

A Component Unit of the City of Houston, Texas COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE YEARS ENDED JUNE 30, 2013 AND JUNE 30, 2012



# SERVING CITY OF HOUSTON EMPLOYEES FOR OVER 70 YEARS

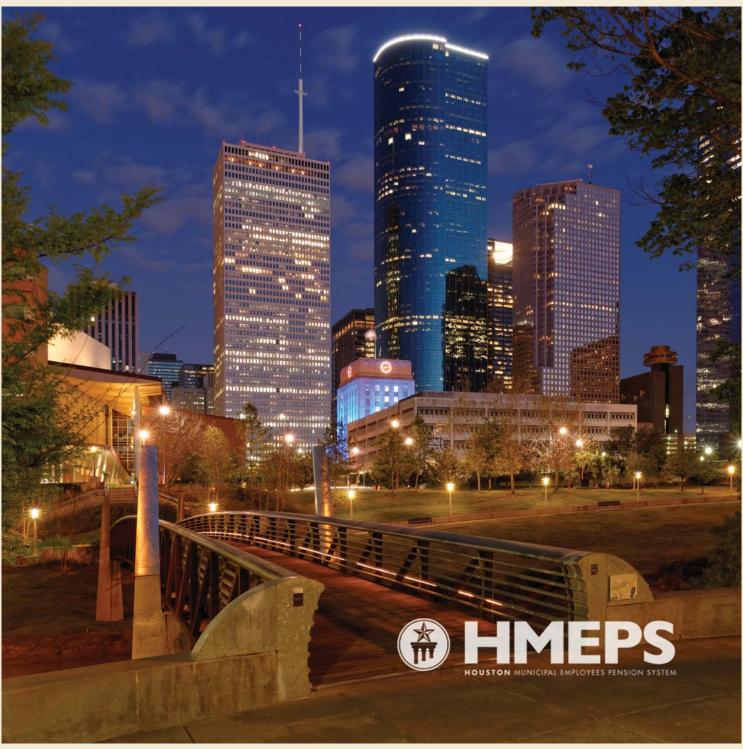


HOUSTON MUNICIPAL EMPLOYEES PENSION SYSTEM A COMPONENT UNIT OF THE CITY OF HOUSTON, TEXAS

Comprehensive annual financial report For the years ended june 30, 2013 and <u>june 30, 2012</u>

PREPARED BY THE PENSION ADMINISTRATION STAFF RHONDA SMITH, EXECUTIVE DIRECTOR

HOUSTON MUNICIPAL EMPLOYEES PENSION SYSTEM 1201 LOUISIANA, SUITE 900, HOUSTON, TEXAS 77002-5608 713-595-0100 WWW.HMEPS.ORG



The Buffalo Bayou hike and bike trail by the Hobby Center for the Performing Arts

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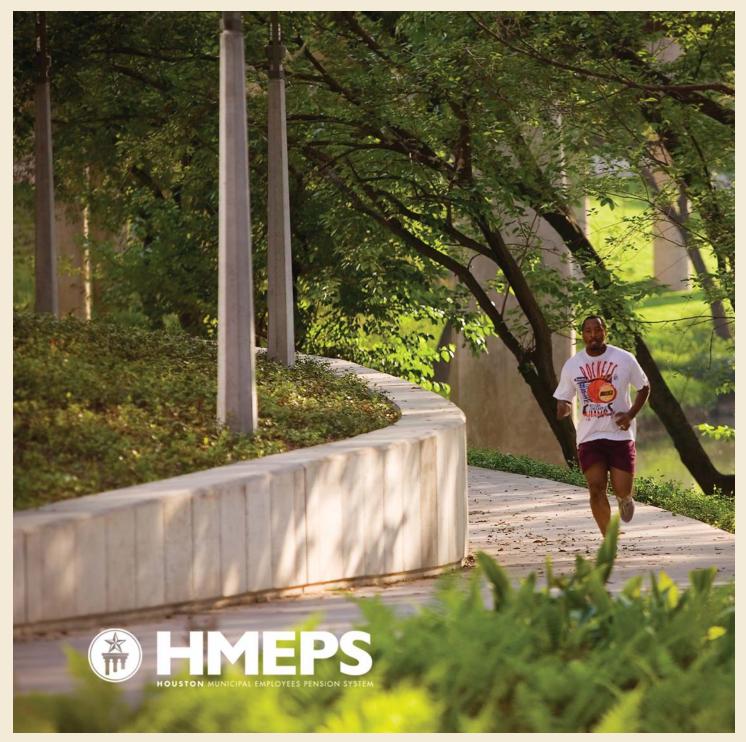
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Buffalo Bayou Park running trail



## SECTION 1

## INTRODUCTION

Board of Trustees CHAIRMAN Sherry Mose VICE CHAIRMAN Roy W. Sanchez SECRETARY Lonnie Vara David L. Long I Asha Patnaik I Lenard Polk I Barbara Chelette Richard Badger | Ramon Manning | Craig T. Mason | Adrian Patterson Executive Director Rhonda Smith





November 21, 2013

Kelly Dowe **Director of Finance City of Houston, Texas** P.O. Box 1562 Houston, Texas 77251

#### 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, 2013 and June 30, 2012. 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, 2013 and 2012 (pages 22-23). 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.

#### **Contributions - Meet and Confer Agreement**

On July 1, 2011, the Amended and Restated Meet and Confer Agreement (Agreement) between the City and the System went into effect.

Under the Agreement, the City's annual contribution to the System is the greater of the previous fiscal year's rate plus 2 percent of covered payroll (Percentage Amount) or the previous fiscal year's contribution amount plus \$10 million (Dollar Amount). This provision will stay in place until the actuarially determined contribution rate is met, at which time that rate becomes the effective contribution rate. For fiscal year 2013, the City's contribution was 21.36% of covered payroll based on the Percentage Amount, which exceeded the Dollar Amount of \$108.5 million.

#### **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 8.5 percent over the long-term. The differences between the assumed and actual investment return are phased in (smoothed) over five years, yielding an actuarial value of assets. The 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%. As of July 1, 2012 HMEPS' AVA and AAL were \$2.34 billion and \$3.97 billion, respectively, resulting in a funded ratio of 59.1%. This is lower than the funded ratio as of July 1, 2011 which was 61.4%.

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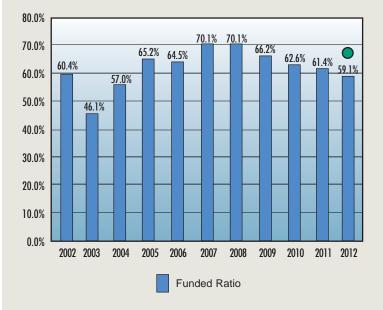
Based on actuarial estimates, the System's projected funded ratio as of July 1, 2012 would be 68.3%, or approximately 10 percentage points higher, if the City had contributed the annual required contribution rate (ARC) in each of the preceding 10 years. The System's funded ratio decreased from the prior year primarily due to the loss on the actuarial value of assets, and due to the City's

#### LETTER OF TRANSMITTAL

covered payroll decreasing rather than increasing at the assumed rate. However, the Agreement provides a program for steadily improving the funded status of the System, as future City contributions will increase by at least \$10 million per year until the actuarially determined contribution rate is met, at which time the actuarially determined contribution rate will be the required rate.

Like most large public pension plans, HMEPS was significantly impacted by the volatility in the investment markets after 2008. While the 2010 and 2011 returns substantially exceeded the 8.5% assumed rate of return, the 2012 return was significantly less than the assumed rate. Although the FY 2013 return of 13.58% substantially exceeded the assumed rate, this volatility means there are still some investment losses being deferred due to the smoothing methodology used in the valuation. In the absence of future investment gains, the contribution rate needed to amortize the unfunded liability will increase over the next few valuation cycles.

A historical perspective of the System's funding levels is presented in the Schedule of Funding Progress in the Required Supplemental Information in the Financial Section of this report, in addition to the graph below.



FUNDED RATIO

Hypothetical funded ratio if City had contributed the ARC (68.3%)

#### Market Environment

The nation's economy showed improvement during the fiscal year, and by June 2013 consumer confidence was at its highest level since 2008. Unemployment dropped to 7.6% and GDP growth continued to be positive. After a year of steady gains, equity markets fell in June, following indications of a change in policy by the Federal Reserve. Despite the June drawdown, the US Equity markets, as represented by the Wilshire 5000 index, finished the fiscal year with gains of 21.1%.

Across the Atlantic, European markets continued to lag US markets due to political uncertainty and concerns over the future of the Euro. In Japan, new government policies led to a strong rally in the equity markets, with the Nikkei hitting a five year high on May 22, 2013. Emerging markets were held back by the slowdown in China's economy and turmoil in Brazil and Turkey, with the MSCI EMF index returning 2.9% for the year. Overall, international markets had a positive return of 14.1%.

In the fixed income markets, high yield bonds benefited from the recovering economy, gaining 9.6% for the fiscal year, as represented by the Merrill Lynch High Yield Master II Index. Investment grade fixed income was the asset class most negatively affected by the announcement of tapering of Federal Reserve accommodative policies, ending the fiscal year down -0.7%.

Among the alternative asset classes, Inflation Linked performed the best for the System, returning 14.5%. This was largely driven by the performance of Master Limited Partnerships (MLP), a new asset category the System funded at the beginning of the fiscal year.

Overall, the System's investments returned 13.6%, compared to the actuarially assumed rate of return of 8.5%.

Through the efforts of the Board over the past 10 years, the System's investment portfolio is more broadly diversified than most public pension plans, and consequently, exhibits less volatility, particularly during extreme market environments. Over longer periods of time (10 years), the System's investment performance exceeds 95% of its peers. During the 10-year period ending June 30, 2013, the System's annualized return was 9.52%, with the median comparable fund returning 6.94%.

#### LETTER OF TRANSMITTAL

#### Major Current and Future Initiatives

#### **Member Services**

The Benefits Division has continued its effort to provide information relating to pension benefits by holding seminars in the field and individual benefit meetings at HMEPS. In FY 2013, HMEPS:

- Responded to increased 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 130 individual counseling sessions and hosted 75 joint presentations for various City departments as well as new employee orientations for the benefit of 2,395 attendees. A growing number of participants requested financial counseling based on other participants' recommendations.
- Processed 1,957 benefit applications for payroll, including retirements, survivor benefits and lump-sum payments.
- Initiated social media efforts to provide information relating to pension benefits to participants through Facebook and Twitter, two platforms that provide methods of communicating and interacting with participants.
- The HMEPS financial counselor conducted 400 one-on-one counseling sessions with participants during the past fiscal year in addition to numerous group presentations. He also monitored pension related issues nationally and locally, a critical part of fulfilling HMEPS' obligation to keep participants fully informed.
- Benefits counselors and the financial counselor participated in the 2013 Financial Retirement Employees Educational Summit, an annual event that helps City of Houston employees better plan their financial futures.

#### Operations

The operations group extended the organization's document management system to enhance workflows and controls over Accounts Payable and purchase order documents, and to reduce or eliminate the use and routing of paper records.

The operations group also launched a redesigned and enhanced website that contains innovative and interactive features, including a members-only site. Further developments were made to the online calculator to allow Group D members to project benefit amounts and eligibility dates.

#### 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 reevaluated in April 2013. Risk-return assumptions and correlations for asset classes were reexamined taking into account current and forecasted economic conditions. A new policy was adopted with the following changes: U.S. Equity and non-U.S Equity were combined into a single asset class, Global Equity, with the combined target weight reduced to 35% from 40%. The target allocation to Fixed Income was reduced from 20% to 15%, while Real Estate was reduced from 12% to 10% and Private Equity from 18% to 17.5%. The two asset classes which received an increased target allocation were Absolute Return, which increased from 5% to 10% and Inflation Linked Asset Class (ILAC) which increased from 5% to 12.5%.

During fiscal year 2013, the System completed a search for Emerging Market Fixed Income investments to further diversify the Fixed Income asset class. With the help of the System's alternative investment consultant, Cliffwater LLC, HMEPS invested in six private equity partnerships, six real estate partnerships, one ILAC partnership, one commodities fund and four absolute return funds. This activity will bring the System's portfolio closer to the strategic asset allocation policy targets.

The System's investment portfolio closed its 2013 fiscal year at \$2.2 billion, up from \$2.05 billion at the beginning of the year. The total investment return for the fiscal year was 13.6%. The System's investment performance was 13.6%, 11.5% and 5.5% for the past one-, three- and five-year periods. Although the System lagged the policy benchmark for fiscal year 2013, it outperformed the policy benchmark for the ten-year period. Relative to its peer group (TUCS Public Fund Universe), the fund continues to post attractive investment returns over the long term. For the period ended June 30, 2013, the Fund ranks in the top quartile for the fiscal year and is in the top decile over the trailing ten-year period. The best performing

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#### LETTER OF TRANSMITTAL

asset classes for fiscal year 2013 were U.S. Equity (+22.6%) and Non U.S. Equity (+17.2%). The benefits of a well-diversified asset allocation are evidenced by the System's ability to perform very competitively over the two-year period where different asset classes drove overall returns.

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

#### **System Milestones**

#### New Strategic Asset Allocation

In April 2013, the System performed an asset allocation study and, as a result, the board approved a change in the target allocation for fiscal year 2014. As of June 30, 2013 the System was transitioning to the new allocation.

#### Public Website

The public website was redesigned to include better navigation and to make the site more interactive using videos and other multimedia tools. Additionally, the public website's benefit calculator was modified to allow Group D participants, who began service in 2008, to forecast normal and early retirement options. Finally, new content was released within the members-only section of the website (AccessHMEPS) to expand the amount information accessible on the website for participants.

#### **Board Governance**

Lenard Polk was re-elected to employee trustee Position 3, and Lonnie Vara was re-elected to retiree trustee Position 7. Asha Patnaik was elected to employee trustee Position 4. City Council appointed Adrian Patterson and reappointed Richard Badger as the City Council appointees.

#### **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, 2012. This was the 19th 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 State 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

Rhonda Snith

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Rhonda Smith Executive Director

## ORGANIZATIONAL OVERVIEW<sup>\*</sup> (AS OF JUNE 30, 2013)



Sherry Mose Chairman



Roy W. Sanchez Vice Chairman



Lonnie Vara Secretary



David L. Long Elected Trustee



Asha Patnaik Elected Trustee



Lenard Polk Elected Trustee



Barbara Chelette Appointed Trustee



Richard Badger Council Appointee



Ramon Manning Controller Appointee



Craig T. Mason Mayoral Appointee



Adrian Patterson Council Appointee



Rhonda Smith 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.

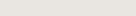
### Board of Trustees Elected and Appointed Trustees

Sherry Mose, *Chairman* Roy W. Sanchez, *Vice Chairman* Lonnie Vara, *Secretary* David L. Long Asha Patnaik Lenard Polk Barbara Chelette, *Appointed* 

#### **City Appointed Trustees**

Richard Badger Ramon Manning Craig T. Mason Adrian Patterson

Rhonda Smith, Executive Director





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, 2012. 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 19 consecutive years (fiscal years ended June 30, 1994 through 2012). 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.



## PROFESSIONAL CONSULTANTS AND INVESTMENT MANAGERS

## Consultants (Fiscal Year 2013)

#### Actuary

Gabriel, Roeder, Smith & Company

Auditor Doeren Mayhew, P.C.

Board Medical Advisor Charles Schuhmacher, M.D.

Communication Services LT Communications

Technology Services Pension Benefits Information

#### **Governmental Representation**

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

Anchorage Capital Group LLC

**Brigade Capital Management** 

Davidson Kempner Capital

Gracie Asset Management

Mason Capital Managment

Graham Capital Management

Highland Capital Management

MKP Capital Management, LLC

York Capital Management LP

Alliance Bernstein Institutional

DDJ Capital Management, L.L.C.

**Och-Ziff Capital Mangement Group** 

Claren Road Asset Management, LLC

Absolute Return

Management, LLC

Samlyn Capital, LLC

Wexford Capital LP

Scopia Capital

Fixed Income

Investments

GMO LLC

BlackRock, Inc.

Loomis, Sayles & Co.

Smith Graham & Co.

Inflation-Linked

**Pugh Capital Management** 

Angelo, Gordon & Co.

**Brevan Howard US LLC** 

### Investment Consultants

Cliffwater, L.L.C. Gray & Co. Wilshire Associates, Inc.

#### Investment Performance Analysis

Cliffwater, L.L.C. State Street Bank and Trust Co. 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 Bank and Trust Co.

### Investment Managers (Fiscal Year 2013)

Oaktree Capital Management Quantum Energy Partners Riverstone Holdings The Carlyle Group Tortoise Capital Advisors

#### Non-U.S. Equity

Baring International BlackRock, Inc. EARNEST Partners OFI Institutional Management Thomas White International

#### **Private Equity**

Adams Street Partners Brera Capital Partners, L.L.C. Brockway Moran & Partners, Inc. Centerbridge Partners **CVE Kaufman Fellows Endowment** GTCR Management LC Goldman, Sachs & Co. HarbourVest Partners, L.L.C. Hellman & Friedman, L.L.C. ICV (Inner City Ventures) J.W. Childs Associates, L.P. JMI Equity Lexington Partners, Inc. Matlin Patterson Global Advisors New Enterprise Associates Oaktree Capital Management Pacven Walden Management Co., LTD. Pegasus Investors, L.P. Pharos Capital Partners, L.L.C. Platinum Equity Capital Partners Siris Capital Group Summit Partners Sun Capital Partners, Inc. The Carlyle Group

The Jordan Company, L.P. Valor Equity Partners Vista Equity Partners Wayzata Investment Partners

#### **US Equity**

BlackRock, Inc. DePrince, Race & Zollo, Inc. EARNEST Partners, L.L.C. INTECH Investment Management, L.L.C. Neumeier Investment Counsel, L.L.C. OakBrook Investments, L.L.C. PanAgora Asset Management, Inc. Piedmont Investment Advisors, L.L.C. Profit Investment Management State Street Global Advisors T. Rowe Price Associates, Inc.

#### Real Estate

Aetos Capital Angelo, Gordon & Co CB Richard Ellis Investors Crow Holdings Fortress Investment Group, L.L.C. Goldman, Sachs & Co. Grove International Partners IC Berkeley Partners Lone Star U.S. Acquisitions, L.L.C. Morgan Stanley Asset Management, Inc. Olympus Real Estate Corp. KTR Capital Partners RREEF America L.L.C. State Street Global Advisors Starwood Capital Group Global LP

### **HMEPS** Comprehensive Annual Financial Report 2013

BlackRock, Inc. Brevan Howard US LLC Encap Investments LP Enervest, Ltd Global Forest Partners, L.P. NGP Energy Capital



Buffalo Bayou Carruth Bridge



## SECTION 2

## FINANCIAL INFORMATION

INTRODUCTION TO FINANCIAL STATEMENTS

### An Overview

The Audited Financial Statements and the accompanying Independent Auditors' Report included in this CAFR were approved by the System's Board of Trustees (the Board) in its meeting of September 26, 2013. The audit of the System's financial statements was conducted in accordance with generally accepted auditing standards (GAAS). The Independent Auditors' Report is based on that audit, and it is intended to give reasonable assurance to users of the System's financial statements that those financial statements are free of material misstatement when taken as a whole and that they present fairly the financial position and results of operations of the System at the times and for the periods reported. The audit gives reasonable assurance to the Board and participants of the System that the System's assets are adequately safeguarded and that its financial transactions are properly authorized and recorded.

The financial statements provide a comprehensive overview of the financial position of the System as of June 30, 2013 and June 30, 2012 and the results of its operation for the years then ended. The financial statements are presented in conformity with accounting and reporting standards of the Governmental Accounting Standards Board (GASB).

The System is responsible for the accuracy of its financial statements and the completeness and fairness of their presentation. The auditors are responsible for issuing an opinion on those financial statements when taken as a whole.

The financial statements consist of Statements of Plan Net Position, Statements of Changes in Plan Net Position, Notes to the Basic Financial Statements, and Supplemental Schedules.

#### **Statements of Plan Net Position**

The Statements of Plan Net Position present the financial position of the System as of the end of the fiscal years reported. They are statements of the System's assets, liabilities, and net position held in trust for pension benefits. An asset is anything having commercial economic or exchange value. Assets include cash, receivables (interest and dividends earned by the investments of the System and employee member and employer contributions), investment, collateral on securities lending arrangements, and furniture, fixtures and equipment. System liabilities include money reserves for participants who are entitled to benefits and obligations for professional services the System has used, but for which payment has not been made.

#### **Statements of Changes In Plan Net Position**

The Statements of Changes in Plan Net Position include additions to the System's assets and deductions from them and the increase or decrease in plan net position. Additions consist of contributions, investment income, and other income. Deductions are benefit payments, fees for professional services and costs of administering the programs of the System. The net of additions and deductions represents the change, for the years presented, in net position held in trust for pension benefits.

