358	306,980	1,810,782	1,268,939
Benefit payments, including refunds of Member contributions	(851,885)	(804,089)	(770,318)	(740,567)	(721,153)	(701,400)
Administrative expenses	(17,699)	(17,454)	(17,204)	(15,860)	(12,372)	(13,281)
Others ⁽²⁾	<u>(471)</u>	<u>-</u>	<u>-</u>	<u>(4,666)</u>	<u>(2,288)</u>	<u>(2,514)</u>
Net change in Plan fiduciary net position	1,054,714	1,371,187	(111,241)	129,491	1,636,593	1,095,647
Plan fiduciary net position-beginning	<u>13,180,516</u>	<u>11,809,329</u>	<u>11,920,570</u>	<u>11,791,079</u>	<u>10,154,486</u>	<u>9,058,839</u>
Plan fiduciary net position-ending (b)	<u>\$ 14,235,230</u>	<u>\$ 13,180,516</u>	<u>\$ 11,809,329</u>	<u>\$ 11,920,570</u>	<u>\$ 11,791,079</u>	<u>\$ 10,154,486</u>
Plan's net pension liability-ending (a)-(b)	<u>\$ 5,709,348</u>	<u>\$ 5,277,672</u>	<u>\$ 5,615,667</u>	<u>\$ 4,989,426</u>	<u>\$ 4,457,774</u>	<u>\$ 4,727,177</u>
Plan fiduciary net position as a percentage of the total pension liability (b)/(a)	71.4%	71.4%	67.8%	70.5%	72.6%	68.2%
Covered payroll	\$ 2,057,565	\$ 1,973,049	\$ 1,876,946	\$ 1,835,637	\$ 1,802,931	\$ 1,736,113
Plan's net pension liability as a percentage of covered payroll	277.5%	267.5%	299.2%	271.8%	247.3%	272.3%

(1) In calculating the Plan's net pension liability, the total pension liability and the Plan fiduciary net position exclude amounts associated with non-pension related benefits (Family Death and Larger Annuity Benefits).

(2) On July 1, 2015, the System segregated Members' voluntary larger annuity contributions into the (non-pension related) Reserve for Larger Annuity Contributions pursuant to a suggestion made by the System's actuarial consultant. The Reserve balance for Larger Annuity Contributions as of June 30, 2015 was \$5,200,000. On July 1, 2017, the System reallocated \$471,000 of interest from the Reserve for Mandatory Member Contributions into the Reserve for Voluntary Member Contributions.

Notes to Schedule:

Changes of Benefit Terms: The June 30, 2018 calculation reflected the newly adopted enhanced benefits for Airport Peace Officers (APO) who elected to stay at LACERS Plan (refer to Note 2 – Retirement Plan Description, Tier 1 – Enhanced Benefits on page 17). Enhanced benefits became effective as of January 7, 2018.

Required Supplementary Information

Retirement Plan

Schedule of Changes in Net Pension Liability and Related Ratios (Continued)

Change of Assumptions: The June 30, 2014 calculations reflected various assumption changes based on the triennial experience study for the period from July 1, 2011 through June 30, 2014. The increase of total pension liability for fiscal years ended on June 30, 2014 is primarily due to the lowered assumed investment rate of return from 7.75% to 7.50%, and longer assumed life expectancies for Members and beneficiaries while the June 30, 2017 increase is primarily due to the lowered assumed investment rate of return from 7.50% to 7.25%.

The June 30, 2018 calculations reflected changes in the actuarial assumptions adopted by the Board on August 14, 2018 based on the triennial experience study for the period from July 1, 2014 through June 30, 2017, including revising the mortality tables from static to generational to reflect future mortality improvement, contributing to increased total pension liability.

Schedule of Contribution History (Dollars in Thousands)

Fiscal Year	Actuarially Determined Contributions (ADC)	Contributions in Relation to ADC	Contribution Deficiency	Covered Payroll	Contributions as a Percentage of Covered Payroll
2009	\$274,555	\$274,555	\$ -	\$1,832,796	15.0%
2010	258,643	258,643	-	1,827,864	14.2
2011	303,561	303,561	-	1,678,059	18.1
2012	308,540	308,540	-	1,715,197	18.0
2013	346,181	346,181	-	1,736,113	19.9
2014	357,649	357,649	-	1,802,931	19.8
2015	381,141	381,141	-	1,835,637	20.8
2016	440,546	440,546	-	1,876,946	23.5
2017	453,356	453,356	-	1,973,049	23.0
2018	450,195	450,195	-	2,057,565	21.9

Notes to Schedule:

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

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Actuarial Cost Method (individual basis).

Amortization Method Level Percent of Payroll.

