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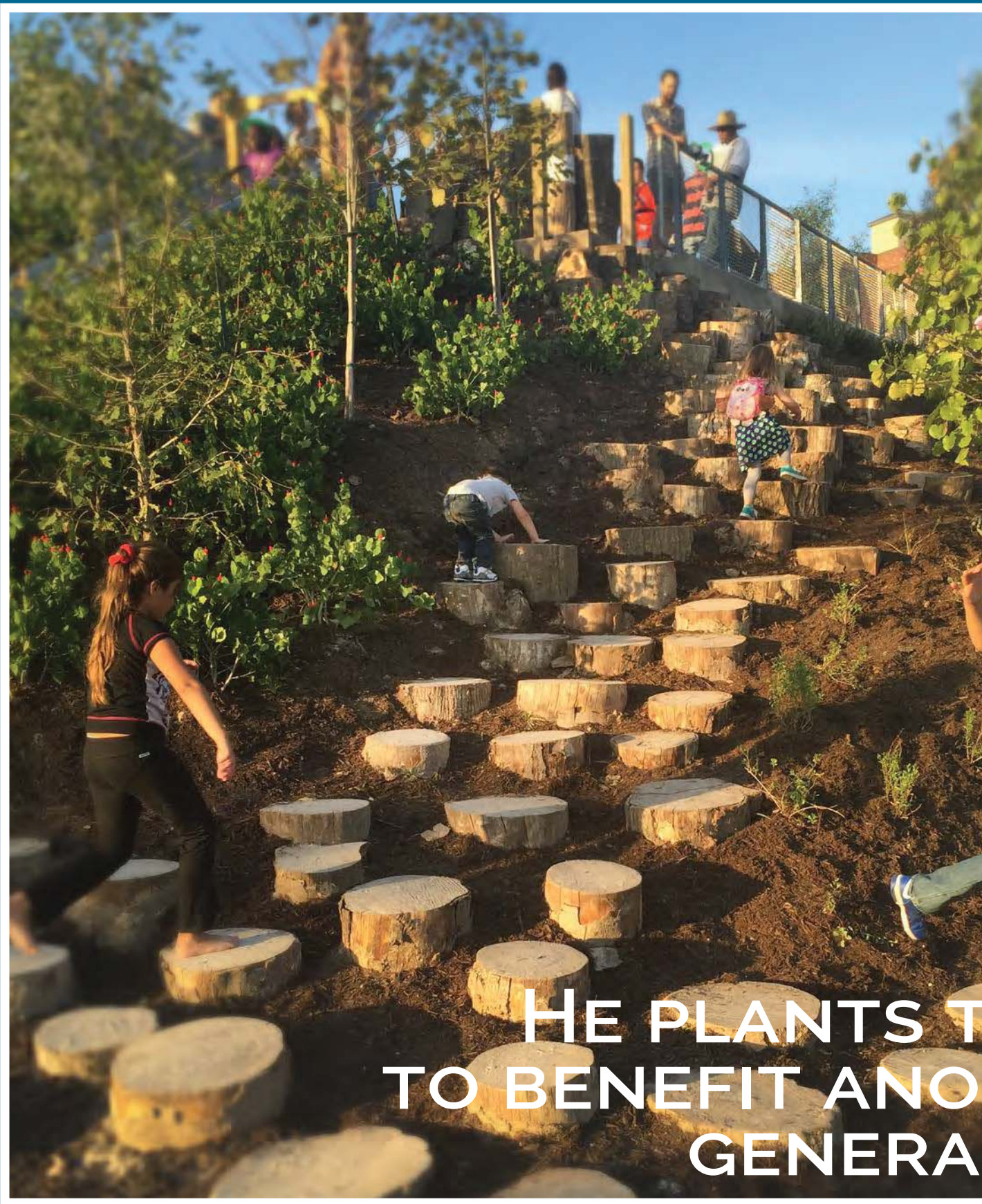
HOUSTON MUNICIPAL EMPLOYEES PENSION SYSTEM



100
YEARS OF
**HOUSTON
PARKS**

A Component Unit
of the City of Houston, Texas

COMPREHENSIVE ANNUAL FINANCIAL REPORT
FOR THE YEARS ENDED JUNE 30, 2016 AND JUNE 30, 2015



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A COMPONENT UNIT OF THE CITY OF
HOUSTON, TEXAS

COMPREHENSIVE ANNUAL
FINANCIAL REPORT
FOR THE YEARS ENDED JUNE 30, 2016
AND JUNE 30, 2015



PREPARED BY THE PENSION
ADMINISTRATION STAFF
DAVID L. LONG EXECUTIVE DIRECTOR

HOUSTON MUNICIPAL EMPLOYEES
PENSION SYSTEM
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TEXAS 77002-5608
713-595-0100
WWW.HMEPS.ORG

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HOUSTON MUNICIPAL EMPLOYEES PENSION SYSTEM



CELEBRATING OUR PARKS

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HMEPS



“Teaching children about the natural world should be seen as one of the most important events in their lives.”

-Thomas Berry

SECTION ONE

INTRODUCTION

Board of Trustees CHAIRMAN Sherry Mose VICE CHAIRMAN Roy W. Sanchez SECRETARY Lonnie Vara
Barbara Chelette | Roderick J. Newman | Asha Patnaik | Lenard Polk
David Donnelly | Edward J. Hamb II | Adrian Patterson

Executive Director David L. Long



HMEPS
HOUSTON MUNICIPAL EMPLOYEES PENSION SYSTEM

December 15, 2016

Kelly Dowe, Director
Finance Department
611 Walker, 10th Floor
Houston, Texas 77002

Dear Mr. Dowe:

We are pleased to present the Comprehensive Annual Financial Report (CAFR) of the Houston Municipal Employees Pension System (the System), a Component Unit of the City of Houston, Texas (the City), for the fiscal years ended June 30, 2016 and June 30, 2015. The accuracy, fairness of presentation and completeness of this report are the responsibility of the Board of Trustees (the Board) of the System. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of the operations of the System. The System's basic financial statements will be included in the annual financial report of the City.

Accounting System and Internal Controls

The financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) and presented in accordance with guidance provided by applicable statements issued by the Governmental Accounting Standards Board (GASB).

The System's independent auditors have audited the financial statements and issued an unmodified opinion as of June 30, 2016 and 2015 (pages 12-13). The purpose of the audit is to give reasonable assurance to users of those financial statements, the Board, and participants of the System, that the financial statements present fairly, in all material respects, information regarding the System's net position held in trust for pension benefits and in conformity with accounting principles generally accepted in the United States of America.

A significant responsibility of the Board is to ensure that the System has in place an adequate system of internal controls. A system of internal controls is an entity's plan of organization and its coordinated methods and measures adopted to safeguard its assets, ensure the accuracy and reliability of the accounting system and promote adherence to management policies. These controls include strategic design of the entity's business systems, the appropriate segregation of duties and responsibilities, sound practices in the performance of those duties, retaining capable personnel, and the organizational structure itself. For each implemental control, the cost of the control should not exceed the benefits to be derived. An objective of these controls is to provide reasonable assurance that the financial statements are free of any material misstatement. We believe the System's internal controls are adequate and are working as designed.

Financial Information

The Management's Discussion and Analysis (MD&A) that immediately follows the Independent Auditors' Report provides condensed financial information and activities for the current and prior two fiscal years of the System. It provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

Plan History and Profile

The System was created in 1943 under Chapter 358, Acts of the 48th Texas Legislature, Regular Session, Article 6243g, Vernon's Annotated Revised Texas Civil Statutes, and was reenacted and continued under HB1573, 77th Texas Legislature, as Article 6243h, Vernon's Annotated Revised Texas Civil Statutes, as amended (the Statute).

The System is a multiple-employer, defined benefit pension plan and includes a contributory group (Group A) and two noncontributory groups (Groups B and D). The System provides service retirement, disability retirement and death benefits for eligible participants which covers all municipal employees, except police officers and fire fighters (other than certain police officers in the System as authorized by the Statute) employed full time by the City, elected City officials, and the full-time employees of the System (collectively referred to as "participants"). The System's plan net assets are used to pay benefits for eligible participants of Group A, Group B and Group D. The System is administered by an eleven-member Board of Trustees. The Trustees include four elected trustees who are members of the System, two elected trustees who are retirees of the System, a trustee appointed by the elected trustees, the mayor's appointee, the controller's appointee, and two city council appointees.

Budget

The costs of administering the System, consisting of operating administrative expenses and capitalized items, are paid by the System from current earnings pursuant to an annual fiscal budget adopted by the Board.

Funding Status

The System's funding objective is to establish contributions which, when combined with present assets and future investment returns, will be sufficient to meet the financial obligations to present and future retirees and beneficiaries.

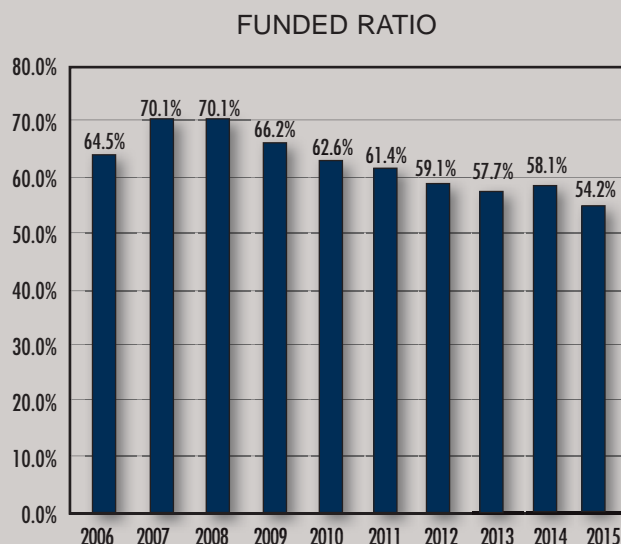
Annual actuarial valuations measure the progress toward these goals, as well as test the adequacy of the contribution rate. HMEPS receives contributions from two sources: employer contributions, which are determined as a percent of covered payroll (unless

otherwise specified under the Amended and Restated Meet and Confer Agreement); and Group A member contributions. The System's actuary assumes that the System's investments will return 8.0 percent over the long-term. The differences between the assumed and actual investment return are phased in over 5 years, yielding an actuarial value of assets. This smoothing is intended to avoid extreme volatility in employer contribution rates due to short-term fluctuations in the investment markets.

The funded ratio, the ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL), is a standard measure of a plan's funded status. In the absence of benefit improvements or reduced funding, a plan's funded ratio should increase over time, until it reaches 100%. The funded status alone is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

As of July 1, 2015 HMEPS' AVA and AAL were \$2.58 billion and \$4.77 billion, respectively, resulting in a funded ratio of 54.2%. This is lower than the funded ratio as of July 1, 2014 which was 58.1%. This change is primarily the result of a reduction in the assumed investment rate of return from 8.5% in 2014 to 8.0% in 2015.

A historical perspective of the System's funding levels is presented in the graph below.



(Continued on page 4)

Market Environment

For most of fiscal year 2016, two dominant macroeconomic themes dominated financial markets: 1) Economic slowdown in China, and 2) U.S. interest rates. China's economic slowdown had major effects on the global economy. Commodity prices were broadly lower in the first half of fiscal year 2016 as China's slowdown resulted in less than expected demand for raw materials. Commodities, led by gold and oil, rallied sharply in the second half of the fiscal year and finished the year only moderately down. After years of anticipation, the Federal Open Markets Committee raised the short term interest rate target range from 0.00-0.25% to 0.25-0.50% in December 2015. The measured increase had been widely expected by bond markets, so bond yields increased only moderately subsequent to the rate hike. The Federal Open Markets Committee did not take further action during the fiscal year citing weaker economic growth indicators, lackluster U.S. payroll growth, and declining productivity as reasons against raising interest rates further. In the final days of fiscal year 2016, the so-called Brexit referendum in the U.K. injected much uncertainty in global markets. After British citizens voted to leave the European Union, global equities experienced a two-day sharp sell-off immediately followed by an equally sharp recovery before June 30, 2016. Investors moved to the safety of U.S. Treasuries and other sovereigns. Yields plummeted for these safe haven bonds with the German 10-year Bund briefly trading at negative interest rates.

U.S. equity markets began the fiscal year sharply down in the first quarter. A healthy rebound in the next three quarters resulted in the broad Wilshire 5000 index posting a modest 3.0% gain for the fiscal year. Reversing a trend of previous years, value stocks outperformed growth stocks, but large capitalization stocks continued to outpace smaller stocks. The Wilshire 5000's 3.0% gain marked the seventh consecutive positive fiscal year for the index since the credit crisis of 2008-2009.

International markets faced many challenges. Emerging markets lagged developed markets, and Asian shares underperformed other regions as China's economic slowdown affected many of its neighbors. Emerging country commodity producers

that provided China with its raw materials also faced difficulties. Europe's anemic growth weighed on developed market performance. Additionally, despite a year-end rally, Brexit fears put downward pressure on European equities during the year. Overall, an index comprised of countries other than the United States, the MSCI ACWI ex-U.S. Index (net), returned -10.2% during fiscal year 2016.

U.S. Treasury securities generated positive returns in fiscal year 2016 as uncertainty in financial markets led to investors seeking safe havens. The Federal Reserve's very modest increase in interest rates in December 2015 was too small to lead to major changes in the bond markets. Over the course of the fiscal year, investors' preference for safety weighed on high yield fixed income securities which underperformed investment grade bonds. Investment grade bonds as represented by the Barclay's U.S. Aggregate bond index were up 6.0% for fiscal year 2016. High yield bonds as represented by the Merrill Lynch High Yield Master Trust II Index were up 1.7% for the fiscal year.

Among the alternative asset classes, Real Estate and Private Equity returned 13.0% and 7.0% respectively. The slowly growing U.S. economy provided stable returns for real estate, and the increase in short term interest rates was too small to meaningfully change that dynamic. Fiscal year 2016 turned in another solid year for private equity returns. General partners saw the best fundraising environment since the 2008 credit crisis, though 2016 private equity returns moderated from the returns of previous years.

Overall, the System's investments returned 1.6% for fiscal year 2016. Through the efforts of the Board of Trustees, the System's investment portfolio is more broadly diversified than most public pension plans and exhibits less volatility, particularly during extreme market environments. Over long periods of time (10 years), the System's investment performance ranks in the top 10% in the TUCS Master Trusts – Public universe peer group. During the 10-year period ending June 30, 2016, the system's annualized return was 6.7%, with the median comparable fund returning 5.9%.

Major Current and Future Initiatives

Member Services

The Benefits Division has continued its effort to provide information relating to pension benefits by

holding seminars City departments and individual benefit meetings at HMEPS. In FY 2016, HMEPS:

- Responded to continued demand for the Outreach Program, which reaches hundreds of members with individual and group sessions provided by our benefits counselors and our Certified Financial Planner. This past year, these staff members conducted 245 individual counseling sessions and hosted 36 joint presentations for various City departments as well as new employee orientations for the benefit of 1,925 attendees.
- Processed 1,829 benefit applications, including retirements, the Deferred Retirement Option Plan, survivor benefits, refunds, and lump-sum payments.
- Continued social media efforts to provide information relating to pension benefits to participants through Facebook.
- Participated in the Spring and Fall Financial Retirement Employees Educational Summits, annual events that help City of Houston employees better plan their financial futures.
- Conducted 306 one-on-one counseling sessions between the HMEPS financial counselor and participants in addition to numerous group presentations. The financial counselor also monitored pension-related issues nationally and locally, a critical part of fulfilling HMEPS' efforts to stay informed. A growing number of participants requested financial counseling based on other participants' recommendations.

Investments

The System's strategic asset allocation policy is designed to manage risk by diversifying among public and private asset classes. The strategic asset allocation policy was most recently evaluated in 2013. Risk-return assumptions and correlations for asset classes were reexamined taking into account current and forecasted economic conditions.

The current target allocation to Global Equity is 35%. The target allocation to Fixed Income is 15%, while Real Estate is 10% and Private Equity is 17.5%. The target allocation of the Absolute Return asset class is 10%, and the target allocation for the Inflation Linked asset class is 12.5%. The current asset allocation policy went into effect on July 1, 2013. During fiscal year 2016, the System continued to rebalance its portfolio to move closer to the strategic

asset allocation policy targets. With the help of the System's alternative investment consultant, Cliffwater LLC, the System invested in three private equity partnerships, seven private real estate partnerships and an absolute return partnership.

The System's investment portfolio closed its 2016 fiscal year at \$2.4 billion. The total investment return for the fiscal year was 1.6%. The System's investment performance was 6.9%, 6.8% and 6.7% for the past three-, five- and ten-year periods. Compared to similar investment portfolios (TUCS Master Trusts – Public universe), the fund posts attractive investment returns over the long term. The fund ranks in the top 10% over the trailing ten-year period ending June 30, 2016. The best performing asset classes for fiscal year 2016 were Real Estate (13.0%) and Private Equity (7.0%).

In the upcoming fiscal year, the System will continue to work with consultants Wilshire Associates and Cliffwater LLC to identify attractive public and private market investments consistent with the strategic asset allocation.

Board Governance

During FY 2016, three Trustee positions were up for election, and all three incumbent Trustees were unopposed. Lenard Polk was re-elected to employee trustee Position 3, Asha Patnaik was re-elected to employee trustee Position 4, and Lonnie Vara was re-elected to retiree trustee Position 7.

Certificate of Achievement

The Government Finance Officers Association (GFOA) of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to the Houston Municipal Employees Pension System for its comprehensive annual financial report for the year ended June 30, 2015. This was the 22nd consecutive year that the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current comprehensive annual financial report continues to meet the

Certificate of Achievement Program requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgement

This CAFR was prepared through the combined efforts of the System staff and was subject to the scrutiny of the Board. It is intended to provide information to its user that may be a basis for a general understanding of the System. This CAFR is being forwarded to the City of Houston, the Texas Pension Review Board, the GFOA, and other interested parties who may from time to time request it.

In Closing...

A core purpose of the System is to help provide for the financial security of its participants when they are eligible to receive benefits. Municipal public sector employees are vital to providing and maintaining important city services for Houston residents. Quality employees are attracted to and retained by the public sector in part by the security and benefits offered by a sound pension system. The System is proud to serve the dedicated municipal employees and retirees who have made tremendous contributions to Houston and its citizens.

Sincerely,



Sherry Mose
Chairman



David L. Long
Executive Director



Sherry Mose
Chairman



Roy W. Sanchez
Vice Chairman



Lonnie Vara
Secretary



Roderick J. Newman
Elected Trustee



Asha Patnaik
Elected Trustee



Lenard Polk
Elected Trustee



Barbara Chelette
Appointed Trustee



Edward J. Hamb II
Controller Appointee



Adrian Patterson
Council Appointee



Craig T. Mason
Mayoral Appointee



David L. Long
Executive Director

BOARD OF TRUSTEES

Elected and Appointed Trustees

Sherry Mose, Chairman
Roy W. Sanchez, Vice Chairman
Lonnie Vara, Secretary
Roderick J. Newman
Asha Patnaik
Lenard Polk
Barbara Chelette, Appointed

City Appointed Trustees

Edward J. Hamb II
Craig T. Mason
Adrian Patterson
David L. Long, Executive Director

Administrative Organization

Audit Committee
Budget and Oversight Committee
Disability Committee
External Affairs Committee
Investment Committee
Personnel and Procedures Committee

Executive Director
General Counsel
Chief Investment Officer
Investment Managers' Services
Market Research
Performance Measurement

Member Services
Benefit Administration Services
Communications
Financial Counseling
Member Services

Operations
Accounting
Financial Reporting
Records
Technology Support

** Information pertaining to investment-related professionals is located on Page 9.*

GFOA CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association (GFOA) of the United States and Canada awarded a "Certificate of Achievement for Excellence in Financial Reporting" to Houston Municipal Employees Pension System for its comprehensive annual financial report for the fiscal year ended June 30, 2015. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial

report, the contents of which conform to program standards. Such a CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The Houston Municipal Employees Pension System has received a Certificate of Achievement for the last 22 consecutive years (fiscal years ended June 30, 1994 through 2015). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to the GFOA for consideration.



Consultants (Fiscal Year 2016)

Actuary

Gabriel, Roeder, Smith & Co. Holdings, Inc.

Auditor

Doeren Mayhew, P.C.
McConnell and Jones L.L.P.

Board Medical Advisor

Charles Schuhmacher, M.D.

Communication Services

LT Communications, L.L.C.

Governmental Representation

Harris Law Firm, P.C.
HillCo Partners, Inc.
Locke Lord L.L.P.

Investment Consultants

Cliffwater, L.L.C.
Wilshire Associates, Inc.

Investment Performance Analysis

Cliffwater, L.L.C.
Wilshire Associates, Inc.

Legal Counsel

Baker Botts, L.L.P.
Jackson Walker, L.L.P.
Locke Lord L.L.P.

Master Custodian/Trustee

State Street Corp.

Technology Services

Pension Benefits Information, Inc.

Investment Managers (Fiscal Year 2016)

Absolute Return

Anchorage Capital Group
Angelo, Gordon & Co.
Brevan Howard US
Brigade Capital Management
Claren Road Asset Management
Davidson Kempner Capital Management
Graham Capital Management
Highland Capital Management
MKP Capital Management
Och-Ziff Capital Management Group
Raveneur
Samlyn Capital
Scopia Capital
Soroban Capital Partners
York Capital Management

Fixed Income

Alliance Bernstein Institutional Investments
BlackRock, Inc.
DDJ Capital Management
GMO L.L.C.
Loomis, Sayles & Co.
Pugh Capital Management
Smith Graham & Co.
Whippoorwill Associates, Inc.

Inflation-Linked

BlackRock, Inc.
EnCap Investments
Envest, Ltd.
Global Forest Partners
NGP Energy Capital
Oaktree Capital Management

Quantum Energy Partners
Riverstone Holdings
The Carlyle Group
Tortoise Capital Advisors

Global Equity

Ariel Investments
Baring International
BlackRock, Inc.
DePrince, Race & Zollo, Inc.
EARNEST Partners
INTECH Investment Management
Neumeier Investment Counsel
OFI Institutional Management
PanAgora Asset Management, Inc.
Profit Investment Management
State Street Global Advisors
Thomas White International

Private Equity

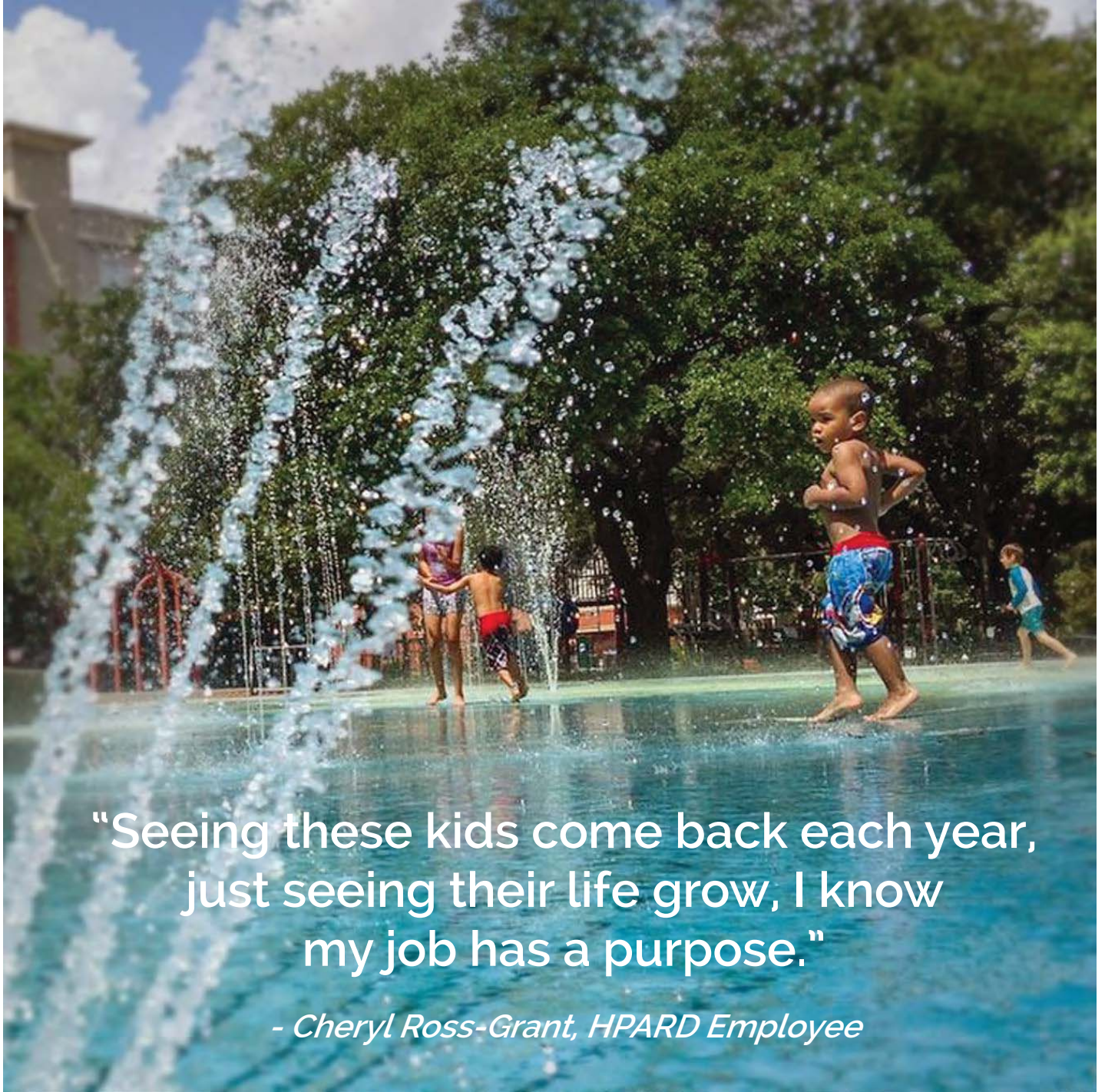
Adams Street Partners
Brera Capital Partners
Brockway Moran & Partners, Inc.
Centerbridge Partners
Clearlake Capital Partners
CVE Kaufman Fellows Endowment
GTCR Management
Goldman, Sachs & Co.
HarbourVest Partners
Hellman & Friedman
ICV Partners III
J.W. Childs Associates
JMI Equity
Lexington Partners, Inc.
Matlin Patterson Global Advisors
New Enterprise Associates
New Mainstream Capital

Oaktree Capital Management
Onex Corporation
Pacven Walden Management Co., Ltd.
Pegasus Investors
Pharos Capital Partners
Platinum Equity Capital Partners
Siris Capital Group
Summit Partners
Sun Capital Partners, Inc.
The Carlyle Group
The Jordan Company
Valor Equity Partners
Vista Equity Partners
Wayzata Investment Partners

Real Estate

Aetos Capital
Angelo, Gordon & Co.
CB Richard Ellis Investors
Crow Holdings
DRC Capital
Fortress Investment Group
GEM Realty Capital
Goldman, Sachs & Co.
Grove International Partners
KTR Capital Partners
IC Berkeley Partners
Lone Star U.S. Acquisitions
Long Wharf Real Estate Partners
Mesa West Capital
Morgan Stanley Asset Management, Inc.
Olympus Real Estate Corp.
Orion Capital Managers
RREEF America
State Street Global Advisors
Starwood Capital Group Global

HMEPS



“Seeing these kids come back each year,
just seeing their life grow, I know
my job has a purpose.”

- Cheryl Ross-Grant, HPARD Employee

SECTION TWO

FINANCIAL INFORMATION

Independent Auditors' Report

To the Board of Trustees

Houston Municipal Employees Pension System:

Report on the Financial Statements

We have audited the accompanying basic financial statements of the Houston Municipal Employees Pension System (the System), which comprise the statements of fiduciary net position as of June 30, 2016 and 2015, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the basic financial statements.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, information regarding the financial status of the System as of June 30, 2016 and 2015, and the changes therein for years then ended, in accordance with US GAAP.

Other Matters

Required supplemental information

US GAAP requires that the Management's Discussion and Analysis (MD&A) and the Schedules of Changes in Net Pension Liability and Related Ratios, Employer Contributions, Investment Returns, and Funding Progress for OPEB be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which 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 Supplemental 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.

Additional supplemental information

Our audit was conducted for the purpose of forming an opinion on the basic financial statements as a whole. The additional supplemental information, which comprise Schedules 6, 7 and 8, as listed in the Table of Contents, is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of the System's management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in our audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or the basic financial statements themselves, and other additional procedures in accordance with US GAAS. In our opinion, the other supplemental information is fairly stated in all material respects in relation to the basic financial statements as a whole.

McConnell & Pous LLP

Houston, Texas
October 27, 2016

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

The Board of Trustees (the Board) of the Houston Municipal Employees Pension System (the System) is pleased to provide this overview and analysis of the financial performance and activities of the System for the fiscal years (FY) ended June 30, 2016 and 2015. We encourage the readers to consider the information presented here in conjunction with the basic financial statements.

OVERVIEW OF THE FINANCIAL STATEMENTS

The discussion and analysis is intended to serve as an introduction to the System's financial statements. The financial section consists of (1) System's Basic Financial Statements, (2) Notes to Basic Financial Statements, and (3) Supplemental Information. The year-end financials for FY 2016 and 2015, Notes to the Financial Statements, and the Required Supplemental Information and Other Supplemental Information in this report were prepared in conformity with generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB).

System's Basic Financial Statements

There are two basic financial statements presented herewith. The Statements of Fiduciary Net Position as of June 30, 2016 and 2015 indicate the net position available to meet future payments and give a snapshot at a particular point in time. The Statements of Changes in Fiduciary Net Position for the fiscal years ended June 30, 2016 and 2015 provide a view of the fiscal year's additions to and deductions from the System.

Notes to Basic Financial Statements

The notes are an integral part of the basic financial statements and provide additional background information that is essential for a complete understanding of the data provided in the System's financial statements. The notes to the basic financial statements can be found on pages 23 to 42 of this report.