### **Notes to Basic Financial Statements**

Notes to the Basic Financial Statements contain disclosures required by generally accepted accounting principles and GASB reporting standards. Required disclosures include a summary description of the pension plan, significant accounting policies, information about the System's funding status and progress toward achieving its funding objectives, information about the System's investments and investing activities, and information about the System's commitments.

#### **Supplemental Information**

Supplemental Schedules provide information required by the GASB which include the supplementary 10-year trend information. These charts show the progress toward reaching the goal of being totally funded, as well as sources of revenues and types of expenses of the System during the fiscal year.

Other supplementary information provides additional information for analysis.



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#### **INDEPENDENT AUDITORS' REPORT**

Board of Trustees Houston Municipal Employees Pension System:

#### **Report on the Financial Statements**

We have audited the accompanying basic financial statements of Houston Municipal Employees Pension System (the System), which comprise the statement of plan net position as of June 30, 2013, and the related statement of changes in plan net position for the year 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; 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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free from 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 Plan's net position - restricted for pension benefits as of June 30, 2013, and the changes in its net position - restricted for pension benefits for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

#### **Required Supplemental Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (MD&A) and the schedules of funding progress, employer contributions 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, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the MD&A and schedules of funding progress, employer contributions and funding progress for OPEB in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### **Other Supplemental Information**

Our audit was conducted for the purpose of forming an opinion on the basic financial statements as a whole. The other supplemental information (schedules 4, 5 and 6) 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 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 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 and certain additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplemental information is fairly stated in all material respects in relation to the basic financial statements as a whole.

#### Other Matter – 2012 Financial Statements

The basic financial statements of the System as of June 30, 2012, were audited by other auditors whose report dated September 27, 2012, expressed an unmodified opinion on those statements.

Moeren May/un

Houston, Texas September 26, 2013

## 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 ended June 30, 2013 and 2012. 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.

#### System's Basic Financial Statements

There are two basic financial statements presented herewith. The Statements of Plan Net Position as of June 30, 2013 and 2012 indicate the Plan Net Position available to pay future payments and give a snapshot at a particular point in time. The Statements of Changes in Plan Net Position for the fiscal years ended June 30, 2013 and 2012 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 24 to 42 of this report.

#### **Supplemental Information**

The required supplemental information consists of:

**Schedule 1** - Schedule of Funding Progress - this provides historical trend information that contributes to the understanding of the changes in the funded status of the System over time. 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 System over a number of years. 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 Employer Contributions - this provides historical trend information of required annual employer contributions as determined actuarially and the contributions actually made in relation to this requirement over time.

**Schedule 3** - Schedule of Funding Progress for OPEB this provides historical trend information that contributes to the understanding of the changes in the funded status of the other postemployment benefits (OPEB) over time. 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 OPEB over a number of years. It should be noted though that actuarial information is based upon assumptions about future events, and therefore, the figures presented are estimates.

The other supplemental information consists of:

**Schedule 4** - Investment Summary - this lists the System's investments by type presented both at cost and fair market value.

**Schedule 5** - Investment Services, Professional Services, and Administration Expenses - this provides more information for purposes of more detailed analysis.

**Schedule 6** - Summary of Costs of Investment and Professional Services - this provides more information for purposes of more detailed analysis.

### COMPARATIVE FINANCIAL STATEMENTS

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

Assets	June 30, <u>2013</u>	June 30, <u>2012</u>	June 30, <u>2011</u>
Cash and equivalents	\$ 6,168	1,647	1,065
Investments	2,202,676	2,048,112	2,192,678
Receivables on asset sales	12,395	9,935	7,487
Other receivables	5,697	6,718	27,480
Collateral on securities lending	161,317	261,194	116,401
Furniture, fixtures and equipment, net	247	325	307
Total assets	2,388,500	2,327,931	2,345,418
Liabilities			
Payable on asset purchases	25,458	36,997	72,632
Accrued liabilities	5,109	5,505	26,944
Collateral on securities lending	161,317	261,194	116,401
Total liabilities	191,884	303,696	215,977
Net position – restricted for pension benefits	\$ 2,196,616	2,024,235	2,129,441

Below is a comparative summary of Statements of Changes in Plan Net Position restricted for pension benefits (In thousands of dollars)

	Fiscal Year	Fiscal Year	Fiscal Year
Additions	<u>2013</u>	<u>2012</u>	<u>2011</u>
Contributions	\$ 128,900	115,635	106,611
Investment and interest income (loss), net	263,891	(11,964)	391,095
Other income	1,246	654	1,185
Total additions	394,037	104,325	498,891
Deductions			
Benefits paid	213,178	200,014	189,199
Contribution refunds	1,266	2,205	1,620
Administration expenses and professional fees	7,212	7,312	7,123
Total deductions	221,656	209,531	197,942
Net increase (decrease) in net position	172,381	(105,206)	300,949
Net position – restricted for pension benefits (beginning of the year)	2,024,235	2,129,441	1,828,492
Net position – restricted for pension benefits (beginning of the year)	\$ 2,196,616	2,024,235	2,129,441

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#### **Contributions**

The System received \$17,042 and \$18,473 in employee contributions from approximately 6,830 and 7,129 Group A active participants, respectively, during fiscal years 2013 and 2012. The System received \$18,473 and \$19,326 in employee contributions from 7,129 and 7,831 active Group A participants during fiscal years 2012 and 2011, respectively. 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 has been 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 2013, employee contributions decreased by \$1,431 or 7.75% compared to fiscal year 2012 and decreased by \$853 or 4.4% in fiscal year 2012 compared to fiscal year 2011.

The System received employer contributions from the City of Houston (the City) of \$111,859 and \$97,162 (net of contributions to the replacement benefit plan of \$1,368 and \$1,338) for fiscal years 2013 and 2012, respectively, which represents contributions of 21.36% of covered payroll in fiscal year 2013, and agreed upon amounts of \$98.5 million and \$88.5 million (net of contributions to the replacement benefit plan of \$1,338 and \$1,220) for fiscal years 2012 and 2011, respectively.

While the City contributed 21.36% of covered payroll for fiscal year 2013, the City's annual payroll was about \$13 million less than projected, resulting in approximately \$2.8 million less in employer contributions received than forecasted for fiscal year 2013. The agreed upon employer contribution amounts for fiscal years 2012 and 2011 were fixed dollar amounts and were therefore unaffected by any changes to the City's actual payroll.

#### **Benefit Payments**

Benefit payments increased to \$213,178 during fiscal year 2013, compared to \$200,014 and \$189,199 during fiscal year 2012 and 2011, respectively. There were 9,274 participants who received benefits for fiscal year 2013 compared to 9,014 participants in 2012, and 8,659 participants in fiscal year 2011. The dollar increases in benefits paid represent a 6.6% increase in fiscal year 2013 over fiscal year 2012,

and a 6.9% increase in fiscal year 2012 over fiscal year 2011. Refunds of Group A contributions to terminated employees fell to \$1.3 million in fiscal year 2013 from \$2.2 million in fiscal year 2012, after increasing from a payout amount of \$1.6 million in fiscal year 2011.

Monthly recurring retirement pension benefits amounted to \$191,247, up 5.3% from the fiscal year 2012 total of \$181,555, which is a 6.8% increase from fiscal year 2011's total of \$169,985 in recurring benefit payments. These payments represent approximately 90% of the total benefit payments made for each of the fiscal years in this report. For the recurring pension benefit total, fiscal year 2013 saw net participant growth account for 5.1% of the increase and cost-of-living increases adding the remaining 0.2%, while fiscal year 2012 had a net participant growth account for 6.6% of the increase and the remaining 0.2% associated with cost-of-living increases.

Distributions to DROP (Deferred Retirement Option Plan) participants amounted to \$21,821 or 10.2% of the total benefit payments during fiscal year 2013, compared to \$18,432 or 9.2% of total benefits paid during fiscal year 2012, and \$19,014, or 10% of the total benefit payments made in fiscal year 2011. Of these DROP payments, fiscal year 2013 lump sum payments totaled \$19,597, along with an annual amount of \$2,224 paid out over monthly distributions. Fiscal years 2012 and 2011 had similar payments of \$15,744 and \$2,688, and \$15,637 and \$3,377, respectively. The three year history of percentage changes in amounts paid out for DROP distributions are: an 18% increase in fiscal year 2013; a 3% decrease in fiscal year 2012; and a 32% decrease in fiscal year 2011. Total benefit payments exceeded total employee plus employer contributions by \$84,278, \$84,379, and \$82,588

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employer contributions by \$84,278, \$84,379, and \$82,588 during fiscal years 2013, 2012 and 2011, respectively.

#### **Accounting and Administration**

Costs of administering the benefit programs of the System, including professional fees, decreased to \$7,212 for fiscal year 2013 from \$7,312 in fiscal year 2012, down 1.4% primarily due to a reduction in professional fees associated with fewer reviews for alternative investments as the System's investment portfolio matured within this asset class. In addition, fiscal year 2013 reflected the full year effect of rental expense reduction due to an office move with more favorable rates. Fiscal year 2012

FINANCIAL HIGHLIGHTS (In Thousands of Dollars, Unless It is the System's policy to adjust the carrying value of Otherwise Noted) I limited partnerships and real estate trusts during their

expenses of \$7,312 were up 2.6% versus fiscal year 2011 expenses of \$7,123, due to higher general and administrative expenses offset against a reduction in rent expense as a result of a fiscal year 2011 office relocation that resulted in more favorable lease terms.

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 2013, 2012, and 2011 are \$247, \$325, and \$307, respectively.

The System's Plan Net Position was \$2,196,616 at the end of fiscal year 2013, an increase of \$172,381, or 8.5%. For fiscal year 2012, the Plan Net Position was \$2,024,235, a decrease of \$(105,206) or (4.9%), and for fiscal year 2011 the Plan Net Position was up 16.5%, an increase of \$300,949 to \$2,129,441.

#### **Investments**

The net investment and interest income of the System was \$263,891 during fiscal year 2013, compared to a loss of \$(11,964) during fiscal year 2012, versus a gain of \$391,095 in fiscal year 2011. The investment and interest income of the System consists of:

It is the System's policy to adjust the carrying value of limited partnerships and real estate trusts during their holding period based on information provided by the general partner. The total investment gains associated with these holdings consist of realized gains/(losses) and unrealized appreciation/(depreciation).

#### **Investment Review**

The System's investment portfolio closed its 2013 fiscal year at \$2.20 billion, up from \$2.05 billion at the beginning of the year. The investment return for the fiscal year was 13.6%. The System's investment portfolio closed the 2012 fiscal year at \$2.05 billion, down from \$2.19 billion at the beginning of the year, and the investment return for fiscal year 2012 was -0.1%. The System's performance, including the total fund, each asset class and their corresponding benchmark(s), for fiscal year 2013 and the trailing three-, five-, and ten-year periods are listed in the table on the next page.

The System's investment performance was 13.6%, 11.5%, 5.5% and 9.5% for the past one-, three-, five-, and ten-year periods. Although the System lagged slightly behind the policy benchmark for fiscal year 2013, it outperformed the policy benchmark for the ten-year period. Relative to its peer group (Wilshire TUCS Universe), the System continues to post attractive investment returns over the long term. For the one-year period ended June 30, 2013, the Fund

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	Fiscal	Fiscal		Fiscal	Fiscal	
	Year	Year	Dollar	Year	Year	Dollar
	<u>2013</u>	<u>2012</u>	Change	2012	<u>2011</u>	Change
Interest	\$ 20,253	\$ 18,306	\$ 1,947	\$ 18,306	\$ 14,720	\$ 3,586
Dividends	21,245	20,446	799	20,446	16,769	3,677
Earnings from limited partnerships						
and real estate trusts	8,400	14,448	(6,048)	14,448	17,398	(2,950)
Realized gain on investments	108,074	49,516	58,558	49,516	121,039	(71,523)
Change in unrealized gain (loss)						
on investments	112,976	(107,831)	220,807	(107,831)	227,109	(334,940)
Net proceeds from lending securities	755	638	117	638	436	202
Less cost of investment services	(7,812)	(7,487)	(325)	(7,487)	(6,376)	(1,111)
Net investment and interest income (loss)	\$ 263,891	\$ (11,964)	\$275,855	\$ (11,964)	\$ 391,095	\$ (403,059)

#### PERFORMANCE OF INVESTMENT CLASSES

Periods Ended June 30, 2013	Investment Return			
	<u>FY 2013</u>	3-Years	5-Years	10-Years
System's Total Portfolio	13.6%	11.5%	5.5%	9.5%
Policy Benchmark <sup>1</sup>	14.0%	13.1%	6.2%	8.6%
Median Public Fund (TUCS Master Trusts – Public)	12.3%	11.5%	5.4%	6.9%
U. S. Equities	22.6%	19.3%	7.6%	7.7%
Dow Jones Wilshire 5000 Index	21.1%	18.5%	7.2%	8.0%
Non-U.S. Equities	17.2%	9.4%	-0.8%	8.8%
MSCI All World ex U. S. Index	14.1%	8.5%	-0.3%	9.1%
Fixed Income	6.0%	7.2%	7.7%	6.5%
Barclay Aggregate Index	-0.7%	3.5%	5.2%	4.5%
Merrill Lynch High Yield Master II Index	9.6%	10.4%	10.6%	8.8%
Real Estate <sup>2</sup>	12.8%	9.1%	-6.9%	7.4%
NCREIF Property Index	10.7%	13.1%	2.8%	8.6%
Private Equity <sup>3</sup>	7.9%	13.6%	6.3%	12.2%
S&P 500 Index + 3.0%	23.6%	21.4%	10.0%	10.3%
Absolute Return <sup>4</sup>	10.9%	7.8%	-	-
LIBOR + 4%	4.3%	4.6%	-	-
Inflation Linked Asset Class <sup>5</sup>	14.5%	7.7%	-	-
CPI + 4%	5.8%	6.6%	-	-
Cash	0.2%	0.3%	0.8%	
Citigroup 3 Month T-Bill Index	0.1%	0.1%	0.3%	1.7%

<sup>1</sup> The System's Policy Benchmark is the weighted average of benchmarks for each individual asset class. For fiscal year 2013, the Policy Benchmark was: 20% Wilshire 5000 Index (US Equity); 20% MSCI ACWI x-US Index (Non-US Equity); 10% Barclays Aggregate Index (Investment Grade Fixed Income); 10% Merrill Lynch High Yield Master Trust II Index (Non Investment Grade Fixed Income): 12% NCREIF Property Index (Real Estate); 18% S&P 500 Index + 3% (Private Equity); 5% LIBOR + 4% (Absolute Return); and 5% CPI + 4% (Inflation Linked Assets).

<sup>2</sup> Prior to October 1, 2008, the Real Estate composite included returns of real assets, public and private real estate and energy. Starting October 1, 2008, the Real Estate composite is just the public and private real estate.

<sup>3</sup> Prior to October 1, 2008, the Private Equity composite included the returns of private equity and absolute return. Starting October 1, 2008, the Private Equity composite only contains private equity.

<sup>4</sup> The Absolute Return composite was created on October 1, 2008. The underlying funds' historical performance is included in the private equity and real estate composites.

<sup>5</sup> The Inflation Linked composite was created on October 1, 2008. The underlying funds' historical performance is included in the private equity and real estate composites.

ranks in the top quartile for the year and is in the top decile over the trailing ten-year period. The best performing asset classes for fiscal year 2013 were International Equity (+17.2%) and Domestic Equity (+22.6). Fixed Income and Private Equity were the top two performing asset classes for fiscal year 2012. The benefits of a well-diversified asset allocation are evidenced by the System's ability to perform competitively even when different asset classes drive overall returns. For the past three-year period, Domestic Equity was the System's best performing asset class, providing a 19.3% return. Fixed Income was the best performing asset class over the trailing five-year period, returning 7.7%. The target allocation of 18% to Private Equity helped enable the System to perform well over the long term, returning 12.2% for 10 years through fiscal year-end 2013. Private Equity has been the highest performing asset class within the portfolio over this timeframe, and exceeded the S&P 500 plus three percent policy benchmark performance of 10.3% over the same time period.

Fiscal year 2013 saw equity markets rise on continued accommodative Federal Reserve policies, increasing consumer confidence, and the easing of fears from the European debt crisis. Domestic equities (Wilshire 5000) ended the year with a gain of 21.1% versus 4.0% in fiscal year 2012, while international equities (MSCI All World ex-US) produced a gain of 14.1% in fiscal year 2013 versus a -14.2% loss in fiscal year 2012.

High yield bonds as represented by the Merrill Lynch High

## FINANCIAL HIGHLIGHTS (In Thousands of Dollars, Unless received cash, securities issued or guaranteed by the Otherwise Noted) United States government, and irrevocable bank letters of

Yield II Total Return Index performed well, returning 9.6% versus 6.5% in 2012. High quality investment grade bonds declined due to anticipation of interest rate increases, ending the year with a slight loss of -0.7% versus an increase of 7.5% in 2012. Real Estate also performed well, as the NCREIF Property Index yielded 12.8% in fiscal year 2013, similar to the 12% return registered in fiscal year 2012.

For fiscal year 2013, the System's target asset allocation mix was 20% U.S. Equities, 20% Non-U.S. Equities, 20% Fixed Income, 18% Private Equity, 12% Real Estate, 5% Absolute Return and 5% Inflation Linked Asset Class. In April 2013, the System performed an asset allocation study and, as a result, the Board approved a change in the target allocation for fiscal year 2014 to 35% Global Equities, 15% Fixed Income, 10% Real Estate, 10% Absolute Return, 12.5% Inflation Linked and 17.5% Private Equity. At fiscal year-end, the System was transitioning to a new Strategic Asset Allocation. Actual asset class weights, as of June 30, 2013, are shown in the chart below.

 Cash 1.0%
 Domestic Equity 21.7%
 International Equity 23.4%

 Mabolute Return 7.1%
 Private Equity 14.0%
 Exed Isotome 19.5%

 LAC 4.5%
 Red Estate 8.8%

SYSTEM'S ACTUAL ASSET ALLOCATION

#### **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, 2013 and 2012, 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. The Board has limited the System's securities lending program utilization level (on-loan balance as a percentage of lendable assets) to 33.5%. Actual loan balance percentage levels for fiscal years 2013, 2012, and 2011 were 17.6%, 30% and 24.1%, respectively.

#### Limited Partnership Commitment

The System's investments in limited partnerships are included in the first table appearing in Note 7. In connection with those investments, the System has remaining commitments as of June 30, 2013, 2012 and 2011 of approximately \$388 million, 309 million and \$213 million, respectively, pursuant to terms of the respective limited partnerships.

#### **Other Comments**

The two Basic Financial Statements within this report (pages 22 and 23) have new report names; now referred to as the Statements of Plan Net Position and the Statements of Changes in Plan Net Position. These changes are in accordance with the Governmental Accounting Standard Board's Statement No. 63 requirements for all financial reporting periods after December 15, 2011. Please refer to Note 2 beginning on page 27 of this report for more details. 20

During fiscal year 2013, the System performed an asset allocation study, and as a result the Board adopted a new Strategic Asset Allocation, effective July 1, 2013, with the objective of maintaining or increasing the portfolio's expected return while decreasing the level of volatility. Aside from changing the weightings of the existing asset classes (see next page), the most notable change to the Strategic Asset Allocation is the combining of U.S. and Non-U.S. Equity into a single Global Equity asset class and the introduction of a 25% Minimum Volatility component to the Global Equity asset class benchmarked to the MSCI ACWI Minimum Volatility Index. The new Strategic Asset Allocation Policy also changed the System's Policy Benchmark effective July 1, 2013:

		Asset Allocation	
	Current Asset	Effective	
Asset Class	Allocation	July 1, 2013	Benchmark
U.S. Equity	20.0	-	Wilshire 5000
Non-U.S. Equity	20.0	-	MSCI ACWI x-U.S.
Global Equity	-	35.0	75% MSCI ACWI; 25%
			MSCI ACWI Minimum Volatility
Fixed Income:			
Investment Grade	10.0	7.5	Barclays Aggregate
Noninvestment Grade	10.0	7.5	Merrill Lynch High Yield Master
			Trust II
Real Estate	12.0	10.0	NCREIF
Inflation Linked	5.0	12.5	CPI + 4%
Private Equity	18.0	17.5	S&P 500 + 3%
Absolute Return	5.0	10.0	LIBOR + 4%
Cash	-	-	

## CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

This financial report is designed to provide our participants, business partners, and taxpayers with a general overview of the System's financial activities. If you have questions about this report or need additional financial information, contact the Executive Director of the Houston Municipal Employees Pension System at 1201 Louisiana, Suite 900, Houston, Texas 77002.