Amortization Period Multiple layers – closed amortization period.
Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 Early Retirement Incentive Program (ERIP), are amortized over 15 years. Future ERIPs will be amortized over five years. Any actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two Governmental Accounting Standards Board (GASB) Statements No. 25/27 layers, were combined and amortized over 30 years.

Asset Valuation Method Fair value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets. An Ad Hoc change was made in 2018 to combine the unrecognized returns and losses of prior years as of June 30, 2017 into one layer and recognize it evenly over six years from fiscal year 2017-18 through fiscal year 2022-23.

Required Supplementary Information

Retirement Plan

Schedule of Contribution History (Continued)

Notes to Schedule (Continued)

Methods and Assumptions Used to Determine Contribution Rates (Continued)

Actuarial Assumptions:

Investment Rate

of Return 7.25%

Inflation 3.00%

Real Across-the-Board

Salary Increase 0.50%

Projected Salary

Increases⁽¹⁾ Ranges from 3.90% to 10.00% based on years of service.

Cost of Living Adjustment⁽²⁾

Tier 1: 3.00%

Tier 3: 2.00%

Mortality

Healthy: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.

Disabled: Headcount-Weighted RP-2014 Disabled Retiree Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.

- (1) Includes inflation at 3.00% as of June 30, 2018, plus across-the-board salary increase of 0.50% plus merit and promotional increases.
- (2) Actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.00% maximum for Tier 1 and a 2.00% maximum for Tier 3.

Schedule of Investment Returns For the Fiscal Years Ended June 30

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expenses	9.3%	12.6%	0.2%	2.6%	18.2%

Note to Schedule:

The rates of investment returns for the fiscal years 2015 and 2016 were much lower compared to other fiscal years. It reflected the impact of divergent and volatile global markets on LACERS investment portfolio over these reporting periods.

Required Supplementary Information

Postemployment Health Care Plan

The schedules included in the Required Supplementary Information for the Postemployment Health Care Plan are intended to show information for 10 years. However, the following schedules do not have a full 10-year trend, and therefore, Los Angeles City Employees' Retirement System (LACERS, the Plan, or the System) presented information only for those years for which information is available:

- 1) Schedule of Net OPEB Liability
- 2) Schedule of Changes in Net OPEB Liability and Related Ratios
- 3) Schedule of Investment Returns

Additional years will be displayed in the future as they become available.

Schedule of Net OPEB Liability For the Fiscal Years Ended June 30 (Dollars in Thousands)

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Total OPEB Liability	\$ 3,256,827	\$ 3,005,806	\$ 2,793,689
Plan Fiduciary Net Position	<u>(2,676,371)</u>	<u>(2,438,862)</u>	<u>(2,134,877)</u>
Plan's Net OPEB Liability	<u>\$ 580,456</u>	<u>\$ 566,944</u>	<u>\$ 658,812</u>
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	82.2%	81.1%	76.4%

Note to Schedule:

Refer to the note to the Schedule of Changes in Net OPEB Liability and Related Ratios.

Required Supplementary Information
Postemployment Health Care Plan

Schedule of Changes in Net OPEB Liability and Related Ratios
For the Fiscal Years Ended June 30
(Dollars in Thousands)

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Total OPEB Liability			
Service cost	\$ 74,611	\$ 68,385	\$ 62,360
Interest	218,686	210,170	199,078
Changes of benefit terms	948	-	17,215
Differences between expected and actual experience ⁽¹⁾	(7,321)	19,666	(22,013)
Changes of assumptions	92,178	33,512	-
Benefit payments	<u>(128,081)</u>	<u>(119,616)</u>	<u>(109,940)</u>
Net change in total OPEB liability	251,021	212,117	146,700
Total OPEB liability-beginning	<u>3,005,806</u>	<u>2,793,689</u>	<u>2,646,989</u>
Total OPEB liability-ending (a)	<u>\$ 3,256,827</u>	<u>\$ 3,005,806</u>	<u>\$ 2,793,689</u>
Plan fiduciary net position			
Contributions-employer	\$ 100,909	\$ 97,457	105,983
Net investment income (loss)	269,380	330,708	(344)
Benefit payments	(128,081)	(119,616)	(109,940)
Administrative expense	<u>(4,699)</u>	<u>(4,564)</u>	<u>(4,528)</u>
Net change in Plan fiduciary net position	237,509	303,985	8,829
Plan fiduciary net position-beginning	<u>2,438,862</u>	<u>2,134,877</u>	<u>2,143,706</u>
Plan fiduciary net position-ending (b)	<u>\$ 2,676,371</u>	<u>\$ 2,438,862</u>	<u>\$ 2,134,877</u>
Plan's net OPEB liability-ending (a)-(b)	<u>\$ 580,456</u>	<u>\$ 566,944</u>	<u>\$ 658,812</u>
Plan fiduciary net position as a percentage of the total OPEB liability (b)/(a)	82.2%	81.1%	76.4%
Covered payroll	\$ 2,057,565	\$ 1,973,049	\$ 1,876,946
Plan's net OPEB liability as a percentage of covered payroll	28.2%	28.7%	35.1%