Supplemental Information

The required supplemental information consists of:

Schedule 1 - Schedule of Changes in Net Pension Liability: Information about the components of the net pension liability and related ratios includes the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percentage of covered-employee payroll. It should be noted though that actuarial information is based upon

assumptions about future events, and therefore, the figures presented are estimates.

Schedule 2 - Schedule of Net Pension Liability: This schedule provides the historical liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit pension plan.

Schedule 3 - Schedule of Employer Contributions: Details the actuarially determined contribution calculated for employers, actual contributions, covered-employee payroll, and actual contributions as a percentage of covered-employee payrolls.

Concerning Schedules 1, 2 and 3, it should be noted that for FY14 and forward, GASB 67, *Financial Reporting for Pension Plans*, changed the definition of Covered Payroll to now reflect Gross Salaries versus Pensionable Pay. This differs from the historical definition of Covered Payroll as Pensionable Pay, which is the pay basis used to calculate pension benefits.

Schedule 4 - Schedule of Investment Returns: A 10-year schedule presenting for each fiscal year the annual money-weighted rate of return on pension plan investments.

Schedule 5 - Schedule of Funding Progress for OPEB and Notes to Required Schedule: These are calculations made by the System's actuary and they provide actuarial information that contributes to the understanding of the changes in the actuarial funding of and the funded status of the Other Post-Employment Benefits (OPEB) over a number of years. It should be noted that actuarial information is based upon assumptions about future events, and therefore, the figures presented are estimates.

The other supplemental information consists of:

Schedule 6 - Investment Summary: This lists the System's investments by type presented both at cost and fair market value.

Schedule 7 - Investment Services, Professional Services, and Administration Expenses: This provides more information for purposes of a more detailed analysis.

Schedule 8 - Summary of Costs of Investment and Professional Services: This provides more information for purposes of a more detailed analysis.

COMPARATIVE FINANCIAL STATEMENTS

Below is a condensed and comparative summary of major classes of Fiduciary Net Position at fair value. *(In thousands of dollars)*

	June 30, 2016	June 30, 2015	June 30, 2014
Assets			
Cash and equivalents	\$ 7,551	\$ 622	\$ 401
Investments	2,396,798	2,467,340	2,464,628
Receivables on asset sales	9,041	19,724	12,066
Other receivables	4,337	5,156	6,808
Collateral on securities lending	73,941	101,533	139,504
Furniture, fixtures and equipment, net	298	395	444
Total assets	<u>\$ 2,491,966</u>	<u>\$ 2,594,770</u>	<u>\$ 2,623,851</u>
Liabilities			
Payable on asset purchases	\$ 12,133	\$ 30,552	\$ 14,147
Accrued liabilities	5,868	6,141	5,761
Collateral on securities lending	73,941	101,533	139,504
Total liabilities	<u>91,942</u>	<u>138,226</u>	<u>159,412</u>
Net Position Restricted for Pensions	<u>\$ 2,400,024</u>	<u>\$ 2,456,544</u>	<u>\$ 2,464,439</u>

Below is a comparative summary of Statements of Changes in Fiduciary Net Position available for pension benefits. *(In thousands of dollars)*

	Fiscal Year 2016	Fiscal Year 2015	Fiscal Year 2014
Additions			
Contributions	\$ 175,832	\$ 161,205	\$ 144,854
Investment and interest income, net	27,988	73,854	351,793
Other income	1,303	557	729
Total additions	<u>205,123</u>	<u>235,616</u>	<u>497,376</u>
Deductions			
Benefits paid	253,178	234,955	221,925
Contribution refunds	1,105	1,549	1,213
Administration expenses and professional fees	7,360	7,007	6,415
Total deductions	<u>261,643</u>	<u>243,511</u>	<u>229,553</u>
Increase (decrease) in net position restricted for pensions	(56,520)	(7,895)	267,823
Restricted net position, beginning of year	<u>2,456,544</u>	<u>2,464,439</u>	<u>2,196,616</u>
Restricted net position, end of year	<u>\$ 2,400,024</u>	<u>\$ 2,456,544</u>	<u>\$ 2,464,439</u>

FINANCIAL HIGHLIGHTS (IN THOUSANDS OF DOLLARS, UNLESS OTHERWISE NOTED)

CONTRIBUTIONS

The System received \$15,874 and \$16,198 during fiscal years 2016 and 2015 in employee contributions from approximately 5,482 and 5,873 Group A active participants respectively, and \$16,580 in employee contribution from 6,364 active Group A participants during fiscal year 2014. Employee Contributions from Group A members represent 5% of the employee's qualifying base salary. Because Group A is the only Group that requires employee contributions and since the Group was closed to new participants as of January 1, 2008, total employee contributions have been in a declining trend as a result of employee attrition. For fiscal year 2016, employee contributions decreased by \$324 or 2.0% compared to fiscal year 2015 and decreased by \$382 or 2.3% in fiscal year 2015 compared to fiscal year 2014. The System received cash contributions from the City of Houston (the City) of \$159,959, \$145,007 and \$128,274 (which are net of contributions to the replacement benefit plan of \$1,612, \$1,425 and \$1,441) for fiscal years 2016, 2015 and 2014, respectively. This represents actual employer contributions of 27.36% of covered payroll (pensionable pay) in fiscal year 2016, 25.36% and 23.36% of covered payroll (pensionable pay) for fiscal years 2015 and 2014, respectively. The System assumes a 3% growth rate in its active member payroll.

BENEFIT PAYMENTS

Benefit payments increased to \$253,178 during fiscal year 2016, compared to \$234,955 during fiscal year 2015, and compared to \$221,925 during fiscal year 2014. There were 10,286 participants that received benefits for fiscal year 2016 compared to 10,025 participants in 2015, versus 9,722 participants in fiscal year 2014. The increase in benefits paid represents a 7.75% increase in fiscal year 2016 over fiscal year 2015, and a 5.9% increase in fiscal year 2015 over fiscal year 2014. Refunds experienced a 29% decrease to \$1.1 million in fiscal year 2016 from \$1.5 million in fiscal year 2015, after a 25% increase from \$1.2 million in payouts in fiscal year 2014.

Monthly recurring retirement pension benefits amounted to \$223,731 (a 5% increase from fiscal

year 2015), accounting for 88% of the total benefit payments for fiscal year 2016 and \$213,112 for fiscal year 2015 representing 91% of monthly retirement benefits, or a 5.6% increase over fiscal year 2014.

Distributions to Deferred Retirement Option Plan (DROP) participants amounted to \$29,195, an increase of \$7,554 (35%) for the year compared to \$21,641 during fiscal year 2015, which was an increase of \$1,711 (8.5%) as compared to the fiscal year 2014 total of \$19,930. DROP distributions represented 11.5% of the total benefit payments during fiscal year 2016, 9.2% of the total in fiscal year 2015, and 9% of the total payments made in fiscal year 2014. The breakdown in payments includes fiscal year 2016 lump sum payments of \$27,420, along with an annual amount of \$1,775 paid out over monthly distributions versus fiscal years 2015 and 2014 which had payments of \$19,778 and \$1,863 and \$17,822 and \$2,108 for lump sums and monthly distributions respectively.

Total benefit payments exceeded total employee plus employer contributions by \$77,346, \$73,750, and \$77,071 during fiscal years 2016, 2015, and 2014, respectively.

ACCOUNTING AND ADMINISTRATION

Costs of administering the benefit programs of the System, including professional fees, increased to \$7,360 for fiscal year 2016 from \$7,007 for fiscal year 2015, up 4.9%. This increase is mainly due to increase in legal services of \$243, along with increases in personnel and healthcare costs of \$105. Fiscal year 2015 expenses of \$7,007 were up 9.2% versus fiscal year 2014 due to increases for personnel/OPEB and healthcare costs along with increases in legal/professional services related to costs for litigation.

The System capitalizes expenditures for furniture, fixtures and equipment in accordance with Governmental Accounting Standards Board Statement No. 34, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments, as amended. Furniture, fixtures and equipment, net of accumulated

depreciation, as of fiscal year ends 2016, 2015, and 2014 are \$298, \$395 and \$444, respectively.

ACTUARIAL VALUATIONS AND FUNDING

The funded ratio is a standard measure of a plan's funded status representing the ratio of the actuarial value of assets to the actuarial accrued liability. The funded ratio as of the last actuarial report, July 1, 2015, is 54.2%, which is lower than the 58.1% funded ratio as of July 1, 2014 while the funded ratio for the actuarial report as of July 1, 2013 was 57.7%. As of July 1, 2015, the Systems' unfunded actuarial accrued liability was \$2.183 billion. In determining contribution rates an actuarial value of assets is used rather than a market value of assets, with the actuarial value of assets (AVA) based on smoothed returns. This "smoothing method" is intended to help

reduce the volatility of the contribution rates from year to year. The method used to compute the AVA takes the difference between the actual market value of assets and the expected actuarial value of assets (based on the assumed 8.0% investment return rate), and establishes a base each year which is equal to this difference less any unrecognized bases from prior years. If the current year's base is of opposite sign from the prior years' bases then it is offset dollar for dollar against the prior years' bases (oldest bases first) until either the prior years' bases or the current year's base is reduced to zero. Any remaining bases are then recognized over the remaining period for the base (5 less the number of years between the base year and the valuation year) in equal dollar amounts.

INVESTMENTS

The net investment and interest income of the System was \$27,988 during fiscal year 2016, a decrease of \$45,962 from fiscal 2015's income of \$73,854. The investment and interest income of the System consists of:

	Fiscal Year 2016	Fiscal Year 2015	Dollar Change	Fiscal Year 2015	Fiscal Year 2014	Dollar Change
Interest	\$ 17,753	\$ 17,417	\$ 336	\$ 17,417	\$ 24,080	\$ (6,663)
Dividends	18,844	19,323	(479)	19,323	19,523	(200)
Earnings from limited partnerships and real estate trusts	1,034	8,679	(7,645)	8,679	4,996	3,683
Realized gain on investments	22,164	102,543	(80,379)	102,543	202,834	(100,291)
Change in unrealized gain on investments	(24,618)	(66,208)	41,590	(66,208)	108,354	(174,562)
Net proceeds from lending securities	349	484	(135)	484	590	(106)
Less cost of investment services	(7,538)	(8,384)	846	(8,384)	(8,584)	200
Net investment and interest income (loss)	\$ 27,988	\$ 73,854	\$ (45,866)	\$ 73,854	\$ 351,793	\$ (277,939)

- The System's gross rate of return on investments during FY 2016 was 1.6% compared with the FY 2015 rate of return of 3.4%. The decrease in the rate of return was due primarily to market performance in fiscal year 2016.
- Fiscal year 2016 saw global equity decline due to continuing slowing in China, low commodity prices and decision of British voters to exit the European Union. Domestic equities (Wilshire 5000) ended the year with a gain of 3.0%, but international equities (MSCI All Country ex-US) recorded a loss of 10.2%.
- High yield bonds as represented by the Merrill Lynch High Yield II Total Return index gained slightly with a return of 1.7%. High quality investment grade bonds performed better with a gain of 6.0% as investors continued to seek safety. Real Estate had another year of strong performance, as the NCREIF Property Index returned 10.6% in fiscal year 2016.

MANAGEMENT'S DISCUSSION AND ANALYSIS

- At June 30, 2016, the Plan's total pension liability was \$5.03 billion. The Plan's Fiduciary Net Position was \$2.4 billion leaving a Net Pension Liability of \$2.63 billion. The Plan's Fiduciary Net Position as a percentage of total pension liability was 47.67%.
- The Fiduciary Net Position of \$2.4 billion decreased by \$56.5 million or 2.3% during fiscal year 2016 due to benefit payments which exceeded investment income for the fiscal year. This compares to a decrease of \$7.9 million or 0.3% in the Fiduciary Net Position during fiscal year 2015.

INVESTMENT REVIEW

The System's investment portfolio closed its 2016 fiscal year at \$2.400 billion, down from \$2.456 billion at the beginning of the year. The total gross investment return for the fiscal year was 1.6%. The System's performance, including the total fund, each asset class and their corresponding benchmark(s), for fiscal year 2016 and the trailing three, five, and ten-year periods are listed on the next page in Table 1.

The System's gross investment performance was 1.6%, 6.9% and 6.8% for the past one-, three- and five-year periods. The System outperformed its policy benchmark for the ten-year period. Relative to its peer group (Wilshire TUCS Master Trusts - Public) the fund continues to post attractive investment returns over the long term, remaining in the top decile over the trailing ten-year period.

The best performing asset classes for fiscal year 2016 were Real Estate, up 13.0% and Private Equity, up 7.0%. For fiscal year 2015, Real Estate, 10.9% and Private Equity, 10.4%, were the top two performing asset classes. The benefits of a well-diversified asset allocation are evidenced by the System's ability to perform very competitively over multi-year periods where different asset classes drive overall returns. For the past three-year and five-year periods, Real Estate and Domestic Equity were the System's best performing asset class, providing a 11.0% return. The System's allocation to Private Equity helped enable the System to perform well over the long term returning 8.3% while a more traditional asset allocation (60%/40% mix of S&P 500 Index/Barclays Aggregate Bond Index) would have returned 6.5% over the ten-year period.

The System continuously monitors the actual allocation with the goal of moving it toward the target. The Target Allocation and Actual Asset Allocation charts below reflect the System's target and actual asset allocation mix as of June 30, 2016.

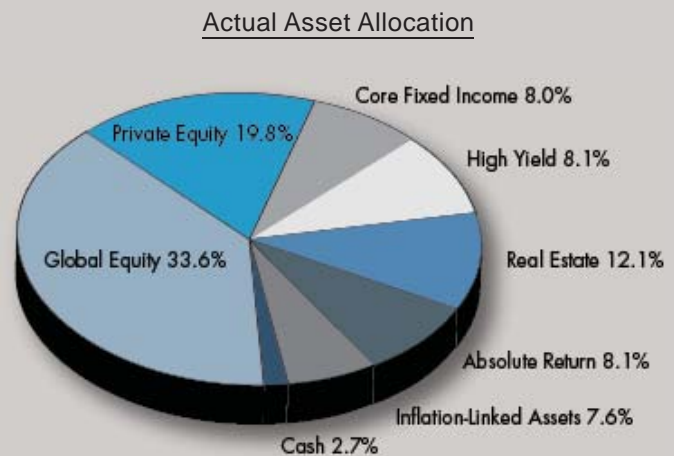
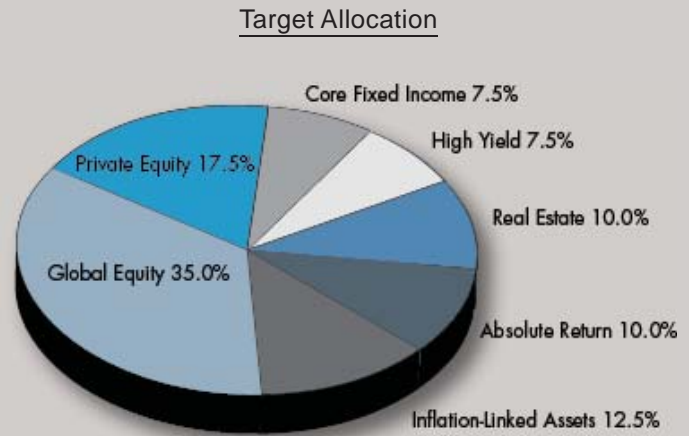


TABLE 1

Periods Ended June 30, 2016

	Assets		Performance			
	(\$ Millions)	(%)	1 -year	3 -year	5 -year	10 -year
Total Global Equity	808.3	33.6	-0.3%	7.5%	-.-%	-.-%
<i>Global Equity Policy</i> ¹			-2.0%	7.3%	-.-%	-.-%
MSCI All Country World IMI (Net)			-3.9%	6.1%	-.-%	-.-%
Global Low Volatility Equity	221.3	9.2	12.1%	-.-%	-.-%	-.-%
<i>MSCI ACWI Min Vol (Net)</i>			11.6%	-.-%	-.-%	-.-%
Domestic Equity	274.7	11.4	1.2%	10.0%	11.0%	6.7%
<i>Wilshire 5000</i>			3.0%	11.3%	11.6%	7.5%
International Equity	312.3	13.0	-9.4%	1.1%	1.1%	2.0%
<i>MSCI ACWI ex-US (Net)</i>			-10.2%	1.2%	10.0%	1.9%
Global Fixed Income	387.6	16.1	3.3%	4.5%	5.2%	6.3%
<i>Global Fixed Income Policy</i> ²			3.9%	4.2%	4.8%	6.0%
<i>Barclays Aggregate</i>			6.0%	4.1%	3.8%	5.1%
<i>ML HY Master II</i>			1.7%	4.2%	5.7%	7.4%
Real Estate	290.2	12.1	13.0%	11.0%	9.9%	3.1%
<i>NCREIF Property</i>			10.6%	11.6%	11.5%	7.4%
Private Equity	476.6	19.8	7.0%	10.5%	10.1%	9.9%
<i>S&P 500 + 3%</i>			7.0%	14.7%	15.1%	10.4%
Absolute Return	193.8	8.1	-6.9%	0.8%	-2.7%	-.-%
<i>Custom Benchmark</i> ³			4.5%	4.3%	4.4%	-.-%
Inflation Linked	182.8	7.6	-12.2%	-0.8%	-2.7%	-.-%
<i>Custom Benchmark</i> ⁴			5.0%	5.1%	5.3%	-.-%
Cash	65.5	2.7	0.7%	2.6%	2.5%	-.-%
Total Fund	2405.7	100.0	1.6%	6.9%	6.8%	6.7%
<i>Policy Index</i>			4.0%	8.1%	8.2%	6.8%

¹ The Global Equity Policy benchmark from 3Q13 to Present: 75% MSCI All-Country World IMI (Net), 25% MSCI All-Country World Minimum Volatility Index (Net).

² The Global Fixed Income Policy benchmark from 1Q04 to Present: 50% Barclays US Aggregate Bond Index, 50% ML High Yield Master II.

³ The Absolute Return Custom Benchmark from 2Q11 to Present: Libor 3-Month Yield + 4% annually; Prior to 2Q11: Libor 3-Month Yield + 5% annually.

⁴ The Inflation-Linked Assets Custom Benchmark from 2Q11 to Present: CPI + 4% annually; Prior to 2Q11: CPI + 5% annually.

SECURITIES LENDING PROGRAM

The System's securities lending program obtains additional income by lending securities to broker dealers and banks. During the years ended June 30, 2016 and 2015, the System's custodian lent the System's securities and received cash, securities issued or guaranteed by the United States government, and irrevocable bank letters of credit as collateral. The Board and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested in a collective investment pool.

LIMITED PARTNERSHIP COMMITMENT

The System's investments in limited partnerships are included in the first table appearing in Note 9 on page 32. In connection with those investments, the System has remaining commitments as of June 30, 2016, 2015, and 2014 of approximately \$700 million, \$680 million, and \$603 million, respectively, pursuant to terms of the respective limited partnerships.

OTHER COMMENTS

The System's FY2016 financial statements were prepared in conformity with GASB Statement No. 72, Generally Accepted Accounting Principles established by the Governmental Accounting Standards Board. Please refer to Note 10 on pages 38 and 40 of this report for more details.

GASB Statement No. 72, Fair Value Measurement and Application provides guidance for determining a fair value measurement for financial reporting purposes as well as guidance for applying fair value to certain investments and disclosures related to all fair value measurements. The Statement is effective for fiscal years beginning after June 15, 2015.

CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

This financial report is designed to provide our participants, business partners, and taxpayers and other community stakeholders with a general overview of the System's financial activities. Questions about this report should be directed to the Executive Director of the Houston Municipal Employees Pension System at 1201 Louisiana, Suite 900, Houston, Texas 77002.

STATEMENTS OF FIDUCIARY NET POSITION | JUNE 30, 2016 AND 2015
(IN WHOLE DOLLARS)

	2016	2015
<u>Assets</u>		
Cash and cash equivalents	\$ 7,551,046	\$ 621,966
<u>Receivables</u>		
Receivables on asset sales	6,048,347	19,723,815
Receivables on foreign exchanges	2,993,199	227,905
Other receivables	4,336,845	4,928,263
Total receivables	13,378,391	24,879,983
<u>Investments, at fair value</u>		
Short term investment funds	79,291,774	78,699,020
Government securities	92,416,960	85,622,635
Corporate bonds	200,401,238	225,280,044
Capital stocks	664,796,012	768,810,623
Commingled funds	364,164,627	393,973,477
Real assets	271,114,650	239,169,712
Alternative investments	724,612,264	675,784,017
Total investments	2,396,797,525	2,467,339,528
Collateral on securities lending arrangements, at fair value	73,941,330	101,533,453
Furniture, fixtures and equipment, net	297,957	395,173
Total assets	2,491,966,249	2,594,770,103
<u>Liabilities</u>		
Payables on asset purchases	9,139,310	30,552,327
Payables on foreign exchanges	2,993,653	229,106
Accrued liabilities	3,076,483	3,559,320
Accrued other post retirement benefits	2,792,233	2,352,338
Collateral on securities lending arrangements, at fair value	73,941,330	101,533,453
Total liabilities	91,943,009	138,226,544
Fiduciary net position, restricted for pensions	\$ 2,400,023,240	\$ 2,456,543,559

See accompanying notes to basic financial statements.

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION | JUNE 30, 2016 AND 2015
(IN WHOLE DOLLARS)

<u>Additions</u>	2016	2015
Contributions:		
City of Houston	\$ 159,958,607	\$ 145,007,059
Participants	15,873,664	16,198,216
Total contributions	<u>175,832,271</u>	<u>161,205,275</u>
Other income	<u>1,302,748</u>	<u>556,975</u>
<u>Investment Income</u>		
Interest on bonds and deposits	17,753,498	17,417,150
Dividends	18,843,687	19,322,863
Earnings from limited partnerships and real estate	1,034,091	8,679,065
Net (depreciation) appreciation on investments	<u>(2,453,865)</u>	<u>36,334,869</u>
Total investment income	<u>35,177,411</u>	<u>81,753,947</u>
Proceeds from lending securities	592,940	706,852
Less costs of securities lending	<u>(244,036)</u>	<u>(223,280)</u>
Net proceeds from lending securities	<u>348,904</u>	<u>483,572</u>
Less costs of investment services	<u>(7,537,844)</u>	<u>(8,383,636)</u>
Total investment income	<u>27,988,471</u>	<u>73,853,883</u>
Total additions to net position	<u>205,123,489</u>	<u>235,616,133</u>
<u>Deductions</u>		
Benefits paid to participants	253,178,363	234,954,625
Contribution refunds to participants	1,105,306	1,549,404
Professional services	1,021,470	822,310
Administration expenses	<u>6,338,669</u>	<u>6,185,112</u>
Total deductions	<u>261,643,808</u>	<u>243,511,451</u>
Net decrease	<u>(56,520,319)</u>	<u>(7,895,318)</u>
<u>Fiduciary net position, restricted for pensions</u>		
Beginning of year	<u>2,456,543,559</u>	<u>2,464,438,877</u>
End of year	<u>\$ 2,400,023,240</u>	<u>\$ 2,456,543,559</u>

See accompanying notes to basic financial statements.

NOTE 1 – DESCRIPTION OF PLAN

The Houston Municipal Employees Pension System (the System) was created under Chapter 358, Acts of the 48th Texas Legislature, Regular Session, 1943 (Article 6243g, Vernon’s Texas Civil Statutes) and reenacted and continued under HB1573, 77th Texas Legislature, Article 6243h, Vernon’s Texas Civil Statutes (the Pension Statute), as amended. The System is a cost-sharing multiple-employer defined benefit pension plan with two participating employers covering all municipal employees, except police officers and firefighters (other than certain police officers in the System as authorized by the Pension Statute), employed full time by the City of Houston, Texas (the City), elected City Officials, and the full time employees of the System (collectively referred to as participants). The System includes a contributory group (Group A) and two noncontributory groups (Group B and Group D) and provides for service, disability and death benefits for eligible participants. The System’s plan net position is used to pay benefits for eligible participants of Group A, Group B and Group D. The System is a governmental plan and therefore is not subject to the Employee Retirement Income Security Act of 1974. The System is governed by a Board of Trustees (the Board) consisting of eleven trustees--four elected by the active plan members, two elected by the retired plan members, one appointed by the elected trustees, one appointed by the mayor of the city, one appointed by the controller of the city, and two appointed by the governing body of the city. The appointed trustees must have expertise in at least one of the following areas: accounting, finance, pension, investment or actuarial. The System can only be terminated or amended by an act of the Legislature of the State of Texas or by an agreement between the City and the Board pursuant to the Pension Statute.

Participation

Participants newly hired on or after January 1, 2008 automatically become members of Group D, a noncontributory group.

Participants hired before September 1, 1981 participate in Group A, unless they elected before December 1, 1981 or after May 1, 1996 to transfer to Group B. Participants hired or rehired after September 1, 1981 but before September 1, 1999, may make a one-time irrevocable election to participate in Group

A; otherwise, they participate in Group B. Participants hired or rehired on or after September 1, 1999 and before January 1, 2008 participate in Group A; except that Executive Officials of the City and the Executive Director of the System (Executive Officials) participated in Group C. Effective January 1, 2005, the Executive Officials of the City and the Executive Director of the System automatically became Group A members pursuant to the First Amendment to Meet and Confer Agreement, dated December 21, 2004.

As of July 1, 2015, the most recent actuarial report shows the following System’s participants:

	2015	2014
Retirees and beneficiaries currently receiving benefits	10,023	9,685
Former employees - vested but not yet receiving benefits	3,202	3,313
Former employees - non-vested	2,293	2,219
Vested active participants	8,352	8,818
Non-vested active participants	3,475	3,131
Total participants	<u>27,345</u>	<u>27,166</u>

Retirement Eligibility

Effective January 1, 2008, new employees participate in a noncontributory group (Group D) with:

- No employee contributions,
- Normal retirement eligibility of age 62 and 5 years of credited service,
- Benefit accrual of 1.8% for the first 25 years of credited service, and 1% thereafter,
- Option to elect an actuarially equivalent benefit with a survivor benefit,
- Option to elect an early reduced retirement benefit, and
- Option to roll over funds from a section 457(b) plan to purchase an increased benefit.

A former employee who is rehired as an employee by the City or by the System on or after January 1, 2008 is a member of the group in which the employee participated at the time of the employee’s immediately preceding separation from service.

There is no change in benefits for current members and retirees. For those participants in Group A and Group B employed effective January 1, 2005, a participant who terminates employment with the City or the System is eligible for a normal retirement pension

beginning on the member's effective retirement date after the date the member completes at least five years of credited service and attains:

- 62 years of age, or
- a combination of years of age and years of credited service, including parts of years, the sum of which equals the number 75, provided the participant is at least 50 years of age, or
- any combination of age and credited service that when added together equal 70 or more, provided that the member, prior to January 1, 2005 completed at least 5 years of credited service and attained a combination of age and credited service that when added together equal 68 or more.

Pension Benefits

Pension benefits are based on a participant's average monthly salary and years of credited service, as defined in the Pension Statute. The maximum pension benefit is 90% of the participant's average monthly salary.

Pension benefits are increased annually by a Cost of Living Adjustment (COLA) equal to 3% of the original benefit amount, not compounded, for all persons receiving a pension or survivor benefit as of January 1 of the year in which the increase is made, provided the person receiving the pension was an employee on or before December 31, 2004, and the person receiving the survivor benefit is an eligible survivor of a person who was an employee on or before December 31, 2004.

Effective January 1, 2005, pension and survivor benefits for all retirees and eligible survivors of Group A and Group B are increased annually by 2%, not compounded, for all persons receiving a pension or survivor benefit as of January 1 of the year in which the increase is made, provided the person receiving the pension was hired or rehired on or after January 1, 2005. Retirees who received a 3% COLA and who are rehired on or after January 1, 2005 will also receive a 3% COLA on the subsequent benefit. Individuals participating in Group D do not have a COLA provision.

A participant who is eligible to receive a deferred benefit may elect to receive his or her pension benefit in an early lump sum distribution if the actuarial present value of the participant's benefit is less than

\$20,000 on the date of termination. Early lump-sum distributions are subject to approval by the Board.

Disability Benefits

Service-connected disability benefits for covered participants are based on the participant's normal accrued benefit, but are not less than 20% of the participant's final monthly salary. There is no minimum credited service requirement to qualify for service-connected disability benefits.

Participants with at least five years of credited service who become disabled may qualify for a non-service connected disability allowance equal to the participant's normal accrued pension benefit.

Survivor Benefits

Survivor benefits are provided for a member's surviving spouse and/or dependent children. A deceased member must have had at least five years of credited service at the time of his or her death to qualify for survivor benefits unless death was caused by a service-connected incident as defined by the Pension Statute. For a Group D member, death benefits for a death that occurs while actively employed are determined in the same manner as for Group A and Group B. For death that occurs after the Group D member's termination of employment, the payment of a death benefit depends on whether the participant elected an optional annuity.

A Group D participant with at least five years of credited service has the option to elect an actuarially equivalent amount under one of three joint annuity options in lieu of a normal benefit with no survivor benefit. If a Group D participant with at least five years of credited service elects a normal benefit, no death or survivor benefit is payable. If a Group D participant with at least five years of credited service makes no optional annuity election and dies prior to retirement, the surviving spouse is eligible to receive an amount equal to the amount that would have been paid if the participant had elected a 50% joint and survivor annuity and named the spouse as the designated beneficiary.

Effective July 1, 2011, eligible unmarried Group A and Group B members who terminate service on or after June 30, 2011 have the option to select a joint and survivor (J&S) annuity option in lieu of a normal benefit.

The optional annuity election, which was already available to vested Group D members and vested Group B members who separated from service prior to September 1997, allows eligible participants to elect to take a reduced pension and provide an annuity (50% J&S, 100% J&S, or 10-year Guarantee) to a designated annuitant. The optional annuity provision does not affect Group A and Group B members who are married at the time of their termination from employment or do not otherwise fall into the categories of eligible participants.