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## STATEMENTS OF PLAN NET POSITION JUNE 30, 2013 AND 2012

	2013	2012
Assets		
Investments, at fair value:		
Short-term investment funds	\$ 44,753,225	\$ 65,204,046
Government securities	64,523,245	71,642,342
Corporate bonds	233,867,977	230,905,237
Capital stocks	891,290,553	810,010,042
Commingled funds	279,270,827	255,302,205
Real assets	171,818,020	193,775,820
Alternative investments	517,151,692	421,272,705
Total investments	2,202,675,539	2,048,112,397
Cash and cash equivalents	6,167,532	1,646,509
Receivables:		
Receivables on asset sales	12,395,087	9,934,485
Receivables on foreign exchanges	32,179	828,082
Other receivables	5,664,640	5,889,837
Total receivables	18,091,906	16,652,404
Collateral on securities lending arrangements, at fair value	161,316,927	261,194,816
Furniture, fixtures and equipment, net	247,645	324,608
Total assets	2,388,499,549	2,327,930,734
Liabilities		
Payable on asset purchases	25,458,449	36,997,289
Payables on foreign exchanges	32,175	811,799
Accrued liabilities	3,473,396	3,405,703
Accrued other post retirement benefits	1,603,377	1,286,400
Collateral on securities lending arrangements, at fair value		261,194,816
Total liabilities	191,884,324	303,696,007
Net position - restricted for pension benefits	\$_2,196,615,225	\$ 2,024,234,727

See accompanying notes to basic financial statements.

## STATEMENTS OF CHANGES IN PLAN NET POSITION YEARS ENDED JUNE 30, 2013 AND 2012

	2013	2012
Additions to net position:		
Contributions:		
City of Houston	\$ 111,858,885	\$ 97,161,723
Participants	17,041,531	18,472,747
Total contributions	128,900,416	115,634,470
Other income	1,245,543	654,047
Investment income:		
Interest on bonds and deposits	20,253,352	18,306,213
Dividends	21,244,999	20,445,946
Earnings from limited partnerships and real estate trusts	8,400,396	14,448,804
Net (depreciation) appreciation on investments	221,049,602	(58,314,805)
Total investment income (loss)	270,948,349	(5,113,842)
Proceeds from lending securities	1,131,750	1,031,898
Less costs of securities lending	(376,973)	(394,261)
Net proceeds from lending securities	754,777	637,637
Less costs of investment services	(7,812,494)	(7,487,343)
Total investment income (loss), net	263,890,632	(11,963,548)
Total additions to net position	394,036,591	104,324,969
Deductions from net position:		
Benefits paid to participants	213,178,316	200,014,192
Contribution refunds to participants	1,265,864	2,205,685
Professional services	870,765	1,048,042
Administration expenses	6,341,148	6,263,665
Total deductions from net position	221,656,093	209,531,584
Net increase (decrease) in net position	172,380,498	(105,206,615)
Net position - restricted for pension benefits:		
Beginning of year	2,024,234,727	2,129,441,342
End of year	\$	\$_2,024,234,727

See accompanying notes to basic financial statements.

#### **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 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 local 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) and 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 the noncontributory Group D.

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.

At July 1, the System's participants consisted of the following:

	<u>2012</u>	<u>2011</u>
Retirees and beneficiaries		
currently receiving benefits	9,078	8,717
Former employees - vested but		
not yet receiving benefits	3,237	3,178
Former employees - non-vested	2,434	2,435
Vested active participants	8,158	8,108
Non-vested active participants	3,512	4,237
Total participants	26,419	26,675

Participants may no longer elect to convert previous Group B service to Group A after December 31, 2005.

#### **Contributions**

For fiscal years 2013 and 2012, covered active Group A participants were required to contribute 5% of their qualifying base salary to the System.

The System's Pension Statute provides that the employer contribution to the System be based on a percentage contribution rate multiplied by the combined eligible salaries paid to participants of all groups. The percentage contribution rate is based on the results of actuarial valuations made at least every three years, calculated on the basis of an acceptable reserve funding method approved by the Board. Notwithstanding any other provision, the City's minimum percentage contribution rate may not be less than the greater of two times the contribution rate of Group A participants, or 10%.

Starting in 2004, the City and the System established a Meet and Confer process. Part of the agreement provided for fixed contribution amounts. On June 29, 2011, the City

approved the Amended and Restated Meet and Confer Agreement (Agreement). Under the Agreement, the City contributed \$98.5 million (net of contributions to the replacement benefit plan of \$1.34 million) to the System in fiscal year 2012 (which was established in the Agreement as 19.36% of covered payroll) and 21.36% of covered payroll in fiscal year 2013. For each of the succeeding fiscal years, the City will contribute either the previous fiscal year's rate plus 2 percent of payroll or the previous fiscal year's contribution amount plus \$10 million, whichever is greater. This provision will stay in place until the actuarially determined contribution rate is met, at which time that rate becomes the effective contribution rate.

#### **Retirement Eligibility**

Effective January 1, 2008, new employees participate in the noncontributory 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 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.

For those participants in Group A and Group B employed effective January 1, 2005, and prior to January 1, 2008, 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 either:

(i) 62 years of age, or

#### NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

- (ii) 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
- (iii) completed at least 5 years of total credited service and attained 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.

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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. The Fourth Amendment to the Meet and Confer Agreement established the \$20,000 threshold. Prior to this agreement, the maximum amount was \$10,000. 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 participant's surviving spouse and/or dependent children. A deceased participant 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 participant, death benefits for a death that occurs while actively employed are determined in the same manner as for Group A and Group B. For a 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.

#### NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

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.

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#### **Deferred Retirement Option Plan**

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 will be equal to half the return on the System's investment 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 DROP Entry Date.

Effective September 1, 1999, the DROP Entry Date may precede DROP Election Date. However, 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 retirement for reasons other than death or disability may request a refund of their accumulated employee contributions, without interest, in lieu of a pension or in the

#### NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

event the participant has fewer than five years of credited service.

## 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 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 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 and 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. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. The fair value of limited partnerships and real estate trusts is based on independent appraisals or recent financial results. Short-term investments are carried at cost, which approximates fair value. Investments that do not have an established market are reported at estimated 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

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,

#### NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

compensatory time off, annual leave and sick leave) are accrued as a liability and expense in the Statements of Plan Net Position and Changes in Plan Net Position at their most current rate, respectively.

#### **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 April 23, 2002, in which the Internal Revenue Service stated that the System, as amended on May 11, 2001, is in compliance with the applicable requirements of the Internal Revenue Code. The System has been amended since receiving the determination letter. However, the System's management and Board believe that the System is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code.

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#### 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.

#### Recent Accounting Pronouncements

GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Plan Net Position.* 

This statement is intended to improve financial reporting by providing citizens and other users of state and local government financial reports with information about how past transactions will continue to impact a government's financial statements in the future.

This statement provides a new statement of Plan Net Position format to report all assets, deferred outflows of resources, liabilities, deferred inflows of resources, and Plan Net Position (which is the net residual amount of the other elements). The statement requires that deferred outflows of resources and deferred inflows of resources be reported separately from assets and liabilities. The statement also discusses how Plan Net Position (no longer net assets) should be displayed. Ultimately, this new framework will serve to standardize the presentation of deferred balances and their effects on a government's Plan Net Position and address uncertainty related to their display.

The provisions of this statement were implemented by the System effective for its June 30, 2013 financial statements. GASB Statement No. 65, *Items Previously Reported as* 

Assets and Liabilities.

This statement clarifies the appropriate reporting of deferred outflows of resources and deferred inflows of resources to ensure consistency in financial reporting. It was drafted to clarify the application of GASB Concepts Statement No. 4. It reclassifies certain items currently being reported as assets and liabilities as deferred outflows of resources and deferred inflows of resources. In addition, this Statement recognizes certain items currently being reported as assets and liabilities as outflows of resources and deferred inflows of resources.

The provisions of this statement are effective for financial statements for periods beginning after December 15, 2012. Management expects no significant changes in the System's financial report as a result of implementing this statement.

GASB Statement No. 66, Technical Corrections - 2012.

This statement amends GASB Statement No. 10, Accounting and Financial Reporting for Risk Financing and Related Insurance Issues, by removing the provision that limits fund-based reporting of a state and local government's risk financing activities to the general fund and the internal service fund type. As a result, governments would base their decisions about governmental fund type usage for risk financing activities on the definitions in GASB Statement No. 54, Fund Balance Reporting and Governmental Fund Type Definitions.

This Statement also amends GASB Statement No. 62, Codification of Accounting and Financial Reporting

#### NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, by modifying the specific guidance on accounting for (1) operating lease payments that vary from a straight-line basis, (2) the difference between the initial investment (purchase price) and the principal amount of a purchased loan or group of loans, and (3) servicing fees related to mortgage loans that are sold when the stated service fee rate differs significantly from a current (normal) servicing fee rate. These changes would eliminate any uncertainty regarding the application of GASB Statement No. 13, Accounting for Operating Leases with Scheduled Rent Increases, and result in guidance that is consistent with the requirements in GASB Statement No. 48, Sales and Pledges of Receivables and Future Revenues and Intra-Entity Transfers of Assets and Future Revenues, respectively.

The provisions of this statement are effective for financial statements for periods beginning after December 15, 2012. Management expects no significant changes in the System's financial report as a result of implementing this statement.

GASB Statement No. 67, *Financial Reporting for Pension Plans*.

This statement replaces the requirements of GASB Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* and GASB Statement No. 50 as they relate to pension plans that are administered through trusts or similar arrangements meeting certain criteria.

This statement builds upon the existing framework for financial reports of defined benefit pension plans, which includes a statement of fiduciary plan net position (the amount held in a trust for paying retirement benefits) and a statement of changes in fiduciary plan net position. GASB Statement No. 67 enhances note disclosures and required supplemental information (RSI) for both defined benefit and defined contribution pension plans. GASB Statement No. 67 also requires the presentation of new information about annual money-weighted rates of return in the notes to the financial statements and in 10-year RSI schedules.

The provisions in GASB Statement No. 67 are effective for

financial statements for periods beginning after June 15, 2013. System management has not determined the impact on the disclosures in the financial statements.

GASB Statement No. 68, Accounting and Financial Reporting for Pensions.

This statement replaces the requirements of GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* and GASB Statement No. 50, *Pension Disclosures*, as they relate to governments that provide pensions through pension plans administered as trusts or similar arrangements that meet certain criteria. GASB Statement No. 68 requires governments providing defined benefit pensions to recognize their long-term obligation for pension benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits. The Statement also enhances accountability and transparency through revised and new note disclosures and RSI.

The statement also will improve the comparability and consistency of how governments calculate the pension liabilities and expense. The changes applicable to defined benefit plans include:

- Projections of Benefit Payments. Projections of benefit payments to employees will be based on the then-existing benefit terms and incorporate projected salary changes and projected service credits (if they are factors in the pension formula), as well as projected automatic postemployment benefit changes (those written into the benefit terms), including automatic cost-of-living-adjustments (COLAs). For the first time, projections also will include ad hoc postemployment benefit changes (those not written into the benefit terms), including ad hoc COLAs, if they are considered to be substantively automatic.
- Discount Rate. The rate used to discount projected benefit payments to their present value will be based on a single rate that reflects (a) the long-term expected rate of return on plan investments as long as the Plan Net Position is projected under specific conditions to be sufficient to pay pensions of current employees and retirees and the pension plan assets are expected to be invested using a strategy to achieve that return;

#### NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

and (b) a yield or index rate on tax-exempt 20-year, AA-or-higher rated municipal bonds to the extent that the conditions for use of the long-term expected rate of return are not met.

 Attribution Method. Governments will use a single actuarial cost allocation method – "entry age," with each period's service cost determined as a level percentage of pay.

The provisions in GASB Statement No. 68 are effective for fiscal years beginning after June 15, 2014. System management has not determined the impact on the disclosures in the financial statements.

#### 3. CONTRIBUTIONS AND FUNDING STATUS

#### **Contributions**

Group A active participants are required to contribute to the System amounts as set forth in the Pension Statute. As of June 30, 2013 and 2012, 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.

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Under the System's Pension Statute, the City's contribution rate shall not be less than the greater of 10% of all participant salaries or two times the rate contributed by Group A participants. 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.

Starting in 2004, the City and the System established a Meet and Confer process. Part of the agreement provided for fixed contribution amounts. On June 29, 2011, the City approved the Amended and Restated Meet and Confer Agreement (Agreement). The Agreement provides for structured contributions from the City to provide the City budgetary flexibility while strengthening the System, enhancements to Board operations to promote best practices, and increased options for eligible participants that are cost neutral to the System. The Agreement has an effective date of July 1, 2011. Under the Agreement, the City contributed \$98.5 million (net contributions to the replacement benefit plan of \$1.34 million) to the System in fiscal year 2012 (which was established in the Agreement as 19.36% of covered payroll) and 21.36% of covered payroll in fiscal year 2013. For each of the succeeding fiscal years, the City will contribute either the previous fiscal year's rate plus 2 percent of payroll or the previous fiscal year's contribution amount plus \$10 million, whichever is greater. This provision will stay in place until the actuarially determined contribution rate is met, at which time that rate becomes the effective contribution rate.

Although the City and participants have contributed the amounts as required under the Meet and Confer Agreement, the actual contributions made by the City have been less than the Annual Required Contribution (ARC) for the periods covered by this report. The actuarially determined ARC for fiscal years 2013 and 2012 were calculated at 23.45% and 22.36% of estimated payroll of \$543 million and \$595 million, respectively, as shown in the July 1, 2012 and 2011 Actuarial Valuation Reports. The City's actual contribution rates for fiscal years 2013 and 2012 were 21.36% and 19.36%, respectively. The System expected to receive \$116 million in employer contributions for fiscal year 2013 based on an estimated payroll of \$543 million. Instead, the System received \$113.2 million based on an actual payroll of approximately \$528 million, which was around \$13 million less than projected. The difference between the expected \$116 million and the actual \$113.2 million in contributions is approximately \$2.8 million. Because the System's assumed growth rate for covered payroll is 3%, future decreases in covered payroll could

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

increase the percentage of pay contribution rate needed to amortize the unfunded liability.

# **Funding Status**

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 July 1, 2012 is 59.1%. This is lower than the funded ratio as of July 1, 2011, which was 61.4%. The funded ratio calculation was modified as a result of the 2007 Fourth Amendment to the Meet and Confer Agreement. Prior to the Fourth Amendment, the actuarial value of System assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a five-year period (20% each year).

Under the previous agreement for purposes of the July 1, 2007 actuarial valuation, instead of recognizing 20% of the prior years' deferred investment gains/(losses), all of the deferred gains/(losses) from 2006 and prior were fully recognized as of July 1, 2007. Only the 2007 and 2010 investment gain and the 2008 and 2009 investment loss have the normal deferral that is part of the actuarial value of assets (AVA) methodology. In future years, the number of deferral bases will grow until the System is once again recognizing prior years' investment gains/(losses) over five years.

The funded status of the System as of July 1, 2012, the most recent actuarial valuation date, is as follows (dollar amounts in millions):

	runded olards of the bystem as of bury 1, 2012									
Actuarial	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded	Funded	Covered	UAAL as a Percentage of Covered				
Valuation	(AVA)	(AAL)	(UAAL)	Ratio	Payroll	Payroll				
Date	(1)	(2)	(2-1)	(1/2)	(3)	((2-1)/3)				
07/01/12	\$2,344	\$3,967	\$1,623	59.1%	\$534	304%				

# Funded Status of the System as of July 1, 2012

The City is responsible for funding the deficiency, if any, between the amounts available to pay the System's benefits and the amount required to pay such benefits.

#### **Actuarial Methods and Assumptions**

The July 1, 2012 actuarial valuation used the following significant assumptions:

Actuarial cost method	Entry age normal cost method
Amortization method	Level funding, percentage of
	projected pay, and open
Remaining amortization period	30 years*
Investment rate of return	8.5%, net of expenses
Asset valuation method	5 year modified**
Salary increases	Graded rates based on years of
	service (range from 3 percent to 6
	percent)
Payroll growth factor	3.0% per year
General inflation rate	3.0% per year
Life expectancy	Based on 2000 Retirement
	Pensioners Mortality Tables
	(healthy participants)
	Based on 1965 Railroad
	Retirement Board Disabled
	Life Table (disabled participants)
DROP participation rate	90% at first eligibility
DROP interest credit	4.25% per year

\*As part of the Amended and Restated Meet and Confer Agreement between the Board and the City of Houston, dated July 1, 2011, the Board's funding policy was 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 Fourth Amendment to the Meet and Confer Agreement, all of the deferred gains/(losses) from 2006 and prior were fully recognized as of July 1, 2007. Only the 2007 and 2010 investment gain and the 2008 and 2009 investment loss have the normal deferral that is part of the actuarial value of assets (AVA) methodology. In future years, deferred gains and losses will offset against each other, and the System will recognize 1/5<sup>th</sup> of the aggregate deferred gains or losses each year.

Historical trend information is provided as required supplementary information on pages 43 to 48. This historical information is intended to demonstrate the progress the System has made in accumulating sufficient assets to pay benefits when due and the related actuarial assumptions used in determining the actuarially determined amounts.

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

# 4. 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, 2013 and 2012, the System had fair value bank balances of \$6,113,056 and \$1,763,257, respectively, that are in demand deposit accounts subject to coverage by Federal deposit insurance but not collateralized. 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.

# **5. 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 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, Great-West Retirement Services (Great-West), and the cost of administration and funding are borne by the DCP participants. Amounts deferred are held in trust by Great-West 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.

# 6. POST-EMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS

# **Plan Description**

The System provides health care benefits (i.e., medical, prescription, dental) to retired System employees and their beneficiaries. The System also provides active employees of the system with \$20,000 of life insurance and System retirees 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 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 75.
- 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 selffunded 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.

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 Annual Other Post-Employment Benefits Cost

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 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 of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The System had its first OPEB actuarial valuation performed as of June 30, 2008 as required by GASB Statement No. 45, and then again as of June 30, 2010.

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

The latest actuarial valuation, as of June 30, 2012, covers a three year period through fiscal year 2014. Additionally, the System's annual OPEB costs are as follows:

		June 30 <u>2013</u>	June 30 <u>2012</u>	June 30 <u>2011</u>
Annual required contribution	\$	426,166	413,753	369,029
Interest on OPEB obligation		57,889	44,151	33,314
Adjustment to ARC	_	(53,633)	(40,905)	(30,634)
Annual OPEB cost (end of year)		430,422	416,999	371,709
Net estimated employer contributions	_	(113,445)	(111,724)	(130,905)
Increase in net OPEB obligation		316,977	305,275	240,804
Net OPEB obligation-as of beginning of year	_	1,286,400	981,125	740,321
Net OPEB obligation-as of end of year	\$	1,603,377	1,286,400	981,125

Three-Year Trend Information									
	Annual	Percentage	Net						
Year	OPEB	of ARC	OPEB						
<u>Ended</u>	<u>Cost</u>	Contributed	<b>Obligation</b>						
6/30/11	\$ 371,709	35.2%	\$ 981,125						
6/30/12	416,999	26.8%	1,286,400						
6/30/13	430,422	26.4%	1,603,377						

# **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, 2012 is as follows:

# Actuarial Valuation Date as of June 30, 2012

Actuarial Value of Assets (a)	-
Actuarial Accrued Liability (AAL) (b)	\$ 4,424,477
Unfunded AAL (UAAL) (b-a)	\$ 4,424,477
Funded Ratio (a/b)	0%
Covered Payroll (c)	\$ 2,251,862
UAAL as a % of ((b-a)/c)	196.5%

Under the reporting parameters, the System's retiree health care plan is 0% funded with an estimated actuarial accrued liability exceeding actuarial assets by \$4,424,477 at June 30, 2012. The above funded status figures are required to be updated every three years.

# **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				
	percent to 6% 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 9% in 2012 and				
	decreasing by 0.5% each				
	year to 4.5% by 2021				

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

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 presented as required supplementary information (see schedule 3) 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.

# 7. INVESTMENTS

Portions of the System's investments are classified as security investments. A security is a transferable financial instrument that evidences ownership or creditorship. 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, as follows:

	<u>2013</u>	<u>2012</u>
Short-term investment funds	\$ 44,753,225	65,204,046
Government securities	64,523,245	71,642,342
Corporate bonds	233,867,977	230,905,237
Capital stocks	891,290,553	810,010,042
Commingled funds	279,270,827	255,302,205
Real assets	171,818,020	193,775,820
Alternative investments	517,151,692	421,272,705
	\$ 2,202,675,539	2,048,112,397

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 investment assets of the System, and in said capacity, the Custodian is a fiduciary of the System's investment assets with respect to its discretionary duties including safekeeping the System's investment 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 investment assets that the Board shall from time to time deposit with the Custodian. All rights, title

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

and interest in and to the System's assets shall at all times be vested in the System's Board.