- (1) After the GASB Statement No. 74 valuation report was issued for the fiscal year June 30, 2017, the System's consulting actuary reclassified \$12,450,000 of OPEB liability from the *Changes of Assumption* (revised from \$45,962,000 to \$33,512,000) to the *Differences Between Expected and Actual Experience* (revised from \$7,216,000 to \$19,666,000). However, this reclassification did not affect the recommended employer contribution rates or results of the OPEB valuation in total.

Required Supplementary Information

Postemployment Health Care Plan

Schedule of Changes in Net OPEB Liability and Related Ratios (Continued)

Notes to Schedule:

Changes of Benefit Terms: The OPEB liability from the changes of benefit terms for the fiscal year ended June 30, 2016 is primarily due to providing retiree healthcare benefits to part-time employees who retired with 10 years of service but less than 10 years of service credit (refer to Note 3 – Postemployment Health Care Plan Description, Eligibility Requirement and Benefits Provided on page 21) while the June 30, 2018 increase is primarily as a result of the newly adopted enhanced benefits for Airport Peace Officers (APO) who elected to stay at LACERS Plan (refer to Note 2 – Retirement Plan Description, Tier 1 – Enhanced Benefits on page 17) as some APO Members may retire earlier than expected. Enhanced benefits became effective as of January 7, 2018.

Changes of Assumptions: The OPEB liability from the changes of assumptions for the fiscal year ended June 30, 2017 is primarily due to the lowered assumed investment rate of return, from 7.50% to 7.25%, while the June 30, 2018 increase is primarily due to the new actuarial assumptions adopted in the triennial experience study (July 1, 2014 through June 30, 2017), including revising the mortality tables from static to generational.

Required Supplementary Information
Postemployment Health Care Plan

Schedule of Contribution History
(Dollars in Thousands)

Fiscal Year	Actuarially Determined Contributions (ADC)	Contributions in Relation to ADC	Contribution Deficiency	Covered Payroll	Contributions as a Percentage of Covered Payroll
2009	\$ 95,122	\$ 95,122	\$ -	\$1,832,796	5.2%
2010	96,511	96,511	-	1,827,864	5.3
2011	107,396	107,396	-	1,678,059	6.4
2012	115,209	115,209	-	1,715,197	6.7
2013	72,916	72,916	-	1,736,113	4.2
2014	97,841	97,841	-	1,802,931	5.4
2015	100,467	100,467	-	1,835,637	5.5
2016	105,983	105,983	-	1,876,946	5.7
2017	97,457	97,457	-	1,973,049	4.9
2018	100,909	100,909	-	2,057,565	4.9

Notes to Schedule:

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

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Actuarial Cost Method (level percent of payroll).

Amortization Method Level Percent of Payroll.

Amortization Period Multiple layers – closed amortization period.
 Actuarial gains/losses are amortized over 15 years. Non-health related assumptions or method changes are amortized over 20 years. Health related assumptions or method changes are amortized over 15 years. Plan changes, including the 2009 Early Retirement Incentive Program (ERIP), are amortized over 15 years. Future ERIPs will be amortized over five years. Any actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two Governmental Accounting Standards Board (GASB) Statements No. 25/27 layers, were combined and amortized over 30 years.

Asset Valuation Method Fair value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets. An Ad Hoc change was made in 2018 to combine the unrecognized returns and losses of prior years as of June 30, 2017 into one layer and recognize it evenly over six years from fiscal year 2017-18 through fiscal year 2022-23.

Actuarial Assumptions:

Investment Rate of Return	7.25%
Inflation	3.00%
Real Across-the-Board Salary Increase	0.50%

Required Supplementary Information Postemployment Health Care Plan

Schedule of Contribution History (Continued)

Notes to Schedule (Continued)

Methods and Assumptions Used to Determine Contribution Rates (Continued)

Projected Salary Increases ⁽¹⁾	Ranges from 3.90% to 10.00% based on years of service.
Mortality	<p>Healthy: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.</p> <p>Disabled: Headcount-Weighted RP-2014 Disabled Retiree Mortality Table (separate tables for males and females) projected generationally with the two-dimensional mortality improvement scale MP-2017.</p>

- (1) Includes inflation at 3.00% as of June 30, 2018, plus across-the-board salary increase of 0.50% plus merit and promotional increases.