In order to qualify for survivor benefits other than under an annuity option, a surviving spouse must have been married to the deceased participant at the time the participant's employment with the City or System was terminated and at the time of the participant's death. To qualify for benefits, a child must be the natural, or legally adopted, dependent child of the deceased participant at the time of the participant's death and (a) must be under age 21 and never have been married, or (b) have been totally and permanently disabled before age 18 and at the time of the participant's death and never have been married. Dependent benefits are payable to the legal guardian of the dependent(s) unless the dependent is at least 18 years of age.

Deferred Retirement Option Plan (DROP)

A Group A or Group B participant who is eligible to retire, except that he or she has not retired and remains a full-time employee of the City, or the System, or has been separated from service for not more than thirty calendar days, may elect to participate in the Deferred Retirement Option Plan (DROP). The DROP provides that a monthly amount (monthly DROP credit) will be credited to a notional account (DROP Account). Interest is credited to the DROP Account at a rate approved by the Board, compounded at an interval approved by the Board. Beginning January 1, 2005 and continuing for the duration of the Amended and Restated Meet and Confer Agreement, the DROP interest rate is equal to half the return on the System's investments for the prior fiscal year, with a minimum rate of 2.5% and a maximum rate of 7.5%, compounding currently at daily intervals. The first day of DROP participation is the DROP Entry Date. The day a participant's fully executed DROP election is accepted by the System is the DROP Election Date. Normal pension benefits cease to accrue on the DROP

Entry Date, except that all Cost-of-Living-Adjustments (COLA) noted previously apply to DROP participants who are active employees under the Pension Statute.

Effective January 1, 2005, a participant's election to participate in DROP cannot establish a DROP entry date that occurs prior to the date of the System's receipt of the member's request to participate in DROP. The monthly DROP credit is based on the participant's years of credited service and average monthly salary as of DROP Entry Date, and benefit accrual rates in effect on DROP Election Date.

DROP participation terminates when a DROP participant's employment with the City, or the System, terminates. The balance of the participant's notional DROP account (DROP Benefit) at the time of such termination is an amount equal to the sum of a participant's monthly DROP credits and interest accrued on such amount up to the time the participant's employment terminates. A DROP Benefit is subject to approval by the Board. A DROP participant eligible to receive a DROP Benefit distribution may elect to receive the distribution in a lump-sum, partial distribution, in substantially equal periodic payments over a period of time approved by the Board, or in a combination of a lump-sum followed by substantially equal periodic payments over a period of time approved by the Board until the balance of the DROP Benefit is depleted. The DROP Benefit is not available to a DROP participant until such participant's employment with the City or the System has terminated and the participant has made a DROP distribution election.

Group D participants do not participate in DROP.

Refunds of Participant Contributions

Group A participants who terminate employment prior to being approved for retirement may request a refund of their accumulated employee contributions, without interest, in lieu of a pension or in the event the participant has fewer than five years of credited service.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying basic financial statements are presented in accordance with generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB), which designates the accounting principles and financial reporting standards applicable to state and local governmental units. The accompanying basic financial statements include solely the accounts of the System, which include all programs, activities and functions relating to the accumulation and investment of the assets and related income necessary to provide the pension benefits required by the governing statutes and amendments thereto.

Basis of Accounting

The economic resources basis of accounting is the method by which revenues and expenses are recognized in the accounts and reported in the basic financial statements. The accompanying basic financial statements are presented on the accrual basis of accounting. Under the accrual basis of accounting, revenues, which include investment and other income, are recognized when they are earned and collection is reasonably assured, and expenses are recognized when the liability is incurred. Accrued income, when deemed not collectible, is charged to operations. Participant and employer contributions are recognized as revenues in the period in which they are due pursuant to the Pension Statute and formal commitments. Benefits and refunds are recognized when due and payable in accordance with the terms of the Pension Statute.

Reporting Entity

The System is a component unit of the City. Therefore, its basic financial statements and required supplemental information are included in the City's Comprehensive Annual Financial Report.

Investment Valuation and Income Recognition

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The fair value of limited partnerships and real estate trusts are based on the System's valuation of estimates and assumptions from

information and representations provided by the respective general partners, in the absence of readily ascertainable market values. Short-term investments are carried at cost, which approximates fair value.

Purchases and sales of investments and forward foreign exchange contracts are recorded on the trade date. Gains or losses on the forward foreign exchange contracts are recognized when the contract is complete. Dividend income is recorded on the ex-dividend date. Interest and income from other investments are recorded when earned. Net appreciation/depreciation on investments represents realized gains and losses on sales of investments during the year and the change in the fair value of investments between years.

Furniture, Fixtures and Equipment

Furniture, fixtures and equipment are recorded at cost less accumulated depreciation and amortization. Depreciation and amortization expense is computed using the straight-line method over the estimated useful lives of the related assets ranging from three to ten years. Any gain or loss on the retirement of assets is recognized currently. Maintenance and repairs are charged to expense while expenditures for improvements greater than or equal to \$5,000 are capitalized.

Compensated Employee Absences

The System employees earn paid leave (vacation and sick leave) based on years of service and may accumulate them subject to certain limitations and be paid upon termination or resignation from the System. The amount paid is determined based on the departing employee's regular rate of pay at separation. Compensated employee absences (vacation, compensatory time off, annual leave and sick leave) are accrued as an expense and liability in the basic financial statements at their most current rate.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the basic financial statements and the reported amounts of additions and deductions during the

reporting period. Accordingly, actual results could differ from those estimates.

Income Tax Status

The System obtained its latest determination letter on November 12, 2015, in which the Internal Revenue Service stated that the System is in compliance with the applicable requirements of the Internal Revenue Code.

Accounting principles generally accepted in the United States of America require the System’s management to evaluate tax positions taken by the System and recognize a tax liability (or asset) if the System has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service. System management has analyzed the tax positions taken by the System, and has concluded that as of June 30, 2016 and 2015, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the basic financial statements. The System is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

Costs of Administering the System

The costs of administering the System are paid by the System from current earnings pursuant to an annual fiscal budget adopted by the Board.

New Accounting Pronouncements

GASB Statement No. 72, Fair Value Measurement and Application

In February 2015, GASB issued Statement No. 72, *Fair Value Measurement and Application*. This Statement provides guidance for determining a fair value measurement for financial reporting purposes as well as guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This Statement is effective for fiscal years beginning after June 15, 2015. The provisions of this statement were implemented by the System effective for its June 30, 2016 financial statements.

GASB Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68

This statement generally aligns the reporting requirements for pensions and pension plans not covered in GASB Statements 67 and 68 with the reporting requirements in Statement 68. This Statement is effective for fiscal years beginning after June 15, 2016. System management has not yet determined the impact of the adoption of this standard.

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Other Than Pensions

This Statement replaces the requirements of Statement 43 Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. For defined benefit Other Postemployment Benefit (OPEB) plans, it identifies the methods and assumptions that should be used to project benefit payments and discounts. Statement No. 74 requires more extensive note disclosure and Required Supplementary Information. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2016. System management has not yet determined the impact of the adoption of this standard.

GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions

This Statement establishes new accounting and financial reporting requirements for governments whose employees are provided with OPEB. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2017. System management has not yet determined the impact of the adoption of this standard.

GASB Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments

The objective of this Statement is to identify the hierarchy of Generally Accepted Accounting Principles (GAAP). The “GAAP hierarchy” consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting those principles. This Statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and non-authoritative literature in the event that the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP.

This statement supersedes Statement No. 55, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2015. The System has adopted this statement for the 2016 financial statements, and the adoption of this new pronouncement did not impact the System's financial statement significantly.

GASB Statement No. 82, *Pension Issues – and amendment of GASB Statements No. 67, No. 68, and No. 73*

This statement addresses the presentation of payroll-related measures in required supplementary information; the selection of assumptions and the treatment of deviations from guidance in Actuarial Standards of Practice for financial reporting purpose; and the classification of payments made by employers to satisfy plan member contribution requirements. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2017. System management has not yet determined the impact of the adoption of this standard.

NOTE 3 – CONTRIBUTIONS AND FUNDING POLICY

Group A active participants are required to contribute to the System amounts as set forth in the Pension Statute. As of June 30, 2016 and 2015, the Group A participant contribution rate was 5% of a participant's qualifying base salary. Group B and Group D participants do not contribute to the System.

Under the System's Pension Statute, the City is required to contribute amounts to the System to provide funding on an actuarial reserve basis for normal cost plus the level of percentages of payroll payments based on its amortization period for the unfunded actuarial liability. On July 1, 2011, the Amended and Restated Meet and Confer Agreement (Agreement) between the System and the City went into effect.

Under the Agreement, the City contributed \$98.5 million to the System in fiscal year 2012, which was established under the Agreement as 19.36% of covered payroll. For each of the succeeding fiscal years, the City contributes either the previous fiscal year's rate (25.36% of covered payroll in FY2015) plus 2 percent of covered payroll, or the previous fiscal year's contribution amount plus \$10

million, whichever is greater. This provision will stay in place until the actuarially required contribution (ARC) rate is met as determined by the HMEPS actuary, at which time the ARC becomes the effective contribution rate. Historical contribution trend information is provided as required supplementary information on page 44.

The City's contribution rate, based on the Agreement, was 27.36% for fiscal year 2016, and 25.36% for fiscal year 2015, and was not set by actuarial valuation. The ARC for fiscal years 2016 and 2015 was calculated at 31.81% and 27.38%, respectively, as shown in the July 1, 2015 and 2014 Actuarial Valuations. Although the City and participants have contributed the amounts as required under the Agreement, the actual contributions made by the City have been less than the ARC for the periods covered by this report. As part of the Agreement, the Board's funding policy has been modified to use an open 30-year rolling amortization period until such time that the City's actual contribution rate is equal to the ARC, at which point the amortization period will be a closed 30 year period.

NOTE 4 – NET PENSION LIABILITY

The Total Pension Liability as of June 30, 2016, is based on the actuarial valuation date of July 1, 2015, and rolled-forward using generally accepted actuarial procedures. The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets.

The Schedule of Net Pension Liability presents multi-year trend information (beginning with FY 2014) about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. In addition to the above, this information is presented as a required schedule in the Required Supplemental Information section beginning on page 43.

Actuarial valuation of the System involves estimates and assumptions about events in the future. Amounts determined regarding the net pension liability are subject to revision as actual results are compared with past expectations and new estimates are made regarding the future. The last experience study was performed in 2015 based on the July 1, 2014 valuation. A summary of the actuarial assumptions as of the latest actuarial valuation is shown on the following page.

Funded Status of the System as of June 30, 2016

FY Ending June 30	Total Pension Liability	Fiduciary Net Position	Net Pension Liability	Fiduciary Net Position as a % of Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2016	\$5,034,389,959	\$2,400,023,240	\$2,634,366,719	47.67%	\$640,528,652	411.28%

Valuation Date: July 1, 2015

Notes Actuarially determined contribution rates are calculated as of July 1, which is 12 months prior to the beginning of the fiscal year in which they are contributed.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Open (see notes)
Remaining Amortization Period	30 years
Asset Valuation Method	5 Year smoothed market, direct offset of deferred gains and losses
Inflation	2.5%
Salary Increases	3.25% to 6.00% including inflation
Investment Rate of Return	8.00%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2010 - 2014
Mortality	RP-2000 Mortality Table scaled by 90% for males and 80% for females

Other Information:

The funding period will remain open until increases in the employer contribution rate result in the employer contribution being equal to the actuarially determined contribution, at which point the funding period will be closed. There were no benefit changes during the year.

TARGET ALLOCATION TABLE AND DESCRIPTION

Expected Return Arithmetic Basis

Asset Class	Target Weight	Real Return Arithmetic Basis	Long Term Expected Portfolio Real Rate of Return
Global Equity	35.0%	6.5	2.26
Private Equity	17.5%	8.9	1.56
Core Fixed Income	7.5%	2.8	0.21
High Yield	7.5%	5.7	0.42
Real Estate	10.0%	5.9	0.59
Absolute Return	10.0%	5.8	0.58
Inflation-Linked Assets	12.5%	5.2	0.65
Totals	100.0%		6.27%
Inflation			1.50%
Expected arithmetic nominal return			7.77%

These returns are developed on a 10 year forward looking basis, using historical risk and correlation adjusted to recent trends. Return expectations represent a passive investment in the asset class and do not reflect value added from active management. An optimizer is used to generate an efficient frontier using these estimates; the efficient frontier represents the asset class distribution which would generate the maximum return for a given level of risk. The Board chooses an asset allocation that aims to maximize the safety of promised benefits while minimizing the cost of funding those benefits.

A single discount rate of 8.00% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 8.00%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined

contribution rates and the member rate. Based on these assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

Current Single Discount

1% Decrease	Rate Assumption	1% Increase
7.00%	8.00%	9.00%
\$3,213,661,872	\$2,634,366,719	\$2,152,957,355

The table above illustrates the sensitivity of the net pension liability to changes in the discount rate. In particular, the table presents the plan’s net pension liability, if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher than the single discount rate.

NOTE 5 – DEFERRED RETIREMENT OPTION PLAN (DROP) BALANCES

The DROP provides that a monthly amount (monthly DROP credit) will be credited to a notional account (DROP Account). A DROP Benefit is subject to approval by the System’s Board. The DROP Benefit is not available to a DROP participant until such participant’s employment with the City or the System has terminated and the participant has made a DROP distribution election. For a more detailed description of DROP terms, see Note 1.

DROP balances for all active and inactive participants totaled \$502 million at the end of fiscal year 2016, and \$452.2 million in fiscal year 2015.

NOTE 6 – CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, Custodial Credit Risk is the risk that in the event of a bank failure, the System’s deposits may not be returned to it. The System’s deposits are held by State Street Bank and Trust Company. As of June 30, 2016 and 2015, the System had fair value bank balances of \$7,491,470 and \$536,258, respectively, that are in demand deposit accounts subject to coverage by Federal Deposit Insurance Corporation (FDIC) but

not collateralized. The standard deposit insurance coverage limit is \$250,000. The System does not have a deposit policy for custodial credit risk; however, the management believes that the System’s credit risk exposure is mitigated by the financial strength of the banking institution in which the deposits are held.

NOTE 7 – DEFERRED COMPENSATION PLAN

The System offers its employees a deferred compensation plan (DCP) created in accordance with Internal Revenue Code Section 457. The DCP, available to all full-time employees of the System, permits employees to defer a portion of their salary until future years. Distributions from the DCP are not available to employees until termination, retirement, death or unforeseeable emergency. The DCP has a third party administrator, Empower Retirement, formerly Great-West Retirement Services, and the cost of administration and funding is borne by the DCP participants. Amounts deferred are held in trust by Empower Retirement and, since the System has no fiduciary responsibility for the DCP, these amounts are not reflected in the accompanying financial statements in accordance with GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*.

NOTE 8 – POST-EMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS

Health Care Plan Description

The System provides health care benefits (i.e., medical, prescription, dental) to current and retired System employees and their beneficiaries. The System also provides System employees with life insurance and offers System retirees only with \$5,000 of life insurance. A System employee is eligible for retiree health benefits and life insurance if the individual has at least five years of full-time service with the System and meets at least one of the following conditions:

- Has retired due to disability
- Age 62 or greater
- Total of years of age and years of full-time service are greater than or equal to 70
- Employee is eligible to begin receiving a retirement pension within five years after the employee’s termination of employment.

The health care benefits are partially self-funded by the System. The System is fully responsible for the self-funded benefits. An insurance company processes claims and provides other services to the System related to the self-funded benefits. The insurance company does not insure or guarantee the self-funded benefits. However, the System's plan includes an excess loss insurance established by the insurance company and the System is insured for the aggregate excess loss of \$20,000 maximum amount per covered person.

Funding Policy and Other Post-Employment Benefits (OPEB)

Contribution requirements of the System's retired employees are established and may be amended by the Board. The System currently offers a choice of two insurance plans, a conventional preferred provider organization (PPO) plan and a high deductible health plan. Retiree health care contributions depend on their choice of plan. For life insurance, the retiree pays 100% of the cost of the premium.

The System's annual Other Post-Employment Benefits (OPEB) cost is calculated based on the Annual Required Contribution (ARC) of the employer, and is an amount that is actuarially determined in accordance with the parameters of GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The latest actuarial valuation, as

of June 30, 2015, covers a three year period through fiscal year 2017. Additionally, the System's annual OPEB costs are listed in the following table:

	June 30, 2016	June 30, 2015	June 30, 2014
Annual required contribution	\$ 574,691	557,952	438,951
Interest on OPEB obligation	105,855	86,578	72,152
Adjustment to ARC	(98,074)	(80,214)	(66,848)
Annual OPEB cost (end of year)	582,472	564,316	444,255
Net estimated employer contributions	(142,576)	(135,935)	(123,676)
Increase in net OPEB obligation	439,896	428,381	320,579
Net OPEB obligation — as of beg. of year	2,352,338	1,923,957	1,603,377
Net OPEB obligation — as of end of year	\$ 2,792,234	2,352,338	1,923,956

Three-Year Trend Information

Year Ended	Annual OPEB Cost	Percentage Contributed	Net OPEB Obligation
6/30/14	444,255	27.8%	1,923,956
6/30/15	564,316	24.1%	2,352,338
6/30/16	582,472	24.5%	2,792,234

Funded Status and Funding Progress

The most recent funded status of the System's retiree health care plan, under GASB Statement No. 45 as of June 30, 2015 is as follows:

Actuarial Valuation Date as of June 30,	Actuarial Value of Assets (a)	Accrued Liability (ML) (b)	Unfunded AAL (MAO) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
2015	-0-	\$5,167,086	\$5,167,086	0%	\$2,608,493	198.1%

Under the reporting parameters, the System’s retiree health care plan is 0% funded with an estimated actuarial accrued liability exceeding actuarial assets by \$5,167,086 at June 30, 2015. The above funded status figures are required to be updated every three years. The three-year trend chart above was prepared by the System, while all other listed figures presented were prepared by the System’s actuary, Gabriel, Roeder, Smith & Company. The System’s postemployment benefit plan is a single-employer plan.

Actuarial Methods and Assumptions

The projected unit credit, level percent of payroll actuarial cost method is used to calculate the GASB ARC for the System’s retiree health care plan. Using the plan benefits, the present health premiums and a set of actuarial assumptions, the anticipated future payments are projected. The projected unit credit method then provides for a systematic funding for these anticipated payments.

The yearly ARC is computed to cover the cost of benefits being earned by covered members as well as to amortize a portion of the unfunded accrued liability. If experience is in accordance with the assumptions used, the ARC will increase at approximately the same rate as active employee payroll, and the ARC as a percentage of payroll will remain basically level on a year to year basis. Projections of health benefits are based on the plan as understood by the System and include the types of benefits in force at the valuation date and the pattern of sharing benefit costs between the System and the System’s employees to that point. Actuarial calculations reflect a long-term perspective and employ methods and assumptions that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets. Significant methods and assumptions were as follows for the System’s retiree healthcare plan:

Actuarial methods and assumptions

Investment rate of return	4.5%, net of expenses
Salary increases	Graded rates based on years of service (range from 3.0 percent to 6.0 percent)
Payroll growth factor	3.0% per year
General inflation rate	3.0% per year
Actuarial cost method	Projected Unit Credit Cost Method
Amortization method	Level percentage of pay
Amortization period	30 Year, open
Health care inflation rate	Starting at 7.25 % in 2016 and decreasing by ¼ % each year to 4.5% by 2027

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events in the future. Amounts determined regarding the funded status and the annual required contributions of the System’s retiree health care plan are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The required schedule of funding progress for OPEB presented as required supplementary information (see schedule 5) provides multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

NOTE 9 – INVESTMENTS

Portions of the System’s investments are classified as security investments. A security is a transferable financial instrument that evidences ownership or creditor-ship. Investments in commingled funds, limited partnerships, real estate trusts, and loans and mortgages are investments that are evidenced by contracts rather than securities. The fair values of the System’s investments at June 30 are presented by type:

	2016	2015
Short-term investment funds	\$ 79,291,774	\$ 78,699,020
Government securities	92,416,960	85,622,635
Corporate bonds	200,401,238	225,280,044
Capital stocks	664,796,012	768,810,623
Commingled funds	364,164,627	393,973,477
Real assets	271,114,650	239,169,712
Alternative investments	724,612,264	675,784,017
	<u>\$2,396,797,525</u>	<u>\$2,467,339,528</u>

Rate of Return

For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 0.9%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. In addition, the money weighted rate of return is similar to the gross time-weighted return of 1.6% that appears mainly in Table 1 on page 19. The two approaches are slightly different methods of calculating investment returns.

Investment Policy

The Board has the authority to establish the investment policy and the asset allocation policy. The general investment objective is to obtain a reasonable long term total return consistent with the degree of risk assumed while emphasizing the preservation of capital. The allocation is 35% Global Equity, 15% Fixed Income, 10% Real Estate, 12.5% Inflation Linked, 17.5% Private Equity and 10% Absolute Return. For the System's actual allocation, see the chart on page 18.

The Master Custodian

The System's Board, in accordance with the power and authority conferred under the Texas Statutes, employed State Street Bank and Trust Company (Custodian) as custodian of the assets of the System, and in said capacity, the Custodian is a fiduciary of the System's assets with respect to its discretionary duties including safekeeping the System's assets. The Custodian has established and maintains a custodial account to hold, or direct its agents to hold, for the account of the System all assets that the Board shall from time to time deposit with the Custodian. All rights, title and interest in and to the System's assets shall at all times be vested in the System.

In holding System assets, the Custodian shall act with the same care, skill, prudence and diligence under the prevailing circumstances that a prudent person acting in like capacity and familiar with matters of this type would use in the conduct of an enterprise with a like character and with like aims.

Further, the Custodian shall hold, manage and administer the System's assets for the exclusive purpose of providing the benefits to the members and the qualified survivors of the System.

The Board shall manage the investment program of the System in compliance with all applicable Federal and State statutes and regulations concerning the investment of pension assets. The Board has adopted an Investment Policy Statement to set forth the factors involved in the management of investment assets for the System and which is made part of every investment management agreement.

Custodial Risk

For an investment, custodial risk is the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial risk if the securities are uninsured, are not registered in the name of the System, and are held by either the counterparty or the counterparty's trust department or agent but not in the System's name.

At June 30, 2016 and 2015, the System's investments that were not subject to custodial credit risk were

the investments in U.S. government securities and corporate bonds as they are registered in the name of the System and held in possession of the Custodian.

Concentration Risk

The allocation of assets among various asset classes is set by the Board. For major asset classes (e.g., global equity, fixed income, real estate, private equity, inflation-linked, and absolute return.), the System will further diversify by employing managers with demonstrated skills in complementary areas of expertise. The managers retained will utilize varied investment approaches, but, when combined will exhibit characteristics that are similar, but not identical, to the asset class proxy utilized in the strategic asset allocation plan. The Investment Policy Statement of the System provides that no public market investment manager shall have more than 20% (at market value) of the System's assets.

Representative guidelines by type of investment are as follows:

U.S. Equity Managers

- A manager's portfolio shall contain a minimum of twenty-five issues.
- No more than 5% of the manager's portfolio at market shall be invested in American Depository Receipts (ADRs).
- No individual holding in a manager's portfolio may constitute more than 5% of the outstanding shares of an issuer.
- No individual holding may constitute more than 5% of a manager's portfolio at cost or 10% at market.
- Short sales, purchases on margin, non-negotiable or otherwise restricted securities are prohibited, other than where expressly permitted.
- While there are no restrictions on cash, a manager must notify the System if the cash position exceeds 10%.

International Equity Managers

- Not more than 5% at cost and 10% at market value of a manager's portfolio shall be invested in the securities of any one issuer.
- Not more than 30% of the assets of a manager's portfolio (at market value) shall be invested in any one country with the exception of Japan.
- While there are no restrictions on cash, a manager must notify the System if the cash position exceeds 10%.
- Forward foreign currency exchange contracts will be limited as follows:

- forward and future exchange contracts of any currency may be used to hedge up to 100% of the currency exposure of the portfolio in aggregate or of the currency exposure to any single country,
- foreign exchange contracts with a maturity exceeding 12 months may not be made, and
- currency options may be entered into in lieu of or in conjunction with forward sales of currencies. The same effective limitations specified in (a) and (b) above will apply to currency options.

Fixed Income Managers

- No more than 10% of a manager's portfolio at market shall be invested in the securities of any single issuer, with the exception of the U.S. government and its agencies.
- No individual holding in a manager's portfolio shall constitute more than 10% of the market value of an issue.

Global Opportunistic Fixed Income/High Yield Managers

- No more than 5% at cost and 10% at market value of a manager's portfolio shall be invested in the securities of any single issuer, with the exception of the U.S. government and its agencies.

As of June 30, 2016, across all asset classes, the System held one security with a market value over 5% of the System's fiduciary net position. The security, BlackRock MSCI ACWI Minimum Volatility Index, had a fair value of \$221 million, representing 9.2% of the System's portfolio as of June 30, 2016. There were no securities held by the System from a single issuer that

exceeded 9.2% of the System's portfolio in FY2016. It was the same investment that exceeded the 5% threshold in 2015 as well.

Interest Rate Risk

The System invests in fixed income securities including, but not limited to, investments representing instruments with an obligated fixed rate of interest including public and private debentures, mortgages, investments in life insurance general accounts and guaranteed investment contracts, with maturities greater than one year, and options/futures. Instruments may have an investment grade or non-investment grade rating. Purchases and sales, investment selection and implementation of investment strategies are delegated to the discretion of the investment manager, subject to compliance with its management agreement and the Investment Policy.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of a debt investment's exposure to fair value changes arising from changes in interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates and vice-versa. Duration is the measure of a bond price's sensitivity to a 100-basis point change in interest rates. The duration of the System's debt securities is managed by the active managers.

At June 30, 2016, the following table shows the System's investments by type, amount and the effective duration rate.

	Effective Duration	Domestic	International	Fair Value
Collateralized mortgage obligations	3.53	\$ 9,464,490	\$ -	\$ 9,464,490
Convertible bonds	3.55	9,598,675	-	9,598,675
Corporate bonds	5.52	135,905,870	4,070,028	139,975,898
GNMA/FNMA/FHLMC	2.31	31,372,740	-	31,372,740
Municipal	8.79	1,677,615	-	1,677,615
Government issues	5.95	54,634,416	4,732,188	59,366,604
Misc. receivable (auto/credit card)	2.26	5,797,190	-	5,797,190
Other asset backed securities	2.46	266,067	-	266,067
Bank Loan ¹	N/A	33,033,965	2,264,953	35,298,918
		\$ 281,751,028	\$ 11,067,169	\$ 292,818,197

¹The bank loan market, or "leveraged loan" market as it is sometimes known, comprises debt with below investment grade credit ratings. Bank loans generally rank senior to the company's other debt, and offer higher credit ratings, and less risk than high yield bonds. Bank loans typically use floating rather than fixed interest rates. Companies often tap this market to fund leveraged buyouts.

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at June 30, 2016 are as follows:

Quality Rating	AUTO LOAN RECV.	BANK LOAN	CWO	CONVERT. BONDS	CORP. BONDS	CREDIT CARD RECV	FHLMC	FNMA	GNMA I	GNMA II	GOV'T ISSUES	MUNICIPALS	OTHER ASSET BACKED	Grand Total	% of HOLDINGS
AAA	\$ 1,844,703	\$ -	\$ 4,190,896	\$ -	\$ 710,900	\$ 1,758,904	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 643,019	\$ 266,067	\$ 9,414,489	0.39%
AA	930,175	-	-	-	1,229,888	-	-	-	-	-	-	397,342	-	2,557,405	0.11%
AA+	-	-	-	-	2,675,497	185,006	-	-	-	-	1,601,393	253,184	-	4,715,080	0.20%
AA-	564,339	-	200,938	-	1,361,259	-	-	-	-	-	-	-	-	2,126,536	0.09%
A	-	-	-	-	5,237,864	-	-	-	-	-	2,387,731	384,070	-	8,009,665	0.33%
A+	-	-	-	-	2,144,488	-	-	-	-	-	-	-	-	2,144,488	0.09%
A-	-	-	448,873	-	10,461,435	-	-	-	-	-	-	-	-	10,910,308	0.46%
BBB	-	-	-	-	5,669,408	-	-	-	-	-	-	-	-	5,669,408	0.24%
BBB+	-	-	-	-	11,574,095	-	-	-	-	-	-	-	-	11,574,095	0.48%
BBB-	-	-	-	384,750	5,108,786	-	-	-	-	-	-	-	-	5,493,536	0.23%
BB	-	-	-	1,863,498	8,972,024	-	-	-	-	-	-	-	-	10,835,522	0.45%
BB+	-	-	-	1,086,531	8,304,358	-	-	-	-	-	-	-	-	9,390,889	0.39%
BB-	-	-	-	1,376,076	12,837,227	-	-	-	-	-	-	-	-	14,213,303	0.59%
B	-	-	-	1,541,078	7,624,762	-	-	-	-	-	-	-	-	9,165,840	0.38%
B+	-	-	-	777,854	8,631,904	-	-	-	-	-	-	-	-	9,409,758	0.39%
B-	-	-	-	-	14,173,835	-	-	-	-	-	79,817	-	-	14,253,652	0.59%
CCC	-	-	-	-	4,492,753	-	-	-	-	-	-	-	-	4,492,753	0.19%
CCC+	-	-	-	-	16,739,358	-	-	-	-	-	-	-	-	16,739,358	0.70%
CCC-	-	-	-	-	368,750	-	-	-	-	-	-	-	-	368,750	0.02%
CC	-	-	-	-	458,925	-	-	-	-	-	-	-	-	458,925	0.02%
D	-	-	-	1,698,412	3,614,626	-	-	-	-	-	-	-	-	5,313,038	0.22%
NA*	356,226	35,298,918	4,623,782	870,474	7,583,757	157,836	12,740,920	2,562,589	577,472	5,491,760	55,297,664	-	-	135,561,398	5.66%
Total Fixed Income Securities	\$3,695,443	\$35,298,918	\$9,464,489	\$9,598,673	\$139,975,899	\$2,101,746	\$12,740,920	\$2,562,589	\$77,472	\$5,491,760	\$59,366,605	\$1,677,615	\$266,067	\$292,818,196	12.22%
Other Investments														2,103,979,329	87.78%
Total Investments														\$2,396,797,525	100.00%

*NA = Not Available

Credit Risk

The quality ratings of investments in fixed income securities are set forth in the Investment Policy Statement as follows:

- All issues purchased by investment grade fixed income managers must be of investment grade quality BAA (Moody’s) or BBB (S&P) unless expressly authorized by the Board, in which case a minimum B rating shall apply, with a maximum limit of non-investment grade credits of 20% at market.
- For global opportunistic fixed income/high yield securities, more than 50% of a manager’s portfolio at market shall be invested in non-investment grade fixed income securities, i.e. those with ratings of BA1 (Moody’s), BB+ (Standard & Poor’s), or lower, or unrated bonds, including but not limited to corporate bonds, convertible bonds, and preferred stocks.