In holding all System investment 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 investment 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 (IPS) 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 Credit Risk**

For an investment, custodial credit 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 credit 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, 2013 and 2012, 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 of Credit Risk**

The allocation of assets among various asset classes is set by the Board. For major asset classes (e.g., U.S. equity, international equity, fixed income, real assets, and alternative investments), 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 of the System provides that no investment manager shall have more than 15% (at market value) of the System's assets in one investment style offered by the firm, with the exception of passive management.

Representative guidelines by type of investment are as follows:

### U.S. Equity Managers

- 1. 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%.

- Forwards 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,
  - b. Foreign exchange contracts with a maturity exceeding 12 months may not be made, and
  - c. 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.

There is no security issued by a single issuer that is being held with market value over 5% of the System's Plan Net Position as of June 30, 2013 and June 30, 2012.

#### 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

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

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 are managed by the active managers.

At June 30, 2013, the following table shows the System's investments by type, amount and the effective duration rate:

	Effective Duration	-	International	<u>Fair Value</u>
Collateralized mortgage	2.45	¢ 44 500 040		14 522 240
obligations	3.45	\$ 11,532,219		11,532,219
Convertible bonds	4.17	10,177,749	263,999	10,441,748
Corporate bonds	5.66	149,152,653		149,152,653
Corporate bonds (International)	11.77		5,094,115	5,094,115
GNMA/FNMA/ FHLMC	4.00	32,559,905		32,559,905
Municipal	7.53	1,398,604		1,398,604
Government issues	4.62	27,724,040		27,724,040
Government issues (International)	7.09		2,840,696	2,840,696
Misc. receivable (auto/credit card)	2.21	7,048,277		7,048,277
Other asset backed securities	3.02	3,116,127		3,116,127
Bank loans and othe	er N/A	47,482,838		47,482,838
		\$ 290,192,412	8,198,810	298,391,222

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

At June 30, 2012, the following table shows the System's investments by type, amount and the effective duration rate:

E	Effective	Э		
Ξ	Duration	n <u>Domestic</u>	International	Fair Value
Collateralized mortgage				
obligations	3.25	\$ 10,462,087		10,462,087
Convertible bonds	3.46	11,320,947	237,338	11,558,285
Corporate bonds	4.91	168,880,837		168,880,837
Corporate bonds (International)	5.22		8,075,601	8,075,601
GNMA/FNMA/ FHLMC	2.15	40,265,061		40,265,061
Municipal	7.45	1,266,852		1,266,852
Government issues	8.52	27,777,674		27,777,674
Government issues (International)	7.19		2,332,757	2,332,757
Misc. receivable (auto/credit card)	1.41	7,309,002		7,309,002
Other asset	0.40	4 000 004		4 000 004
backed securities	8.16	1,338,324		1,338,324
Bank loans and othe	r N/A	23,281,099		23,281,099
		\$ 291,901,883	10,645,696	302,547,579

# 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.

(Continued in the middle of the following page.)

# **Quality Ratings**

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at June 30, 2013 are as follows:

						Government	al			
Quality		Convertible	Corporate	Sponsored		Issues		Other Asset	Grand Total	Percentage
Rating	CMO	Bonds	Bonds	Agencies	Municipals	(Int)	Other	Backed	Fair Value	of Holdings
AAA	\$ 7,143,380		20,027		179,029		3,332,658	3,116,127	13,791,221	0.63%
AA	284,777		1,429,328				203,924		1,918,029	0.09%
AA+			770,532	32,559,905	164,905	859,679	412,655		34,767,676	1.58%
AA-	524,604		379,383				1,085,100		1,989,087	0.09%
А			3,289,822		360,059				3,649,881	0.17%
A+	817,606				420,657				1,238,263	0.06%
A-	310,367		5,458,530		273,954		594,337		6,637,188	0.30%
BBB		404,939	11,585,134						11,990,073	0.54%
BBB+			6,876,732			2,394,483			9,271,215	0.42%
BBB-		583,917	8,578,840						9,162,757	0.42%
BB		859,215	9,569,677			446,213			10,875,105	0.49%
BB+		1,564,372	1,552,246						3,116,618	0.14%
BB-		2,205,612	6,401,856						8,607,468	0.39%
В		1,492,306	21,109,182						22,601,488	1.03%
B+		1,044,854	15,049,244						16,094,098	0.73%
B-		627,463	19,773,195						20,400,658	0.93%
Below C		938,569	36,827,358						37,765,927	1.71%
NA	2,451,486	720,501	5,575,681				48,902,442		57,650,110	2.62%
Subtotal	\$ 11,532,220	10,441,748	154,246,767	32,559,905	1,398,604	3,700,375	54,531,116	3,116,127	271,526,862	12.33%
Total cred	it risk debt securit	ties							271,526,862	12.33%
U.S. gove	rnment fixed inco	me securities							26,864,360	1.22%
Total fixed	l income securities	S							298,391,222	13.55%

Other investments

Total investments

1,904,284,317

\$2,202,675,539

86.45% 100.00%

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

# **Quality Ratings**

The quality ratings of investments in fixed income securities as described by nationally recognized statistical rating organizations at June 30, 2012 are as follows:

						Government	tal			
Quality		Convertible	Corporate	Sponsored		issues		Other Asset	Grand Total	Percentage
Rating	CMO	Bonds	Bonds	Agencies	Municipals	(Int)	Other	Backed	Fair Value	of Holdings
AAA	\$ 8,191,487		309,388				4,104,210	1,338,324	13,943,409	0.68%
AA			1,487,154				75,933		1,563,087	0.08%
AA+				33,917,574			177,337		34,094,911	1.66%
AA-			194,207		117,557				311,764	0.02%
А			947,434		356,187		126,581		1,430,202	0.07%
A+	801,494		179,496		665,900				1,646,890	0.08%
A-	319,152		6,543,506		127,208				6,989,866	0.34%
BBB		176,231	11,433,500						11,609,731	0.57%
BBB+			6,596,366			2,194,311			8,790,677	0.43%
BBB-			11,141,307						11,141,307	0.54%
BB		529,489	7,450,606			138,446			8,118,541	0.40%
BB+		1,559,307	6,307,731						7,867,038	0.38%
BB-		2,660,969	4,197,026						6,857,995	0.33%
В		1,731,706	35,015,893						36,747,599	1.79%
B+		1,585,863	17,321,828						18,907,691	0.92%
B-		492,444	26,206,727						26,699,171	1.30%
Below C		929,088	35,525,976						36,455,064	1.78%
NA	1,149,954	1,893,188	6,098,293	7,489,294			26,106,046		42,736,775	2.09%
Subtotal	\$10,462,087	11,558,285	176,956,438	41,406,868	1,266,852	2,332,757	30,590,107	1,338,324	275,911,718	13.47%
	t risk debt securit								275,911,718	13.47%
U	mment fixed inco								26,635,861	1.30%
	income securities	S							302,547,579	14.77%
Other inve								1	,745,564,818	85.23%
Total	investments							\$2	,048,112,397	100.00%

# Foreign Currency Risk (continued)

The System has an indirect exposure to foreign currency fluctuation as of June 30, 2013 and 2012 as follows:

	<u>June 30, 2013</u>			<u>June 30, 2012</u>			
		Percentage of			Percentage of		
	Fair Value	air Value Foreign Holdings			Foreign Holdings		
Australian Dollar	\$ 6,821,031	2.68%	\$	8,424,135	4.09%		
Brazilian Real	2,581,232	1.01%		3,904,399	1.90%		
Canadian Dollar	8,026,447	3.16%		7,585,236	3.68%		
Danish Krone	2,394,589	0.94%		1,576,201	0.77%		
Euro Currency	75,420,144	29.65%		52,888,889	25.67%		
Hong Kong Dollar	17,744,323	6.98%		12,375,671	6.01%		
Indonesian Rupiah	834,589	0.33%		1,540,580	0.75%		
Japanese Yen	31,203,047	12.27%		23,670,490	11.49%		
Malaysian Ringgit	957,765	0.38%		798,898	0.39%		
Mexican Peso	1,491,695	0.59%		2,326,310	1.13%		
New Taiwan Dollar	362,984	0.14%		482,232	0.23%		
Norwegian Krone	8,334,640	3.28%		4,991,231	2.42%		
Pound Sterling	53,124,810	20.88%		48,562,057	23.57%		
Singapore Dollar	4,858,689	1.91%		4,633,328	2.25%		
South African Rand	3,789,500	1.49%		5,541,623	2.69%		
South Korean Won	4,678,537	1.84%		4,469,039	2.17%		
Swedish Krona	9,792,617	3.85%		7,641,956	3.71%		
Swiss Franc	16,536,921	6.50%		10,504,481	5.10%		
Thailand Baht	2,656,067	1.04%		1,970,535	0.96%		
Turkish Lira	2,759,522	1.08%		2,127,606	1.02%		
	\$ 254,369,149	100.00%	\$	206,014,897	100.00%		

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Schedule 6 on page 48 lists the System's investment and professional service providers.

# Credit Risk

The quality ratings of investments in fixed income securities are set forth in the Investment Policy 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 noninvestment 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.

#### Securities Lending

The System is authorized under its Investment Policy 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, 2013 and 2012, 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, 2013 and June 30, 2012, the liquidity pool had an average duration of 28.78 and 36 days and an average weighted final maturity of 85 and 73 days, respectively. As of June 30, 2013 and 2012, the duration pool had an average duration of 43.89 and 40 days and an average weighted final maturity of 1,972 and 1,328 days, respectively. Because the loans were

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

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%.

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The collateral held and the fair value of securities on loan as of June 30, 2013 was \$161,316,927 and \$156,736,505, respectively, and \$261,194,816 and \$260,751,596 as of June 30, 2012, respectively.

# JUNE 30, 2013 AND 2012

Fair Value

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

		<u>2013</u>	<u>2012</u>
Domestic equity	\$	96,912,384	194,836,769
Domestic fixed income		42,230,746	47,640,524
International equity	_	17,593,375	18,274,303
	\$	156,736,505	260,751,596

### **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 years 2013 and 2012, the System recognized \$(13,293) and \$(1,401,347), respectively, in investment loss/revenue related to derivatives.

The System's investment guidelines allow fixed income managers to hold stock rights and warrants. On June 30, 2013, two fixed income managers held stock warrants. These warrants were acquired through corporate actions or negotiated as part of a private offering. The fixed income managers intend to hold the warrants and expect them to increase in value.

On June 30, 2013, three of the System's international equity managers held stock rights. These rights are typically acquired as the result of international stocks paying a dividend. The rights are short-lived and are converted to cash in about a month. At the end of fiscal year 2013, one international equity manager held foreign exchange swaps to mitigate currency risk.

As of June 30, 2013 and 2012, the System held derivatives with a notional value of \$263,402 and \$244,119 and a fair value of \$2,529,868 and \$2,614,251, respectively.

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

<u> </u>	<u>rando</u>		<u>~</u>			-
<b>Classification</b>	Amo	<u>ount l</u>	Notional	Amo	ount	Notional
Common Stoc	k\$2	20,178	7,750	2,614,	,251	244,119
Common Stoc	k <u>2,50</u>	9,690 2	255,652		-	
Totals	\$ 2,52	9,868 2	263,402	2,614,	,251	244,119
Changes in Fair Value				<u>2013</u>	<u>3</u>	<u>2012</u>
Investment						
<b>Derivatives</b>	<u>Class</u>	ification				
Rights	Investme	nt revenu	ue	\$ 86,8	75	(8,637)
Warrants	Investme	nt revenu	ue	(100,10	68) (1	,392,710)
Totals				\$ (13,29	93) (1	,401,347)

2012

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In addition to the above, the System has exposure to derivatives through its investments in hedge funds and commingled vehicles.

# **Covered Call Options**

The System may write covered call options as an investment technique to enhance portfolio returns and to reduce portfolio volatilities. When a call option is sold (written), it obligates the System to deliver stock at a set price for a specific period of time. The System receives premium income for options written, and the value of the options are recorded as a liability due to the obligation to deliver stock. The liability is recorded at the current fair value of the options written. Fair value is the amount that the System would pay to terminate the contracts at the reporting date.

If a call option expires, a gain is realized to the extent of the premium received. If a call option is exercised, the premium received is realized as a gain. A gain or loss is also realized on the underlying security to satisfy the delivery obligation. The System may repurchase a call option written at its discretion when it is favorable to do so. When a contract is repurchased, the liability is reduced and the difference between the premium received and the amount paid to close the contract is realized as a gain or loss.

The System held no options at June 30, 2013 and 2012.

# 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 2013 and 2012. 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 favorable or unfavorable 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.

The System held no forward foreign exchange contracts at June 30, 2013.

# 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 prepaid or refinanced which reduces the expected return of the security. If interest rates rise the likelihood of prepayments decrease, 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,

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

called tranches. The repayments from the pool of passthrough 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.

# 8. FURNITURE, FIXTURES AND EQUIPMENT

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

	<u>2013</u>	<u>2012</u>
Office furniture and equipment	\$ 49,391	49,391
Computer equipment	524,256	721,473
Leasehold improvements	130,773	130,773
	704,420	901,637
Less accumulated depreciation		
and amortization	(456,775)	(577,029)
	\$ 247,645	324,608

# 9. 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, 2013 and 2012, aggregate contributions from these eligible participants of the System were approximately \$140,624,000 and \$134,469,000, respectively.

The System's investments in limited partnerships and real estate trusts are included in the table appearing in note 7. In connection with those investments, the System has remaining commitments as of June 30, 2013 and 2012 of approximately \$388 million and \$309 million, respectively, pursuant to terms of the respective limited partnerships and real estate trusts.

The System leases office facilities under a five year lease, ending October 30, 2016. This lease agreement provides for two months of abated rent and a base rent of

\$14 per square foot for the first eighteen months. Subsequently, it will increase by \$0.50 per square foot per year for the remainder of the term. The payments under the lease will be:

Year	<u>Amount</u>
Fiscal year 2014	\$ 313,748
Fiscal year 2015	323,158
Fiscal year 2016	332,576
Fiscal year 2017	111,472
Total	\$ 1,080,954

Additional amounts are assessed for use of common areas, utilities and maintenance. Total rental expense, including these assessments, amounted to approximately \$461,000 and \$439,000 during the years ended June 30, 2013 and 2012, respectively.

# **10. 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 changes could materially affect the amounts reported in the statements of Plan 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, participant demographics, and payroll growth rates, 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.

# NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2013 AND 2012

# 11. MANAGEMENT'S REVIEW OF SUBSEQUENT EVENTS

Management has evaluated subsequent events through September 26, 2013, the date which the financial statements were available to be issued. Management has determined that no subsequent events require disclosure in these financial statements.

Actuarial Valuation Date	Actuarial Value of Assets (AVA) (1)	Acturial Accrued Liability (AAL) (2)	Unfunded (UAAL) (2-1)	Funded Ratio (1/2)	Covered Payroll (3)	UAAL as a Percentage of Covered Payroll ((2-1)/3)
07/01/03	1,510.3	\$ 3,278.2	\$ 1,767.9	46%	\$ 390.3	453%
07/01/04	1,501.2	2,633.8	1,132.6	57%	366.2	309%
07/01/05	1,777.6	2,725.3	947.7	65%	404.6	234%
07/01/06	1,867.3	2,894.3	1,027.0	65%	422.5	243%
07/01/07*	2,193.7	3,128.7	935.0	70%	448.9	208%
07/01/08	2,310.4	3,296.3	985.9	70%	483.8	204%
07/01/09	2,284.4	3,451.4	1,167.0	66%	539.0	217%
07/01/10	2,273.1	3,632.5	1,359.4	63%	550.7	247%
07/01/11	2,328.8	3,790.3	1,461.5	61%	544.7	268%
07/01/12	2,344.1	3,966.9	1,622.8	59%	534.4	304%

# SCHEDULE 1 - SCHEDULE OF FUNDING PROGRESS (UNAUDITED) (IN MILLIONS OF DOLLARS)

Analysis of the dollar amounts of the actuarial value of assets, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the plan is becoming financially stronger or weaker; generally, the greater this percentage, the stronger the plan. Trends in unfunded actuarial accrued liability and covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the System's progress made in accumulating sufficient assets to pay benefits when due; generally, the smaller this percentage, the stronger the plan.

\* The funded ratio calculation was modified as a result of the 2007 Fourth Amendment to the Meet and Confer Agreement. Prior to the Fourth Amendment, the actuarial value of System assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a five-year period (20% each year). Under the previous agreement for purposes of the July 1, 2007 actuarial valuation, instead of recognizing 20% of the prior years' deferred investment gains/(losses), all of the deferred gains/(losses) from 2006 and prior were fully recognized as of July 1, 2007. Only the 2007 and 2010 investment gain and the 2008 and 2009 investment loss have the normal deferral that is part of the actuarial value of assets (AVA) methodology. In future years, the number of deferral bases will grow until the System is once again recognizing prior years' investment gains/(losses) over five years.

See accompanying independent auditors' report. See accompanying note to required supplemental schedules.

# SCHEDULE 2 - SCHEDULE OF EMPLOYER CONTRIBUTIONS (UNAUDITED)

Fiscal <u>Year</u>	Actuarial Valuation <u>Date</u>	Annual Required Contributions (in millions)*	Percentage Contributed
06/30/04	07/01/02	\$ 123.9	46.0%
06/30/05	07/01/03	102.9	61.0%
06/30/06	07/01/05	119.1	56.2%
06/30/07	07/01/06	101.8	69.0%
06/30/08	07/01/07	110.6	66.0%
06/30/09	07/01/08	93.8	81.9%
06/30/10	07/01/09	99.3	82.6%
06/30/11	07/01/10	115.1	77.0%
06/30/12	07/01/11	133.1	74.0%
06/30/13	07/01/12	127.4	88.9%

\* The required contributions are calculated based on actuarially determined contribution rates along with an assumed amount of projected payroll. Actuarial valuations generally are performed annually. The contribution rate, which is based on a given actuarial valuation and approved by the Board, becomes effective one year after the valuation date. However, a Fourth Amendment to the Meet and Confer Agreement between the System and the City of Houston was adopted in 2007 (Fourth Amendment). As part of this amendment, a funding schedule was implemented consisting of a \$75 million employer contribution for fiscal year 2008, a \$78.5 million employer contribution for fiscal year 2009, a \$83.5 million employer contribution for fiscal year 2010, and a \$88.5 million employer contribution for fiscal year 2011.

Beginning in fiscal year 2012, employer contributions are based on a negotiated amount of \$98.5 million in fiscal year 2012 followed by increases in the following fiscal years equal to the greater of \$10 million or the set contribution rate of 19.36% increased by 2% per year since fiscal year 2012. For fiscal year 2013, the contribution rate was 21.36%. 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 fiscal year 2013 rate of 23.45% was set by the July 1, 2011 valuation). Schedule 2 does not provide information with respect to contributions actually made in relation to the amounts required under the Fourth Amendment.

For fiscal year 2013, the required contributions above (column 3) were based on the actuarially determined contribution rate of 23.45% times a covered payroll of \$543 million. The percentage contributed (column 4) was calculated using actual contributions received of \$113.2 million divided by the required contributions.

See accompanying independent auditors' report.

See accompanying note to required supplemental schedules.

# NOTES TO REQUIRED SUPPLEMENTAL SCHEDULES 1 and 2 (UNAUDITED)

The information presented in the required supplemental schedules 1 and 2 was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	July 1, 2012
Actuarial cost method	Entry Age Normal
Amortization method	Level funding, percentage of projected pay, oper
Amortization period	30-Year open funding period*
Asset valuation method	5-year modified
Actuarial assumptions:	
Investment rate of return	8.5%, 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
DROP participation rate	90% at first eligibility
DROP interest credit	4.25% per year
Mortality rates	Based on 2000 Retirement
	Pensioners Mortality Table
	(healthy participants);
	1965 Railroad Retirement
	Board Disabled Life Table
	(disabled participants)

\*As part of the Amended and Restated Meet and Confer Agreement between the Board and the City of Houston, dated July 1, 2011, the Board's funding policy was 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.

See accompanying independent auditors' report.

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# SCHEDULE 3 - SCHEDULE OF FUNDING PROGRESS FOR OPEB (UNAUDITED)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
June 30, 2012	\$ -	\$ 4,424,477	4,424,477	0%	2,251,862	196%
June 30, 2010	-	3,594,835	3,594,835	0%	2,062,917	174%
June 30, 2008	-	3,297,680	3,297,680	0%	2,150,026	153%

See accompanying independent auditors' report. See accompanying note to required supplemental schedule.

# NOTE TO REQUIRED SUPPLEMENTAL SCHEDULE 3 (UNAUDITED)

The information presented in the required supplemental schedule 3 was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2012
Actuarial cost method	Projected unit credit
Amortization method	Level percent of payroll
Amortization period	30-Year period
Asset valuation method	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 9% in 2012 and
	decreasing by 0.5% each year to 4.5% by 2021

See accompanying independent auditors' report.

