

FINANCIAL STATEMENTS AND REQUIRED  
SUPPLEMENTARY INFORMATION

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)  
Year Ended December 31, 2013  
With Report of Independent Auditors

Ernst & Young LLP



Building a better  
working world

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Financial Statements and Required Supplementary Information

Year Ended December 31, 2013

**Contents**

Report of Independent Auditors.....	1
Financial Statements	
Required Supplementary Information – Management’s Discussion and Analysis .....	3
Statement of Plan Net Position .....	8
Statement of Changes in Plan Net Position .....	9
Notes to Financial Statements.....	10
Required Supplementary Information	
Schedule of Employers’ and Other Contributing Entities’ Contributions .....	27
Schedule of Funding Progress .....	28



## Report of Independent Auditors

Management and  
Boston Retirement Board

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

We have audited the accompanying financial statements of plan net position and changes in plan net position of the State-Boston Retirement System (the System), a component unit of the City of Boston, as of and for the year ended December 31, 2013, and the related notes to the financial statements, which collectively comprise the State-Boston Retirement System's basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

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

### **Auditor's Responsibility**

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

## **Opinions**

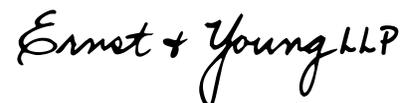
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the State-Boston Retirement System as of December 31, 2013, and the respective changes in financial position for the year then ended in conformity with U.S. generally accepted accounting principles.

## **Required Supplementary Information**

U.S. generally accepted accounting principles require that Management's Discussion and Analysis on pages 3 through 7 and the schedules of employers' and other contributing entities' contributions and funding progress on pages 28 and 29 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States, 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 Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we also have issued our report dated August 18, 2014 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.



August 18, 2014

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Required Supplementary Information

Management's Discussion and Analysis

December 31, 2013

The following discussion provides an overview and analysis of the plan net position and changes in plan net position of the State-Boston Retirement System (the System or Plan) by management for the year ended December 31, 2013.

**Overview of the Financial Statements**

The System's financial statements comprise a statement of plan net position, statement of changes in plan net position, and notes to the financial statements.

The Statement of Plan Net Position presents information on the System's assets and liabilities and the resulting net position held in trust for pension benefits. This statement reflects the System's investments at fair value, as well as cash, receivables, and other assets and liabilities.

The Statement of Changes in Plan Net Position presents information showing how the System's net position held in trust for pension benefits changed during the year ended December 31, 2013. It reflects contributions by members and participating employers, along with deductions for retirement benefits, refunds and withdrawals, and administrative expenses. Investment income from investing and securities lending activities is also presented.

The Notes to the Financial Statements provide additional information that is essential for the reader to gain a full understanding of the data provided in the financial statements.

The Required Supplementary Information includes management's discussion and analysis and schedules of employers' and other contributing entities' contributions and funding progress.

**Financial Highlights and Analysis**

- Net position is available for payment of monthly retirement benefits and other qualified distributions to the System's participants. Net position held in trust for pension benefits was \$5.5 billion at December 31, 2013 compared to \$4.9 billion at December 31, 2012. The increase in net position of \$0.6 billion resulted primarily from an increase in the fair value of portfolio investments and investment income.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Required Supplementary Information

Management's Discussion and Analysis (continued)

- The System's equity and fixed income investments comprised 57.1% of invested assets; the remaining 42.9% of investments were invested in real estate investments (6.5%), alternative investments, including private equity and hedge fund of funds investments (9.8%), PRIT General Fund (25.3%) and short-term investments (1.3%).
- Receivables decreased by \$17.0 million at December 31, 2013, primarily due to a decrease in domestic investment receivables by \$9.4 million and international investment receivables by \$0.4 million.
- Liabilities increased by \$22.8 million at December 31, 2013, due to an increase of \$22.4 million in security lending activity.

Employers' contributions are made in accordance with a funding schedule approved by the Massachusetts Public Employee Retirement Administration Commission. The System's funding objective is to meet long-term benefit obligations through contributions and investment income. As of January 1, 2013, the funding ratio was 61.87%. All employers fully met the required funding amounts in 2013.