Foreign Currency Risk

International securities investment managers are expected to maintain diversified portfolios by sector and by issuer using the System’s Investment Policy.

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Each investment manager, through the purchase of units in a commingled investment trust fund or international equity mutual fund, establishes investments in international equities. The System has an indirect exposure to foreign currency fluctuation as of June 30, 2016 as follows:

	Fair Value	Percentage
Australian Dollar	\$ 4,425,907	0.18%
Brazilian Real	1,690,713	0.07%
Canadian Dollar	8,518,545	0.35%
Danish Krone	5,814,928	0.24%
Euro Currency	77,078,050	3.21%
Hong Kong Dollar	9,845,320	0.41%
Indonesian Rupiah	805,525	0.03%
Japanese Yen	25,813,750	1.07%
Malaysian Rigit	21	0.00%
Mexican Peso	4,209,586	0.18%
New Israeli Shekel	506,910	0.02%
New Taiwan Dollar	5,307,288	0.22%
Norwegian Krone	2,718,326	0.11%
Pound Sterling	52,627,417	2.19%
Singapore Dollar	2,029,872	0.08%
South African Rand	2,442,033	0.10%
South Korean Won	4,200,041	0.18%
Swedish Krona	4,936,370	0.21%
Swiss Franc	14,730,333	0.61%
Thailand Baht	1,202,625	0.05%
Turkish Lira	1,644,756	0.07%
US Dollar	2,173,740,677	90.41%
	<u>\$ 2,404,288,993</u>	<u>100.00%</u>

Schedule 8 on page 50 lists the System’s investment and professional service providers.

Securities Lending

The System is authorized under its Investment Policy Statement to participate in a securities lending program through its agent and Custodian. Under this program, for an agreed upon fee, System-owned investments are loaned to a borrowing financial institution. During the years ended June 30, 2016 and 2015, the Custodian lent the System’s securities and received cash and securities issued or guaranteed by the United States government as collateral. The cash collateral received on each loan is invested together with the cash collateral of other lenders, in a collective investment pool comprised of a liquidity pool and a duration pool. As of June 30, 2016 and June 30, 2015, the liquidity pool had an average duration for USD collateral of 42.78 and 27.64 days, and an average weighted final maturity of 82.66 and 109.17 days, respectively. As of June 30, 2016 and 2015, the duration pool for USD collateral had an average duration of 44.57 and 42.27 days and an average weighted final maturity of 2,211 and 2,106 days, respectively. Because the loans were terminable at will, their duration did not generally match the duration of the investments made with cash collateral.

Borrowers are required to deliver collateral for each loan equal to: (i) in the case of loaned securities denominated in United States dollars or whose primary trading market was located in the United States or sovereign debt issued by foreign governments, 102% of the market value of the loaned securities; and (ii) in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States, 105% of the market value of the loaned securities. The Custodian does not have the ability to pledge or sell securities delivered for collateral, absent a borrower’s default. The Board and the borrowers maintained the right to terminate all securities lending transactions on demand.

On March 26, 2009, the Board amended its securities lending agreement with its Custodian to clarify responsibilities regarding borrower defaults. The amendment requires that if at the time of a default by a borrower, the Custodian shall indemnify the System against the failure of the borrower to return the loaned securities by purchasing a number of replacement securities equal to the number of such unreturned loaned securities, to the extent that such replacement securities are available on the open market. To the

extent that such proceeds are insufficient or the collateral is unavailable, the purchase of replacement securities shall be made at the Custodian's expense. If replacement securities are unavailable, the Custodian will credit to the System's account an amount equal to the market value of the unreturned loaned securities for which replacement securities are not purchased. The Board also approved a motion limiting the System's securities lending program utilization level (on-loan balance as a percentage of lendable assets) at 33.5%.

The cash collateral held and the fair value of securities on loan as of June 30, 2016 (USD) was \$73,941,330 and \$89,720,222, respectively and \$101,533,453 and \$115,839,781, as of June 30, 2015, respectively.

The fair values of the underlying securities lent as of June 30, are as follows:

	2016	2015
Domestic equity	\$ 65,636,027	\$ 85,403,282
Domestic fixed income	16,611,673	22,797,198
International equity	7,472,522	7,639,301
	<u>\$ 89,720,222</u>	<u>\$ 115,839,781</u>

Derivative Investing

The System's investment managers may invest in derivatives if permitted by the guidelines established by the System's Board. Derivatives are generally defined as contracts whose values depend on, or are derived from, the value of an underlying asset, reference rate or index. Short options positions will generally be hedged with cash, cash equivalents, current portfolio security holdings, or other options or futures positions.

During fiscal year 2016, the System recognized a loss of \$67,621, while 2015 recognized a gain of \$1,443,170, related to derivatives.

The System's investment guidelines allow fixed income managers to hold stock rights and warrants acquired as a result of a re-organization. Domestic equity managers may use index futures as a cash flow hedge. Zero and two of the System's domestic investment managers held rights and warrants on behalf of the System during fiscal year 2016 and 2015, respectively.

One and three of the System's international money managers during fiscal year 2016 and

2015 respectively, held foreign exchange forwards and stock rights and warrants to mitigate the risk associated with these investments.

As of June 30, 2016 and 2015, the System held derivatives with a notional value of \$26,529 and \$26,529 and a fair value of \$478,975 and \$479,470, respectively.

The following is a summary of derivatives held directly by the System:

Fair Value Classification	2016		2015	
	Amount	Notional	Amount	Notional
Common Stock	\$ 478,975	\$ 26,529	\$ 479,470	\$ 26,529

Changes in Fair Value

Investment Derivatives	Classification	2016	2015
Rights	Investment revenue	\$ (67,556)	\$ (117,194)
Warrants	Investment revenue	(65)	1,560,364
Totals		<u>\$ (67,621)</u>	<u>\$ 1,443,170</u>

In addition to the above, the System has exposure to derivatives through its investments in hedge funds, reported in alternative investments in the financial statements.

Forward Foreign Exchange Contracts

A currency forward is a contractual agreement between two parties to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed upon exchange rate. Forward commitments are not standardized and carry credit risk due to the possible nonperformance by one of the counter-parties. The maximum potential loss is the aggregate face value in U.S. dollars at the time the contract was opened; however, the likelihood of such loss is remote. No such losses occurred during fiscal years 2016 and 2015. Forwards are usually traded over-the-counter. These transactions are entered into in order to hedge risks from exposure to foreign currency rate fluctuation and to facilitate trade settlement of foreign security transactions. Forwards carry market risk resulting from adverse fluctuations in foreign exchange rates. Recognition of realized gain or loss depends on whether the currency exchange rate has moved favorably or unfavorably to the

contract holder upon termination of the contract. Prior to termination of the contract, the System records the unrealized currency translation gain or loss based on the applicable forward exchange rates.

Mortgage-Backed Securities

A mortgage-backed security depends on the underlying pool of mortgage loans to provide the cash flow to make principal and interest payments on the security. A decline in interest rates can result in prepayments, called contraction risk. This risk occurs as mortgages are pre-paid or refinanced which reduces the expected return of the security. If interest rates rise, the likelihood of prepayments decreases, resulting in extension risk. Since loans in a pool underlying a security are being prepaid at a slower rate, investors are unable to capitalize on higher interest rates because their investments are locked in at a lower rate for a longer period of time. A collateralized mortgage obligation (CMO) is a type of mortgage-backed security that creates separate pools of pass-through rates for different classes of bondholders with varying maturities, called tranches. The repayments from the pool of pass-through securities are used to retire the bonds in the order specified by the bonds' prospectus.

The System may invest in mortgage-backed securities to enhance fixed-income returns. Mortgage-backed securities are subject to credit risk, in that the borrower may be unable to meet its obligations.

NOTE 10 – FAIR VALUE MEASUREMENT

GASB Statement No. 72, Fair Value Measurement and Application, specifies a hierarchy of valuation classifications based on whether the inputs to the valuation techniques used in each valuation classification are observable or unobservable. These classifications are summarized in three broad levels listed below:

- Level 1: Unadjusted quoted prices for identical instruments in active markets
- Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable.

- Level 3: Valuations derived from valuation techniques in which significant inputs or significant value drivers are unobservable.

Inputs used to measure fair value might fall in different levels of the fair value hierarchy, in which case the System defaults to the lowest level input that is significant to the fair value measurement in its entirety. These levels are not necessarily an indication of the risk or liquidity associated with the investments.

The following table presents fair value measurements as of June 30, 2016 (in thousands of dollars):

	Level 1	Level 2	Level 3	Total
Cash	\$ -	\$ 42,316	\$ -	\$ 42,316
Equivalent Equities				
Master Limited Partnership	112,465	-	-	112,465
Common Stock	452,283	-	1,389	453,672
Mutual Funds	-	-	-	-
Other	40,030	-	97	40,127
Fixed Income				
Corporate Bonds	-	133,480	6,496	139,976
Other	-	186,472	257	186,729
Warrants	-	-	479	479
Spot Contracts	(2)	-	-	(2)
Total	\$ 604,776	\$ 362,268	\$ 8,718	\$ 975,762
				1,421,033
Investment held at NAV				\$ 2,396,795

Level 1 Limited Partnership investments consist of Master Limited Partnerships that are publicly traded and listed on a national securities exchange.

Level 1 Common Stock investments are valued using exchange listed prices or broker quotes in active markets.

Other Level 1 Equity investments are valued using exchange listed prices or broker quotes in active markets.

Level 1 Spot Contracts are valued using broker quotes in an active market.

Level 2 Corporate Bonds are valued using evaluated prices which are based on a compilation of primarily

observable market information or a broker quote in an inactive market.

Other Level 2 Fixed Income investments are valued using evaluated prices which are based on a compilation of primarily observable market information or a broker quote in an inactive market. The valuation of convertible securities may be imputed based on the conversion ratio or other security specific information or broker quotes in a non-active market.

Level 2 Cash Equivalent investments are valued using amortized cost.

Level 3 investments in all categories are securities in which no indications are available, and the company's financials and other market indicators are used to calculate valuation. These include common stocks and bonds of companies undergoing reorganization, tradable bank loans and similar instruments.

The table at the bottom of the page presents investments measured at NAV (in thousands of dollars).

Real Estate Investment Trusts. This category includes investments in two private real estate investment trusts (REITs). A REIT is a company that owns real estate, typically income-producing properties. REITs are diversified across property types such as multi-family, office, industrial, and retail. The fair values of REIT investments have been determined using the NAV per share of the investment. Investments representing about 2.5% of the assets

in this category are currently being liquidated by the portfolio manager.

Real Estate Limited Partnerships. This category includes investments in 28 limited partnerships that own direct real estate and real estate related debt instruments. Investments in Real Estate Limited Partnerships are diversified by property type, geographic location, and capital structure. The fair values of Real Estate Limited Partnership investments have been determined using the NAV of the System's interest in the partnership provided by the General Partner. Real Estate Limited Partnerships cannot be redeemed because they are private market investments. Distributions from Real Estate Limited Partnerships are determined by the General Partner. Real Estate Limited Partnerships typically have 10 year terms.

Event Driven Hedge Funds. This category includes investments in three hedge funds. Event Driven Hedge Funds seek to add value by exploiting pricing inefficiencies that may occur before or after a corporate event such as a bankruptcy, merger, acquisition or spinoff. Event Driven managers may invest in announced corporate events, or the manager may anticipate a corporate event and position the portfolio accordingly. Event Driven hedge fund managers may invest in either debt or equity positions, and often hedge out market risk. The fair values of Event Driven Hedge Fund investments have been determined using

	NAV	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Real Estate Investment Trusts	\$ 37,448	\$ -	Quarterly	
Real Estate Limited Partnerships	213,762	232,323	Private Market	Private Market
Event Driven Hedge Funds	31,254	-	Quarterly	65-90 days
Global Macro Hedge Funds	51,645	-	Quarterly or Monthly	30-90 days
Equity Long / Short Hedge Funds	38,422	-	Quarterly or Semiannually	45-90 days
Credit Hedge Funds	29,900	-	Quarterly or Annually	60-90 days
Multi-Strategy Hedge Funds	43,084	-	Annually	45-90 days
Private Equity Funds	550,211	467,271	Private Market	Private Market
Common Collective Trusts	425,307	-	Typically Daily	Less than 1 month
TOTAL	\$ 1,421,033	\$ 699,594		

the NAV provided by the administrator of the hedge fund. HMEPS has requested a full redemption of one of its Event Driven Hedge Funds, and has received 90% of that redemption already in FY-2017.

Global Macro Hedge Funds. This category includes investments in three hedge funds. Global Macro Hedge Funds invest in long and short positions in a wide variety of assets including equities, fixed income, currencies, commodities, and futures. Global Macro Hedge Fund managers seek to add value by accurately anticipating overall macroeconomic trends in various countries. The fair values of Global Macro Hedge Fund investments have been determined using the NAV provided by the administrator of the hedge fund. Two of HMEPS' Global Macro managers have monthly liquidity, and one has quarterly liquidity.

Equity Long / Short Hedge Funds. This category includes investments in three hedge funds. Equity Long / Short Hedge Funds employ a strategy that involves taking long positions in stocks that expected to increase in value and short positions in stocks that are expected to decrease in value. Equity Long / Short Hedge Funds will often short stock market indexes in order to lessen total market risk. The fair values of Equity Long / Short Hedge Fund investments have been determined using the NAV provided by the administrator of the hedge fund. Two of HMEPS' Equity Long / Short managers have quarterly liquidity, and one has semiannual liquidity.

Credit Hedge Funds. This category includes investments in four hedge funds. Credit Hedge Fund managers look for relative value between senior and junior securities of the same issuer. They will also trade securities of equivalent credit quality from different corporate issuers, or different tranches in complex capital structures such as mortgage-backed securities or collateralized loan obligations. Credit Hedge Funds typically focus on credit rather than interest rates. In fact, many managers will sell short interest rate futures or Treasury bonds to hedge their interest rate exposure. The fair values of Credit Hedge Fund investments have been determined using the NAV provided by the administrator of the hedge fund. HMEPS is redeeming one of its Credit Hedge Fund manager, and another is liquidating under court supervision.

Multi Strategy Hedge Funds. This category includes investments in two hedge funds. Multi-Strategy Hedge Funds may employ any combination of the hedge fund strategies listed above. The fair values of Multi Strategy Hedge Fund investments have been determined using the NAV provided by the administrator of the hedge fund. Both of HMEPS' Multi Strategy managers have annual liquidity.

Private Equity Limited Partnerships. This category includes investments in 81 limited partnerships that own equity in privately held companies including equity in energy and commodity investments. Investments in Private Equity Limited Partnerships are diversified by industry sector, geographic location, and capital structure. The fair values Private Equity Limited Partnership investments have been determined using the NAV of the System's interest in the partnership provided by the General Partner. Private Equity Limited Partnerships cannot be redeemed because they are private market investments. Distributions from Private Equity Limited Partnerships are determined by the General Partner. Private Equity Limited Partnerships typically have 10 year terms.

Common Collective Trusts. This category includes investments in seven common collective trusts. Common Collective Trusts may have active or passive strategies in publicly traded equity and fixed income securities. The fair values of Common Collective Trusts investments have been determined using the NAV provided by the administrator of the common collective trusts. Common Collective Trusts usually have higher liquidity than other investment strategies valued at NAV.

NOTE 11 – FURNITURE, FIXTURES AND EQUIPMENT

Furniture, fixtures and equipment are comprised as follows at June 30:

	2016	2015
Office furniture and equipment	\$ 74,382	\$ 55,531
Computer equipment	848,582	786,967
Leasehold improvements	139,820	146,765
	<u>1,062,784</u>	<u>989,263</u>
Less accumulated depreciation and amortization	(764,827)	(594,090)
	<u>\$ 297,957</u>	<u>\$ 395,173</u>

Depreciation expense for fiscal years 2016 and 2015 are \$170,739 and \$164,483, respectively.

NOTE 12 – COMMITMENTS

As described in Note 1, certain participants of the System are eligible to receive, upon request, a refund of their accumulated Group A and/or Group C contributions, without interest, upon termination of employment with the City, or System, prior to being eligible for pension benefits. At June 30, 2016 and 2015, aggregate contributions from these eligible participants of the System were approximately \$157,672,532 and \$153,851,812, respectively.

The System’s investments in limited partnerships and real estate trusts are included in the first table appearing in Note 10. In connection with those investments, the System has remaining commitments as of June 30, 2016 and 2015 of approximately \$700 million and \$680 million, respectively, pursuant to terms of the respective limited partnerships and real estate trusts.

The System leased office facilities under a five-year lease, ending October 31, 2016, and extended the term of the lease by ten years, ending October 31, 2026. This lease agreement began with a base rent of \$14 per square foot for the first eighteen months. Subsequently, the rent increases by \$0.50 per square foot per year until October 31, 2016, after which the base rent is \$23.50 per square foot for 12 months, subsequently increasing by \$0.50 per square foot per year for the remainder of the term.

The payments under the lease will be:

Year Ending June 30,	Amount
2017	\$ 395,283
2018	448,615
2019	458,026
2020	467,438
2021	476,849
2022	486,261
2023	495,672
2024	505,084
2025	514,495
2026	517,632
Total	<u>\$ 4,765,355</u>

Additional amounts are assessed for use of common areas, utilities and maintenance. Total rental expense, including these assessments, amount to approximately \$572,516 and \$564,544 during the years ended June 30, 2016 and 2015, respectively.

The System has other annual and/or monthly lease services for copiers, miscellaneous office equipment, and offsite storage totaling approximately \$42,270 and \$33,000 for fiscal years 2016 and 2015 respectively. Each of these contracts contains a cancellation provision.

NOTE 13 – RISKS AND UNCERTAINTIES

The System invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term and that such change could materially affect the amounts reported in the statements of fiduciary net position.

The System’s contribution rates are made and the actuarial information included in the Notes and in Schedules 1, 2 and 3 are based on certain assumptions pertaining to interest rates, inflation rates and participant demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term could be material to the basic financial statements.

NOTE 14 – CONTINGENCIES

On March 20, 2015, the Texas Supreme Court in the *Klumb v. Houston Municipal Employees Pension System* case issued a decision confirming the authority of the System’s Board of Trustees to determine that persons employed by Houston First Corporation (“HFC”), Houston First Foundation (“HFF”), and CCSI, Inc. (“CCSI”) constitute employees of the City of Houston for purposes of membership in the System’s pension plan. Following unsuccessful attempts by the System to obtain compliance by the City with the Texas Supreme Court’s ruling and its statutory duties to provide information and pay contributions into the plan for HFC, HFF and CCSI employees, the System filed Houston Municipal Employees Pension System

v. City of Houston et al., No. 2015-35252, in the 333rd Judicial District Court of Harris County, Texas, against the City and its representatives. The lawsuit seeks, among other things, writs of mandamus compelling the City and its representatives to provide payroll and other information regarding the HFC, HFF, and CCSI employees and to make the contributions and pick up payments owed for those employees. On September 17, 2015, the City filed a counterclaim and third-party claim against HMEPS and its board alleging breach of agreement, violation of unspecified statutory provisions, and inverse condemnation. The City also subsequently filed a Plea to the Jurisdiction, which HMEPS disputes, alleging that the court does not have jurisdiction to hear HMEPS' causes of action. HMEPS and its board deny the City has any viable claims, and that such claims are barred by, among other things, the *Klumb* decision. On October 9, 2015, a hearing was held in the 333rd district court on the City's Plea to the Jurisdiction. Following arguments of counsel, the court denied the City's Plea to the Jurisdiction. The City immediately appealed. The appeal was assigned to the Fourteenth Court of Appeals. Briefs have been filed in the appeal.

NOTE 15 – SUBSEQUENT EVENTS

Management has evaluated subsequent events through October 27, 2016, the date which the financial statements were available to be issued.

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY (UNAUDITED) (SCHEDULE 1)

Fiscal year ending June 30,	<u>2016</u>	<u>2015</u>	<u>2014</u>
<u>Total Pension Liability</u>			
Service Cost	\$ 68,968,481	\$ 59,465,512	\$ 61,480,204
Interest on the Total Pension Liability	379,781,300	363,639,884	348,418,895
Benefit Changes	-	-	-
Difference between Expected and Actual Experience	(16,194,133)	(22,057,834)	-
Assumption Changes	324,938,905	-	-
Benefit Payments	(253,178,363)	(234,954,625)	(221,925,083)
Refunds	(1,105,306)	(1,549,404)	(1,213,474)
Net Change in Total Pension Liability	503,210,884	164,543,533	186,760,542
Total Pension Liability- Beginning	4,531,179,075	4,366,635,542	4,179,875,000
Total Pension Liability - Ending (a)	\$ 5,034,389,959	\$ 4,531,179,075	\$ 4,366,635,542
<u>Fiduciary Net Position</u>			
Employer Contributions	\$ 159,958,607	\$ 145,007,059	\$ 128,274,419
Employee Contributions	15,873,664	16,198,216	16,579,600
Pension Plan Net Investment Income	27,639,567	73,370,310	352,522,858
Benefit Payments	(253,178,363)	(234,954,625)	(221,925,083)
Refunds	(1,105,306)	(1,549,404)	(1,213,474)
Pension Plan Administrative Expense	(7,360,139)	(7,007,422)	(6,414,668)
Other	1,651,651	1,040,548	-
Net Change in Fiduciary Net Position	(56,520,319)	(7,895,318)	267,823,652
Fiduciary Net Position - Beginning	2,456,543,559	2,464,438,877	2,196,615,225
Fiduciary Net Position - Ending (b)	\$ 2,400,023,240	\$ 2,456,543,559	\$ 2,464,438,877
Net Pension Liability - Ending (a) - (b)	2,634,366,719	2,074,635,516	1,902,196,665
Fiduciary Net Position as a Percentage of Total Pension Liability	47.67%	54.21%	56.44%
Covered Employee Payroll	\$ 640,528,652	\$ 624,205,549	\$ 598,245,952
Net Pension Liability as a Percentage of Covered Employee Payroll	411.28%	332.36%	317.96%

Notes to Schedule: NA

See accompanying independent auditors' report.

See accompanying note to required supplemental schedules.

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

REQUIRED SUPPLEMENTAL INFORMATION

SCHEDULE OF NET PENSION LIABILITY (UNAUDITED) (SCHEDULE 2)

Funded Status of System

FY Ending June 30,	Total Pension Liability	Fiduciary Net Position	Net Position Liability	Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll ¹	Net Pension Liability as a % of Covered Payroll
2014	\$ 4,366,635,542	\$ 2,464,438,877	\$ 1,902,196,665	56.44%	\$ 598,245,952	317.96%
2015	\$ 4,531,179,075	\$ 2,456,543,559	\$ 2,074,635,516	54.21%	\$ 624,205,549	332.36%
2016	\$ 5,034,389,959	\$ 2,400,023,240	\$ 2,634,366,719	47.67%	\$ 640,528,652	411.28%

1. With the adoption of GASB Statement No. 67, GASB changed the definition of Covered Payroll to be total gross compensation. The Covered Payroll for fiscal year 2014 and later uses this new definition.

See accompanying independent auditors' report.

See accompanying note to required supplemental schedules.

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

SCHEDULE OF EMPLOYER CONTRIBUTIONS (UNAUDITED) (SCHEDULE 3)

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll ¹	Actual Contribution as a % of Covered Payroll ²
2007	106,568,897	70,264,721	36,304,176	448,925,000	15.65%
2008	116,281,212	73,271,799	43,009,413	483,815,000	15.14%
2009	102,257,047	76,837,216	25,419,831	539,023,000	14.25%
2010	107,535,744	82,052,013	25,483,731	550,709,000	14.90%
2011	107,472,679	87,284,737	20,187,942	544,665,000	16.03%
2012	122,465,396	97,161,723	25,303,673	534,394,000	18.18%
2013	124,317,102	111,858,885	12,458,217	549,971,000	20.34%
2014	144,953,327	128,274,419	16,678,908	598,245,952	21.44%
2015	155,299,296	145,007,059	10,292,237	624,205,549	23.23%
2016	162,229,984	159,958,607	2,271,377	640,528,652	24.97%

¹ The covered payroll reported prior to fiscal year 2014 is based on pensionable pay. With the adoption of GASB Statement No. 67, GASB changed the definition of Covered Payroll to be total gross compensation. The Covered Payroll for fiscal year 2014 and later uses this new definition. For comparison purposes, if the Covered Payroll number for fiscal year 2014 was still based on pensionable pay it would have been \$555,376,730.

² The Actual Contribution as a % of Covered Payroll does not correspond to the funding requirements of the Amended and Restated Meet and Confer Agreement and should not be used for funding purposes.

See accompanying independent auditors' report.

See accompanying note to required supplemental schedules.

NOTES TO REQUIRED SUPPLEMENTAL INFORMATION (UNAUDITED)

Note to Schedules 1 and 2 - The total pension liability contained in this schedule was provided by the System's retained actuary, Gabriel, Roeder, Smith & Company. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

Note to Schedule 3 - The required employer contributions and percent of those contributions actually made are presented in the schedule. The information presented was used in the actuarial valuation for purposes of determining the actuarially determined contribution rate. The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the Board. Additional information as of the latest actuarial valuation is presented in the table below.

Valuation Date: July 1, 2015

Notes Actuarially determined contribution rates are calculated as of July 1, which is 12 months prior to the beginning of the fiscal year in which they are contributed.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method	Entry Age Normal
Amortization method	Level Percentage of Payroll, Open (see notes)
Remaining amortization period	30 years
Asset valuation method	5 Year smoothed market, direct offset of deferred gains and losses
Inflation	2.5%
Salary increases	3.25% to 6.00% including inflation
Investment rate of return	8.00%
Retirement age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2015 valuation pursuant to an experience study of the period 2010 - 2014
Mortality	RP-2000 Mortality Table scaled by 90% for males and 80% for females

Other Information:

Note: The funding period will remain open until increases in the employer contribution rate result in the employer contribution rate being equal to the actuarially determined contribution, at which point the funding period will be closed. There were no benefit changes during the year.

Note: All post-retirement cost-of living adjustments are non-compounding and are based on 3% of the original benefit for all persons receiving a pension or survivor benefit as of January 1 of the year in which the increase is made, provided the participant was an employee on or before December 31, 2004. Effective January 1, 2005, cost-of living adjustments are increased annually by 2%, not compounded, for all persons receiving a benefit, provided the participant was an employee on or after this date. Retirees who received a 3% cost-of-living adjustment who are rehired after December 31, 2004 receive a 3% cost-of-living adjustment on the subsequent benefit. Individuals participating in Group D do not have a cost-of-living provision.

REQUIRED SUPPLEMENTAL INFORMATION

SCHEDULE OF INVESTMENT RETURNS (UNAUDITED) (SCHEDULE 4)

<u>FY Ending June 30,</u>	<u>Annual Return¹</u>
2016	0.9%
2015	3.47%
2014	16.42%

¹ Annual money-weighted rate of return, net of investment fees.

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

**SCHEDULE OF FUNDING PROGRESS FOR OPEB AND NOTES TO
REQUIRED SCHEDULE (UNAUDITED) (SCHEDULE 5)**

UAAL as an Actuarial Valuation Payroll Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll ¹ (c)	Percentage of Covered Payroll ((b-a)/c)
June 30, 2015	\$ 0	5,167,086	5,167,086	0%	2,608,493	198.1%
June 30, 2012	\$ 0	4,424,447	4,424,447	0%	2,251,862	196.5%
June 30, 2010	\$ 0	3,594,835	3,594,835	0%	2,062,917	174.3%

¹ With the adoption of GASB Statement No. 67, GASB changed the definition of Covered Payroll to be total gross compensation. The Covered Payroll for fiscal year 2014 and later uses this new definition.

The information presented in this schedule was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date

Actuarial cost method
Amortization method
Amortization period
Asset valuation method

June 30, 2015

Projected unit credit
Level percent of payroll
30-Year period, open
Market value of assets

Actuarial assumptions:

Investment rate of return 4.5%, net of expenses
Salary increases Graded rates based on years of service
Payroll growth factor 3.0% per year
General inflation rate 3.0% per year
Health care inflation rate Starting at 7.25% in 2016 and decreasing by ¼% each year to 4.5% by 2027

See accompanying independent auditors' report.

INVESTMENT SUMMARY (SCHEDULE 6)

	June 30, 2016		June 30, 2015			
	Cost	Fair Value	Unrealized Appreciation (Depreciation)	Cost	Fair Value	Unrealized Appreciation (Depreciation)
Fixed income:						
Government securities	\$ 91,567,927	\$ 92,416,960	\$ 849,033	\$ 86,589,861	\$ 85,622,635	\$ (967,226)
Corporate bonds	206,806,317	200,401,238	(6,405,079)	225,675,634	225,280,044	(395,590)
Total fixed income	298,374,244	292,818,198	(5,556,046)	312,265,495	310,902,679	(1,362,816)
Short-term investment funds	79,291,774	79,291,774	-	78,699,020	78,699,020	-
Capital stocks	635,114,315	664,796,012	29,681,697	679,776,933	768,810,623	89,033,690
Commingled funds	276,358,193	364,164,627	87,806,434	337,791,953	393,973,477	56,181,524
Real assets	307,450,236	271,114,650	(36,335,586)	292,806,595	239,169,712	(53,636,883)
Alternative investments	621,672,880	724,612,264	102,939,384	563,005,794	675,784,017	112,778,223
Total investments	\$ 2,218,261,642	\$ 2,396,797,525	\$ 178,535,883	\$ 2,264,345,790	\$ 2,467,339,528	\$ 202,993,738

See accompanying independent auditors' report.