		June 30, 2013			June 30, 2012	
			Unrealized			Unrealized
			Appreciation			Appreciation
	Cost	Fair Value	(Depreciation)	Cost	Fair Value	(Depreciation)
Fixed income:						
Government securities	\$ 64,922,56	9 \$ 64,523,245	5 \$ (399,324) \$	\$ 69,414,811	\$ 71,642,342	\$ 2,227,531
Corporate bonds	226,706,16	5 233,867,977	7,161,812	221,237,073	230,905,237	9,668,164
Total fixed income	291,628,734	298,391,222	6,762,488	290,651,884	302,547,579	11,895,695
Short-term investment funds	44,753,225	5 44,753,225		65,204,046	65,204,046	
Capital stocks	790,625,244	891,290,553	100,665,309	800,028,115	810,010,042	9,981,927
Commingled funds	227,876,59	5 279,270,827	51,394,232	215,341,820	255,302,205	39,960,385
Real assets	210,810,01	171,818,020	(38,991,991)	239,777,964	193,775,820	(46,002,144)
Alternative investments	472,101,904	517,151,692	45,049,788	380,726,515	421,272,705	40,546,190
Total investments	\$ 2,037,795,713	8 \$2,202,675,539 	\$\$	1,991,730,344	\$ 2,048,112,397	\$ 56,382,053

# SCHEDULE 4 - INVESTMENT SUMMARY JUNE 30, 2013 and 2012

Space and cost restrictions make it impractical to print the entire investment portfolio in this report. A portfolio listing is available for review at the System's office by appointment, upon request.

See accompanying independent auditors' report.

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# SCHEDULE 5 - INVESTMENT SERVICES, PROFESSIONAL SERVICES, AND ADMINISTRATION EXPENSES YEARS ENDED JUNE 30, 2013 AND 2012

	<u>2013</u>	<u>2012</u>
Investment services:		
Custodial services	\$ 352,953	\$ 355,614
Money management services	6,565,541	6,272,729
Consulting services	894,000	859,000
Total investment services	\$ 7,812,494	\$
Professional services:		
Actuarial services	\$ 71,872	\$ 67,809
Auditing and consulting services	89,932	43,507
Legal services	518,436	765,226
Other professional services	190,525	171,500
Total professional services	\$ 870,765	\$
Administration expenses:		
Office costs	\$ 532,132	\$ 606,805
Insurance costs	158,517	181,779
Costs of staff and benefits	4,394,684	4,264,486
Costs of equipment and supplies	836,412	812,116
Depreciation and amortization	166,649	203,159
Costs of education and research	252,754	195,320
Total administration expenses	\$ 6,341,148	\$6,263,665

See accompanying independent auditors' report.



# SCHEDULE 6 - SUMMARY OF COSTS OF INVESTMENT AND PROFESSIONAL SERVICES YEARS ENDED JUNE 30, 2013 AND 2012

Service Provider	Service Provided	<u>2013</u>	2012
Investment services:			
Baring Asset Management	Money management	\$ 402,533	\$ 409,435
BlackRock (formerly Barclays)	Money management	212,000	301,015
DDJ Capital Management, LLC	Money management	718,037	637,048
DePrince, Race and Zollo, Inc.	Money management	563,280	515,485
Earnest Partners, LLC	Money management	735,515	768,794
Enhanced Investment (INTECH)	Money management	185,922	201,631
Global Forest Partners, LP/UBS Timber Investors	Money management	55,796	54,705
Loomis, Sayles and Company, LP	Money management	566,240	498,124
Neumeier Investment Counsel, LLC	Money management	439,434	422,128
Oakbrook	Money management	148,469	149,955
OFI Institutional	Money management	537,204	476,954
Panagora	Money management	205,100	201,656
Piedmont Investment Advisors	Money management	106,326	112,318
Profit Investment Management	Money management	181,643	181,250
Pugh Capital Management	Money management	96,707	79,854
Smith Graham & Company	Money management	323,203	327,171
Thomas White	Money management	501,853	445,162
T. Rowe Price Associates	Money management	217,093	229,213
Tortoise Capital Advisors	Money management	189,697	5,531
UBS Global Asset (formerly Brinson Part)	Money management	129,128	202,232
State Street Global Advisors	Money management	50,361	53,068
State Street Bank and Trust Company	Custodial services	352,953	355,614
Willshire Associates, Incorporated	Consulting services	284,000	284,000
Cliffwater LLC	Consulting services	550,000	550,000
Gray & Company	Consulting services	60,000	25,000
	<b>3</b> • • • • • •		
Total investment services		7,812,494	7,487,343
Professional services:			
Gabriel, Roeder, Smith & Co.	Actuarial services	\$ 71,872	\$ 67,809
Doeren Mayhew (formerly MFR, P.C.)	Auditing and professional services	66,857	41,907
VR Election Services	Auditing and professional services	23,075	
Pension Benefits Information	Consulting services		1,600
Baker Botts, LLP	Legal services	185,169	258,828
Gibbs & Bruns LLP	Legal services	480	1,080
Jackson Walker LLP	Legal services	17,987	51,112
Locke Lord LLP	Legal services	314,800	454,206
CP Paragon Solutions, L.P.	Professional services	- ,	12,500
Harris Law Firm	Professional services	30,382	,
HillCo Partners, LLC	Professional services	101,625	102,000
Houston City Personnel	Professional services	101,020	6,000
LT Communications	Professional services	48,000	48,000
PacoTech Inc	Professional services	7,518	10,000
Pressley Partnership	Professional services	3,000	3,000
Total professional services		870,765	1,048,042
Total costs of investment and professional services		\$ 8,683,259	\$ 8,535,385

See accompanying independent auditors' report.

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# SECTION

# 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 following provides an outline of the IPS.

# Purpose

The IPS assists the Board in its fiduciary duties 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, and d) establishing criteria to select, remove, monitor and evaluate performance of money managers and vendors on a regular basis.

# **Investment Objectives**

The investment objectives of the total portfolio are to obtain the reasonable long-term return with the degree of risk assumed while emphasizing the preservation of capital and to exceed the actuarial rate assumed by the System's actuary and approved by the Board. This will enable 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 and the Fund is currently working toward its target asset allocation goal.

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 TUCS Master Trusts – Public Universe.

#### 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 to changes in the composition of the global equity market more efficiently. Second, the target exposure to Fixed Income was reduced from 20% to 15% in response to the continuing 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 Absolute Return increased from 5% to 10%.

This new asset allocation is effective July 1, 2013. The System will gradually transfer assets to the new asset allocation targets. The target and actual allocations as of June 30, 2013 are included in Table 1.

# 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 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, 2013, the System had retained the services of 83 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 manage 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 2013, 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 agreement 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 investment managers seek best execution for all trades ordered on behalf of the System. Equity managers are encouraged to direct a designated percentage of their brokerage activity to an approved list of brokers. 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 periodically 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 fail to meet expectations will be placed on probation (for public market managers) or watchlist (for private market managers). Staff and 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 other factors.

# **Investment Performance Evaluation**

The Board reviews System investment performance on a periodic basis to evaluate conformity to the goals and objectives established in the IPS. 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 the industry standard timeweighted rate of return method.

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### **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, 2013 encompasses 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 seven of the past ten fiscal years, met or exceeded its policy index in five of those ten fiscal years, and outperformed its peer group in eight of those ten years. Due to the diversification of assets, the System's 10-year annualized return is 9.52%, in excess of its return target of 8.50%. The 20-year return stands at 8.67%.

As shown in the Table 2, HMEPS' total fund return exceeds its policy portfolio over the last ten years. In addition, HMEPS' total fund performance compares very favorably to the median public fund, as represented by the TUCS Master Trusts – Public Universe, and has outperformed this benchmark for the five- and ten-year periods. Over the ten-year period, HMEPS is in the top decile of funds in the TUCS Master Trusts – Public Universe.

The consistent long-term above-benchmark performance 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 \$2,484, while the same \$1,000 would have grown to \$2,273 and \$1,939 respectively in the policy benchmark portfolio and the median public fund.

# Fiscal Year 2013 Results

For the fiscal year ended June 30, 2013, the System returned 13.58%. This rate of return lagged the System's policy benchmark return of 13.99%, but exceeded the return of the median fund in the TUCS Master Trusts – Public Universe of 12.27%.

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

# SCHEDULE OF ASSET ALLOCATION

# TABLE 1

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

	Alloc	ation	Inv	estment Pe	erformance	•
Asset Class	Target	Actual	1 Yr.	3 Yrs.	5 Yrs.	10 Yrs.
U.S. Equity	20.0 %	21.7 %	22.6 %	19.3 %	7.6 %	7.7 %
Wilshire 5000 Index			22.1	18.5	7.2	8.0
Non-U.S. Equity	20.0	23.4	17.2	9.4	-0.8	8.8
MSCI All Country World Ex-US Index			14.1	8.5	-0.3	9.1
Fixed Income	20.0	19.5	6.0	7.2	7.7	6.5
Barclays Aggregate Index			-0.7	3.5	5.2	4.5
Merrill Lynch High Yield Master II Index			9.6	10.4	10.6	8.8
Private Equity <sup>1</sup>	18.0	14.0	7.9	13.6	6.3	12.2
S&P 500 Index + 3%			23.6	21.4	10.0	10.3
Real Estate <sup>2</sup>	12.0	8.8	12.8	9.1	-6.9	7.4
NCREIF Property Index			10.7	13.1	2.8	8.6
Inflation-Linked <sup>3</sup>	5.0	4.5	14.5	7.7	n/a	n/a
CPI + 4% <sup>4</sup>			5.8	6.6	n/a	n/a
Absolute Return <sup>5</sup>	5.0	7.1	10.9	7.8	n/a	n/a
LIBOR + 4% <sup>6</sup>			4.3	4.6	n/a	n/a
Cash	-	0.7	0.2	0.3	0.8	n/a
Total Portfolio	100.0	100.0	13.6	11.5	5.5	9.5
Policy Benchmark <sup>7</sup> Median Public Fund (TUCS			14.0	13.1	6.2	8.6
Master Trusts - Public)			12.3	11.5	5.4	6.9

<sup>1</sup>Beginning October 1, 2008, Private Equity is separate from Absolute Return. Prior returns were combined in the Private Equity composite.

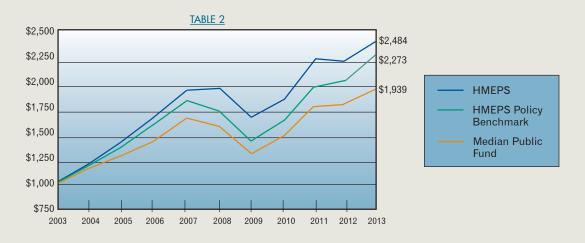
<sup>2</sup> Beginning October 1, 2008, Real Estate is separate from Inflation-Linked. Prior returns were combined in the Real Estate composite.

<sup>3</sup> The Inflation-Linked composite was created on October 1, 2008. Prior returns are included in the Real Estate composite.

<sup>4</sup> Prior to April 1, 2011, the benchmark for Inflation-Linked was CPI + 5%. Longer term benchmark returns reflect a blend of both benchmarks.

<sup>5</sup> The Absolute Return composite was created on October 1, 2008. Prior returns are included in the Private Equity composite.

<sup>6</sup> Prior to April 1, 2011, the benchmark for Absolute Return was LIBOR + 5%. Longer term benchmark returns reflect a blend of both benchmarks. 7 The System's Policy Benchmark is the weighted average of benchmarks for each individual asset class. For fiscal year 2013, the Policy Benchmark was: 20% Wilshire 5000 Index (US Equity); 20% MSCI ACWI x-US Index (Non- US Equity); 10% Barclays Aggregate Index (Investment Grade Fixed Income); 10% Merrill Lynch High Yield Master Trust II Index (Non Investment Grade Fixed Income); 12% NCREIF Property Index (Real Estate); 18% S&P 500 Index + 3% (Private Equity); 5% LIBOR + 4% (Absolute Return); and 5% CPI + 4% (Inflation Linked Assets).

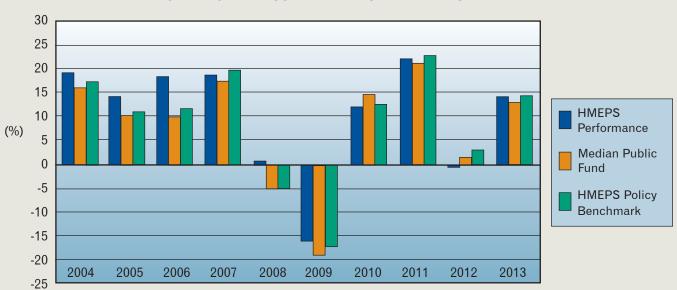


# SCHEDULE OF TOP EQUITY INVESTMENTS AS OF JUNE 30, 2013

Name of Investment	Fair Value of Investment	Percent of Portfolio
BlackRock ACWI x-U.S. Index	104,960,094	4.8%
Baring Asset Management	96,423,988	4.4%
State Street Global Advisors REIT Index	39,203,860	1.8%
Blackrock S&P Midcap Index	14,334,028	0.7%
Blackrock Equity Index Fund A	12,717,949	0.6%
Core Laboratories NV	4,231,314	0.2%
ARM Holding PLC	3,697,379	0.2%
Denso Corp	3,405,522	0.2%
ICICI Bank Ltd	3,255,075	0.2%
OFG Bancorp	3,180,116	0.1%

# SCHEDULE OF TOP DEBT INVESTMENTS AS OF JUNE 30, 2013

Name of Investment	Fair Value of Investment	Percent of Portfolio
BlackRock U.S. Debt Index (Barclays Aggregate)	78,494,932	3.6%
GMO Emerging Country Debt	14,134,136	0.6%
Alliance Bernstein Emerging Market	14,040,137	0.6%
US Treasury N/B 03/18 0.75	5,801,226	0.3%
FNMA TBA 30YR Single Family JU	5,299,135	0.2%
US Treasury N/B 01/17 0.875	5,121,997	0.2%
Energy Future Finan Secured 144A 03/22 12.25	3,679,650	0.2%
Expert Global Solutions Inc Term Loan B	3,644,736	0.2%
Harbringer Group Inc SR Secured 144A 07/19 7.875	3,241,325	0.2%
MGM Mirage Term Loan B	3,240,806	0.2%



# PERFORMANCE BY FISCAL YEAR LAST TEN YEARS

	LIBOR	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.34%	0.33%	0.46%	0.31%	0.36%	n/a	n/a
HMEPS Absolute	Return	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23.39%	13.94%	-0.86%	10.87%	7.79%	n/a	n/a
Consumer HMEPS Price Absolute	Index	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.05%	3.56%	1.66%	1.75%	2.32%	n/a	n/a
HMEPS 0	Linked	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21.52%	39.72%	-21.96%	14.52%	7.68%	n/a	n/a
NCREIF Property	Index	7.64%	10.83%	18.02%	18.67%	17.24%	9.20%	-19.57%	-1.48%	16.73%	12.00%	10.73%	13.14%	2.79%	8.59%
HMEPS Real	Estate	5.84%	15.92%	30.03%	36.39%	20.09%	18.19%	-40.37%	-9.52%	10.92%	3.78%	12.80%	9.10%	-6.87%	7.41%
S&P 500	Index	0.25%	19.10%	6.31%	8.63%	20.59%	-13.12%	-26.22%	14.43%	30.68%	5.44%	20.59%	18.45%	7.00%	7.30%
HMEPS Private	Equity	-3.40%	13.32%	19.96%	22.46%	25.38%	11.87%	-20.93%	16.82%	22.54%	11.00%	7.85%	13.63%	6.27%	12.21%
Barclays Merrill Capital Lynch Aggregate High Yield Bond Master II	Index	22.24%	10.05%	10.62%	4.70%	11.73%	-2.09%	-3.53%	27.53%	15.40%	6.51%	9.57%	10.43%	10.63%	8.75%
Barclays Capital Aggregate Bond	Index	10.41%	0.32%	6.81%	-0.81%	6.11%	7.13%	6.06%	9.50%	3.90%	7.48%	-0.69%	3.51%	5.19%	4.52%
HMEPS Fixed	Income	13.99%	3.99%	9.17%	2.61%	9.57%	1.96%	0.36%	17.00%	9.33%	6.31%	5.99%	7.20%	7.66%	6.53%
MSCI ACW ex	US Index	-4.19%	32.50%	16.95%	28.40%	30.14%	-6.20%	-30.54%	10.87%	30.33%	-14.15%	14.14%	8.48%	-0.34%	9.09%
HMEPS Non-U.S.	Equity	-3.76%	34.44%	13.24%	30.14%	29.54%	-5.41%	-31.93%	7.87%	28.14%	-12.86%	17.15%	9.37%	-0.80%	8.83%
Wilshire 5000	Index	1.27%	21.24%	8.23%	9.92%	20.46%	-12.53%	-26.40%	15.68%	31.99%	3.96%	21.10%	18.45%	7.19%	7.95%
HMEPS U.S.	Equity	3.18%	21.95%	7.94%	11.15%	19.35%	-16.79%	-27.56%	17.29%	33.77%	3.43%	22.58%	19.25%	7.58%	7.67%
Median Wilshire Public Fund	Portfolio Univ./TUCS Equity	4.00%	16.54%	10.41%	10.85%	17.63%	-4.92%	-19.19%	14.71%	21.19%	1.25%	12.27%	11.52%	5.35%	6.94%
HMEPS	Portfolio L	3.55%	17.35%	11.59%	13.09%	20.00%	-4.88%	-17.55%	13.00%	22.89%	3.23%	13.99%	13.13%	6.16%	8.60%
Period HMEPS HMEPS Policy Total Policy	Fund	3.55%	18.64%	13.85%	18.11%	18.64%	0.47%	-16.02%	12.24%	22.17%	-0.14%	13.58%	11.48%	5.49%	9.52%
Period Policy	06-30	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	3 Yrs.	5 Yrs.	10 Yrs.

# SCHEDULE OF FEES AND COMMISSIONS PAID IN FISCAL YEAR 2013

Broker Name	Shares	Commissions (\$)	Cents/Share
Abel Noser Corporation	161,100.00	4,833.00	3.00
Banco Chase Manhattan	64,400.00	3,838.24	5.96
Barclays Capital	777,530.00	17,362.80	2.23
BNY Convergex	71,639,362.00	72,310.39	0.10
Cantor Fitzgerald & Co	332,155.00	12,473.09	3.76
Capital Institutional Services Inc	3,351,938.00	85,170.39	2.54
Charles Schwab & Co	297,000.00	4,825.35	1.62
Citigroup Global Markets	904,159.00	11,946.06	1.32
Cowen and Company	156,800.00	2,472.00	1.58
Craig Hallum	100,760.00	4,030.40	4.00
Credit Agricole Indosuez Cheuvreux	281,097.00	3,729.61	1.33
Credit Suisse Securities	799,605.00	14,226.74	1.78
Deutsche Bank Securities	729,290.00	9,696.57	1.33
Dongwon Securities	36,230.00	2,748.45	7.59
Friedman Billings & Ramsey	73,100.00	2,918.00	3.99
G Trade Service Ltd	6,529,793.00	75,148.65	1.15
Goldman Sachs & Co	474,558.83	12,777.05	2.69
Guzman & Co	288,365.00	4,669.24	1.62
HSBC Bank	93,175.00	3,275.54	3.52
Instinet	913,396.00	28,218.14	3.09
J.P. Morgan Securities	3,076,273.00	43,864.58	1.43
Jefferies & Co.	343,029.00	6,447.52	1.88
Jones Trading Institutional Services	1,196,269.00	45,561.10	3.81
Keefe Bruyette & Woods	211,671.00	8,418.84	3.98
Keybanc Capital Markets	339,310.00	13,546.40	3.99
Merrill Lynch & Co	1,620,459.00	20,694.34	1.28
Morgan Stanley Co.	1,306,543.00	15,868.57	1.21
Pershing LLC	5,580,900.00	12,383.27	0.22
Robert W. Baird Co.	114,025.00	4,480.20	3.93
Rosenblatt Securities	486,578.00	7,196.43	1.48
Sanford C Bernstein Co	899,149.00	12,220.85	1.36
Scott & Stringfellow Inc	51,740.00	2,059.60	3.98
Sidoti & Company	171,080.00	6,793.20	3.97
Societe Generale	162,717.00	2,945.57	1.81
State Street Global Markets	64,400.00	3,117.57	4.84

(continued on following page)

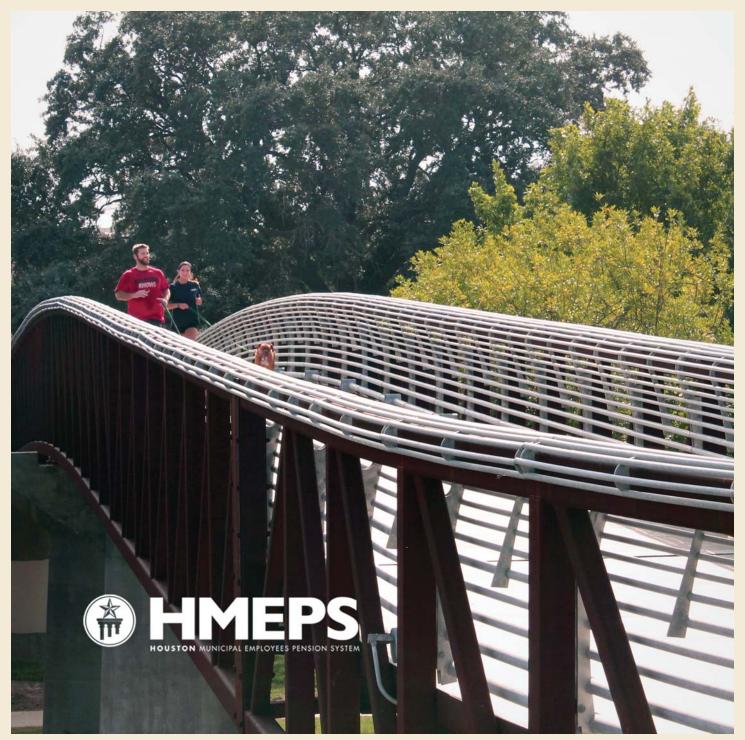
# SCHEDULE OF FEES AND COMMISSIONS PAID - CONT.