Schedule of Investment Returns For the Fiscal Years Ended June 30

	2018	2017
Annual money-weighted rate of return, net of investment expenses	10.8%	15.2%

Note to Schedule:

The required disclosure about factors that significantly affect trends in the money-weighted rate of return is not provided as the rate was not available prior to fiscal year 2017. As additional years' money-weighted rate of return become available, the System will disclose factors that significantly affect trends in the rate of return.

SUPPLEMENTAL SCHEDULES

Schedule of Administrative Expenses
For the Fiscal Year Ended June 30, 2018
(In Thousands)

	<u>Retirement Plan</u>	<u>Postemployment Health Care Plan</u>	<u>Total</u>
Personnel Services:			
Salaries	\$ 9,571	\$ 2,141	\$ 11,712
Employee Benefits and Development	<u>3,729</u>	<u>834</u>	<u>4,563</u>
Total Personnel Services	<u>13,300</u>	<u>2,975</u>	<u>16,275</u>
Professional Services:			
Actuarial	280	63	343
Audit	76	17	93
Legal Counsel	482	108	590
Disability Evaluation	143	32	175
Retirees' Health Admin Consulting	-	715	715
Benefit Payroll Processing	<u>203</u>	<u>45</u>	<u>248</u>
Total Professional Services	<u>1,184</u>	<u>980</u>	<u>2,164</u>
Information Technology:			
Computer Hardware and Software	325	73	398
Computer Maintenance and Support	<u>191</u>	<u>43</u>	<u>234</u>
Total Information Technology	<u>516</u>	<u>116</u>	<u>632</u>
Leases:			
Office Space	696	156	852
Office Equipment	<u>34</u>	<u>8</u>	<u>42</u>
Total Leases	<u>730</u>	<u>164</u>	<u>894</u>
Other Expenses:			
Fiduciary Insurance	28	6	34
Educational and Due Diligence Travel	47	11	58
Office Expenses	276	62	338
Depreciation	<u>313</u>	<u>70</u>	<u>383</u>
Total Other Expenses	<u>664</u>	<u>149</u>	<u>813</u>
Total Administrative Expenses	<u>\$ 16,394</u>	<u>\$ 4,384</u>	<u>\$ 20,778</u>

Schedule of Investment Fees and Expenses
For the Fiscal Year Ended June 30, 2018
(In Thousands)

	Assets Under Management	Fees and Expenses
<u>Retirement Plan</u>		
Investment Management Fees:		
Fixed Income Managers	\$ 3,512,761	\$ 4,840
Equity Managers	8,242,897	21,029
Subtotal Investment Management Fees	<u>11,755,658</u>	<u>25,869</u>
Other Investment Fees and Expenses:		
Private Equity Consulting Fees	N/A	654
Real Estate Consulting Fees	N/A	176
Other Consulting Fees	N/A	388
Investment Related Administrative Expenses	N/A	1,408
Subtotal Other Investment Fees and Expenses	<u>N/A</u>	<u>2,626</u>
<u>Postemployment Health Care Plan</u>		
Investment Management Fees:		
Fixed Income Managers	656,835	1,083
Equity Managers	1,541,304	4,704
Subtotal Investment Management Fees	<u>2,198,139</u>	<u>5,787</u>
Other Investment Fees and Expenses:		
Private Equity Consulting Fees	N/A	146
Real Estate Consulting Fees	N/A	39
Other Consulting Fees	N/A	87
Investment Related Administrative Expenses	N/A	315
Subtotal Other Investment Fees and Expenses	<u>N/A</u>	<u>587</u>
Total Investment Fees and Expenses excluding Private Equity and Real Estate	<u>\$ 13,953,797</u>	<u>\$ 34,869</u>
Private Equity Managers' Fees and Expenses:		
Retirement Plan	\$ 1,522,628	\$ 28,311
Postemployment Health Care Plan	284,710	6,333
Total Private Equity Managers' Fees and Expenses	<u>\$ 1,807,338</u>	<u>\$ 34,644</u>
Real Estate Managers' Fees and Expenses:		
Retirement Plan	\$ 675,353	\$ 6,883
Postemployment Health Care Plan	126,281	1,540
Total Real Estate Managers' Fees and Expenses	<u>\$ 801,634</u>	<u>\$ 8,423</u>
Total Assets Under Management and Fees and Expenses	<u>\$ 16,562,769⁽¹⁾</u>	<u>\$ 77,936⁽²⁾</u>

(1) Excluding Security Lending Collateral assets of \$795,076,000. Total Investments including Security Lending Collateral was \$17,357,845,000.

(2) Included Investment Management Fees and Expenses of \$76,213,000 and Investment Related Administrative Expenses of \$1,723,000.