INVESTMENT SERVICES, PROFESSIONAL SERVICES, AND ADMINISTRATION EXPENSES (SCHEDULE 7)**YEARS ENDED JUNE 30, 2016 AND 2015**

	2016	2015
Investment services:		
Custodial services	\$ 375,160	\$ 365,105
Money management services	5,506,914	6,337,647
Consulting services	834,000	834,000
Legal services	24,096	64,227
Investment research expense	47,524	41,189
Investment personnel costs	683,367	668,522
Other investment expenses	66,783	72,946
Total investment expenses	<u>\$ 7,537,844</u>	<u>\$ 8,383,636</u>
Professional services:		
Actuarial services	\$ 133,623	\$ 165,080
Auditing and professional services	80,687	55,700
Legal services	469,201	226,639
Other professional services	337,959	374,891
Total professional services	<u>\$ 1,021,470</u>	<u>\$ 822,310</u>
Administration expenses:		
Office costs	\$ 577,680	\$ 577,288
Insurance costs	163,160	152,891
Costs of staff and benefits	4,486,662	4,381,977
Costs of equipment and supplies	819,947	772,713
Depreciation and amortization	170,739	164,483
Costs of continuing education	120,481	135,760
Total administration expenses	<u>\$ 6,338,669</u>	<u>\$ 6,185,112</u>

See accompanying independent auditors' report.

OTHER SUPPLEMENTAL INFORMATION

SUMMARY OF COSTS OF INVESTMENT AND PROFESSIONAL SERVICES (SCHEDULE 8)

YEAR ENDED JUNE 30, 2016 AND 2015

Service Provider	Service Provided	2016	2015
Investment services:			
Ariel Investments	Money management	\$ 199,731	\$ 113,889
Baring Asset Management	Money management	264,374	295,054
BlackRock (formerly Barclays)	Money management	170,070	173,138
DDJ Capital Management, LLC	Money management	640,440	678,809
DePrince, Race and Zollo, Inc.	Money management	212,223	542,840
Earnest Partners, LLC	Money management	578,370	657,117
Enhanced Investment (INTECH)	Money management	233,527	181,647
Global Forest Partners, LP/UBS Timber Investors	Money management	57,739	57,336
Loomis, Sayles and Company, LP	Money management	445,137	487,244
Neumeier Investment Counsel, LLC	Money management	496,960	477,498
Oakbrook	Money management	-	110,802
OFI Institutional	Money management	492,253	505,477
Panagora	Money management	166,947	172,033
Profit Investment Management	Money management	147,553	266,329
Pugh Capital Management	Money management	127,561	111,837
Smith Graham & Company	Money management	319,528	332,912
Thomas White	Money management	355,796	401,123
Tortoise Capital Advisors	Money management	521,310	669,584
UBS Global Asset (formerly Brinson Part)	Money management	26,624	43,708
State Street Global Advisors	Money management	50,771	59,272
State Street Bank and Trust Company	Custodial services	375,160	365,105
Wilshire Associates, Incorporated	Consulting services	284,000	284,000
Cliffwater LLC	Consulting services	550,000	550,000
Baker Botts LLP	Legal services	-	19,563
Locke Lord LLP	Legal services	24,096	44,664
Naviant	Other Investment exp	-	600
Total investment services		6,740,170	7,601,581
Professional services:			
Gabriel, Roeder, Smith & Co.	Actuarial services	133,623	100,080
Segal Consulting	Actuarial services	-	65,000
Doeren Mayhew CPAs and Advisors	Auditing and Prof. services	12,022	3,000
McConnell & Jones, LLP	Auditing and Prof. services	64,490	42,225
VR Election Services	Auditing and Prof. services	-	10,475
Baker Botts LLP	Legal services	466,645	224,249
Jackson Walker LLP	Legal services	2,511	1,814
Locke Lord LLP	Legal services	-	576
Harris Law Firm	Prof. and legal services	13,500	30,000
HillCo Partners, LLC	Prof. and legal services	101,500	102,000
Election-America Inc.	Professional services	4,175	-
Leadership Consulting Group, Inc.	Professional services	-	7,470
Locke Lord LLP	Professional services	170,004	163,446
LT Communications	Professional services	53,000	48,000
Pearl Meyers & Partners	Professional services	-	14,925
VR Election Services	Professional services	-	9,050
Total professional services		1,021,470	822,310
Total costs of investment and professional services.		\$ 7,761,640	\$ 8,423,889

See accompanying independent auditors' report.



HMEPS



**"PARKS BUILD
COMMUNITY"**

-ABLE GONZALES - HPARD EMPLOYEE

SECTION THREE

INVESTMENT INFORMATION

The Board of Trustees (“Board”) of the Houston Municipal Employees Pension System (the “System”) has adopted an Investment Policy Statement (“IPS”) as a framework for the investment of the System’s assets. The authority to amend the IPS rests solely with the Board. The following provides an outline of the IPS.

PURPOSE

The IPS assists the Board in acting as fiduciaries for the System’s investments by: a) specifying the Board’s expectations, objectives and guidelines for the System, b) clarifying the responsibilities of the Board, the staff, the consultants and vendors, c) setting forth an investment structure for managing the portfolio, d) encouraging effective communications, and e) establishing criteria to select, remove, monitor and evaluate performance of money managers and vendors on a regular basis.

INVESTMENT OBJECTIVES

The investment objective of the total portfolio is to produce an annualized investment return over the long term that exceeds the actuarial return rate assumption approved by the Board. This will help the Board to achieve its overall objective of providing adequate retirement benefits to the members of the System.

The performance of the System’s investments is compared with the policy portfolio. The policy portfolio is comprised of market indices, which are consistent with the overall investment policy. The policy portfolio reflects a passive implementation of the investment policy. This policy portfolio was last updated on July 1, 2013.

Comparisons of total fund performance are also made with a universe of public pension funds implementing generally comparable investment policies. The public pension fund universe used for comparative purposes is the Wilshire TUCS Master Trusts – Public.

INVESTMENT STRATEGIES

Asset Allocation

The System’s investment allocation provides an efficient allocation of assets that is designed to achieve overall portfolio risk and return objectives. The Board periodically undertakes strategic studies

to address the appropriateness of asset classes to be considered for inclusion in the asset allocation, and to define the targeted percentage to each asset class to achieve the desired level of diversification.

During fiscal year 2013, the Board conducted a study to review asset class risk-return assumptions and correlations which resulted in several changes to the System’s asset allocation targets. These changes were intended to reduce the volatility of the System’s investment returns while providing adequate expected return. First, the target exposure to Global Equities was reduced from 40% to 35%, and U.S and non-U.S. equities were combined to allow the System to respond more efficiently to changes in the composition of the global equity market. Second, the target exposure to Fixed Income was reduced from 20% to 15% in response to the low interest rate environment. The Real Estate asset class target was decreased from 12% to 10%, while the Private Equity target was decreased from 18% to 17.5%. The target exposure of the Inflation Linked asset class increased from 5% to 12.5%, while the Absolute Return asset class target increased from 5% to 10%.

This asset allocation became effective July 1, 2013. The System intends to maintain a portfolio mix which is consistent with these asset allocation targets. The target and actual allocations are included in table 2.

Diversification

The System invests in six major asset classes (Equities, Fixed Income, Real Estate, Private Equity, Inflation-Linked, and Absolute Return) and engages the services of numerous professional investment managers (including in both public markets and private partnerships) with demonstrated skills and expertise in managing portfolios within each asset class as a method to maximize overall fund diversification. The managers retained are expected to utilize varied investment approaches that, when combined, will exhibit characteristics that are similar to the asset class proxy utilized in the strategic asset allocation plan. As of June 30, 2016, the System had retained the services of 87 investment management firms, several of which manage multiple mandates. Cash inflows and outflows are directed within the targeted asset class to the various managers so that actual characteristics of the portfolio will be consistent with the strategic plan. No investment manager is

permitted to have more than 20% of the fair value of the System's assets.

Rebalancing

The IPS requires a periodic adjustment, or rebalancing, of assets be made to ensure conformance with policy target levels. Such rebalancing is necessary to reflect sizable cash flows and performance imbalances among the various asset classes that may occur over time. During fiscal year 2016, Staff directed the rebalancing of assets within the strategic asset allocation targets in response to market dynamics and the System's liquidity needs.

Investment Manager Guidelines – Public

Markets

Investment managers are subject to guidelines and objectives incorporated in the investment management agreements entered into by the Board and the respective investment managers. Investment managers are expected to perform their fiduciary duties as prudent people skilled in such matters and, further, are expected to comply with all applicable State and Federal statutes governing the investment of retirement funds. Within the context of the guidelines, investment managers have full discretion with respect to the purchase and sale of individual securities and portfolio weightings. Portfolios are to be managed in a manner similar to other portfolios within an organization with similar guidelines and performance objectives.

The Board requires that all investment managers seek best execution for all trades ordered on behalf of the System. Equity managers are encouraged to direct some of their brokerage activity to an approved list of brokers if such trades reduce total transaction costs and do not affect best execution. Fixed income managers are encouraged to direct primary trading activity wherever there is an opportunity to recapture a portion of the syndication costs for the System.

Manager Evaluation

Managers of portfolios are evaluated quarterly against predetermined benchmarks such as an appropriate market index or a comparable peer group. All public market managers are required to provide written reports to HMEPS of their activities and performance. In addition, System personnel and professional consultants engaged by the Board

monitor managers' performance, material changes in the managers' organization and conformity with their guidelines and objectives.

Managers who do not meet expectations will be placed on probation (for public market managers) or watchlist (for private market managers). Staff and the consultant will increase monitoring of these managers, evaluating factors such as changes in the assets in the portfolio, changes in investment style, peer universe ranking and others.

Investment Performance Evaluation

The Board reviews System investment performance on a periodic basis to evaluate conformity to the goals and objectives established in the strategic plan. The Board recognizes that financial markets from time to time may not support attainment of those goals and objectives. During such times, progress toward conformity is evaluated by comparing the System's performance to the policy index and to a peer group comparable in class and weight to the styles in the System's investment portfolio. Investment results are calculated using a time-weighted rate of return based on the market rate of return.

Proxy Voting

The Board authorizes each investment manager to vote all proxies relating to shares of securities under management, and requires each investment manager to provide a written proxy voting policy statement. Each manager is expected to promptly vote all proxies and related actions in a manner consistent with the long-term interests of the System and its participants and beneficiaries. Each investment manager is required to keep detailed records of all voting of proxies and related actions and to comply with all related regulatory obligations. The System's management staff periodically reviews each investment manager's policies and actions in respect to proxy voting.

INVESTMENT RESULTS

Long-Term Results

The 10-year period ended June 30, 2016 encompassed the 2008 financial crisis and has produced volatile returns, both for the markets as a whole, and also for the System. The System generated double digit positive returns in six of the past ten fiscal years,

and outperformed its peer group in seven of those ten years. Due to the diversification of assets, the System's 5-year annualized return is 6.8%. The 10-year return stands at 6.7%.

As shown in the investment results table, HMEPS' total fund performance compares very favorably to the median public fund, as represented by the Wilshire TUCS Master Trusts – Public Universe. Over the ten-year period, HMEPS is in the top 10% of funds in the Wilshire TUCS Master Trusts – Public Universe.

HMEPS' consistent long-term performance relative to its peers is best illustrated by the growth of \$1,000 invested in HMEPS' total fund, the policy benchmark portfolio and median public fund during the past 10 years. The ending points indicate that \$1,000 invested in HMEPS' total fund would have grown to \$1,904, while the same \$1,000 would have grown to \$1,937 and \$1,730 respectively in the policy benchmark portfolio and the median public fund.

Fiscal Year 2016 Results

For the fiscal year ended June 30, 2016, the System returned 1.6%. This rate of return lagged the System's policy benchmark return of 4.0%, but exceeded the return of the median fund in the Wilshire TUCS Master Trusts – Public Universe of 1.1%.

The Investment Section was written by Chief Investment Officer Gregory Brunt, CFA, Senior Financial Analyst Brad Bangen, and Financial Analyst Jumana Aumir, CFA.

SCHEDULE OF ASSET ALLOCATION

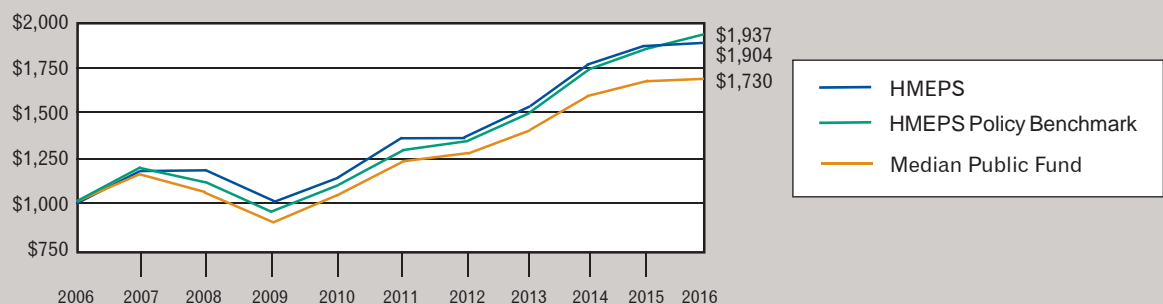
TABLE 1

(Calculated based on a time-weighted rate of return based on the market rate of return)

Asset Class	Allocation		Investment Performance			
	Target	Actual	1 Yr.	3 Yrs.	5 Yrs.	10 Yrs.
Global Equity ¹	35.0 %	33.6 %	-0.3 %	7.5 %	n/a %	n/a
MSCI All Country World IMI			-3.9	6.1	n/a	n/a
MSCI All Country World Min Volatility			11.6	10.6	n/a	n/a
Fixed Income	15.0	16.1	3.3	4.5	5.2	6.3
Barclays Aggregate Index			6.0	4.1	3.8	5.1
Merrill Lynch High Yield Master II Index			1.7	4.2	5.7	7.4
Private Equity ²	17.5	19.8	7.0	10.5	10.1	9.9
S&P 500 Index + 3%			7.0	14.7	15.1	10.4
Real Estate ³	10.0	12.1	13.0	11.0	9.9	3.1
NCREIF Property Index			10.6	11.6	11.5	7.4
Inflation-Linked ⁴	12.5	7.6	-12.2	-0.8	-2.7	n/a
CPI + 4% ⁵			5.0	5.1	5.3	n/a
Absolute Return ⁶	10.0	8.1	-6.9	0.8	2.4	n/a
LIBOR + 4% ⁷			4.5	4.3	4.4	n/a
Cash	-	2.7				
Total Portfolio	100.0	100.0	1.6	6.9	6.8	6.7
Policy Benchmark ⁸			4.0	8.1	8.2	6.8
Median of Wilshire Public Fund Universe/TUCS			1.1	6.8	6.8	5.9

1. The Global Equity composite was created on July 1, 2013. It combined the previously separate Domestic Equity and Global Equity composites.
2. Beginning October 1, 2008, Private Equity is separate from Absolute Return. Prior returns were combined in the Private Equity composite.
3. Beginning October 1, 2008, Real Estate is separate from Inflation-Linked. Prior returns were combined in the Real Estate composite.
4. The Inflation-Linked composite was created on October 1, 2008. Prior returns are included in the Real Estate composite.
5. Prior to April 1, 2011, the benchmark for Inflation-Linked was CPI + 5%. Longer term benchmark returns reflect a blend of both benchmarks.
6. The Absolute Return composite was created on October 1, 2008. Prior returns are included in the Private Equity composite.
7. Prior to April 1, 2011, the benchmark for Absolute Return was LIBOR + 5%. Longer term benchmark returns reflect a blend of both benchmarks.
8. For fiscal year 2016, the Policy Benchmark was 26.25% MSCI ACWI IMI (Global Equity), 8.75% MSCI ACWI Min Vol (Low Volatility Global Equity), 7.5% Barclays Aggregate Index (Investment Grade Fixed Income), 7.5% Merrill Lynch High Yield Master Trust (High Yield Fixed Income), 10% NCREIF Property Index (Real Estate), 17.5% S&P 500+3 (Private Equity), 10% LIBOR +4 (Absolute Return), 12.5% CPI+4 (Inflation Linked Assets)

TABLE 2



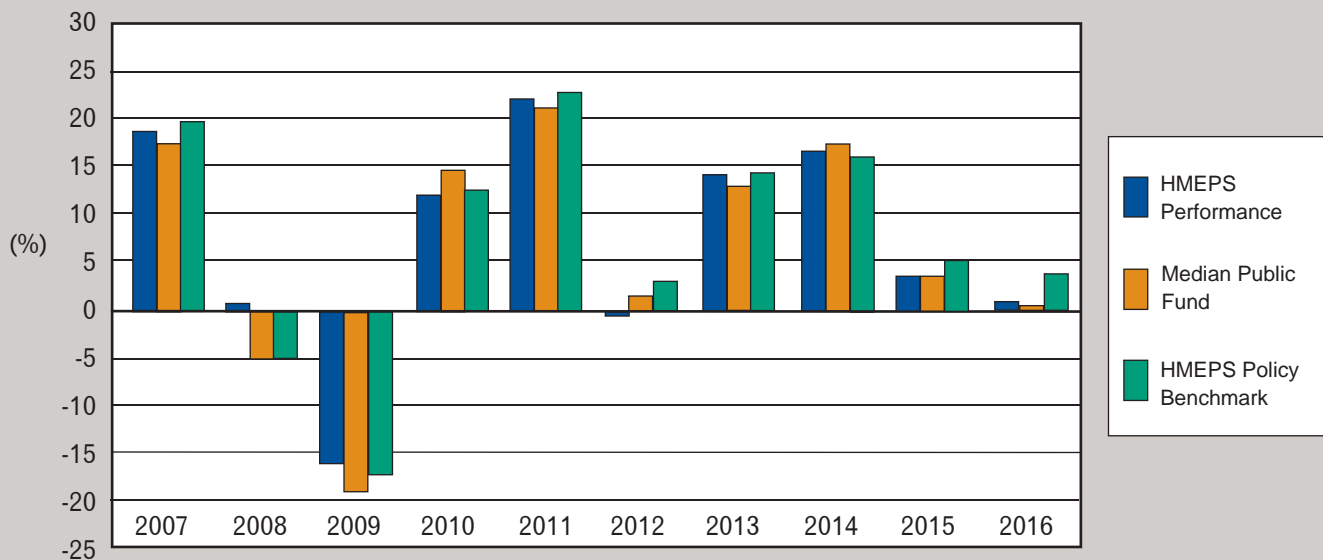
SCHEDULE OF TOP PUBLIC EQUITY INVESTMENTS AS OF JUNE 30, 2016*

Name of Investment	Fair Value of Investment	Percent of Portfolio
BlackRock MSCI ACWI MIC Index	\$ 221,264,657	9.2%
RREEF America REIT II	\$36,500,432	1.5%
State Street Global Advisors REIT Index	\$30,509,348	1.2%
BlackRock ACWI ex-US Index	\$14,179,954	0.6%
Blackrock Equity Index Fund A	12,070,324	0.5%
Enterprise Product Partners	11,189,287	0.5%
Magellan Midstream Partners	10,670,172	0.4%
Plains All American Pipeline	7,738,270	0.0%
Energy Transfer Equity	9,291,110	0.4%
Sunoco Logistics Partners	7,405,655	0.3%

SCHEDULE OF TOP DEBT INVESTMENTS AS OF JUNE 30, 2016*

Name of Investment	Fair Value of Investment	Percent of Portfolio
BlackRock U.S. Debt Index (Barclays Aggregate)	45,998,708	1.9%
GMO Emerging Country Debt	17,531,533	0.6%
Alliance Bernstein Emerging Market	16,500,161	0.7%
US Treasury N/B 06/21 2.125	7,752,435	0.3%
US Treasury N/B 03/18 0.75	6,287,117	0.3%
US Treasury N/B 11/18 1.375	6,124,206	0.3%
US Treasury N/B 06/19 1.625	4,845,930	0.2%
HRG Group Inc. SR Unsecured 01/22 7.75	3,496,205	0.2%
Foresight Energy Company Guar 144A 08/21 7.875	3,201,600	0.1%
Century Aluminum Company Secured 144A 06/21 7.5	2,862,000	0.1%

* A complete list of the System's holdings is available at the System's office by appointment.



COMPARISON OF INVESTMENT RETURNS - YEARS ENDED JUNE 30

(Calculated based on a time-weighted rate of return based on the market rate of return)

Period Ending 06-30	HMEPS Total Fund	HMEPS Policy Portfolio	Median of Wilshire Public Fund Univ./TUCS	HMEPS Global Equity	MSCI ACWI Min Vol	HMEPS Fixed Income	Barclays Capital Aggregate Bond Index	Merrill Lynch High Yield Master II Index	HMEPS Private Equity	S&P 500 Index	HMEPS Real Estate	NCREIF Property Index	HMEPS Inflation-Linked	Consumer Price Index	HMEPS Absolute Return	LIBOR
2007	18.64%	20.00%	17.63%	n/a	n/a	9.57%	6.11%	11.73%	25.38%	20.59%	20.09%	17.24%	n/a	n/a	n/a	n/a
2008	0.47%	-4.88%	-4.92%	n/a	n/a	1.96%	7.13%	-2.09%	11.87%	-13.12%	18.19%	9.20%	n/a	n/a	n/a	n/a
2009	-16.02%	-17.55%	-19.19%	n/a	n/a	0.36%	6.06%	-3.53%	-20.93%	-26.22%	-40.37%	-19.57%	n/a	n/a	n/a	n/a
2010	12.24%	13.00%	14.71%	n/a	n/a	17.00%	9.50%	27.53%	16.82%	14.43%	-9.52%	-1.48%	21.52%	1.05%	23.39%	0.34%
2011	22.17%	22.89%	21.19%	n/a	n/a	9.33%	3.90%	15.40%	22.54%	30.68%	10.92%	16.73%	39.72%	3.56%	13.94%	0.33%
2012	-0.14%	3.23%	1.25%	n/a	n/a	6.31%	7.48%	6.51%	11.00%	5.44%	3.78%	12.00%	-21.96%	1.66%	-0.86%	0.46%
2013	13.58%	13.99%	12.27%	n/a	n/a	5.99%	-0.69%	9.57%	7.85%	20.59%	12.80%	10.73%	14.52%	1.75%	10.87%	0.31%
2014	16.39%	15.61%	16.83%	n/a	13.84%	9.22%	4.37%	11.80%	14.31%	24.61%	9.11%	11.21%	22.33%	2.07%	7.28%	0.24%
2015	3.38%	4.96%	3.38%	n/a	6.59%	1.13%	1.86%	-0.55%	10.36%	7.42%	10.88%	12.96%	-9.14%	0.12%	2.65%	0.25%
2016	1.65%	4.02%	1.07%	-0.31%	11.55%	3.33%	6.00%	1.71%	7.05%	3.99%	12.95%	10.64%	-12.18%	1.01%	-6.92%	0.51%
3 Yrs.	6.94%	8.07%	6.78%	7.50%	10.62%	4.50%	4.06%	4.18%	10.53%	11.66%	10.97%	11.60%	-0.80%	1.06%	0.83%	0.34%
5 Yrs.	6.76%	8.19%	6.82%	n/a	n/a	5.16%	3.76%	5.71%	10.08%	12.10%	9.85%	11.51%	-2.69%	1.32%	2.41%	0.36%
10 Yrs.	6.65%	6.80%	5.94%	n/a	n/a	6.31%	5.13%	7.44%	9.89%	7.42%	3.11%	7.40%	n/a	n/a	n/a	n/a

SCHEDULE OF FEES AND COMMISSIONS PAID

SCHEDULE OF FEES AND COMMISSIONS PAID IN FISCAL YEAR 2016

Broker Name	Number of Shares	Commissions (\$)	Cents/Share
Able Noser	89,724	2,692	3.00
Barclay Capital	539,515	5,152	0.95
Bloomberg Tradebook Europe Ltd.	872,587	3,982	0.46
BNP Paribas Securities Services	515,583	5,450	1.06
BNY Convergenx	9,722,587	101,078	1.04
Cantor Fitzgerald & Co./Castleoak SEC	55,494	2,211	3.98
Capital Institutional Svcs Inc. Equities	34,230,467	30,344	0.09
Charles Schwab & Co. Inc	325,265	5,288	1.63
Cheevers & Co.	156,188	4,686	3.00
Citigroup Global Markets Inc.	2,244,789	11,951	0.53
Craig - Hallum	87,300	3,492	4.00
Credit Suisse Securities	5,642,780	5,995	0.11
Deutsche Bank Securities Inc.	1,216,679	7,251	0.60
Fig Partners	69,888	2,796	4.00
Goldman Sachs & Co.	351,020	3,904	1.11
Guzman & Co.	278,365	4,358	1.57
Instinet	407,291	10,452	2.57
ISI Group	294,837	2,363	0.80
J.P. Morgan Securities Inc.	1,457,887	17,044	1.17
Jefferies & Co.	1,437,303	8,539	0.59
Jones Trading Institutional Services	1,974,305	23,999	1.22
J.P. Morgan Securities Plc.	670,269	4,652	0.69
Keybank Capital Markets	128,595	5,106	3.97
Korea Investment and Securities	42,700	2,178	5.10
Loop Capital Markets	104,901	3,147	3.00
Merril Lynch & Co.	4,424,906	19,242	0.43
Morgan Stanley Co.	2,936,525	22,678	0.77
Piper Jaffray	96,170	3,836	3.99
Raymond James and Associates	56,422	2,049	3.63
RBC Capital Markets	280,525	4,414	1.57
Robert W. Baird Co.	87,266	3,416	3.91
Rosenblatt Securities	149,000	3,205	2.15
Roth Capital Partners	90,975	3,639	4.00
Sanford C. Bernstein	417,144	5,837	1.40
SG Americas Securities	171,850	3,204	1.86
Sidoti & Co.	88,769	3,551	4.00
State Street Bank and Trust	707,747	9,500	1.34
Stifel Nicolaus	234,782	8,867	3.78
UBS Securities	1,068,410	35,404	3.31
Wells Fargo Securities	673,985	8,248	1.22
Other	1,268,543	30,841	2.43
Grand Total	75,669,338	446,040	
Average Cents/Share			2.10

SCHEDULE OF FEES AND COMMISSIONS PAID

Public Market Investments	Fair Value	Fees	Basis Points
Global Equity	\$ 808,272,734	\$ 3,293,060	4
Fixed Income	387,308,646	1,557,410	4
Inflation Linked	117,404,355	521,310	4
Other Public Market	30,509,348	50,948	2
Non-Public Market Instruments	1,062,067,019	84,363	0
Total	\$ 2,405,562,103	\$ 5,507,091	

Custodian Bank

State Street Bank & Trust Company	375,160
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Consultant Services

Wilshire Associates, Inc.	284,000
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Cliffwater LLC	550,000
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Legal Services	24,096
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Other Investment Expenses	797,497
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Total Investment Expenses	\$ 7,537,844
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HMEPS



SECTION FOUR

ACTUARIAL INFORMATION

ACTUARY'S LETTER TO THE BOARD OF TRUSTEES

Gabriel Roeder Smith & Company

March 24, 2016

Board of Trustees

Houston Municipal Employees Pension System

1201 Louisiana, Suite 900

Houston, TX 77002

Dear Members of the Board:

This report describes the current actuarial condition of the Houston Municipal Employees Pension System (HMEPS), determines the calculated employer contribution rate, and analyzes changes in this contribution rate. The results presented herein may not be applicable for other purposes. Valuations are prepared annually, as of July 1, the first day of the HMEPS plan year.

Under the HMEPS statute, the employer contribution rate is determined actuarially, based on the Board's funding policy and HMEPS' governing law. The contribution rate determined by a given actuarial valuation and implemented by the Board becomes effective twelve months after the valuation date, i.e., the rates determined by this July 1, 2015 actuarial valuation will be used by the Board when determining the employer contribution rate for the year beginning July 1, 2016 and ending June 30, 2017.

Under the Amended and Restated Meet & Confer Agreement (ARM&CA) between the Board and the City of Houston, the City will contribute the greater of the 2015 fiscal year contribution increased by \$10 million or 27.36% of payroll in fiscal year 2016. Contributions in future fiscal years will increase by the greater of the prior fiscal year's contribution amount increased by \$10 million or 2% of payroll over the prior year's rate until such time that the City's contribution rate equals the actuarially determined contribution rate. As part of the agreement the Board's funding policy has been modified to use an open 30-year rolling amortization period until such time that the City's actual contribution rate is equal to the actuarially determined contribution rate, at which point the funding period will be closed.

Under the terms of the ARM&CA and based on an estimated payroll of \$590.7 million, the estimated City contribution for FY 2016 is \$161.6 million (27.36% of pay) and based on an estimated payroll of \$608.4 million, the estimated City contribution for FY 2017 is \$178.6 million (29.36% of pay).

Financing objectives and funding policy

The amortization period is set by statute, and was modified under the ARM&CA. The contribution rate and liabilities are computed using the Entry Age Normal actuarial cost method. The employer contribution rate is the sum of two pieces: the employer normal cost rate and the amortization rate. Both the normal cost

rate and the amortization rate are determined as a level percentage of pay. The amortization rate is the amount required to amortize the unfunded actuarial accrued liability over an open 30-year period. The amortization rate is adjusted for the one-year deferral in contribution rates. The amortization period will remain open until the actual employer contribution rate is equal to the actuarially determined employer contribution rate.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The funded ratio as of July 1, 2015 is 54.2%. This is a decrease from the 58.1% funded ratio from the prior year's valuation. The funded status alone is not appropriate for assessing the need for or the amount of future contributions and is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

The calculated employer contribution rate for FY 2017 is 31.81%. This rate is greater than the 27.38% rated calculated in the 2014 valuation. This increase is mostly due to the change in actuarial assumptions. Please see page 70 for a detailed analysis of the change in the calculated employer contribution rate from the prior year to this year.