Broker Name	Shares	Commissions (\$)	Cents/Share
Stifel Nicolaus & Co	470,591.00	12,491.20	2.65
UBS Securites	,	,	
	1,195,603.00	39,241.93	3.28
Weeden & Co.	156,929.00	3,578.78	2.28
Others	1,282,745.00	36,465.71	2.84
Grand Total	106,733,824.83	674,045.37	0.63

# FEES FOR INVESTMENT SERVICES

Public Market Investments	Market Value	Fees	Basis points
US Equity	\$ 478,688,451	\$ 2,138,809	45
Non-US Equity	515,541,222	2,301,790	45
Fixed Income	428,399,275	1,750,070	41
Other	51,199,818	374,872	73
Custodian Bank State Street Bank and Trust Company	2,201,390,765	352,953	2
Consultant Services			
Wilshire Associates, Incorporated	1,422,818,646	284,000	2
Cliffwater LLC and Other	601,613,439	610,000	10

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Buffalo Bayou Jackson Hill Bridge



# SECTION 4

# ACTUARIAL INFORMATION

#### **Gabriel Roeder Smith & Company**

May 13, 2013

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. 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, 2012 actuarial valuation will be used by the Board when determining the employer contribution rate for the year beginning July 1, 2013 and ending June 30, 2014.

Under the Amended and Restated Meet & Confer Agreement 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 will increase by the greater of \$10 million or 2% of payroll 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.

The employer contribution amounts for FY 2012 and FY 2013 were not set by actuarial valuations. Therefore, the calculated contribution rates from those valuations are not being contributed. Instead, employer contributions of \$98.5 million for FY 2012 and the greater of \$108.5 million or 21.36% of payroll for FY 2013 are made under the terms of the Amended and Restated Meet & Confer Agreement.

Under the terms of the Amended and Restated Meet & Confer Agreement and based on an estimated payroll of \$543.2 million, the estimated City contribution for FY 2013 is \$116.0 million (21.36% of pay) and based on an estimated payroll of \$559.4 million, the estimated City contribution for FY 2014 is \$130.7 million (23.36% of pay).

# Financing objectives and funding policy

The amortization period is set by statute, and was modified under the Amended and Restated Meet & Confer Agreement. 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. The normal cost rate is determined as a percent of pay. The amortization rate is determined as a level percent of pay. It 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.

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# 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, 2012 is 59.1%. This is a decrease from the 61.4% funded ratio from the prior year's valuation.

The calculated employer contribution rate for FY 2014 is 26.10%. This rate is more than the 23.45% rated calculated in the 2011 valuation. This increase is mostly due to the impact of the covered payroll actually decreasing rather than increasing by 3.0% as assumed and to the continued recognition of the deferred investment losses from FY 2009. Please see page 72 for a detailed analysis of the change in the calculated employer contribution rate from the prior year to this year.

Like most large public pension plans, HMEPS was significantly impacted by the substantial decline in the investment markets during FY 2009. While the 2011 return was very good, the 2012 return was significantly less than the assumed 8.50% assumed rate of return. This means there are still some investment losses being deferred due to the smoothing methodology used in the valuation. In fact the amount of deferred losses increased from approximately \$199 million at the prior valuation to \$320 million in this valuation. In the absence of future investment gains, the contribution rate needed to amortize the UAAL will increase over the next few valuation cycles. Future decreases in covered payroll could also increase the percentage of pay contribution rate needed to amortize the UAAL.

#### **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 in Tables 5 & 6. This past fiscal year the System had a total liability loss of approximately \$12.3 million, almost entirely due to the interest credits on DROP accounts being higher than the assumed 4.25% due to the very high market return on assets in FY 2011. Relative to the total liabilities of the System we do not consider this liability loss significant.

#### **Benefit provisions**

The benefit provisions reflected in this valuation are those which were in effect on July 1, 2012. The Fourth Amendment to the Meet and Confer Agreement between the City and the Board changed the benefit provisions substantially, effective January 1, 2008. 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 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 assumptions used in this valuation were adopted by the Board effective with the July 1, 2010 actuarial valuation based on recommendations from an Experience Study conducted by GRS in the spring of 2010.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results 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.

The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 25.

All assumptions and methods are described on page 83.

# Data

Member data for retired, active and inactive members was supplied as of July 1, 2012 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.

# ACTUARY'S CERTIFICATION

Asset information as of July 1, 2012 was taken from the Comprehensive Annual Financial Report (CAFR) for the Year Ended June 30, 2012.

# 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 and in the actuarial section of the HMEPS CAFR were prepared by Gabriel, Roeder, Smith & Company. We certify that the information presented herein is accurate and fairly portrays the actuarial position of HMEPS as of July 1, 2012.

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

Jou Mente

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

Lewis Ward

Lewis Ward Consultant

HMEPS Comprehensive Annual Financial Report 2013

# EXECUTIVE SUMMARY

ltom		Luby 1 - 0010		Luby 1 - 0011
<u>Item</u> Membership		July 1, 2012		July 1, 2011
Number of:				
- Active members		11,670		12,345
- Retirees and beneficiaries		9,078		8,717
- Inactive members		5,671		5,613
- Total		26,419		26,675
Annualized Payroll supplied by HMEPS	\$	534,394	\$	544,665
Almualized Faylon supplied by HMEFS	φ	334,394	φ	544,005
Calculated Contribution rates				
• Employer		26.10%		23.45%
Assets				
Market value	\$	2,024,235	\$	2,129,441
Actuarial value		2,344,128		2,328,804
Estimation of return on market value		-0.9%		21.6%
Estimation of return on actuarial value		4.5%		6.3%
Employer contribution	\$	97,162	\$	87,285
Member contribution	\$	18,473	\$	19,326
Ratio of actuarial value to market value		115.8%		109.4%
Actuarial Information				
Employer normal cost %		5.83%		5.86%
Unfunded actuarial accrued liability (UAAL)	\$	1,622,736	\$	1,461,524
Amortization rate		20.27%		17.59%
Funding period		30.0 years		30.0 years
GASB funded ratio		59.1%		61.4%

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

<sup>1</sup> Employee contribution rate is 5%. Members newly hired after January 1, 2008 are noncontributory.

#### STATEMENT OF PLAN NET ASSETS

			<u>July 1, 2012</u>
А.	AS	SETS	
	1.	Current Assets	
		a. Cash and short term investments	
		1) Cash on hand	\$ 1,647
		2) Short term investments	65,204
		b. Accounts Receivable	
		1) Sale of investments	9,935
		2) Other	6,718
		c. Total Current Assets	\$ 83,504
	2.	Long Term Investments	
		a. US. Government securities	\$ 71,642
		b. Corporate bonds	230,905
		c. Capital stocks	810,010
		d. Commingled Funds	255,302
		e. LP's, real estate trusts, loans and mortgages	615,048
		f. Total long term investments	\$ 1,982,907
	3.	Other Assets	
		a Collateral on securities lending	\$ 261,195
		b. Furniture, fixtures and equipment, net	325
		c. Total other assets	\$ 261,520
	4.	Total Assets	\$ 2,327,931
В.	LIA	ABILITIES	
	1.	Current Liabilities	
		a. Amounts due on asset purchases	\$ 37,809
		b. Accrued liabilities	4,692
		c. Collateral on securities lending	261,195
	2.	Total Liabilities	303,696
	3.	Net Assets Held in Trust	\$ 2,024,235

# C. TARGET ASSET ALLOCATION FOR CASH & LONG TERM INVESTMENTS

1.	Cash	0.0%
2.	Fixed Income	20.0%
3.	Real Estate	12.0%
4.	Domestic Equities	20.0%
5.	International Equities	20.0%
6.	Alternative Investments	28.0%
7.	Total	100.0%

Note: Dollar amounts in \$000 Columns may not add due to rounding

# **RECONCILIATION OF PLAN NET ASSETS**

		Yea	r Ending June 30, 2012
1.	Market value of assets at beginning of ye	ear \$	2,129,441
2.	Revenue for the year		
	a. Contributions		
	i. Member contributions	\$	18,473
	ii. Employer contributions (see no	te)	97,162
	iii. Total	\$	115,634
	b. Net investment income		
	i. Interest	\$	18,306
	ii. Dividends		20,446
	iii. Earnings from LP's and real est	ate trusts	14,449
	iv. Net appreciation (depreciation)	on investments	(58,315)
	v. Net proceeds from lending secu	urities	638
	vi. Less investment expenses		(7,487)
	vii. Other		654
	c. Total revenue	\$	104,325
3.	Expenditures for the year		
	a. Refunds	\$	2,206
	b. Benefit payments		200,014
	c. Administrative and miscellaneous e	expenses	7,312
	d. Total expenditures	\$	209,532
4.	Increase in net assets (Item 2c - Item 3d)	) \$	(105,207)
5.	Market value of assets at end of year (Ite	em 1 + Item 4) \$	2,024,235

## Note: Dollar amounts in \$000

Employer contribution does not include amounts contributed to the replacement benefit plan. Columns may not add due to rounding

# DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

		 July 1, 2012
1. Acti	uarial value of assets, at beginning of year	\$ 2,328,804
a. C b. B	new investments ontributions enefits paid efunds otal	\$ 115,634 (200,014) (2,206) (86,585)
3. Ass	umed investment return rate	8.50%
4. Exp	ected return	\$ 194,343
5. Exp	ected value of assets at end of year	\$ 2,436,562
6. Mar	ket value of assets at end of year	\$ 2,024,235
7. Exc	ess of market value over expected value (6)-(5)	\$ (412,327)
8. Net	remainng deferrals from prior years	\$ (199,363)
9. Exc	ess/deficit for current year (7) - (8)	\$ (212,964)
10. Tota	I Recognized Investment Gain/Loss	\$ (92,434)
11. Act	uarial value of assets at end of year: (5) + (10)	\$ 2,344,128
Note: D	ollar amounts in \$000	

# ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS

	 July 1, 2012
1. Active members	
a. Retirement benefits	\$ 1,760,083
b. Deferred termination benefits	114,955
c. Refunds	14,425
d. Death benefits	72,209
e. Disability benefits	12,535
f. Total	\$ 1,974,207
2. Members in Pay Status	
a. Service retirements	\$ 1,922,265
b. Disability retirements	38,959
c. Beneficiaries	183,236
d. Total	\$ 2,144,460
3. Inactive members	
a. Vested terminations	\$ 163,341
b. Nonvested terminations	4,747
c. Total	\$ 168,088
4. Total actuarial present value of future benefits	\$ 4,286,755

Note: Dollar amounts in \$000

# CALCULATION OF TOTAL ACTUARIAL GAIN OR LOSS

1.	Unfunded actuarial accrued liability (UAAL) as of July 1, 2011	\$ 1,461,522
2.	Employer normal cost for year*	32,090
3.	Employer Contributions during year ending June 30, 2012*	(97,162)
4.	Interest on UAAL for one year	124,229
5.	Interest on Item 2 and Item 3 for one-half year	(2,709)
6.	Expected UAAL as of July 1, 2012 (1+2+3+4+5)	\$ 1,517,970
7.	Actual UAAL as of July 1, 2012	\$ 1,622,736
8.	Actuarial gain/(loss) for the period (6 - 7)	\$ (104,766)
	SOURCE OF GAINS/(LOSSES)	
9.	Asset gain/(loss) (See page 82)	\$ (92,433)
10.	Assumption changes	0
11.	Changes from Meet & Confer	0
12.	Total liability gain/(loss) for the period	\$ (12,333)
13.	Actuarial gain/(loss) for the period	\$ (104,766)

Note: Dollar amounts in \$000

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

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	Net	External	Cash Flow	(12)	\$ (87,774)	(92,938)	(99,188)	(105,592)	(112,854)	(127,248)	(138,776)	(150,815)	(162,420)	(173,388)	(167,274)	1 2008 romain
	Benefit	Payments	and Refunds	(11)	\$ 221,279	240,765	261,244	282,735	305,011	328,241	345,818	363,786	381,281	398,125	397,995	offort January
		Employee	Contributions	(10)	\$ 17,487	16,501	15,587	14,706	13,862	13,052	12,258	11,482	10,713	9,941	9,178	s that wont into
		Employer	Contributions	(6)	\$ 116,0171	131,326	146,469	162,437	178,294	187,941	194,783	201,490	208,148	214,796	221,543	anafit nrovision
		Covered	Compensation	(8)	\$ 543,151	562,183	577,558	593,704	610,513	628,437	647,333	667,200	688,103	709,918	732,551	iming that the h
For Fiscal	Year	Ending	June 30,	(2)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	ament acci
	Market Value	of Fund	(in 000s)	(9)	\$ 2,024,235	2,104,866	2,186,973	2,269,548	2,352,471	2,434,878	2,509,296	2,578,033	2,640,072	2,695,296	2,743,790	and Confer adre
	Funding	Period	(Years) <sup>1</sup>	(5)	30.0	30.0	30.0	30.0	29.0	28.0	27.0	26.0	25.0	24.0	23.0	ated Meet
	Calculated	Funded Contribution	Rate	(4)	26.10%	27.10%	28.19%	29.20%	29.91%	30.09%	30.20%	30.25%	30.26%	30.24%	30.22%	nded and Rect
		Funded	Ratio	(3)	59.1%	57.1%	55.2%	53.3%	52.5%	52.8%	53.0%	53.3%	53.6%	53.9%	54.2%	n the Ame
Unfunded	Actuarial	Accrued Liability	(UAAL, in 000s)	(2)	\$ 1,622,787	1,765,397	1,909,865	2,055,271	2,149,537	2,194,957	2,230,905	2,260,656	2,285,214	2,305,794	2,323,009	These projections are based on the Amended and Restated Meet and Confer acreement assuming that the henefit provisions that went into effect January 1, 2008 remain
	Valuation	as of	July 1,	(1)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	These proje

of the year prior (i.e. the FY 2013 rate is set by the July 1, 2011 valuation). Any changes to future accruals or failure to contribute the calculated rate will change the results 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 method of determining the contribution rate remains in place until the contribution rate reaches the actuarially determined contribution rate determined by the valuation followed by increases in the following fiscal years equal to the greater of \$10 million or the set contribution rate of 19.36% increased by 2% per year since FY 2012. This in effect throughout the projection. Also, beginning in FY2012, the employer contributions shown above are based on a negotiated amount of \$98.5 million in FY2012 of this projection.

<sup>1</sup> 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.

Note: Dollar amounts in \$000.

# CONTRIBUTION INFORMATION

# ANALYSIS OF NORMAL COST

		July 1, 2012	July 1, 2011
		(1)	(2)
1.	Gross normal cost rate		
	a. Retirement benefits	4.65%	4.68%
	b. Deferred termination benefits	0.72%	0.72%
	c. Refunds	0.00%	0.00%
	d. Disability benefits	0.07%	0.07%
	e. Death benefits	0.39%	0.39%
	f. Total	5.83%	5.86%

# CHANGE IN CALCULATED CONTRIBUTION RATE SINCE THE PRIOR VALUATION

1. Calculated Contribution Rate as of July 1, 2011		23.45%
2. Change in Contribution Rate During Year		
a. Change in Employer Normal Cost	(0.03%)	
b. Recognition of prior asset losses (gains)	0.62%	
c. Actuarial (gain) loss from current year asset performance	0.53%	
d. Actuarial (gain) loss from liability sources	0.16%	
e. Impact of City contributing less than actuarially determined rate	0.22%	
f. Effect of Payroll growing slower than Payroll Growth Rate	1.46%	
g. Effect of resetting amortization period to 30 years	(0.31%)	
h. Total Change		2.65%
3. Calculated Contribution Rate as of July 1, 2012		26.10%

# CONTRIBUTION INFORMATION

# CALCULATION OF ANNUAL REQUIRED CONTRIBUTION RATE

		July 1, 2012		July 1, 2011
	_	(1)	_	(2)
1. Covered payroll	\$	534,394	\$	544,665
		,	·	,
2. Projected payroll for upcoming fiscal year	\$	543,151	\$	567,679
3. Present value of future pay	\$	3,650,467	\$	3,742,172
4. Employer normal cost rate		5.83%		5.86%
5. Actuarial accrued liability for active members				
a. Present value of future benefits for active members	\$	1,974,207	\$	1,969,742
b. Less: present value of future employer normal costs		(200,904)		(207,667)
c. Less: present value of future employee contributions		(118,987)		(126,708)
d. Actuarial accrued liability	\$	1,654,316	\$	1,635,367
6. Total actuarial accrued liability for:				
a. Retirees and beneficiaries	\$	2,144,460	\$	2,006,737
b. Inactive participants	\$	168,088		148,224
c. Active members (Item 5d)	\$	1,654,316		1,635,367
d. Total	\$	3,966,864	\$	3,790,328
7. Actuarial value of assets	\$	2,344,128	\$	2,328,804
8. Unfunded actuarial accrued liability (UAAL)				
(Item 6d - Item 7)	\$	1,622,736	\$	1,461,524
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		20.27%		17.59%
b. Employer normal cost		5.83%		5.86%
c. Contribution requirement (a + b)		26.10%		23.45%

Note: Dollar amounts in \$000

HISTORICAL SOLVENCY TEST

		Retirees					
	Active	Beneficiaries	Members	Actuarial		by Reported Assets	
	Members	and Vested	(City	Value of			[(5)-(2)-(3)]/
Valuation Date	Contributions	Terminations <sup>1</sup>	Financed Portion)	Assets	(5)/(2)	[(5)-(2)]/(3)	(4)
(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)
July 1, 1993	\$ 32,866	\$ 369,561	\$ 437,894	\$ 660,637	100.0%	100.0%	59%
July 1, 1994	32,410	384,100	470,189	713,696	100.0%	100.0%	63%
July 1, 1995	31,130	420,830	511,752	770,189	100.0%	100.0%	62%
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

Aggregated Accrued Liabilities for

Note: Dollar amounts in \$000

<sup>1</sup> Column (3) included AAL for DROP participants until 2003, now in Column (4)

# SCHEDULE OF FUNDING PROGRESS

			Unfunded Actuarial			
Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
July 1, 1993	\$ 660,637	\$ 840,321	\$ 179,684	78.6%	\$ 340,249	52.8%
July 1, 1994	713,696	886,699	173,003	80.5%	366,561	47.2%
July 1, 1995	770,189	963,712	193,523	79.9%	378,511	51.1%
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%

# Note: Dollar amounts in \$000

# HISTORICAL CITY CONTRIBUTION RATES

	Calculated		Actual
Valuation Date	Contribution Rate <sup>1</sup>	Time Period for Contribution	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 <sup>2,3</sup>
July 1, 2004	29.43	July 1, 2005 through June 30, 2006	15.49 <sup>3</sup>
July 1, 2005	24.10	July 1, 2006 through June 30, 2007	15.89 <sup>3</sup>
July 1, 2006	24.63	July 1, 2007 through June 30, 2008	15.52 <sup>4</sup>
July 1, 2007	19.47	July 1, 2008 through June 30, 2009	14.63 <sup>4</sup>
July 1, 2008	19.20	July 1, 2009 through June 30, 2010	14.65 <sup>4</sup>
July 1, 2009	20.07	July 1, 2010 through June 30, 2011	16.30 <sup>4</sup>
July 1, 2010	22.36	July 1, 2011 through June 30, 2012	17.74 <sup>5</sup>
July 1, 2011	23.45	July 1, 2012 through June 30, 2013	N/A
July 1, 2012	26.10	July 1, 2013 through June 30, 2014	N/A

1 Rate determined by the actuarial valuation is for the fiscal year beginning on the July 1st next following the valuation date. Rate determined by the actualian variation is for the issue year beginning of the experiment.
Includes \$300 million note.
As pursuant to the funding schedule from the 2004 Meet and Confer agreement.
As pursuant to the funding schedule from the Fourth Amendment.
As pursuant to the funding schedule from the Amended and Restated Meet and Confer agreement.