Plan Experience

As part of each valuation, we examine the System's experience relative to the assumptions. The aggregate results of these analyses are disclosed on page 70. This past fiscal year the System had a total liability gain of approximately \$13.1 million.

Benefit Provisions

The benefit provisions reflected in this valuation are those which were in effect on July 1, 2015.

The Fourth Amendment to the Meet and Confer Agreement between the City and the Board changed the benefit provisions substantially, effective January 1, 2008. Under the Fourth Amendment, the benefits for employees hired prior to January 1, 2008 were not modified, but the benefits for employees newly hired on or after January 1, 2008 were modified substantially, including the elimination of member contributions. There have been no changes in the benefit provisions since the prior valuation date that have a material financial impact on HMEPS.

The benefit provisions are summarized starting on page 87.

Assumptions and Methods

Actuarial assumptions and methods are set by the Board of Trustees, based upon recommendations made by the plan's actuary. The current assumptions were adopted by the Board in 2016 following a regularly scheduled experience study. The rationale for all of the current assumptions is included in that report, dated February 25, 2016.

The actuarial assumptions represent estimates of future experience and are not market measures. The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results (and future measures) can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations are intended to provide information for rational decision making.

This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

All assumptions and methods are described on pages 83-87.

ACTUARY'S LETTER TO THE BOARD OF TRUSTEES

GASB 67

The System was required to begin complying with Governmental Accounting Standards Board Statement No. 67 with the fiscal year ending June 30, 2014. The GASB No. 67 information for the fiscal year ending June 30, 2015 was provided to HMEPS in a separate report dated September 28, 2015 and is not contained in this report.

Data

Member data for retired, active and inactive members was supplied as of July 1, 2015 by the HMEPS staff. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data.

Asset information as of July 1, 2015 was taken from the Comprehensive Annual Financial Report (CAFR) for the Year Ended June 30, 2015.

Certification

We were asked to determine if an unanticipated actuarial cost occurred in the administration of the Deferred Retirement Option Plan (DROP). It is our opinion that the administration of the DROP had no material unanticipated actuarial costs during the prior fiscal year.

All of the tables contained in this actuarial valuation report were prepared by Gabriel, Roeder, Smith & Company. The trend data schedules shown in the Notes section of the HMEPS CAFR are based on our valuation reports, but were prepared by HMEPS staff. We certify that the information presented herein is accurate and fairly portrays the actuarial position of HMEPS as of July 1, 2015.

All of our work conforms with generally accepted actuarial principles and practices, and the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of state law and, where applicable, the Internal Revenue Code, ERISA,

and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries and consultants. Mr. Newton is an Enrolled Actuary and also a Member of the American Academy of Actuaries, and meets the Qualification Standards of the American Academy of Actuaries. Both of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

Gabriel, Roeder, Smith & Company



Joseph P. Newton, FSA, EA, MAAA
Senior Consultant



Lewis Ward
Consultant

Item	July 1, 2015	July 1, 2014
Membership		
Number of:		
Active members	11,827	11,949
Retirees and beneficiaries	10,023	9,685
Inactive members	5,495	5,532
Total	27,345	27,166
Covered payroll (annualized)	\$ 584,025	\$ 568,992
 Calculated Contribution rates		
Employer	31.81 %	27.38 %
 Assets		
Market value	\$ 2,456,544	\$ 2,464,439
Actuarial value	2,582,510	2,490,521
Estimation of return on market value	2.8 %	16.0 %
Estimation of return on actuarial value	6.8 %	7.9 %
Employer contribution	\$ 145,007	\$ 128,274
Member contribution	\$ 16,198	\$ 16,580
Ratio of actuarial value to market value	105.1 %	101.1 %
External cash flow as % of market value assets	-3.4 %	-3.4 %
 Actuarial Information		
Employer normal cost %	6.92 %	5.85 %
Unfunded actuarial accrued liability (UAAL)	\$ 2,183,209	\$ 1,798,058
Amortization rate	23.70 %	21.53 %
Funding period	30.0 years	30.0 years
GASB funded ratio	54.2 %	58.1 %

Note: Dollar amounts in \$000, unless otherwise noted

Projected employer contribution based on ARM&CA

Fiscal year ending June 30,	2017	2016	2015
1. Projected payroll	\$ 608,393,840	\$ 590,673,631	\$ 577,413,249
2. ARM&CA Contribution Rate	29.36 %	27.36 %	25.36 %
3. Projected employer contribution (1 x 2)*	\$ 178,624,432	\$ 161,608,306	\$ 146,432,000

*Employer contribution is at least equal to the prior year dollar contribution plus \$10 million.

Note: For fiscal year 2015 actual payroll was \$577.4 million. The Meet and Confer contribution rate was 25.36% and the actual employer contribution to the System was \$146.4 million (including the 415 Restoration Plan).

STATEMENT OF PLAN NET POSITION

	July 1, 2015
A. ASSETS	
1. Current Assets	
a. Cash and short term investments	
1) Cash on hand	\$ 622
2) Short term investments	78,699
b. Accounts Receivable	
1) Sale of investments	19,724
2) Other	5,156
c. Total Current Assets	\$ 104,201
2. Long Term Investments	
a. US. Government securities	\$ 85,623
b. Corporate bonds	225,280
c. Capital stocks	768,811
d. Commingled Funds	393,973
e. LP's, real estate trusts, loans and mortgages	914,954
f. Total long term investments	\$ 2,388,641
3. Other Assets	
a. Collateral on securities lending	\$ 101,533
b. Furniture, fixtures and equipment, net	395
c. Total other assets	\$ 101,928
4. Total Assets	\$ 2,594,770
B. LIABILITIES	
1. Current Liabilities	
a. Amounts due on asset purchases	\$ 30,782
b. Accrued liabilities	5,911
c. Collateral on securities lending	101,533
2. Total Liabilities	138,226
3. Net Position Held in Trust	\$ 2,456,544
C. TARGET ASSET ALLOCATION FOR CASH & LONG TERM INVESTMENTS	
1. Cash	0.0%
2. Fixed Income	15.0%
3. Real Estate	10.0%
4. Private Equities	17.5%
5. Global Equities	35.0%
6. Alternative Investments	22.5%
7. Total	100.0%

Note: Dollar amounts in \$000

Columns may not add due to rounding.

RECONCILIATION OF PLAN NET POSITION

	Year Ending June 30, 2015
1. Fair value of assets at beginning of year	\$ 2,464,439
2. Revenue for the year	
a. Contributions	
i. Member contributions	\$ 16,198
ii. Employer contributions (see note)	145,007
iii. Total	<u>\$ 161,205</u>
b. Net investment income	
i. Interest	\$ 17,417
ii. Dividends	19,323
iii. Earnings from LP's and real estate trusts	8,679
iv. Net appreciation (depreciation) on investments	36,335
v. Net proceeds from lending securities	484
vi. Less investment expenses	(8,384)
vii. Other	<u>557</u>
c. Total revenue	\$ 235,616
3. Expenditures for the year	
a. Refunds	\$ 1,549
b. Benefit payments	234,955
c. Administrative and miscellaneous expenses	<u>7,007</u>
d. Total expenditures	\$ 243,511
4. Increase in net position (Item 2c - Item 3d)	\$ (7,895)
5. Fair value of assets at end of year (Item 1 + Item 4)	\$ 2,456,544

Note: Dollar amounts in \$000

Employer contribution does not include amounts contributed to the replacement benefit plan.

Columns may not add due to rounding.

ASSET INFORMATION

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

	<u>July 1, 2015</u>
1. Actuarial value of assets at beginning of year	\$ 2,490,521
2. Net new investments	
a. Contributions	\$ 161,205
b. Benefits and refunds paid	<u>(236,504)</u>
c. Subtotal	(75,299)
3. Assumed investment return rate for fiscal year	8.50%
4. Assumed investment income for fiscal year	\$ 208,560
5. Expected Actuarial Value at end of year (1+ 2 + 4)	\$ 2,623,782
6. Fair value of assets at end of year	\$ 2,456,544
7. Difference (6 - 5)	\$ (167,238)
8. Development of amounts to be recognized as of July 1, 2015:	

Fiscal Year End	Remaining Deferrals of Excess (Shortfall) of Investment Income	Offsetting of Gains/ (Losses)	Net Deferrals Remaining	Years Remaining	Recognized For This Valuation	Remaining After This Valuation
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2011	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0
2012	(26,082)	0	(26,082)	2	(13,041)	(13,041)
2013	0	0	0	3	0	0
2014	0	0	0	4	0	0
2015	(141,156)	0	(141,156)	5	(28,231)	(112,925)
Total	\$ (167,238)	\$ 0	\$ (167,238)		\$ (41,272)	\$ (125,966)

9. Final actuarial value of plan net position, end of year (Item 6 - Item 8 Column 6)	\$ 2,582,510
10. Asset gain (loss) for year (Item 9 - Item 5)	\$ (41,272)
11. Asset gain (loss) as % of actual actuarial assets	(1.60%)
12. Ratio of actuarial value to fair value	105.1%

Notes: Remaining deferrals in Column (1) for prior years are from last year's report column (6) of Table 10. The number in the current year is the difference between the remaining deferrals for prior years and the total Excess/(Shortfall) return shown in Item 7. Column 2 is a direct offset of the current year's excess/(shortfall) return against prior years' excess/(shortfall) of the opposite type.

ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS

	<u>July 1, 2015</u>
1. Active members	
a. Retirement benefits	\$ 2,093,301
b. Deferred termination benefits	121,170
c. Refunds	11,227
d. Death benefits	77,388
e. Disability benefits	<u>11,961</u>
f. Total	\$ 2,315,047
2. Members in Pay Status	
a. Service retirements	\$ 2,354,163
b. Disability retirements	40,160
c. Beneficiaries	<u>243,982</u>
d. Total	\$ 2,638,305
3. Inactive members	
a. Vested terminations	\$ 188,994
b. Nonvested terminations	<u>5,561</u>
c. Total	\$ 194,555
4. Total actuarial present value of future benefits	\$ 5,147,907

Note: Dollar amounts in \$000

FUNDING INFORMATION

CALCULATION OF TOTAL ACTUARIAL GAIN OR LOSS

1. Unfunded actuarial accrued liability (UAAL) as of July 1, 2014	\$ 1,798,058
2. Employer normal cost for year*	33,779
3. Employer Contributions during year ending June 30, 2015*	(145,007)
4. Interest on UAAL for one year	152,835
5. Interest on Item 2 and Item 3 for one-half year	(4,631)
6. Expected UAAL as of July 1, 2015 (1+2+3+4+5)	\$ 1,835,034
7. Actual UAAL as of July 1, 2015	\$ 2,183,209
8. Actuarial gain/(loss) for the period (6 - 7)	\$ (348,175)

SOURCE OF GAINS/(LOSSES)

9. Asset gain/(loss) (See page 66)	\$ (41,272)
10. Assumption changes	(319,957)
11. Changes from Meet & Confer	0
12. Total liability gain/(loss) for the period	\$ 13,054
13. Actuarial gain/(loss) for the period	\$ (348,175)

Note: Dollar amounts in \$000

*Employee contributions excluded due to use of replacement life normal cost method for ongoing plan. New members (Group D) do not contribute to the plan.

CHANGE IN CALCULATED CONTRIBUTION RATE SINCE THE PRIOR VALUATION

1. Calculated Contribution Rate as of July 1, 2014	27.38%
2. Change in Contribution Rate During Year	
a. Change in Employer Normal Cost	0.05%
b. Recognition of prior years' asset losses	0.16%
c. Actuarial loss from current year asset performance	0.33%
d. Actuarial gain from liability sources	(0.20%)
e. Impact of City contributing less than actuarially determined rate	0.29%
f. Effect of projected payroll growing faster than expected	(0.51%)
g. Effect of resetting amortization period to 30 years	(0.40%)
h. Change in Actuarial Assumptions	4.71%
i. Total Change	4.43%
3. Calculated Contribution Rate as of July 1, 2015	31.81%

NEAR TERM OUTLOOK

Valuation as of July 1, (1)	Unfunded Actuarial Accrued Liability (UAAL, in 000s) (2)	Funded Ratio (3)	Calculated Contribution Rate (4)	Funding Period (Years) ¹ (5)	Market Value of Fund (in 000s) (6)	For Fiscal Year Ending June 30, (7)	Projected Compensation (8)	Employer Contributions (9)	Employee Contributions (10)	Benefit Payments ² (11)	Net External Cash Flow (12)
2015	\$ 2,183,209	54.2%	31.81%	30.0	\$ 2,456,544	2016	\$ 590,674	\$ 161,608	\$ 16,330	\$ 273,769	\$ (95,831)
2016	2,278,359	53.7%	32.06%	30.0	2,553,477	2017	608,394	178,624	15,421	294,355	(100,310)
2017	2,354,413	53.6%	31.94%	30.0	2,653,510	2018	629,411	197,383	14,565	315,824	(103,876)
2018	2,420,828	53.6%	32.25%	29.0	2,757,840	2019	649,601	207,483	13,728	338,205	(116,993)
2019	2,485,449	53.6%	32.55%	28.0	2,856,884	2020	670,320	216,147	12,906	361,171	(132,118)
2020	2,521,010	54.0%	32.57%	27.0	2,948,133	2021	691,867	225,231	12,091	384,547	(147,224)
2021	2,550,999	54.3%	32.59%	26.0	3,030,984	2022	714,050	232,580	11,277	408,386	(164,529)
2022	2,577,355	54.6%	32.60%	25.0	3,102,479	2023	736,836	240,147	10,471	432,493	(181,875)
2023	2,599,996	54.9%	32.59%	24.0	3,161,667	2024	760,260	247,829	9,683	422,820	(165,308)
2024	2,619,226	55.3%	32.61%	23.0	3,242,807	2025	784,499	255,707	8,908	440,325	(175,710)
2025	2,634,018	55.8%	32.61%	22.0	3,319,628	2026	809,249	263,862	8,156	455,136	(183,118)

These projections are based on the Amended and Restated Meet and Confer agreement assuming that the benefit provisions that went into effect January 1, 2008 remain in effect throughout the projection. Beginning in FY2012, the employer contributions shown above are based on a negotiated amount of \$98.5 million in FY2012 followed by increases in the following fiscal years equal to the greater of the prior year's dollar contribution increased by \$10 million or the set contribution rate of 19.36% increased by 2% per year over the previous year's contribution rate. This method of determining the contribution rate remains in place until the contribution rate reaches the actuarially determined contribution rate determined by the valuation of the year prior (i.e. the FY 2016 rate is set by the July 1, 2014 valuation). Any changes to future accruals or failure to contribute the calculated rate will change the results of this projection.

1 The agreement between the City and HMEPS includes an open 30 year amortization period until the actual City contribution rate reaches the actuarially determined contribution rate.

2 Includes refunds taken by terminating members and plan administrative expenses.

Note: Dollar amounts in \$000

CONTRIBUTION INFORMATION

ANALYSIS OF NORMAL COST

	July 1, 2015	July 1, 2014
	(1)	(2)
1. Gross normal cost rate		
a. Retirement benefits	5.59%	4.67%
b. Deferred termination benefits	0.88%	0.72%
c. Refunds*	0.00%	0.00%
d. Disability benefits	0.08%	0.07%
e. Death benefits	0.37%	0.39%
f. Total	6.92%	5.85%

* Refund of employee contributions excluded due to use of replacement life normal cost method for ongoing plan. New members (Group D) do not contribute to the plan.

HISTORICAL CITY CONTRIBUTION RATES

Valuation Date	Calculated Contribution Rate ¹	Time Period for Contribution Rate	Actual Contribution Rate
(1)	(2)	(3)	(4)
July 1, 1987	5.83 %	January 1, 1988 through December 31, 1988	5.15 %
July 1, 1988	6.27	January 1, 1989 through December 31, 1989	5.15
July 1, 1989	6.88	January 1, 1990 through December 31, 1990	6.27
July 1, 1990	6.23	January 1, 1991 through December 31, 1991	6.27
July 1, 1991	8.77	January 1, 1992 through June 30, 1993	6.27
July 1, 1992	9.11	July 1, 1993 through June 30, 1994	9.11
July 1, 1993	9.30	July 1, 1994 through June 30, 1995	9.30
July 1, 1994	8.80	July 1, 1995 through June 30, 1996	8.80
July 1, 1995	9.20	July 1, 1996 through June 30, 1997	9.20
July 1, 1996	9.10	July 1, 1997 through June 30, 1998	9.10
		July 1, 1998 through June 30, 1999	9.10
July 1, 1998	9.30	July 1, 1999 through June 30, 2000	9.30
July 1, 1999	9.80	July 1, 2000 through June 30, 2001	10.00
July 1, 2000	9.50	July 1, 2001 through June 30, 2002	10.00
July 1, 2001	17.70	July 1, 2002 through June 30, 2003	10.00
July 1, 2002	31.80	July 1, 2003 through June 30, 2004	14.70
July 1, 2003	52.89	July 1, 2004 through June 30, 2005	92.55 ^{2,3}
July 1, 2004	29.43	July 1, 2005 through June 30, 2006	15.49 ³
July 1, 2005	24.10	July 1, 2006 through June 30, 2007	15.89 ³
July 1, 2006	24.63	July 1, 2007 through June 30, 2008	15.52 ⁴
July 1, 2007	19.47	July 1, 2008 through June 30, 2009	14.63 ⁴
July 1, 2008	19.20	July 1, 2009 through June 30, 2010	14.65 ⁴
July 1, 2009	20.07	July 1, 2010 through June 30, 2011	16.30 ⁴
July 1, 2010	22.36	July 1, 2011 through June 30, 2012	17.74 ⁵
July 1, 2011	23.45	July 1, 2012 through June 30, 2013	21.10 ⁵
July 1, 2012	26.10	July 1, 2013 through June 30, 2014	23.70 ⁵
July 1, 2013	27.50	July 1, 2014 through June 30, 2015	25.11 ⁵
July 1, 2014	27.38	July 1, 2015 through June 30, 2016	N/A
July 1, 2015	31.81	July 1, 2016 through June 30, 2017	N/A

1. Rate determined by the actuarial valuation is for the fiscal year beginning on the July 1st next following the valuation date.

2. Includes \$300 million note.

3. As pursuant to the funding schedule from the 2004 Meet and Confer agreement.

4. As pursuant to the funding schedule from the Fourth Amendment.

5. As pursuant to the funding schedule from the Amended and Restated Meet and Confer Agreement.

CALCULATION OF ANNUAL REQUIRED CONTRIBUTION RATE

		July 1, 2015	July 1, 2014
		(1)	(2)
1.	Annualized salaries on valuation date	\$ 584,025	\$ 568,992
2.	Projected payroll for upcoming fiscal year*	\$ 590,674	\$ 561,423
3.	Present value of future pay	\$ 4,141,116	\$ 3,816,664
4.	Employer normal cost rate	6.92 %	5.85 %
5.	Actuarial accrued liability for active members		
a.	Present value of future benefits for active members	\$ 2,315,047	\$ 2,070,248
b.	Less: present value of future employer normal costs	(270,476)	(210,384)
c.	Less: present value of future employee contributions	(111,712)	(109,510)
d.	Actuarial accrued liability	\$ 1,932,859	\$ 1,750,354
6.	Total actuarial accrued liability for:		
a.	Retirees and beneficiaries	\$ 2,638,305	\$ 2,360,600
b.	Inactive participants	\$ 194,555	177,625
c.	Active members (Item 5d)	\$ 1,932,859	1,750,354
d.	Total	\$ 4,765,719	\$ 4,288,579
7.	Actuarial value of assets	\$ 2,582,510	\$ 2,490,521
8.	Unfunded actuarial accrued liability (UAAL) (Item 6d - Item 7)	\$ 2,183,209	\$ 1,798,058
9.	Funding period	30 years	30 years
10.	Assumed payroll growth rate	3.00 %	3.00 %
11.	Employer Contribution requirement		
a.	UAAL amortization payment as % of projected pay	23.70 %	21.53 %
b.	Employer normal cost	6.92 %	5.85 %
c.	Admin Expenses	1.19 %	N/A %
d.	Contribution requirement (a + b + c)	31.81 %	27.38 %

Note: Dollar amounts in \$000

*The projected payroll is the actual pay received for the just completed fiscal year (including pay for any member who received pay during the year: i.e. active, terminated, retired, etc.). This pay is then increased by the payroll growth rate and by the ratio of the current number of active members to the average number of active members during the prior fiscal year.

HISTORICAL SOLVENCY TEST

Valuation Date (1)	Aggregated Accrued Liabilities For				Portions of Accrued Liabilities Covered		
	Active Members Contributions (2)	Retirees Beneficiaries and Vested Terminations ¹ (3)	Members (City Financed Portion) (4)	Actuarial Value of Assets (5)	By Reported Assets		
					(5)/(2)	[(5)-(2)]/(3)	[(5)-(2)-(3)]/(4)
July 1, 1996	\$ 45,819	\$ 438,486	\$ 558,154	\$ 857,332	100.0%	100.0%	67%
July 1, 1998	34,781	502,335	703,025	1,095,617	100.0%	100.0%	79%
July 1, 1999	33,985	599,270	706,678	1,222,240	100.0%	100.0%	83%
July 1, 2000	38,292	646,611	824,470	1,376,020	100.0%	100.0%	84%
July 1, 2001	36,449	804,901	1,114,456	1,490,179	100.0%	100.0%	58%
July 1, 2002	35,888	893,568	1,585,733	1,519,717	100.0%	100.0%	37%
July 1, 2003	44,388	1,115,801	2,118,063	1,510,264	100.0%	100.0%	17%
July 1, 2004	62,062	1,355,157	1,216,599	1,501,235	100.0%	100.0%	7%
July 1, 2005	48,150	1,577,345	1,099,777	1,777,656	100.0%	100.0%	14%
July 1, 2006	58,043	1,729,863	1,106,389	1,867,293	100.0%	100.0%	7%
July 1, 2007	69,544	1,824,992	1,234,178	2,193,745	100.0%	100.0%	24%
July 1, 2008	81,182	1,904,333	1,310,855	2,310,384	100.0%	100.0%	25%
July 1, 2009	95,268	1,974,714	1,381,428	2,284,442	100.0%	100.0%	16%
July 1, 2010	107,421	2,058,813	1,466,236	2,273,142	100.0%	100.0%	7%
July 1, 2011	118,202	2,154,959	1,517,167	2,328,804	100.0%	100.0%	4%
July 1, 2012	124,848	2,312,548	1,529,468	2,344,128	100.0%	96.0%	0%
July 1, 2013	132,238	2,431,950	1,565,395	2,382,585	100.0%	92.5%	0%
July 1, 2014	139,203	2,538,225	1,611,151	2,490,521	100.0%	92.6%	0%
July 1, 2015	143,097	2,832,860	1,789,762	2,582,510	100.0%	86.1%	0%

Note: Dollar amounts in \$000

1. Column (3) included AAL for DROP participants until 2003, now in Column (4)

SCHEDULE OF FUNDING PROGRESS

Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annualized Salaries	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
July 1, 1996	\$ 857,332	\$ 1,042,459	\$ 185,127	82.2%	\$ 367,610	50.4%
July 1, 1998	1,095,617	1,240,141	144,524	88.3%	397,698	36.3%
July 1, 1999	1,222,240	1,339,933	117,693	91.2%	407,733	28.9%
July 1, 2000	1,376,020	1,509,373	133,353	91.2%	432,604	30.8%
July 1, 2001	1,490,179	1,955,806	465,627	76.2%	418,234	111.3%
July 1, 2002	1,519,717	2,515,189	995,472	60.4%	399,794	249.0%
July 1, 2003	1,510,264	3,278,251	1,767,987	46.1%	390,314	453.0%
July 1, 2004	1,501,235	2,633,817	1,132,582	57.0%	366,190	309.3%
July 1, 2005	1,777,656	2,725,272	947,616	65.2%	404,565	234.2%
July 1, 2006	1,867,293	2,894,295	1,027,002	64.5%	422,496	243.1%
July 1, 2007	2,193,745	3,128,713	934,968	70.1%	448,925	208.3%
July 1, 2008	2,310,384	3,296,370	985,986	70.1%	483,815	203.8%
July 1, 2009	2,284,442	3,451,410	1,166,968	66.2%	539,023	216.5%
July 1, 2010	2,273,142	3,632,470	1,359,328	62.6%	550,709	246.8%
July 1, 2011	2,328,804	3,790,328	1,461,524	61.4%	544,665	268.3%
July 1, 2012	2,344,128	3,966,864	1,622,736	59.1%	534,394	303.7%
July 1, 2013	2,382,585	4,129,583	1,746,998	57.7%	549,971	317.7%
July 1, 2014	2,490,521	4,288,579	1,798,058	58.1%	568,992	316.0%
July 1, 2015	2,582,510	4,765,719	2,183,209	54.2%	584,025	373.8%

Note: Dollar amounts in \$000

PARTICIPANT INFORMATION

DISTRIBUTION OF GROUP A ACTIVE MEMBERS BY AGE AND BY YEARS OF SERVICE

Attained Age	0		1		2		3		4		5-9		10-14		15-19		20-24		25-29		30-34		35 & Over		Total			
	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.		Total No. & Avg. Comp.		
Under 25																												
25-29	2	1	2	1	48	1	48	1	48	1	48	1	48	1	48	1	48	1	48	1	48	1	48	1	48	55		
	\$32,219	\$55,806	\$30,711	\$32,136	\$35,836	\$44,262	\$32,136	\$35,836	\$44,262	\$32,136	\$35,836	\$44,262	\$32,136	\$35,836	\$44,262	\$32,136	\$35,836	\$44,262	\$32,136	\$35,836	\$44,262	\$32,136	\$35,836	\$44,262	\$32,136	\$35,967		
30-34	9	7	8	3	213	79	213	79	213	79	213	79	213	79	213	79	213	79	213	79	213	79	213	79	213	324		
	\$38,078	\$48,470	\$35,425	\$41,033	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$40,796	\$44,352	\$43,168		
35-39	6	4	14	12	257	183	257	183	257	183	257	183	257	183	257	183	257	183	257	183	257	183	257	183	257	517		
	\$52,849	\$49,608	\$45,707	\$40,817	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$49,206	\$48,818	\$48,692		
40-44	6	9	12	6	231	228	231	228	231	228	231	228	231	228	231	228	231	228	231	228	231	228	231	228	231	631		
	\$36,937	\$48,979	\$51,551	\$29,959	\$51,150	\$50,413	\$49,135	\$51,150	\$50,413	\$49,135	\$51,150	\$50,413	\$49,135	\$51,150	\$50,413	\$49,135	\$51,150	\$50,413	\$49,135	\$51,150	\$50,413	\$49,135	\$51,150	\$50,413	\$49,135	\$50,308		
45-49	5	8	6	6	237	273	237	273	237	273	237	273	237	273	237	273	237	273	237	273	237	273	237	273	237	869		
	\$46,405	\$47,845	\$41,506	\$36,833	\$51,697	\$51,138	\$56,207	\$51,697	\$51,138	\$56,207	\$51,697	\$51,138	\$56,207	\$51,697	\$51,138	\$56,207	\$51,697	\$51,138	\$56,207	\$51,697	\$51,138	\$56,207	\$51,697	\$51,138	\$56,207	\$52,796		
50-54	7	5	11	20	269	297	269	297	269	297	269	297	269	297	269	297	269	297	269	297	269	297	269	297	269	1,186		
	\$36,088	\$48,115	\$53,405	\$47,313	\$49,501	\$50,260	\$52,570	\$49,501	\$50,260	\$52,570	\$49,501	\$50,260	\$52,570	\$49,501	\$50,260	\$52,570	\$49,501	\$50,260	\$52,570	\$49,501	\$50,260	\$52,570	\$49,501	\$50,260	\$52,570	\$52,129		
55-59	3	9	8	7	226	287	226	287	226	287	226	287	226	287	226	287	226	287	226	287	226	287	226	287	226	1,142		
	\$27,040	\$32,906	\$53,955	\$67,068	\$51,775	\$50,225	\$54,147	\$51,775	\$50,225	\$54,147	\$51,775	\$50,225	\$54,147	\$51,775	\$50,225	\$54,147	\$51,775	\$50,225	\$54,147	\$51,775	\$50,225	\$54,147	\$51,775	\$50,225	\$54,147	\$62,240		
60-64	2	4	2	4	160	214	160	214	160	214	160	214	160	214	160	214	160	214	160	214	160	214	160	214	160	790		
	\$61,839	\$55,001	\$40,404	\$44,751	\$51,032	\$49,983	\$55,142	\$51,032	\$49,983	\$55,142	\$51,032	\$49,983	\$55,142	\$51,032	\$49,983	\$55,142	\$51,032	\$49,983	\$55,142	\$51,032	\$49,983	\$55,142	\$51,032	\$49,983	\$55,142	\$63,508		
65 & Over			1	1	86	131	86	131	86	131	86	131	86	131	86	131	86	131	86	131	86	131	86	131	86	397		
			\$68,952	\$77,438	\$80,517	\$54,485	\$61,279	\$80,517	\$54,485	\$61,279	\$80,517	\$54,485	\$61,279	\$80,517	\$54,485	\$61,279	\$80,517	\$54,485	\$61,279	\$80,517	\$54,485	\$61,279	\$80,517	\$54,485	\$61,279	\$80,838		
Total	40	47	64	60	1,727	1,693	834	1,727	1,693	834	1,727	1,693	834	1,727	1,693	834	1,727	1,693	834	1,727	1,693	834	1,727	1,693	834	5,911		
	\$40,882	\$46,252	\$47,207	\$45,448	\$44,260	\$49,551	\$50,149	\$54,013	\$49,551	\$50,149	\$54,013	\$49,551	\$50,149	\$54,013	\$49,551	\$50,149	\$54,013	\$49,551	\$50,149	\$54,013	\$49,551	\$50,149	\$54,013	\$49,551	\$50,149	\$69,528		
Average:	Age:	50.94	Service:	14.78	Number of participants:																		Fully Vested:	5,685	Males:	3,204	Females:	2,707

Note: A former Group A employee who is rehired on or after January 1, 2008 is still a Group A employee.