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

No. & Avg. \$32,769 576 615 1,389 \$52,338 359 \$32,837 237 \$41,058 \$43,788 606 \$47,746 \$49,738 1,190 Comp. \$46,324 1,123 \$51,194 761 \$56,301 7,167 \$48,051 Total No. & Avg. 35 & Over \$76,712 \$91,502 9  $\infty$ 10 \$63,201 \$78,264 24 Comp. 3,943 3,224 No. & Avg. No. & Avg. \$55,403 ഹ 86 \$60,398 \$66,007 12 30-34 \$56,807 \$55,352 67 2 191 \$57,835 Comp. Males: Females: \$58,806 Comp. 128 \$55,637 \$62,197 \$68,659 25-29 60 58 22 352 \$49,426 84 \$57,229 No. & Avg. \$59,329 33 \$72,714 \$56,310 213 \$57,977 20-24 \$50,419 157 93 724 \$51,639 \$54,966 187 4 6,485 Comp 682 No. & Avg. Fully vested: \$53,618 15-19 \$52,960 \$46,846 \$50,209 174 216 \$52,146 197 \$50,607 152 \$53,336 \$51,654 36 125 57 958 Not Vested: Comp. \$52,141 No. & Avg. No. & Avg. No. & Avg. No. & Avg. \$39,830 \$45,692 208 \$47,590 235 \$47,987 135 \$54,339 \$48,976 \$47,049  $\sim$ \$40,931 120 \$43,491 217 1,253 10-14 64 197 \$45,585 Comp. Number of participants: \$44,632 \$36,875 375 \$45,414 \$46,468 \$33,228 \$42,130 \$46,003 440 431 266 130 \$50,941 2,983 Comp.  $\sim$ 363 \$45,575 \$44,752 153 382 \$45,684 441 5-9 \$40,102 \$42,315 \$41,449 \$47,413 Comp. \$39,046 9 \$31,491 \$31,860 104 78 78 63 57 \$45,893 42 \$46,799 18 \$60,854 544 \$41,290 74 24 4 \$46,108 \$73,574 \$26,845 \$32,617 \$31,240 \$52,207 \$43,069 \$42,242 ഹ \$43,125 \$25,778 1 48.85 12.40 Comp. с Attained No. & Avg. No. & Avg. No. & Avg. \$49,616 N \$54,040 N \$52,499 വ က \$46,388 က \$67,958 \$90,072  $\sim$ \$101,816 \$62,525 19 Comp Age: Service:  $\sim$ \$27,353 \$30,536 \$37,154 \$63,918 \$100,315 က \$34,587 \$46,800 \$118,816 \$48,285 \$36,797 Comp. Average: \$30,625 \$40,158 \$30,664 \$29,669 0 9 10 \$29,766 \$48,674 \$57,929 42 \$37,998 Comp. 0 65 & Over Under 25 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 Age Total

PARTICIPANT INFORMATION

76

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

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Total	No. & Avg.	Comp.		<del>~~</del>	\$72,169	19	\$41,234	83	\$37,977	257	\$42,635	397	\$44,379	393	\$42,046	342	\$45,446	194	\$44,053	73	\$49,852	1,759	\$43,681		
35 & Over	No. & Avg. N	Comp.														4	\$49,661	-	\$38,112			5	\$47,351	863	896
30-34	No. & Avg.	Comp.										-	\$57,210	30	\$45,205	18	\$50,973	7	\$50,873	-	\$41,072	57	\$47,861	Males:	Females:
25-29	No. & Avg.	Comp.										31	\$41,688	51	\$41,022	37	\$45,987	16	\$50,658	12	\$62,115	147	\$45,183		Ľ
20-24	No. & Avg.	Comp.								37	\$43,228	149	\$44,932	113	\$44,256	93	\$48,924	52	\$42,596	24	\$46,980	468	\$45,273	1,673	86
15-19	No. & Avg.	Comp.				2	\$44,193	35	\$40,254	139	\$44,754	135	\$42,875	117	\$40,726	130	\$42,270	84	\$40,802	27	\$51,410	699	\$42,723	Fully vested:	Not Vested:
10-14	No. & Avg.	Comp.				16	\$40,701	39	\$36,767	67	\$38,857	57	\$42,582	62	\$38,692	48	\$43,910	30	\$49,968	8	\$36,489	327	\$41,019		z
5-9	No. & Avg.	Comp.																						Number of participants:	
4	No. & Avg.	Comp.		-	\$72,169	-	\$43,841	2	\$33,514	2	\$27,951	4	\$44,484	2	\$36,401	2	\$57,161			-	\$45,250	21	\$44,282	Nur	
S	No. & Avg. No.	Comp.						9	\$35,364	9	\$42,592	6	\$50,440	10	\$52,109	2	\$33,556	3	\$45,508			36	\$45,734	51.21	18.75
2	No. & Avg.	Comp.								-	\$46,548	-	\$87,780			-	\$53,407					3	\$62,578	Age:	Service:
-	Attained No. & Avg. No. & Avg. No. & Avg.	Comp.								S	\$32,345	2	\$68,080	-	\$42,277							9	\$45,912	Average:	
0	I No. & Avg.	Comp.	Q					-	\$30,056	2	\$39,291	8	\$62,847	4	\$41,408	4	\$41,480	-	\$63,572	ar		20	\$50,327		
	Attained	Age	Under 25	25-29		30-34		35-39		40-44		45-49		50-54		55-59		60-64		65 & Over		Total			

PARTICIPANT INFORMATION

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

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

0	~	CV	m	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
ġ.	Attained No. & Avg. No. & Avg. No. & Avg.	No. & Avg.	No. & Avg. N	No. & Avg.	lo. & Avg. No. & Avg. No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg. No. & Avg.	No. & Avg.		No. & Avg. No. & Avg.	No. & Avg.
	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.
80	26	20	39	22								187
\$29,684	\$28,329	\$29,276	\$27,868	\$30,598								\$29,181
145	56	62	176	96								535
\$34,361	\$34,555	\$37,293	\$33,479	\$33,094								\$34,203
102	46	52	161	96								457
\$38,296	\$37,737	\$41,296	\$38,412	\$36,791								\$38,306
73	43	40	111	79								346
\$41,279	\$46,512	\$48,697	\$43,503	\$43,449								\$43,996
77	33	43	115	67								335
\$42,397	\$37,637	\$39,566	\$44,776	\$38,387								\$41,579
69	51	47	77	72								316
\$43,057	\$50,454	\$56,711	\$44,140	\$40,293								\$45,916
49	19	26	79	48								221
\$54,851	\$39,690	\$52,982	\$44,204	\$43,291								\$47,011
26	13	27	81	49								196
\$47,480	\$72,851	\$57,142	\$49,686	\$46,783								\$51,231
16	7	15	30	26								94
\$66,028	\$50,454	\$66,691	\$43,211	\$49,246								\$53,050
7	ς	6	17	9								42
\$57,441	\$51,476	\$56,001	\$49,740	\$59,596								\$53,897
659	297	341	886	561								2,744
\$40,158	\$41,857	\$46,289	\$40,857	\$39,743								\$41,244
<				2			-					
⊲	Average:	Age:	38.79	Num	Number of participants:		Fully vested:			Males:	1,550	

1,194

Females:

2,744

Not Vested:

2.59

Service:

DISTRIBUTION OF ALL ACTIVE MEMBERS BY AGE AND BY YEARS OF SERVICE ALL EMPLOYEES

	0	-	67	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Attained I	No. & Avg.	No. & Avg.	No. & Avg.	Attained No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.	No. & Avg.
Age	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.	Comp.
	Q	90	CC	00	ÖC	c							105
	00 470.684	478 270	0.2 \$70.75	50 7 268	430 700	426 875							400 221
95 <u>-</u> 90	423,004 145	420,029 50	423,210 69	421,000 181	171	400,07.0 153	0						100,004
2	\$34,361	\$34,188	\$37,293	\$33,455	\$32,788	\$33,228	\$39,830						\$33,813
30-34	111	49	54	172	201	382	80	S					1,052
	\$37,597	\$37,544	\$41,768	\$37,954	\$37,993	\$42,130	\$40,885	\$47,115					\$39,866
35-39	80	45	42	125	159	363	159	71					1,044
	\$40,339	\$45,802	\$48,878	\$43,088	\$41,682	\$44,632	\$41,842	\$43,597					\$43,395
40-44	89	39	49	130	147	441	264	264	78				1,501
	\$42,076	\$37,192	\$40,734	\$44,767	\$40,329	\$46,003	\$43,957	\$47,337	\$47,008				\$44,634
45-49	81	56	51	92	139	440	265	309	306	91	9		1,836
	\$44,356	\$50,351	\$56,713	\$44,686	\$40,937	\$45,575	\$46,513	\$48,093	\$48,373	\$46,790	\$56,875		\$46,703
50-54	61	21	29	100	110	431	297	333	326	179	116		2,003
	\$53,160	\$40,152	\$54,532	\$45,875	\$44,326	\$45,684	\$44,146	\$48,134	\$51,254	\$51,473	\$52,728		\$47,928
55-59	33	15	30	87	96	375	265	327	280	121	85	14	1,728
	\$47,702	\$78,980	\$59,213	\$48,216	\$47,331	\$45,414	\$47,248	\$47,293	\$55,873	\$54,886	\$58,402	\$68,983	\$50,061
60-64	19	8	15	36	50	266	165	236	145	74	28	7	1,049
	\$62,177	\$52,137	\$66,691	\$45,933	\$48,366	\$46,468	\$53,544	\$48,875	\$52,461	\$59,702	\$54,270	\$59,616	\$50,870
65 & Over	2	4	11	18	25	130	83	84	57	34	13	8	474
	\$57,441	\$63,686	\$64,331	\$48,468	\$59,928	\$50,941	\$47,772	\$52,909	\$61,879	\$66,349	\$64,089	\$91,502	\$55,095
Total	721	322	363	980	1,126	2,983	1,580	1,627	1,192	499	248	29	11,670
	\$40,314	\$42,312	\$47,273	\$41,118	\$40,575	\$44,752	\$45,801	\$47,982	\$51,976	\$53,680	\$55,542	\$72,935	\$45,792
	4	Average:	Age:	46.84	Num	Number of participants:		Fully vested:	8,158	_	Males:	6,356	
			Service:	11.05				Not Vested:	3,512	Fei	Females:	5,314	

PARTICIPANT INFORMATION

# PARTICIPANT INFORMATION

# HISTORICAL ACTIVE PARTICIPANT DATA

Valuation Date	Active Count	Average Age	Average Service	Covered Payroll	Average Salary	Percent Changes
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1988	11,344	N/A	N/A	\$227,900	\$20,090	1.9%
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 <sup>1</sup>	13,764	42.8	9.8	\$394,919	\$28,692	9.8%
1999 <sup>1</sup>	13,286	42.9	9.8	\$396,617	\$29,852	4.0%
2000 <sup>1</sup>	13,126	43.7	10.3	\$421,591	\$32,119	7.6%
2001 <sup>1</sup>	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 <sup>2</sup>	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%

Note: Dollar amounts in \$000

<sup>1</sup> Excludes DROP participants

<sup>2</sup> 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

	Added to	<u>Rolls</u>	Removed	from Rolls	<u>Rolls-En</u>	<u>d of Year</u>		
Valuation July 1,	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1995	393	\$ 3,044	220	\$ 1,307	4,441	\$ 36,482	7.4%	\$ 8,215
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

# MEMBERSHIP DATA

		July 1, 2012
1.	Active members	
	a. Number	11,670
	b. Number vested	8,158
	c. Total payroll	\$ 534,394,000
	d. Average salary	45,792
	e. Average age	46.8
	f. Average service	11.1
2.	Inactive participants	
	a. Vested	3,237
	b. Total annual benefits (deferred)	\$ 21,912,012
	c. Average annual benefit	6,769
	d. NonVested	2,434
3.	Service retirees	
	a. Number	7,031
	b. Total annual benefits	\$ 162,527,371
	c. Average annual benefit	23,116
	d. Average age	68.0
4.	Disabled retirees	
	a. Number	391
	b. Total annual benefits	\$ 3,814,351
	c. Average annual benefit	9,755
	d. Average age	64.0
5.	Beneficiaries and spouses	
	a. Number	1,656
	b. Total annual benefits	\$ 21,173,610
	c. Average annual benefit	12,786
	d. Average age	69.5

#### ESTIMATION OF INVESTMENT RETURN YIELD (NET OF EXPENSES)

Item	Market Value	Actuarial Value
(1)	(2)	(3)
1. Assets as of July 1, 2011 (A)	\$ 2,129,441	\$ 2,328,804
2. Contributions during FY12	115,634	\$ 115,634
3. Benefit payments made during FY12	200,014	\$ 200,014
4. Refunds of contributions during FY12	2,206	\$ 2,206
5. Expenses during FY12	7,312	\$ 7,312
6. Investment return during FY12	(11,310)	109,222
7. Assets as of July 1, 2012 (B): (Item 5, Table 9)	2,024,235	2,344,128
8. Approximate rate of return on average invested assets		
a. Net investment income $(6 - 5 = I)^*$	(18,621)	101,910
b. Estimated return (2I/(A + B - I))	-0.89%	4.46%

\*Net investment income is net of both investment and administrative expenses Note: Dollar amounts in \$000

# INVESTMENT EXPERIENCE GAIN OR LOSS

		,	Valuation as of	`	Valuation as of
	Item		6/30/2012		6/30/2011
	(1)		(2)		(3)
1.	Actuarial assets, prior valuation	\$	2,328,804	\$	2,273,142
2.	Total contributions since prior valuation	\$	115,634	\$	106,611
3.	Benefits and refunds since prior valuation	\$	(202,220)	\$	(190,819)
4.	Assumed net investment income at 8.5%				
	a. Beginning assets	\$	197,948	\$	193,216
	b. Contributions		4,814		4,439
	c. Benefits and refunds paid		(8,419)		(7,944)
	d. Total	\$	194,343	\$	189,711
5.	Expected actuarial assets (Sum of Items 1 through 4)	\$	2,436,562	\$	2,378,645
6.	Actual actuarial assets, this valuation	\$	2,344,128	\$	2,328,804
7.	Asset gain (loss) since prior valuation (Item 6 - Item 5)	\$	(92,433)	\$	(49,841)

Note: Dollar amounts in \$000

# HISTORY OF INVESTMENT RETURNS

For Fiscal Year		
Ending	Market Value	Actuarial Value
(1)	(2)	(3)
June 30, 2001	(4.56%)	8.97%
June 30, 2002	(7.99%)	3.64%
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%
Average Compound Return - last 5 years	1.31%	5.14%
Average Compound Return - last 10 years	7.16%	6.49%

Note: Investment returns are estimations made by the actuary and are dollar-weighted returns net of administrative and investment expenses. The market value returns for years 2009-2011 have been changed from those shown on the prior years' reports. The revised numbers reflect the same dollar-weighted methodology used on Table 11 for determining the estimated yields, and used in years prior to 2009.

#### Summary of Actuarial Assumptions and Methods

The following methods and assumptions were used in preparing the July 1, 2012, actuarial valuation. These assumptions were adopted by the Board effective for the July 1, 2010 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 (currently 8.5 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 contribution and an accrued liability contribution.

- c. The normal contribution is determined using the "entry age normal" method. Under this 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 new 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 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.

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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 based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income on an aggregate basis. Expected investment income is determined using the assumed investment return rate and the actuarial value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

#### 4. Economic Assumptions

a. Investment return: 8.50% per year, compounded annually, composed of an assumed 3.00% inflation

rate and a 5.50% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.

 Salary increase rate: A service-related component, plus a 3.00% inflation component, plus a 0.0% general increase, as follows:

Total Annual Rate of Increase
Including 3.00% Inflation

Years of	Service-related	Component and
<u>Service</u>	<u>Component</u>	0.0% General Increase
(1)	(2)	(3)
1	3.00%	6.00%
2	2.75	5.75
3	2.50	5.50
4	2.00	5.00
5-6	1.75	4.75
7	1.50	4.50
8-9	1.25	4.25
10-14	1.00	4.00
15-19	0.75	3.75
20-24	0.50	3.50
25+	0.00	3.00

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 next page).
- b. DROP Participation

90% of eligible members are assumed to enter DROP at first eligibility.

c. DROP Entry Date

Active members (not already in DROP) are assumed to take advantage of the DROP and enter 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
  - 4.25% per year

# SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

e. DROP Payout

It is assumed members with DROP balances will take their DROP balance in 6 equal annual installments beginning the year after retirement. Members currently retired with DROP balances are assumed to take 6 equal annual installments from the valuation date.

- f. Mortality rates (for active and retired members)
  - Healthy males Based on the Retired Pensioners 2000 Mortality Table (combined) for males. Rates are scaled by 110%.
  - Healthy females Based on the Retired Pensioners 2000 Mortality Table (combined) for females. Rates are scaled by 95%.
  - Disabled males and females 1965 Railroad Retirement Board Disabled Life Table. Rates are set-back two years for males and eight years for females.

Sample rates are shown on page 85.

g. 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 below.

#### 6. Other Assumptions

- Percent married: 70% of employees are assumed to be married. (No beneficiaries other than the spouse assumed)
- b. 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.
- c. Percent electing annuity on death (when eligible):
   All of the spouses of vested, married participants are assumed to elect an annuity.

# SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Retirement Rates				
		Expected Retireme	nts per 100 Lives	
	Group A &	B Members	Group E	Members
Age	Males	<u>Females</u>	<u>Males</u>	<u>Females</u>
(1)	(2)	(3)	(4)	(5)
50-54	12	12	3	3
55	12	12	4	4
56	12	12	5	5
57	12	12	6	6
58	12	12	7	7
59	12	12	8	8
60	14	14	10	10
61	16	16	13	13
62	25	20	35	35
63	25	18	25	18
64	18	20	18	20
65	20	20	20	20
66-69	20	19	20	19
70-74	20	19	20	19
75+	100	100	100	100

## Expected Deaths Per 100 Lives

		Expected Death	ns per 100 Lives	
	Healthy	Healthy	Disabled	Disabled
<u>Age</u>	Males	<u>Females</u>	Males	<u>Females</u>
(1)	(2)	(3)	(4)	(5)
25	0.04	0.02	4.41	4.41
30	0.05	0.03	4.41	4.41
35	0.09	0.05	4.41	4.41
40	0.12	0.07	4.41	4.41
45	0.17	0.11	4.42	4.41
50	0.24	0.16	4.48	4.42
55	0.40	0.26	4.67	4.46
60	0.74	0.48	5.09	4.62
65	1.40	0.92	5.76	4.98
70	2.44	1.59	6.84	5.60
75	4.16	2.67	8.62	6.58
80	7.08	4.36	11.40	8.21

For pre-retirement mortality, 90% of the rates shown above are assumed to be for non-service related deaths and 10% for service related deaths.

Mortality Improvement: To account for future mortality improvement, the healthy mortality rates were chosen so that the assumed mortality rates are smaller than the rates observed in the most recent experience study (dated 5-25-2010). The margin at the time of the study was 22%-27% for non-disabled annuitants. No future mortality improvement after the measurement date is assumed except as described above.

# 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	0.1639		
30	0.2585	0.2146	0.1808	0.1563	0.1396	0.1275	0.1143	0.1057	0.0985	0.0919	0.0946		
40	0.2003	0.1645	0.1351	0.1124	0.0954	0.0832	0.0750	0.0683	0.0634	0.0603	0.0427		
50	0.1559	0.1258	0.1013	0.0824	0.0681	0.0577	0.0510	0.0454	0.0411	0.0383	0.0206		
60	0.1341	0.1083	0.0887	0.0740	0.0634	0.0557	0.0469	0.0407	0.0344	0.0277	0.0199		

# Probability of Decrement Due to Withdrawal - Female Members

					fears 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 Disability

Age	Males	Females
20	.00000	.00001
25	.00001	.00002
30	.00005	.00008
35	.00022	.00013
40	.00448	.00029
45	.00087	.00066
50	.00151	.00157
55	.00219	.00253
60	.00289	.00304

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

Rates of decrement due to Ordinary Disabilities are assumed to be 120% of the base rates shown above. Rates of decrement due to Service Related Disabilities are assumed to be 10% of the base rates shown above.