Note: The chart includes four employees who were formerly members of Group C. The chart also includes employees who switch from Group B to Group A.

DISTRIBUTION OF GROUP B ACTIVE MEMBERS BY AGE AND BY YEARS OF SERVICE

Attained Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.
Under 25													
25-29	1	3				8							12
	\$31,200	\$24,149				\$37,578							\$33,689
30-34			1			9	1						11
			\$29,619			\$32,785	\$22,734						\$31,584
35-39	2	1			3			33	1				40
	\$33,166	\$102,232			\$32,718		\$47,026	\$42,474					\$46,526
40-44		6	3	2	2	9	1	88	38				149
		\$34,778	\$28,669	\$41,257	\$36,296	\$44,022	\$105,643	\$44,576	\$47,104				\$44,726
45-49	2	1	1	3	1	9		116	124	35	3		295
	\$53,373	\$46,613	\$34,154	\$37,197	\$29,245	\$43,289		\$42,946	\$47,175	\$50,203	\$31,332		\$45,425
50-54	5	3	7	10	2	11		88	116	88	35		365
	\$42,989	\$47,043	\$38,531	\$66,562	\$55,224	\$43,020		\$42,768	\$47,486	\$45,660	\$47,934		\$46,144
55-59	3	2	4	2	1	13		75	122	59	32	8	321
	\$62,740	\$39,978	\$68,297	\$40,019	\$42,224	\$61,986		\$47,224	\$45,965	\$51,787	\$48,499	\$51,204	\$48,710
60-64	2	1	3	4		3	1	61	73	46	15	9	218
	\$40,269	\$57,970	\$55,314	\$49,905		\$84,725	\$87,922	\$45,943	\$47,289	\$55,963	\$46,464	\$62,659	\$50,165
65 & Over		3	1		1	2		18	33	14	4	2	78
		\$40,567	\$23,795		\$32,635	\$65,291		\$47,072	\$53,765	\$54,203	\$48,469	\$50,419	\$51,075
Total	15	16	23	22	7	67	3	479	507	242	89	19	1,489
	\$45,865	\$41,002	\$44,673	\$53,136	\$41,021	\$46,917	\$72,100	\$44,700	\$47,386	\$50,263	\$47,354	\$56,548	\$47,062
Average:	Age:	52.65	Number of participants:		Fully vested:	1,406	Males:	713					
	Service:	20.54			Not vested:	83	Females:	776					

Note: A former Group B employee who is rehired on or after January 1, 2008 is still a Group B employee.

PARTICIPANT INFORMATION

DISTRIBUTION OF GROUP D ACTIVE MEMBERS BY AGE AND BY YEARS OF SERVICE

Attained Age	0		1		2		3		4		5-9		10-14		15-19		20-24		25-29		30-34		35 & Over		Total	
	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.	No. & Avg. Comp.		
Under 25	107	76	35	14	2	6																			240	
	\$30,765	\$31,071	\$31,256	\$33,033	\$26,146	\$42,162																			\$31,312	
25-29	188	192	116	80	21	107																			704	
	\$36,695	\$36,876	\$37,436	\$38,169	\$41,004	\$34,566																			\$36,839	
30-34	157	174	114	84	37	245																			811	
	\$42,532	\$42,286	\$41,977	\$45,333	\$47,557	\$44,272																			\$43,446	
35-39	138	107	91	52	24	178																			590	
	\$47,238	\$44,092	\$46,168	\$44,963	\$49,262	\$49,517																			\$47,072	
40-44	125	108	74	52	29	155																			543	
	\$50,790	\$50,615	\$49,768	\$50,382	\$54,611	\$51,406																			\$50,957	
45-49	100	70	63	51	25	170																			479	
	\$48,214	\$47,994	\$53,073	\$49,900	\$47,865	\$49,744																			\$49,525	
50-54	67	78	56	41	31	134																			407	
	\$52,759	\$45,693	\$41,953	\$46,454	\$57,403	\$52,751																			\$49,634	
55-59	67	52	71	26	18	115																			349	
	\$49,481	\$50,226	\$53,447	\$66,176	\$71,547	\$51,644																			\$53,493	
60-64	29	36	30	18	5	107																			225	
	\$46,791	\$60,426	\$52,770	\$57,074	\$61,177	\$53,369																			\$54,040	
65 & Over	8	5	8	10	4	44																			79	
	\$41,616	\$56,917	\$60,047	\$49,816	\$51,974	\$63,447																			\$58,172	
Total	986	898	658	428	196	1,261																			4,427	
	\$43,709	\$43,406	\$45,072	\$46,677	\$52,126	\$48,808																			\$45,962	
Average:		Age:	40.16	Number of participants:		Fully vested:	1,261	Males:	2,435																	
		Service:	3.18			Not Vested:	3,166	Females:	1,992																	

PARTICIPANT INFORMATION

HISTORICAL ACTIVE PARTICIPANT DATA

Valuation Date	Active Count	Average Age	Average Service	Annualized Salaries	Average Salary	Percent Changes
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1989	11,356	N/A	N/A	\$235,400	\$20,729	3.2%
1990	12,037	40.0	N/A	\$258,556	\$21,480	3.6%
1991	12,488	40.3	N/A	\$284,914	\$22,815	6.2%
1992	12,913	40.5	N/A	\$314,686	\$24,370	6.8%
1993	13,112	40.9	N/A	\$340,249	\$25,949	6.5%
1994	14,027	40.9	N/A	\$366,561	\$26,133	0.7%
1995	14,364	41.3	N/A	\$378,511	\$26,351	0.8%
1996	14,067	41.8	N/A	\$367,610	\$26,133	(0.8%)
1998 ¹	13,764	42.8	9.8	\$394,919	\$28,692	9.8%
1999 ¹	13,286	42.9	9.8	\$396,617	\$29,852	4.0%
2000 ¹	13,126	43.7	10.3	\$421,591	\$32,119	7.6%
2001 ¹	12,928	43.9	10.3	\$413,021	\$31,948	(0.5%)
2002	12,527	44.7	11.0	\$399,794	\$31,915	(0.1%)
2003	12,120	45.2	11.2	\$390,314	\$32,204	0.9%
2004	11,856	45.1	10.3	\$366,190	\$30,886	(4.1%)
2005 ²	11,974	44.8	9.6	\$404,565	\$33,787	9.4%
2006	12,145	44.8	9.3	\$422,496	\$34,788	3.0%
2007	12,376	45.2	9.3	\$448,925	\$36,274	4.3%
2008	12,653	45.2	9.3	\$483,815	\$38,237	5.4%
2009	13,333	45.1	9.2	\$539,023	\$40,428	5.7%
2010	12,913	45.8	10.0	\$550,709	\$42,648	5.5%
2011	12,345	46.5	10.6	\$544,665	\$44,120	3.5%
2012	11,670	46.8	11.1	\$534,394	\$45,792	3.8%
2013	11,781	46.9	11.1	\$549,971	\$46,683	1.9%
2014	11,949	46.9	11.1	\$568,992	\$47,618	2.0%
2015	11,827	47.1	11.2	\$584,025	\$49,381	3.7%

Note: Dollar amounts in \$000

1. Excludes DROP participants

2. Beginning with the 2005 valuation, a change in methodology now annualizes payroll for new entrants. If the methodology had not been changed, the covered payroll for 2005 would have been \$376,208,345 and the average payroll would have been \$31,419.

RETIREES, BENEFICIARIES, AND DISABLED PARTICIPANTS ADDED TO AND REMOVED FROM ROLLS

Valuation July 1,	Added to Rolls		Removed from Rolls		Rolls-End of year		% Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1996	416	\$ 3,119	239	\$ 1,438	4,618	\$ 38,815	6.4%	\$ 8,405
1998	693	5,840	441	3,212	4,870	43,394	11.8%	8,910
1999	432	2,131	303	1,515	4,999	46,732	7.7%	9,348
2000	360	3,412	255	1,380	5,104	49,970	6.9%	9,790
2001	652	8,937	299	1,030	5,457	57,877	15.8%	10,606
2002	777	15,061	306	2,476	5,928	72,256	24.8%	12,189
2003	598	11,497	311	1,873	6,215	84,519	17.0%	13,599
2004	942	25,189	279	2,624	6,878	107,084	26.7%	15,569
2005	861	18,054	216	1,926	7,523	123,212	15.1%	16,378
2006	654	14,722	397	2,246	7,780	135,688	10.1%	17,441
2007	440	10,280	249	3,007	7,971	142,961	5.4%	17,935
2008	464	11,052	280	3,420	8,155	150,592	5.3%	18,466
2009	474	11,430	289	3,667	8,340	158,356	5.2%	18,988
2010	476	12,040	290	3,938	8,526	166,458	5.1%	19,524
2011	502	13,202	311	4,451	8,717	175,210	5.3%	20,100
2012	654	16,299	293	3,993	9,078	187,515	7.0%	20,656
2013	695	15,566	346	5,051	9,427	198,030	5.6%	21,007
2014	619	15,370	361	5,717	9,685	207,683	4.9%	21,444
2015	771	17,334	433	5,534	10,023	219,484	5.7%	21,898

Note: Dollar amounts in \$000

MEMBERSHIP DATA

	July 1, 2015	July 1, 2014	July 1, 2013
	(1)	(2)	(3)
1. Active members			
a. Number	11,827	11,949	11,781
b. Number vested	8,352	8,818	8,627
c. Annualized salaries	\$ 584,025,000	\$ 568,992,000	\$ 549,971,000
d. Average salary	49,381	47,618	46,683
e. Average age	47.1	46.9	46.9
f. Average service	11.2	11.1	11.1
2. Inactive participants			
a. Vested	3,202	3,313	3,298
b. Total annual benefits (deferred)	\$ 22,450,520	\$ 23,048,675	\$ 22,775,947
c. Average annual benefit	7,011	6,957	6,906
d. NonVested	2,293	2,219	2,257
3. Service retirees			
a. Number	7,819	7,498	7,258
b. Total annual benefits	\$ 188,491,161	\$ 178,109,613	\$ 170,255,078
c. Average annual benefit	24,107	23,754	23,458
d. Average age	68.5	68.5	68.3
4. Disabled retirees			
a. Number	350	371	387
b. Total annual benefits	\$ 3,643,233	\$ 3,749,983	\$ 3,803,033
c. Average annual benefit	10,409	10,108	9,827
d. Average age	64.8	64.8	64.3
5. Beneficiaries and spouses			
a. Number	1,854	1,816	1,782
b. Total annual benefits	\$ 27,349,358	\$ 25,823,664	\$ 23,971,844
c. Average annual benefit	14,752	14,220	13,452
d. Average age	68.3	69.7	69.6

INVESTMENT RETURN INFORMATION

ESTIMATION OF INVESTMENT RETURN YIELD (NET OF EXPENSES)

Item	July 1, 2015	July 1, 2014
(1)	(2)	(3)
A. Market value yield		
1. Beginning of year net market assets	\$ 2,464,439	\$ 2,196,615
2. Net Investment income (net of all expenses)*	67,404	346,108
3. End of year market assets	2,456,544	2,464,439
4. Estimated market value yield	2.78%	16.04%
B. Actuarial value yield		
1. Beginning of year actuarial assets	\$ 2,490,521	\$ 2,382,585
2. Net Investment income (net of all expenses)*	167,288	186,220
3. End of year actuarial assets	2,582,510	2,490,521
4. Estimated actuarial value yield	6.82%	7.95%

*Net investment income is net of both investment and administrative expenses

Note: Dollar amounts in \$000

HISTORY OF INVESTMENT RETURNS

For Fiscal Year Ending	Market Value	Actuarial Value
(1)	(2)	(3)
June 30, 2003	2.34%	1.69%
June 30, 2004	18.10%	4.16%
June 30, 2005	12.85%	4.12%
June 30, 2006	16.41%	8.95%
June 30, 2007	17.85%	21.51%
June 30, 2008	(0.25%)	8.97%
June 30, 2009	(20.14%)	2.60%
June 30, 2010	11.21%	3.54%
June 30, 2011	21.56%	6.27%
June 30, 2012	(0.89%)	4.46%
June 30, 2013	13.02%	5.39%
June 30, 2014	16.04%	7.95%
June 30, 2015	2.78%	6.82%
Average Compound Return - last 5 years	10.18%	6.17%
Average Compound return - last 10 years	7.04%	7.53%

Note: Investment returns are estimations made by the actuary and are dollar-weighted returns net of administrative and investment expenses.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

The following methods and assumptions were used in preparing the July 1, 2015, actuarial valuation. These assumptions were adopted by the Board effective for the July 1, 2015 valuation.

1. Valuation Date

The valuation date is July 1st of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

2. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial liability.

- a. The valuation is prepared on the projected benefit basis, under which the present value, at the investment return rate assumed to be earned in the future (8.0 percent), of each participant's expected benefit payable at retirement or death is determined, based on his/her age, service, sex and compensation. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability, or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.
- b. The employer contributions required to support the benefits of the Plan are determined using a level funding approach, and consist of a normal cost contribution and an accrued liability contribution.
- c. The normal contribution is determined using the "entry age normal" method. Under this cost method, a calculation is made to determine the

average uniform and constant percentage rate of employer contribution which, if applied to the compensation of each participant during the entire period of his/her anticipated covered service, would be required to meet the cost of all benefits payable on his behalf based on the benefits provisions for new employees hired on or after January 1, 2008.

- d. The actuarial accrued liability (AAL) for each member is the difference between their present value of future benefits (PVFB), based on the tier of benefits that apply to the member, and their present value of future normal costs determined using the normal cost rate described in item c above. For inactive and retired members their AAL is equal to their PVFB.
- e. The unfunded accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability and amortizing the result over 30 years from the valuation date.

The contribution rate determined by this valuation will not be effective until one year later and the determination of the rate reflects this deferral. It is assumed that there will be no change in the employer normal cost rate due to the deferral, and it is assumed that payments are made uniformly throughout the year.

3. Actuarial Value of Assets

The actuarial value of assets is equal to the market value of assets less a five-year phase in of the excess (shortfall) between expected investment return and actual income. The actual calculation is based on the difference between actual market value and the expected actuarial value of assets each year, and recognizes the cumulative excess return (or shortfall) at a minimum rate of 20% per year. Each year a base is set up to reflect this difference. If the current year's base is of opposite sign to the deferred bases then it is offset dollar for dollar against the deferred bases. Any remaining bases are then recognized over the remaining period for the base (5 less the number of years between the base year and the valuation year). This is intended to ensure the smoothed value of assets will converge towards the market value in a reasonable amount of time.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Expected earnings are determined using the assumed investment return rate and the beginning of year actuarial value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of investment expenses.

4. Economic Assumptions

- a. Investment return: 8.00% per year, compounded annually, composed of an assumed 2.50% inflation rate and a 5.50% net real rate of return. This rate represents the assumed return, net of all investment expenses.
- b. Salary increase rate: A 2.50% inflation component, plus a 0.75% general increase, plus a service-related component as follows:

Years of Service	Service-related Component	Total Annual Rate of Increase Including 2.50% Inflation Component and 0.75% General Increase Rate
(1)	(2)	(3)
1	2.25%	5.50%
2	2.25	5.50
3	2.75	6.00
4	2.25	5.50
5	1.75	5.00
6	1.50	4.75
7	1.25	4.50
8	1.00	4.25
9	0.75	4.00
10-24	0.50	3.75
25+	0.00	3.25

- c. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 3.00% per year. This increase rate is solely due to the effect of inflation on salaries, with no allowance for future membership growth.

5. Demographic Assumptions

- a. Retirement Rates (see table on the following page).
- b. DROP Participation - 65% of eligible members are assumed to enter DROP.
- c. DROP Entry Date - Those active members (not already in DROP) are assumed to enter DROP when first eligible. For members who have already entered DROP, the actual DROP entry date supplied in the data is used.

- d. DROP Interest Credit - 4.65% per year
- e. Mortality rates (active members)
 - Based on the Retired Pensioners 2000 Mortality Table (combined). Rates are scaled by 90% for male and 80% for female. 90% of the rates are assumed to be for non-service related deaths and 10% for service related deaths.

Sample rates are shown on page 83.

Mortality rates (retired members and beneficiaries):

- Healthy Retirees and beneficiaries: Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment. Male rates are multiplied by 125% and female rates are multiplied by 112%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements.
- Disabled Retirees: Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment. Male rates are multiplied by 125% and female rates are multiplied by 112%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements. Rates are set-forward five years. A minimum rate of 0.04 is applied to male and 0.03 to female.

Sample rates are shown on page 83.

- f. Termination Rates and Disability Rates - Termination rates (for causes other than death, disability or retirement):
 - Termination rates are a function of the member's age and service. Termination rates are not applied after a member becomes eligible for a retirement benefit. Rates at selected ages are shown on page 84.

6. Other Assumptions

- a. Projected payroll for contribution purposes: The aggregate projected payroll for the fiscal year following the valuation date is calculated by increasing the actual payroll paid during the previous fiscal year to all members (actives, terminated and retired) by the payroll growth rate and multiplying by the ratio of current active members to the average number of active members during the previous fiscal year.

(Continued on page 84)

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

RETIREMENT RATES

Expected Retirements per 100 Lives

Age	Group A & B Members		Group D Members	
	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)
45-49	15	12	0	0
50-54	10	11	3	3
55	10	11	4	4
56	10	11	5	5
57	10	11	6	6
58	10	11	7	7
59	10	11	8	8
60	12	11	10	10
61	14	11	13	13
62	16	20	35	35
63	18	18	25	18
64	20	12	18	20
65	20	22	20	20
66-69	20	20	20	19
70-74	20	25	20	19
75+	100	100	100	100

MORTALITY RATES (ACTIVE MEMBERS)

Age	Non-service related Male	Non-service related Female	Service related Male	Service related Female
20	0.000279	0.000138	0.000031	0.000015
25	0.000305	0.000149	0.000034	0.000017
30	0.000360	0.000190	0.000040	0.000021
35	0.000626	0.000342	0.000070	0.000038
40	0.000874	0.000508	0.000097	0.000056
45	0.001221	0.000809	0.000136	0.000090
50	0.001732	0.001207	0.000192	0.000134
55	0.002935	0.001956	0.000326	0.000217
60	0.005465	0.003640	0.000607	0.000404
65	0.010317	0.006988	0.001146	0.000776
70	0.017987	0.012054	0.001999	0.001339
75	0.030646	0.020236	0.003405	0.002248

MORTALITY RATES (RETIRED MEMBERS AND BENEFICIARIES)

Attained Age in 2014	Healthy Male	Healthy Female	Disabled Male	Disabled Female
45	0.002149	0.001489	0.040000	0.030000
50	0.002891	0.002108	0.040000	0.030000
55	0.005029	0.002918	0.040000	0.030000
60	0.009369	0.004815	0.040000	0.030000
65	0.016403	0.009835	0.040000	0.030000
70	0.027069	0.017625	0.043632	0.030000
75	0.043632	0.029215	0.071367	0.046301
80	0.071367	0.046301	0.116414	0.078599
85	0.116414	0.078599	0.194603	0.131126
90	0.194603	0.131126	0.298126	0.198245
95	0.298126	0.198245	0.412954	0.255008
100	0.412954	0.255008	0.497358	0.328290

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Probability of Decrement Due to Withdrawal - Male Members Years of Service

Age	0	1	2	3	4	5	6	7	8	9	10+
20	0.3244	0.2682	0.2300	0.2060	0.1926	0.1824	0.1617	0.1507	0.1400	0.1278	0.0541
30	0.2585	0.2146	0.1808	0.1563	0.1396	0.1275	0.1143	0.1057	0.0985	0.0919	0.0449
40	0.2003	0.1645	0.1351	0.1124	0.0954	0.0832	0.0750	0.0683	0.0634	0.0603	0.0357
50	0.1559	0.1258	0.1013	0.0824	0.0681	0.0577	0.0510	0.0454	0.0411	0.0383	0.0265
60	0.1341	0.1083	0.0887	0.0740	0.0634	0.0557	0.0469	0.0407	0.0344	0.0277	0.0173

Probability of Decrement Due to Withdrawal - Female Members Years of Service

Age	0	1	2	3	4	5	6	7	8	9	10+
20	0.2811	0.2574	0.2344	0.2123	0.1912	0.1711	0.1506	0.1282	0.1040	0.0784	0.1385
30	0.2155	0.1943	0.1736	0.1539	0.1356	0.1188	0.1032	0.0879	0.0730	0.0585	0.0795
40	0.1688	0.1460	0.1250	0.1063	0.0903	0.0770	0.0664	0.0581	0.0517	0.0472	0.0367
50	0.1510	0.1223	0.0984	0.0791	0.0645	0.0544	0.0481	0.0452	0.0453	0.0481	0.0339
60	0.1794	0.1373	0.1049	0.0812	0.0653	0.0570	0.0540	0.0552	0.0601	0.0682	0.0339

Base Rates of Decrement Due to Disability

Age	Males	Females	Service-related Males	Service-related Females
20	0.000004	0.000006	0.000000	0.000001
25	0.000009	0.000013	0.000001	0.000002
30	0.000073	0.000065	0.000005	0.000008
35	0.000318	0.000102	0.000022	0.000013
40	0.000650	0.000234	0.000045	0.000029
45	0.001259	0.000528	0.000087	0.000066
50	0.002195	0.001256	0.000151	0.000157
55	0.003171	0.002021	0.000219	0.000253
60	0.004188	0.002436	0.000289	0.000305

Rates of disability are reduced to zero once a member becomes eligible for retirement.

(Continued from page 82)

- b. Percent married: 70% of employees are assumed to be married. (No beneficiaries other than the spouse assumed). The 70% assumption is intended to provide sufficient margin to cover the costs of any surviving children benefits.
- c. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
- d. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.
- e. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
- f. There will be no recoveries once disabled.
- g. No surviving spouse will remarry.
- h. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.
- i. Administrative expenses: The administrative expenses of the plan are added into the employer contribution rate as a percentage of payroll.

- j. Pay increase timing: Beginning of (fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
- k. Decrement timing: Decrements of all types are assumed to occur mid-year.
- l. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
- m. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
- n. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
- o. Benefit Service: All members are assumed to accrue 1 year of service each year. Fractional service is used to determine the amount of benefit payable.
- p. Retiree Drop Balances Payout Duration: It is assumed that retirees will receive their DROP balances in equal installments over the eight years following retirement.

7. Participant Data

Participant data was supplied on electronic files. There were separate files for (i) active members, (ii) inactive members, and (iii) members and beneficiaries receiving benefits.

The data for active members included birth date, sex, most recent hire date, salary paid during last fiscal year, hours worked by the employee, and employee contribution amounts. For retired members and beneficiaries, the data included date of birth, sex, amount of monthly benefit, and date of retirement. Also included was the member's Group and for members participating in DROP, their account balances and monthly DROP income.

All healthy and disabled retirees are assumed to have 100% joint and survivor, prorated by the 70% marriage assumption and reflecting the 3 year spousal age differential. All non-children beneficiaries are assumed

to have life only benefits and all children beneficiaries' annuities are assumed to stop at age 21.

Salary for the prior fiscal year as well as an annualized rate of pay is provided in the data. The annualized rate increased by one-year's salary increase is the rate of pay the member is assumed to earn in the upcoming fiscal year.

Assumptions were made to correct for missing or inconsistent data. These had no material impact on the results presented.

8. Group Transfers

We assume no current Group B members will transfer to Group A.

9. Changes in Assumptions Since Prior Year

The actuarial assumptions were modified since the prior valuation. In particular the investment return assumption was decreased from 8.50% to 8.00%. In addition, the mortality assumption was changed from a static assumption to a generational approach with constant mortality improvement.

Please see our Experience Study Report dated February 25, 2016 for a detailed description of all of the assumption changes and the rationale for the proposed assumption set.

SUMMARY OF PLAN PROVISIONS

The provisions summarized in this section apply to persons who are members (active employees). Former members may have been covered under different plan provisions, depending on their dates of separation from service.

1. Covered Members

Any person who is a participant of Group A, under the original act.

Persons who became employees of the City of Houston after September 1, 1981 and prior to September 1, 1999, and elected officials of the City of Houston who assumed office after September 1, 1981 and prior to

SUMMARY OF PLAN PROVISIONS

September 1, 1999, participate in Group B, but may make an irrevocable election to participate in Group A instead.

Persons who become employees of the City and persons who are elected as City officials after September 1, 1999 and prior to January 1, 2008 become members of Group A. Certain persons who were or became a Director of a City Department, Chief Administrative Officer, or Executive Director of HMEPS on or after September 1, 1999 and prior to January 1, 2005 participate in Group C. Effective January 1, 2005, all Group C participation ceased and all Group C participants became Group A participants. Accruals earned by Group C participants prior to January 1, 2005 are retained, but all future accruals are based on the Group A formulas.

All future references to Group C participants in this appendix are intended to reflect this change in the Group C status.

Covered employees newly hired on or after January 1, 2008 will be members of Group D.

A former employee who is rehired on or after January 1, 2008 is a member of the group in which such employee participated at the time of his/her immediately preceding separation from service.

2. Monthly Final Average Salary (FAS)

The sum of the seventy-eight highest biweekly salaries paid to a member during his period of credited service, divided by thirty-six. Salary includes base pay, longevity pay, and any shift differential pay. If there are fewer than seventy-eight biweekly salaries, the FAS is determined by multiplying the average of all biweekly salaries paid to the member during the period of credited service by 26 and dividing the product by 12.

3. Credited Service

All services and work performed by an employee, including prior service. For members of Group A and former Group C, all services and work performed after

September 1, 1943 must have been accompanied by corresponding contributions to HMEPS by the employee or legally authorized repayments must have been made.

Credited service for former participants in Group C means the number of years of eligible service after the executive official's effective date of participation in Group C. A former Group C member receives two times the number of actual years of credited service in Group C solely for the purpose of fulfilling the eligibility requirements in Group C.

If former Group D and pre-1997 Group B members who forfeited their previous credited service are rehired they will regain a year of forfeited credited service for each year of service earned upon reemployment.

4. Normal Retirement

a. Eligibility: For participants in Group A or Group B, or, a former Group C member who became a Group A member as of January 1, 2005, the earliest of:

- i. age 62 and 5 years of Credited Service.
- ii. 5 years of Credited Service, and age plus years of Credited Service equal 70 or more, provided that, prior to January 1, 2005, you had at least five years of credited service and the combination of age and years of credited service was equal to or greater than 68.
- iii. 5 years of Credited Service, and age plus years of Credited Service equal 75 or more with minimum age 50.

For participants in Group D

Age 62 and 5 years of Credited Service

b. Benefit:

Prior to January 1, 2005:

Group A: 3.25% of FAS for each of the first 10 years of Credited Service plus 3.50% of FAS for Credited Service greater than 10 years but less than 20 years plus 4.25% of FAS for each year of Credited Service

greater than 20 years (excludes period of DROP participation). Maximum benefit is 90% of FAS for all future retirees.

Group B: 1.75% of FAS for each of the first 10 years of Credited Service plus 2.00% of FAS for Credited Service greater than 10 years but less than 20 years, plus 2.75% of FAS for each year of Credited Service greater than 20 years (excludes period of DROP participation). Maximum benefit is 90% of FAS for all future retirees.

Group C: Double the rate for Group A

All accruals after January 1, 2005:

All accruals under the prior multipliers were frozen as of January 1, 2005 and the following benefit multipliers apply to service on or after that date:

Group A: 2.50% of FAS for each of the first 20 years of Credited Service plus 3.25% of FAS for each year of Credited Service greater than 20 years (excludes period of DROP participation). Maximum benefit is 90% of FAS for all future retirees.

Group B: 1.75% of FAS for each of the first 10 years of Credited Service plus 2.00% of FAS for Credited Service greater than 10 years but less than 20 years, plus 2.50% of FAS for each year of Credited Service greater than 20 years (excludes period of DROP participation). Maximum benefit is 90% of FAS for all future retirees.

Group D: 1.80% of FAS for each of the first 25 years of Credited Service, plus 1.00% of FAS for each year of Credited Service greater than 25 years. Maximum benefit is 90% of FAS for all future retirees.

5. Early Retirement (Group D only)

- a. Eligibility
 - i. at least ten years of Credited Service; or
 - ii. at least five years of Credited Service and a combination of age and service equals or is greater than 75.
- b. Benefit:

Accrued normal retirement benefit reduced by 0.25% for each month you are less than age 62.

6. Vested Pension

- a. Eligibility: 5 years of Credited Service.
- b. Benefit:
 - i. Group A and Group C: Either the accrued normal retirement benefit with payments beginning at the normal retirement eligibility date or a refund of employee contributions, if any, without interest.
 - ii. Group B and Group D: Accrued normal retirement benefit payable at the normal retirement eligibility date.
 - iii. If the actuarial present value of a pension is less than \$20,000, a terminated participant who is not eligible to begin receiving a pension may request an early lump sum distribution of the pension. Such early lump sum distribution is irrevocable. Credited Service associated therewith can be reinstated after reemployment and pursuant to the rules of the plan.

7. Withdrawal Benefit

If a nonvested member withdraws from service with less than 5 years, a refund of the member's contributions is made without interest, upon request.

8. Service-Connected Disability Retirement

- a. Eligibility: Any age
- b. Benefit
 - i. Group A: Accrued normal retirement benefit, but not less than 20% of final monthly salary at time of disability plus 1% of final monthly salary per year of Credited Service, to a maximum of 40% of final monthly salary.
 - ii. Group B and Group D: Accrued normal retirement benefit, but not less than 20% of final monthly salary at time of disability.

9. Non-service-Connected Disability Retirement

- a. Eligibility: 5 years of Credited Service.
- b. Benefit: Accrued normal retirement benefit payable immediately.