- d. 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.
- e. There will be no recoveries once disabled.
- f. No surviving spouse will remarry and there will be no children's benefit.
- g. 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.
- Administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.
- 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.
- j. Decrement timing: Decrements of all types are assumed to occur mid-year.

#### SUMMARY OF PLAN PROVISIONS

- k. 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.
- Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
- m. 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.
- n. 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.

## 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 supplied for the current year was based on the earnings for the year preceding the valuation date. This salary was adjusted by the salary increase rate for one year. For members who worked less than 1900 hours but were not new entrants, the salary was annualized to 1900 hours.

In fiscal years when a 27th pay period occurs the individual pays for employees who were employed throughout the year will be adjusted by multiplying their reported pay by the ratio of 26/27. In years that have only 26 pay periods no adjustment would be needed.

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.

Changes in Assumptions Since Prior Year None.

#### **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 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 prior 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

<u>Prior to January 1, 2005</u> (with 68 points as of January 1, 2005):

The earliest of: age 62 and 5 years of Credited Service 5 years of Credited Service, and age plus years of Credited Service equal 70 or more age 65 (Group C only)

<u>On or after January 1, 2005</u> (less than 68 points as of January 1, 2005):

The earliest of: age 62 and 5 years of Credited Service 5 years of Credited Service, and age plus years of Credited Service equal 75 or more with minimum age 50

For employees newly hired on or after January 1, 2008 (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. Maximum benefit is 90% of FAS for all future retirees. 88

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. 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. 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. Vested Pension

- a. Eligibility
- 5 years of Credited Service.
- b. Benefit

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.

Group B and Group D: Accrued normal retirement benefit payable at the normal retirement eligibility date.

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.

#### 6. 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.

#### 7. Service-Connected Disability Retirement

a. Eligibility

Any age

b. Benefit

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.

Group B and Group D: Accrued normal retirement benefit, but not less than 20% of final monthly salary at time of disability.

- 8. Non-service-Connected Disability Retirement
- a. Eligibility
- 5 years of Credited Service.
- b. Benefit

Accrued normal retirement benefit payable immediately.

#### 9. Pre-retirement Survivor Benefits

- A. Service-connected
- a. Eligibility
- Any age or Credited Service
- b. 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
- a. Eligibility
- 5 years of Credited Service
- b. Benefit

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

If there is a surviving spouse, an amount equal to the 50% J&S benefit. No dependent benefits. If there is 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 (of the 20% J&S benefit).

#### 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.

#### 10. Postretirement 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 normal retirement benefits and who are not married at their termination of service, and Group B members who terminated prior to September 1, 1977 and who are eligible for a normal retirement benefit are Option-Eligible Participants.

#### 11. 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.

#### 12. 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 Amended and Restated Meet & Confer Agreement 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 will increase by the greater of \$10 million or 2% of payroll until such time that the City's contribution rate equals the actuarially determined contribution rate.

#### 13. 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. 90

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.

#### 14. 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 in a ninety-day (90-day) period, as measured from the date of the previous partial distribution.

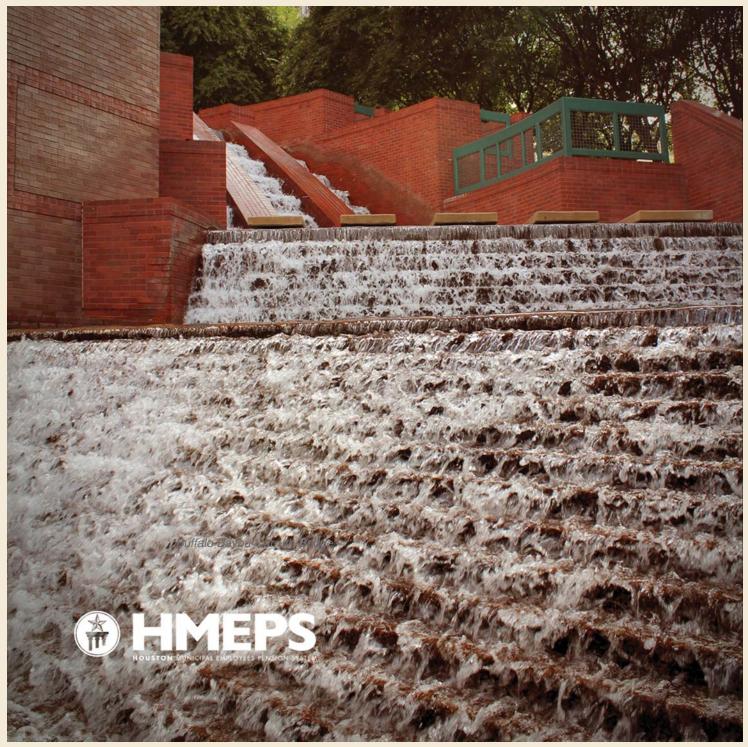
e. Defer election of a payout option until a future date.

#### 15. 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.



Wortham Center Waterfall at Fish Plaza



# SECTION 5

# 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 Plan Net Position schedule shows the additions and deductions from plan net position and the resulting changes in plan net position for the ten years ending June 30, 2013.

Additions to Net Position include city and member contributions to the System which are external sources of additions to plan net positions. Additions also include

# **FINANCIAL TRENDS**

## SCHEDULE OF CHANGES IN PLAN NET POSITION (\$000)

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 Plan Position** are primarily comprised of benefit payments and refunds paid to participants.

**Investment Income Schedule** shows the components of net investment and interest income (loss) for the ten years ending June 30, 2013.

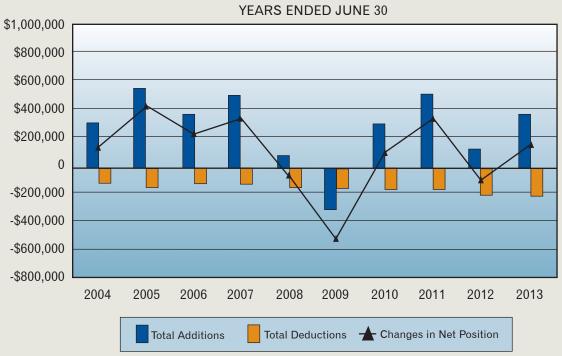
#### **OPERATING INFORMATION**

Participant data for the last ten years ending June 30, 2012 can be found 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, 2012.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Additions										
Employer contributions	57,308	363,247 <sup>1</sup>	66,968	70,265	73,272	76,837	82,052	87,285	97,161	111,859
Member contributions	26,189	23,488	21,888	20,966	21,176	20,449	19,736	19,326	18,473	17,041
Investment Income	227,361	184,419	272,766	337,259	(29,133)	(440,298)	195,433	391,095	(11,963)	263,891
Other income	726	17,250	26,950	29,031	29,839	489	557	1,185	654	1,246
Total additions	311,584	588,404	388,572	457,521	95,154	(342,523)	297,778	498,891	104,325	394,037
Deductions										
Benefit payments	153,202	175,480	154,311	157,716	169,483	180,361	191,048	189,199	200,014	213,178
Refund of contributions	635	992	1,037	1,398	1,760	1,795	1,285	1,620	2,206	1,266
Professional services fees	712	1,088	708	883	638	792	805	1,103	1,048	871
Cost of administration	4,500	4,718	5,072	5,223	5,837	6,420	6,290	6,020	6,264	6,341
Total deduction	159,049	182,278	161,128	165,220	177,718	189,368	199,428	197,942	209,532	221,656
Changes in net position	152,535	406,126	227,444	292,301	(82,564)	(531,891)	98,350	300,949	(105,207)	172,381
Net position as of June 30	1,418,726	1,824,852	2,052,296	2,344,597	2,262,033	1,730,142	1,828,492	2,129,441	2,024,234	2,196,615
10005										

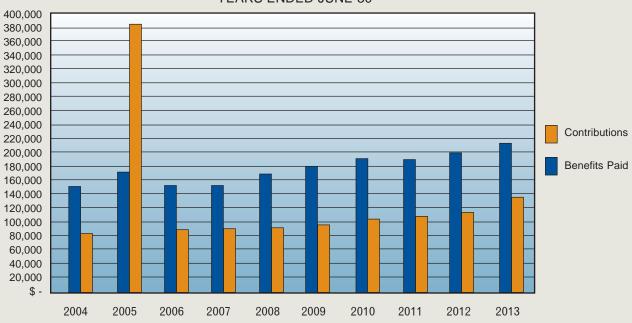
<sup>1</sup> 2005 employer contributions include \$300 million pension obligation note

# STATISTICAL INFORMATION



CHANGES IN PLAN NET POSITION (IN THOUSANDS)

\* 2005 employer contributions include \$300 million pension obligation note



CONTRIBUTIONS AND BENEFITS PAID (IN THOUSANDS) YEARS ENDED JUNE 30

• During fiscal year 2005, the System received cash contributions from the City of Houston of \$63,247 and recognized a \$300 million contribution in the form of a note receivable issued by the City on November 10, 2004. The City paid off the note in its entirety in FY 2009.

# STATISTICAL INFORMATION

# INVESTMENT INCOME (\$000)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Investing Activities										
Interest on bonds and deposits*	9,514	11,101	8,632	15,923	13,453	26,827	11,681	14,720	18,306	20,253
Dividends	15,134	9,891	9,128	15,276	14,381	11,321	13,029	16,769	20,446	21,245
Earnings from limited partnerships										
and real estate trusts	19,464	45,069	25,592	25,035	13,424	4,922	7,775	17,398	14,449	8,400
Net (depreciation) appreciation										
on investments	189,464	124,002	235,078	287,178	(64,877)	(479,332)	168,583	348,148	(58,315)	221,050
Total	233,576	190,063	278,430	343,412	(23,619)	(436,262)	201,068	397,035	(5,114)	270,948
Proceeds from lending securities	1,122	2,695	4,860	6,727	7,411	2,453	752	679	1,032	1,132
Less costs of securities lending	(770)	(2,343)	(4,441)	(6,443)	(6,386)	(1,383)	(326)	(243)	(394)	(377)
Net proceeds from lending securities	352	352	419	284	1,025	1,070	426	436	638	755
Less costs of investment services	(6,568)	(5,996)	(6,083)	(6,437)	(6,540)	(5,106)	(6,061)	(6,376)	(7,487)	(7,812)
Total investment income (loss)	227,360	184,419	272,766	337,259	(29,134)	(440,298)	195,433	391,095	(11,963)	263,891

\* Interest income in fiscal year 2009 includes accrued interest on the \$300 million note from the City of Houston.

## **OPERATING INFORMATION**

Annuitants by Type	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Service	4,319	4,952	5,592	5,847	6,017	6,186	6,336	6,482	6,663	7,031
Disability	494	495	483	452	446	428	415	404	398	391
Survivor	1,402	1,431	1,448	1,481	1,508	1,541	1,589	1,640	1,656	1,656
Total Annuity Count	6,215	6,878	7,523	7,780	7,971	8,155	8,340	8,526	8,717	9,078
Former participants eligible but										
not yet receiving benefits	2,386	2,434	2,659	2,786	2,922	2,931	2,884	2,815	3,178	3,237
Total Eligible for Benefits	8,601	9,312	10,182	10,566	10,893	11,086	11,224	11,341	11,895	12,315

# SCHEDULE OF ANNUITANTS BY BENEFIT TYPE FOR THE TEN YEARS ENDED JUNE 30, 2012

# SCHEDULE OF ANNUITANTS BY BENEFIT AMOUNT (\$000) FOR THE TEN YEARS ENDED JUNE 30, 2012

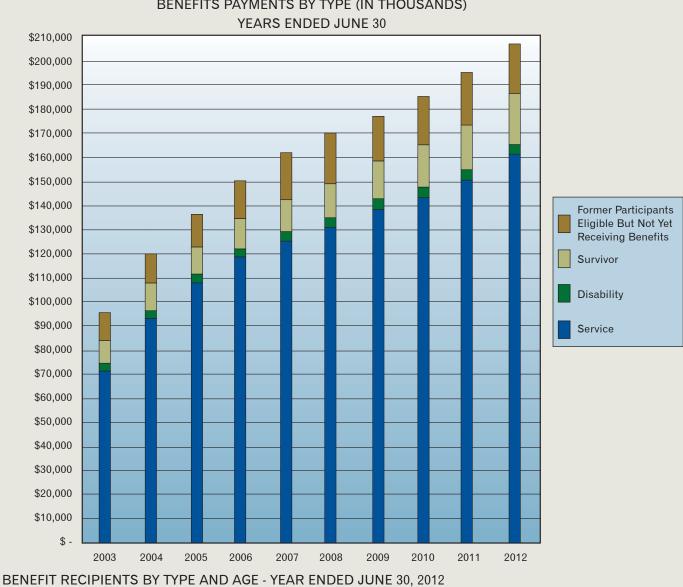
Annuitants by Type	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Service	71,246	92,766	108,217	119,287	125,246	131,765	138,123	144,421	151,806	162,527
Disability	3,715	3,832	3,762	3,658	3,700	3,648	3,689	3,663	3,723	3,814
Survivor	9,558	10,485	11,232	12,743	14,015	15,180	16,544	18,374	19,681	21,174
Total Annuity Payments	84,519	107,083	123,211	135,688	142,961	150,593	158,356	166,458	175,210	187,515
Former participants eligible but not yet receiving benefits	11,537	12,071	14,228	16,531	18,907	19,811	19,598	19,275	20,507	21,912
Total Benefits	96,056	119,154	137,439	152,219	161,868	170,404	177,954	185,733	195,717	209,427

# SCHEDULE OF AVERAGE ANNUAL PAYMENTS BY TYPE FOR THE TEN YEARS ENDED JUNE 30, 2012

Annuitants by Type	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Service	16,496	18,733	19,352	20,401	20,815	21,300	21,800	22,280	22,783	23,116
Disability	7,520	7,742	7,788	8,093	8,296	8,523	8,889	9,067	9,355	9,755
Survivor	6,817	7,327	7,757	8,604	9,293	9,851	10,412	11,204	11,884	12,786
Combined Annuity Average	13,599	15,569	16,378	17,441	17,935	18,466	18,988	19,524	20,100	20,656
Former participants eligible but										
not yet receiving benefits	4,834	4,959	5,351	5,934	6,470	6,759	6,795	6,847	6,453	6,769
Total Eligible for Benefits	11,168	12,796	13,500	14,406	14,860	15,371	15,855	16,377	16,454	17,006

\* All information shown above is derived from the July 1, 2012 Actuarial Valuation.

# STATISTICAL INFORMATION



# BENEFITS PAYMENTS BY TYPE (IN THOUSANDS)

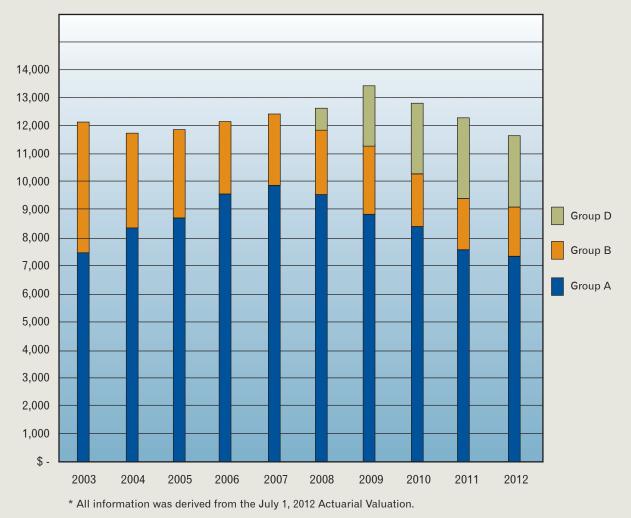
Age on June 30 Service Disability Survivor Total Under 40 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 - 74 75 - 79 80 - 84 85 & Over Total 

\* All information shown above is derived from the July 1, 2012 Actuarial Valuation.

	Active	Vested/Nonv	rested				
Valuation				Number of	Annual Payroll	Average	% Salary
Date	Group A	Group B	Group D	Participants	(\$000)	Salary (\$)	Increase
July 1, 2003	7,576	4,544		12,120	390,314	32,204	0.9
July 1, 2004	8,361	3,495		11,856	366,190	30,886	(4.1)
July 1, 2005	8,811	3,163		11,974	404,565	33,787	9.4
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

# HISTORICAL ACTIVE PARTICIPANT DATA

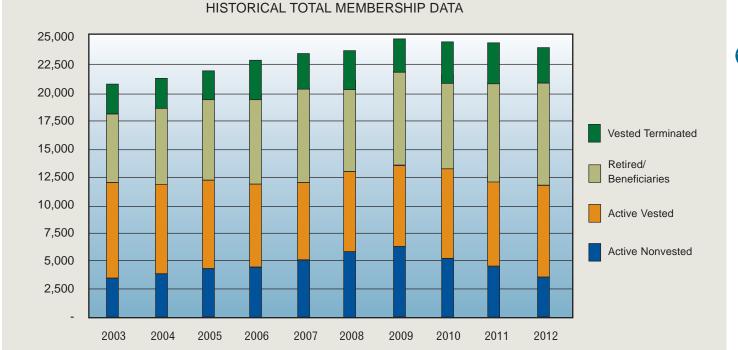
Beginning with 2005, a change in methodology now annualizes payroll for new entrants. If the methodology had not been changed, the covered payroll for 2005 would have been \$376,208,345 and the average payroll would have been \$31,422.



# HISTORICAL ACTIVE PARTICIPANT DATA

Fiscal Year	Active Nonvested	Active Vested	Retired/ Beneficiaries	Vested Terminated	Totals
2003	3,302	8,818	6,215	2,386	20,721
2004	3,648	8,208	6,878	2,434	21,168
2005	4,269	7,705	7,523	2,659	22,156
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

# HISTORICAL TOTAL MEMBERSHIP DATA AND BAR CHART



\* All information was derived from the July 1, 2012 Actuarial Valuation.

HMEPS Comprehensive Annual Financial Report 2013

# AVERAGE BENEFIT PAYMENTS BY YEARS OF CREDITED SERVICE

# Member Retiring During Fiscal Years

		Years of Credited Service						
		<u>5-10</u>	11-15	16-20	21-25	26-30	<u>30+</u>	All Members
2004	Average monthly benefit	\$ 794	\$ 1,071	\$ 1,736	\$ 2,536	\$ 3,270	\$ 3,392	\$ 2,155
	Average monthly salary	\$ 3,146	\$ 3,117	\$ 3,006	\$ 3,206	\$ 3,391	\$ 3,368	\$ 3,186
	Average DROP balance	\$ 58,583	\$ 61,685	\$ 77,000	\$ 103,731	\$ 183,094	\$ 264,073	\$ 112,328
	Number of DROP retirees	40	54	154	262	152	12	674
	Number of retirees	92	105	174	300	164	12	847
2005	Average monthly benefit	\$ 655	\$ 993	\$ 1,715	\$ 2,106	\$ 2,810	\$ 2,898	\$ 1,786
	Average monthly salary	\$ 2,930 \$ 21,201	\$ 2,847 \$ 46,600	\$ 3,069 \$ 94,934	\$ 2,807 \$ 88,710	\$ 3,084 \$ 167,750	\$ 2,979 \$ 250,502	\$    2,927 \$   93,754
	Average DROP balance Number of DROP retirees	\$ 31,291 42	\$ 46,690 81	\$ 81,834 140	\$ 88,719 221	\$ 167,759 97	\$ 250,593 13	\$ 93,754 594
	Number of retirees	89	138	173	275	116	13	805
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 Number of retirees	14 76	31 89	34 76	50 86	13 21	1 3	143 351
	Number of retirees	70	69	70	00	21	3	
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 \$ 07.574	\$ 3,578	\$ 3,794 \$ 244,207	\$ 3,266 \$2,40,270	\$ 3,996	\$ 3,505 \$ 400,000
	Average DROP balance Number of DROP retirees	\$ 52,041	\$ 97,571 27	\$181,686 42	241,297 \$ 50	\$2 49,370 15	\$ 320,514 2	\$182,068 151
	Number of retirees	15 82	91	42 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
9 Years	Average monthly benefit	\$ 598	\$ 1,010	\$ 1,566	\$ 2,257	\$ 2,972	\$ 2,396	\$ 1,592
Ended	Average monthly salary	\$ 3,155	\$ 3,127	\$ 3,284	\$ 3,342	\$ 3,543	\$ 2,805	\$ 3,255
6/30/2012	0	\$ 43,098	\$ 69,922	\$121,761	\$ 159,073	\$ 243,388	\$ 161,233	\$131,421
	Avg Number of DROP retirees	23	45	70	100	44	4	286
	Average Number of retirees	82	101	110	134	57	6	490
	Total number of retirees	737	913	988	1,209	510	53	4,410

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1-14-14 - 1-14



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A Component Unit of the City of Houston, Texas