10. Pre-retirement Survivor Benefits

- a. Service-connected

SUMMARY OF PLAN PROVISIONS

- i. Eligibility: Any age or Credited Service
- ii. Benefit: If there is a surviving spouse, 100% of FAS payable to the spouse. 10% of FAS is payable to each qualifying dependent to a maximum of 20% for all dependents. Surviving spouse's benefit will be reduced by the amount of dependent benefits. If no surviving spouse, dependent benefits are 50% of the amount a surviving spouse would have received for each dependent to a maximum of 100% for all dependents in the aggregate.

b. Non service-connected

- i. Eligibility: 5 years of Credited Service
- ii. Benefit:

Benefits for survivorship of vested Group D members after January 1, 2008:

Death of active employee: If there is a surviving spouse, 100% of accrued pension is payable to the spouse. 10% of accrued pension is payable to each qualifying dependent to a maximum of 20% for all dependents. Surviving spouse's benefit will be reduced by the amount of dependent benefits. If no surviving spouse, dependent benefits are 50% of the amount a surviving spouse would have received for each dependent to a maximum of 100% for all dependents in the aggregate.

Death of terminated vested employee (not yet retired): If participant selected Optional Annuity then benefit will be paid based on selected option. If the participant did not select an optional annuity then if there is a surviving spouse the participant will be deemed to have selected the 50% J&S Optional Annuity. If the participant did not select an Optional Annuity and there is no surviving spouse then no benefit is payable.

For all other Groups on or after August 1, 2001:

If there is a surviving spouse, 100% of accrued normal retirement benefit payable to the spouse and 10% of accrued normal retirement benefit to each qualifying dependent to a maximum of 20% for all dependents in the aggregate. The surviving spouse's benefit will be

reduced by dependent benefits, if any. If there is no surviving spouse, each dependent will receive 50% of the benefit a surviving spouse would have received subject to a maximum of 100% of a surviving spouse's benefit for all dependents in the aggregate.

11. Post-retirement Survivor Benefits

All Groups except Option-Eligible Participants:

If there is a surviving spouse, 100% of the retirement benefit the deceased retiree was receiving at the time of death payable to the spouse and 10% of that retirement benefit payable to each qualifying dependent to a maximum of 20% for all dependents. The surviving spouse's benefit will be reduced by dependent benefits, if any. If there is no surviving spouse, each dependent will receive 50% of the benefit a surviving spouse would have received subject to 100% of a surviving spouse's benefit for all dependents in the aggregate.

Option-Eligible Participants:

Life only to the retiree. Option-Eligible Participants may elect other options based on actuarial factors.

All Group D members, Group A & B members who terminate after June 30, 2011 eligible for a normal retirement benefits and who are not married at their termination of service, and Group B members who terminated prior to September 1, 1997 and who are eligible for a normal retirement benefit are Option-Eligible Participants.

12. Benefit Adjustments

Each year, effective February 1, monthly benefits will be increased 3.0%, not compounded, for all retirees and survivors. This will affect all members currently in payment status and members who enter payment status in the future. For members hired on or after January 1, 2005 future increases will be 2.0%, not compounded. However, pre-2005 retirees who are rehired will receive a 3% COLA on their subsequent benefit instead.

Group D Members:

None assumed.

13. Contribution Rates

- a. Members: 5% of salary only for Group A members. None for Group B or Group D members.
- b. City: Beginning in 1993, the rate required to fund the Retirement Fund on an actuarial reserve basis. However, effective September 1, 1999, the minimum contribution rate is equal to the greater of 10% of covered payroll or twice the contribution rate a Group A member is required to make by statute. Under the ARM&CA between the Board and the City of Houston, the City will contribute the greater of \$108.5 million or 21.36% of payroll in fiscal year 2013. Contributions in future fiscal years increase by the greater of \$10 million or 2% of payroll over the prior year's rate until such time that the City's contribution rate equals the actuarially determined contribution rate.

14. Deferred Retirement Option

- a. Eligibility: Participants (other than Group D) who are eligible to retire but who have not retired and who remain in service with the City may participate in the DROP.
- b. Monthly DROP Credit: An amount equal to the accrued normal retirement benefit as of the effective date of DROP participation. The Monthly DROP Credit is credited to a notional account (DROP Account) on the last calendar day each month.
- c. DROP Credit Interest: Interest is credited to the DROP Account at the beginning of each day based on the DROP Account balance at the end of the previous day and posted monthly on the last calendar day of each month. Effective January 1, 2005, the annual interest rate effective beginning January 1 each year is half of HMEPS' investment return percentage for the prior fiscal year, not less than 2.5% and not greater than 7.5%.
- d. DROP Credits-COLA:

On or after January 1, 2005:

The Monthly DROP Credit for participants who entered the DROP effective on or before January 1 of the then

current year will be increased effective February 1 each year by 3.0%, not compounded.

The Monthly DROP Credit for participants who were first hired on or after January 1, 2005 who entered the DROP effective on or before January 1 of the then current year will be increased effective February 1 each year by 2.0%, not compounded.

- e. DROP Account Balance: The sum of a participant's Monthly DROP (DROP Benefit) Credits, Monthly DROP Credit Adjustments, applicable interest, and employee contributions as applicable.

15. DROP Benefit Pay-out

A terminated DROP participant may elect to:

- a. Receive the entire DROP Account Balance in a lump sum.
- b. Receive the DROP Account Balance in periodic payments as approved by the Pension Board.
- c. Receive a portion of the DROP Account balance in a lump sum and the remainder in periodic payments as approved by the Pension Board.
- d. Receive a partial payment of not less than \$1,000, no more than once each ninety (90) days.
- e. Defer election of a payout option until a future date.

16. Post DROP Retirement

The Final Pension is the accrued normal retirement benefit as of the effective date of DROP participation, increased with COLAs since DROP entry.

Changes in Plan Provisions Since Prior Year

No changes since the prior valuation.

HMEPS

**"THE DOG LIVES
FOR THE DAY, THE
HOUR, EVEN THE
MOMENT."**

-ROBERT FALCON SCOTT



SECTION FIVE

STATISTICAL INFORMATION

INTRODUCTION

The Statistical section of the Comprehensive Annual Financial Report presents detailed information related to the System's financial statements. The schedules within the Statistical section are classified as Financial Trends and Participant Information. All information was derived from Audited Annual Financials and/or our benefit administration system, and/or the annual actuarial valuations.

FINANCIAL TRENDS

The Changes in Fiduciary Net Position schedule shows the additions and deductions from fiduciary net position and the resulting changes in fiduciary net position for the ten years ending June 30, 2016.

Additions to Fiduciary Net Position include city and member contributions to the System which are external

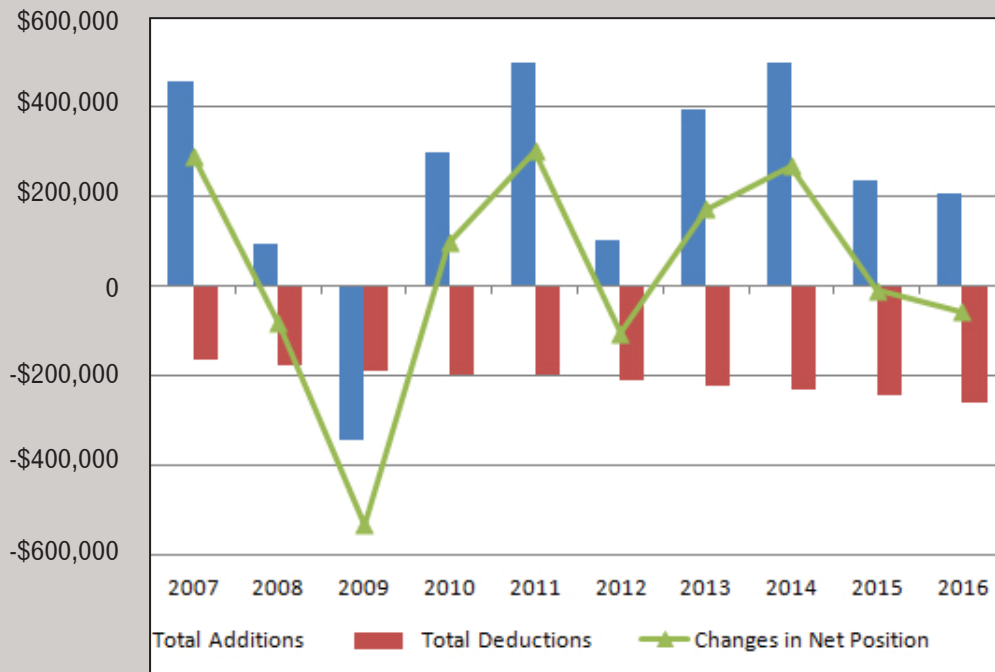
sources of additions to plan net positions. Additions also include earnings from the System's investment activity and are the System's internal sources of, and typically the larger component of, additions to plan net positions.

Deductions from Fiduciary Position are primarily comprised of benefit payments and refunds paid to participants.

OPERATING INFORMATION

Participant data for the last ten years ending June 30, 2015 can be found starting on page 98 and include several schedules regarding benefit payments to participants and participant demographics. The date of the participant information is consistent with the date of the latest actuarial valuation date of July 1, 2015.

CHANGES IN FIDUCIARY NET POSITION (IN THOUSANDS)
YEARS ENDED JUNE 30



FINANCIAL TRENDS

SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION (\$000)

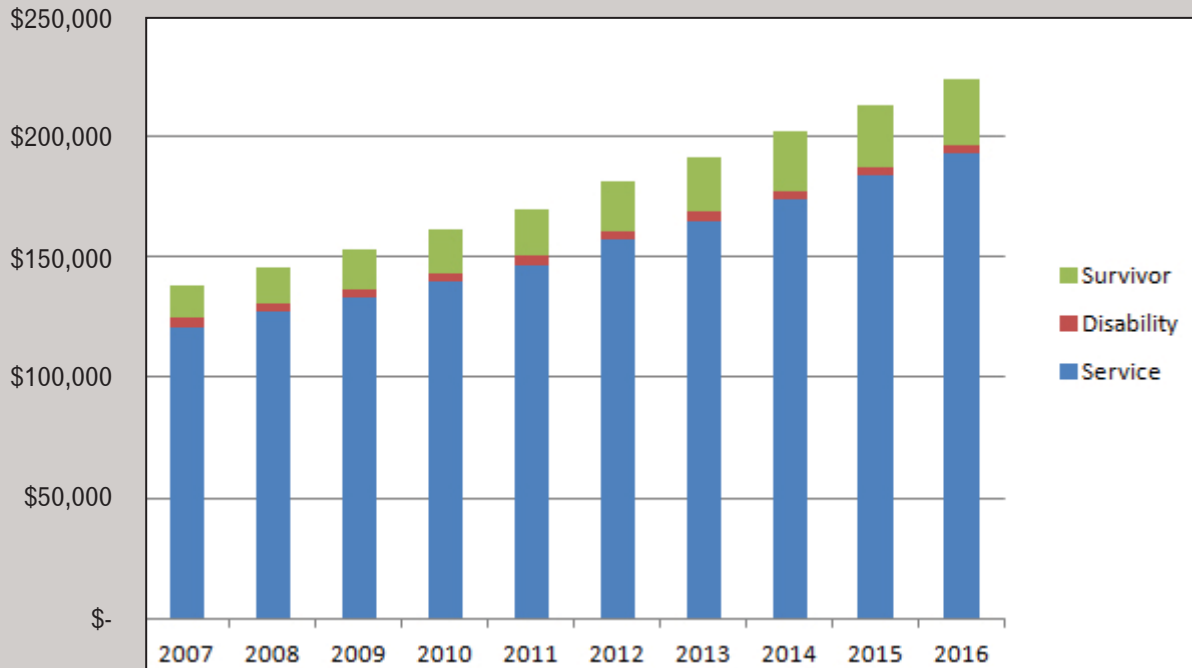
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Additions (Reductions)										
Employer contributions	\$ 70,265	\$ 73,272	\$ 76,837	\$ 82,052	\$ 87,285	\$ 97,161	\$ 111,859	\$ 128,274	\$ 145,007	\$ 159,958
Member contributions	20,966	21,176	20,449	19,736	19,326	18,473	17,041	16,580	16,198	15,874
Investment income (loss)	337,259	(29,133)	(440,298)	195,433	391,095	(11,963)	263,891	351,792	73,854	27,988
Other income	29,031	29,839	489	557	1,185	654	1,246	730	557	1,303
Total additions (reductions) to the net position	457,521	95,154	(342,523)	297,778	498,891	104,325	394,037	497,376	235,616	205,123
Deductions										
Benefit payments	157,716	169,483	180,361	191,048	189,199	200,014	213,178	221,925	234,955	253,179
Refund of contributions	1,398	1,760	1,795	1,285	1,620	2,206	1,266	1,213	1,549	1,105
Professional services fees	883	638	792	805	1,103	1,048	871	597	822	1,021
Cost of administration	5,223	5,837	6,420	6,290	6,020	6,264	6,341	5,818	6,185	6,339
Total deductions to net position	165,220	177,718	189,368	199,428	197,942	209,532	221,656	229,553	243,511	261,644
Change in fiduciary net position	\$ 292,301	\$ (82,564)	\$ (531,891)	\$ 98,350	\$ 300,949	\$ (105,207)	\$ 172,381	\$ 267,823	\$ (7,895)	\$ (56,521)

OPERATING INFORMATION
SCHEDULE OF BENEFIT PARTICIPANTS AND ANNUITIES BY TYPE (IN THOUSANDS)

Participants by Benefit Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Service	6,017	6,186	6,336	6,482	6,663	7,031	7,258	7,522	7,821	8,084
Disability	446	428	415	404	398	391	387	373	350	336
Survivor	1,508	1,541	1,589	1,640	1,656	1,656	1,782	1,827	1,854	1,893
Total Annuity Count	7,971	8,155	8,340	8,526	8,717	9,078	9,427	9,722	10,025	10,313
Inactive Eligible Participants	2,922	2,931	2,884	2,815	3,178	3,237	3,298	3,305	3,313	3,468
Total Eligible for Benefits	10,893	11,086	11,224	11,341	11,895	12,315	12,725	13,027	13,338	13,781
Benefit Payments by Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Service	\$ 120,856	\$ 127,083	\$ 133,209	\$ 139,779	\$ 146,863	\$ 157,214	\$ 164,924	\$ 173,749	\$ 183,613	\$ 192,759
Disability	3,707	3,624	3,652	3,650	3,698	3,769	3,864	3,808	3,722	3,626
Survivor	13,654	15,025	16,160	17,724	19,174	20,533	22,383	24,262	25,777	27,346
Total Annuity Payments	138,217	145,732	153,021	161,153	169,735	181,516	191,171	201,819	213,112	223,731
Lump Sum Payments	313	625	1,067	641	449	156	200	177	201	252
DROP Payments	19,186	23,126	26,273	29,254	19,015	18,342	21,807	19,929	21,641	29,195
Other Benefit Payments	19,499	23,751	27,340	29,895	19,464	18,498	22,007	20,106	21,842	29,447
Total Benefit Payments	\$ 157,716	\$ 169,483	\$ 180,361	\$ 191,048	\$ 189,199	\$ 200,014	\$ 213,178	\$ 221,925	\$ 234,954	\$ 253,178
Refunds of Contributions	\$ 1,398	\$ 1,760	\$ 1,795	\$ 1,285	\$ 1,620	\$ 2,206	\$ 1,266	\$ 1,213	\$ 1,549	\$ 1,105
Average Benefit Payments by Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Service	\$ 20,086	\$ 20,544	\$ 21,024	\$ 21,564	\$ 22,042	\$ 22,360	\$ 22,723	\$ 23,099	\$ 23,477	\$ 23,845
Disability	8,312	8,467	8,800	9,035	9,291	9,639	9,984	10,209	10,634	10,792
Survivor	9,054	9,750	10,170	10,807	11,579	12,399	12,561	13,280	13,903	14,446
Combined Average Annuity Payments	\$ 17,340	\$ 17,870	\$ 18,348	\$ 18,901	\$ 19,472	\$ 19,995	\$ 20,279	\$ 20,759	\$ 21,258	\$ 21,694

BENEFIT PAYMENTS BY TYPE (IN THOUSANDS)

YEARS ENDED JUNE 30

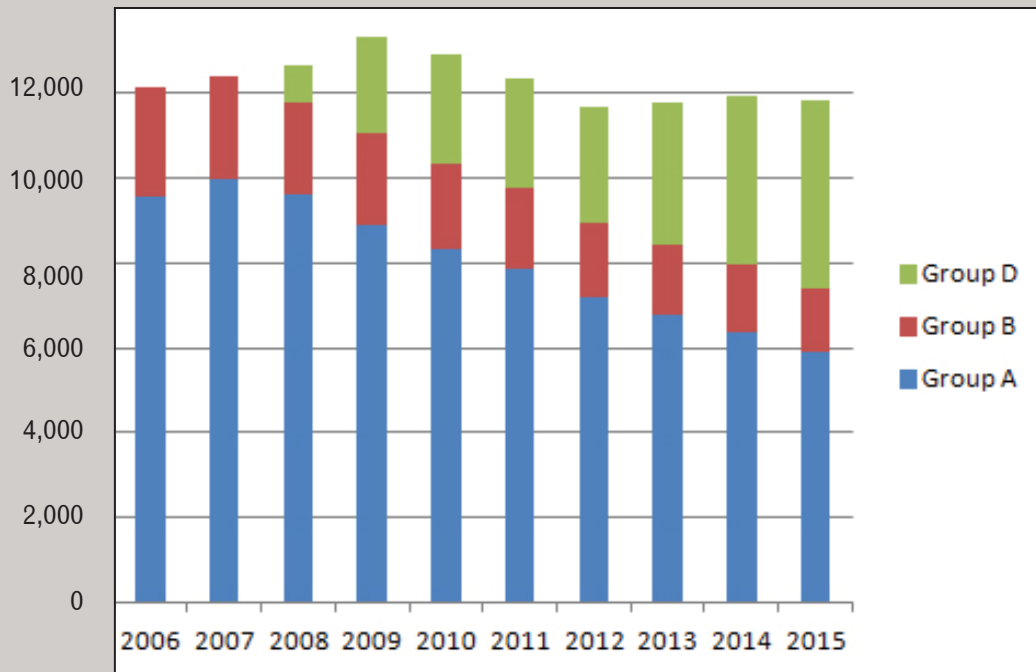


BENEFIT RECIPIENTS BY TYPE AND AGE - YEAR ENDED JUNE 30, 2015

Age on June 30	Service	Disability	Survivor	Total
Under 40	0	1	100	101
40 - 44	0	5	13	18
45 - 49	0	10	25	35
50 - 54	207	28	62	297
55 - 59	869	61	119	1049
60 - 64	1675	72	205	1952
65 - 69	1982	62	204	2248
70 - 74	1416	56	253	1725
75 - 79	802	36	225	1063
80 - 84	506	13	210	729
85 & Over	364	6	301	671
Total	7821	350	1717	9888

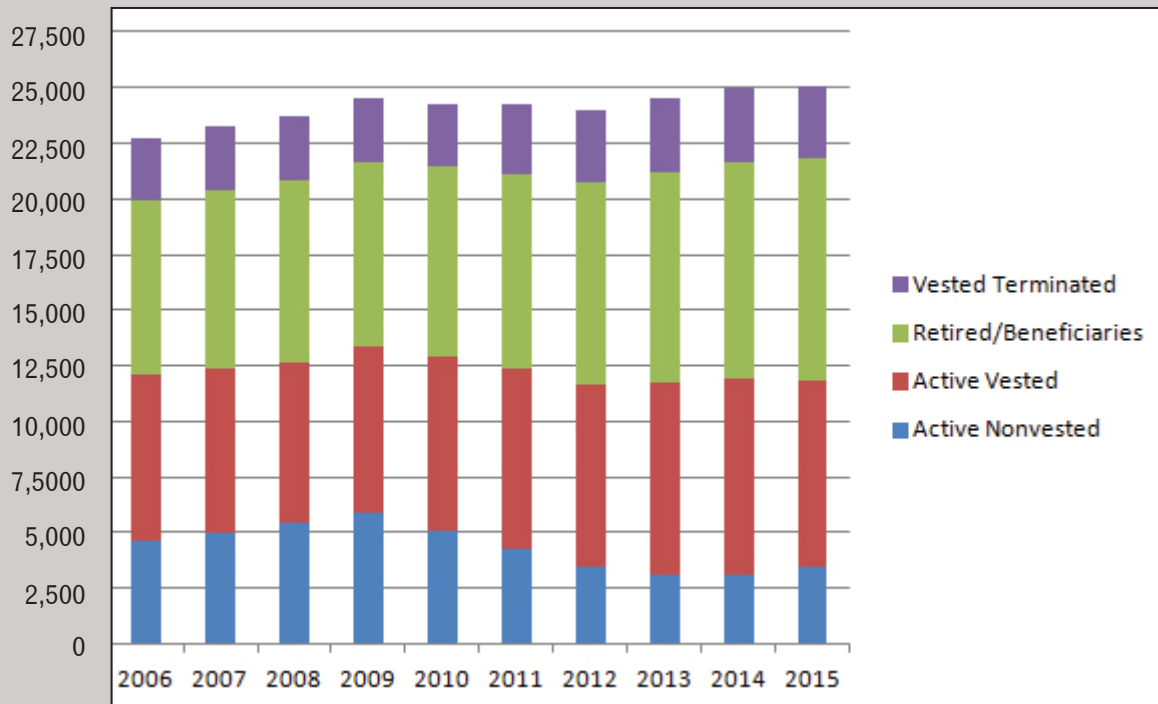
HISTORICAL ACTIVE PARTICIPANT DATA

Valuation Date	Active Vested/Nonvested			Number of Participants	Annual Payroll (\$000)	Average Salary (\$)	% Salary Increase
	Group A	Group B	Group D				
July 1, 2006	9,544	2,601		12,145	422,496	34,788	3.0
July 1, 2007	9,947	2,429		12,376	448,925	36,274	4.3
July 1, 2008	9,587	2,195	871	12,653	483,815	38,237	5.4
July 1, 2009	8,906	2,153	2,274	13,333	539,023	40,428	5.7
July 1, 2010	8,323	1,999	2,591	12,913	550,709	42,648	5.5
July 1, 2011	7,857	1,932	2,556	12,345	544,665	44,120	3.5
July 1, 2012	7,167	1,759	2,744	11,670	534,394	45,792	3.8
July 1, 2013	6,777	1,666	3,338	11,781	549,971	46,683	1.9
July 1, 2014	6,366	1,590	3,993	11,949	568,992	47,618	2.0
July 1, 2015	5,911	1,489	4,427	11,827	584,025	49,381	3.7



HISTORICAL TOTAL MEMBERSHIP DATA AND BAR CHART

Fiscal Year	Active Nonvested	Active Vested	Retired/Beneficiaries	Vested Terminated	Totals
2006	4,621	7,524	7,780	2,782	22,707
2007	5,002	7,374	7,971	2,922	23,269
2008	5,419	7,234	8,155	2,931	23,739
2009	5,941	7,392	8,340	2,884	24,557
2010	5,101	7,812	8,526	2,815	24,254
2011	4,237	8,108	8,717	3,178	24,240
2012	3,512	8,158	9,078	3,237	23,985
2013	3,154	8,627	9,427	3,298	24,506
2014	3,131	8,818	9,685	3,313	24,947
2015	3,475	8,352	10,023	3,202	25,052



AVERAGE BENEFIT PAYMENT BY YEARS OF CREDITED SERVICE

AVERAGE BENEFIT PAYMENTS BY YEARS OF CREDITED SERVICE

Members Retiring During Fiscal Years

		Years of Credited Service						All Members
		5-10	11-15	16-20	21-25	26-30	30+	
2006	Average monthly benefit	\$ 553	\$ 1,147	\$ 1,608	\$ 2,344	\$ 2,870	\$ 2,725	\$ 1,684
	Average monthly salary	\$ 2,906	\$ 3,243	\$ 3,263	\$ 3,186	\$ 3,118	\$ 2,812	\$ 3,156
	Average DROP balance	\$ 33,642	\$ 57,946	\$ 93,836	\$ 126,830	\$ 162,450	\$ 217,721	\$ 105,088
	Number of DROP retirees	22	43	56	92	31	4	248
	Number of retirees	74	91	93	132	40	5	435
2007	Average monthly benefit	\$ 550	\$ 956	\$ 1,350	\$ 2,042	\$ 3,360	\$ 3,252	\$ 1,354
	Average monthly salary	\$ 2,867	\$ 2,893	\$ 2,958	\$ 2,943	\$ 3,555	\$ 3,476	\$ 2,962
	Average DROP balance	\$ 37,590	\$ 56,962	\$ 81,073	\$ 135,316	\$ 273,677	\$ 368,268	\$ 107,410
	Number of DROP retirees	26	50	39	51	19	3	188
	Number of retirees	81	102	63	73	24	4	347
2008	Average monthly benefit	\$ 532	\$ 1,036	\$ 1,503	\$ 2,342	\$ 3,721	\$ 1,826	\$ 1,519
	Average monthly salary	\$ 2,967	\$ 3,169	\$ 3,138	\$ 3,279	\$ 3,956	\$ 2,527	\$ 3,191
	Average DROP balance	\$ 37,547	\$ 67,218	\$ 122,902	\$ 155,089	\$ 422,202	\$ 10,629	\$ 137,606
	Number of DROP retirees	12	38	46	56	13	1	166
	Number of retirees	62	92	88	76	20	2	340
2009	Average monthly benefit	\$ 582	\$ 881	\$ 1,526	\$ 1,839	\$ 2,320	\$ 2,400	\$ 1,290
	Average monthly salary	\$ 3,278	\$ 3,032	\$ 3,267	\$ 3,166	\$ 3,383	\$ 2,959	\$ 3,189
	Average DROP balance	\$ 42,190	\$ 55,623	\$ 173,415	\$ 164,178	\$ 283,627	\$ 19,301	\$ 140,745
	Number of DROP retirees	14	31	34	50	13	1	143
	Number of retirees	76	89	76	86	21	3	351
2010	Average monthly benefit	\$ 572	\$ 1,107	\$ 1,579	\$ 2,631	\$ 3,309	\$ -	\$ 1,579
	Average monthly salary	\$ 3,512	\$ 3,478	\$ 3,796	\$ 4,154	\$ 4,342	\$ -	\$ 3,769
	Average DROP balance	\$ 66,061	\$ 87,798	\$ 174,978	\$ 244,143	\$ 312,750	\$ -	\$ 181,870
	Number of DROP retirees	21	30	34	44	21	-	150
	Number of retirees	84	81	76	64	32	-	337
2011	Average monthly benefit	\$ 593	\$ 925	\$ 1,611	\$ 2,378	\$ 2,310	\$ 2,789	\$ 1,486
	Average monthly salary	\$ 3,474	\$ 3,247	\$ 3,578	\$ 3,794	\$ 3,266	\$ 3,996	\$ 3,505
	Average DROP balance	\$ 52,041	\$ 97,571	\$ 181,686	\$ 241,297	\$ 249,370	\$ 320,514	\$ 182,068
	Number of DROP retirees	15	27	42	50	15	2	151
	Number of retirees	82	91	97	83	35	7	395
2012	Average monthly benefit	\$ 548	\$ 972	\$ 1,463	\$ 2,097	\$ 2,775	\$ 2,279	\$ 1,476
	Average monthly salary	\$ 3,319	\$ 3,114	\$ 3,483	\$ 3,544	\$ 3,789	\$ 3,123	\$ 3,413
	Average DROP balance	\$ 28,933	\$ 97,805	\$ 109,125	\$ 172,352	\$ 135,562	\$ -	\$ 121,920
	Number of DROP retirees	19	53	81	72	33	-	258
	Number of retirees	97	124	148	120	58	6	553
2013	Average monthly benefit	\$ 577	\$ 1,083	\$ 1,524	\$ 2,406	\$ 2,492	\$ 2,936	\$ 1,450
	Average monthly salary	\$ 3,660	\$ 3,565	\$ 3,503	\$ 3,877	\$ 3,573	\$ 4,000	\$ 3,648
	Average DROP balance	\$ 33,482	\$ 96,989	\$ 163,551	\$ 196,720	\$ 70,570	\$ 37,305	\$ 137,474
	Number of DROP retirees	17	44	59	52	13	2	187
	Number of retirees	110	114	113	84	31	12	461
2014	Average monthly benefit	\$ 582	\$ 1,082	\$ 1,523	\$ 2,283	\$ 2,695	\$ 3,424	\$ 1,395
	Average monthly salary	\$ 3,229	\$ 3,238	\$ 3,505	\$ 3,741	\$ 3,625	\$ 4,402	\$ 3,423
	Average DROP balance	\$ 92,531	\$ 118,155	\$ 119,035	\$ 276,187	\$ 131,517	\$ 104,467	\$ 153,977
	Number of DROP retirees	23	46	72	51	27	1	220
	Number of retirees	126	116	123	78	35	4	482
2015	Average monthly benefit	\$ 625	\$ 1,158	\$ 1,871	\$ 2,412	\$ 2,950	\$ 2,762	\$ 1,636
	Average monthly salary	\$ 3,365	\$ 3,586	\$ 3,756	\$ 3,791	\$ 3,847	\$ 3,330	\$ 3,639
	Average DROP balance	\$ 55,711	\$ 112,360	\$ 172,535	\$ 186,044	\$ 136,625	\$ 97,841	\$ 153,083
	Number of DROP retirees	19	47	93	78	24	4	265
	Number of retirees	109	107	131	109	29	7	492
10 Years Ended 6/30/2015	Average monthly benefit	\$ 571	\$ 1,035	\$ 1,556	\$ 2,277	\$ 2,880	\$ 2,439	\$ 1,487
	Average monthly salary	\$ 3,258	\$ 3,256	\$ 3,425	\$ 3,548	\$ 3,645	\$ 3,062	\$ 3,390
6/30/2015	Average DROP balance	\$ 47,973	\$ 84,843	\$ 139,214	\$ 189,816	\$ 217,835	\$ 117,605	\$ 142,124
	Avg Number of DROP retirees	19	41	56	60	21	2	198
	Average Number of retirees	90	101	101	91	33	5	419
	Total number of retirees	901	1,007	1,008	905	325	50	4,193



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