	<i>(In Thousands)</i>		<b>Percentage Change 2013-2012</b>
	<b>2013</b>	<b>2012</b>	
<b>Assets</b>			
Cash and cash equivalents	\$ 174,657	\$ 132,384	32%
Receivables	51,561	68,581	(25)
Investments	5,331,560	4,775,807	12
Securities lending collateral investment pool	185,269	162,759	14
Total plan assets	5,743,047	5,139,531	12%
<b>Liabilities</b>			
Payables	66,211	65,748	1
Obligation to return securities lending collateral	185,639	163,272	14
Total liabilities	251,850	229,020	10
Net position	\$ 5,491,197	\$ 4,910,511	12%

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Required Supplementary Information

Management's Discussion and Analysis (continued)

	<i>(In Thousands)</i>		Percentage
	2013	2012	Change 2013-2012
<b>Additions</b>			
Total contributions	\$ 425,070	\$ 387,706	10%
Net investment income	692,126	559,221	24
Intergovernmental	9,258	13,003	(29)
Total additions	<b>1,126,454</b>	959,930	17
<b>Deductions</b>			
Benefit payments	508,689	487,772	4
Other	37,079	33,247	12
Total deductions	<b>545,768</b>	521,019	5
Net increase (decrease) in plan position	<b>580,686</b>	438,911	32
Net position at beginning of year	<b>4,910,511</b>	4,471,600	10
Net position at end of year	<b>\$ 5,491,197</b>	\$ 4,910,511	12%

**Plan Investments**

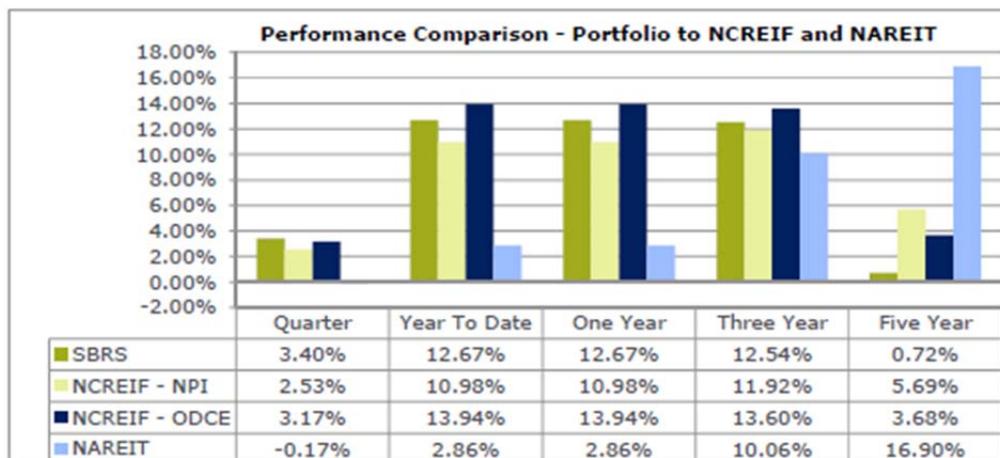
- The total investment return for 2013 was approximately 15.0%. Short-term changes to investment asset allocation strategies from the Plan's target policy allocations added 40 basis points to performance. Active management, or the added value of investing outside of passive index funds, contributed 120 basis points. The majority of the System's active managers outperformed their respective indices.
- In 2013, the large cap equity composite returned 37.6% and outperformed the S&P 500 Index, which returned 32.4%. The small cap equity composite returned 37.8%, underperforming the Russell 2000 Index, which returned 38.8%.
- The international equity portfolio, which includes investments in both international developed (67% of the portfolio) and emerging markets equity (33% of the portfolio), posted a return of 14.0%. International developed markets outpaced emerging markets in 2013, with the Morgan Stanley Capital International (MSCI) EAFE outperforming the MSCI EM index by 25.4%

**State-Boston Retirement System**  
(A Component Unit of the City of Boston, Massachusetts)

**Required Supplementary Information**

**Management's Discussion and Analysis (continued)**

- Domestic fixed income investments posted negative returns in 2013 and returned (0.5)%, outperforming the Barclays Aggregate Bond Index, which returned (2.0)%. On an absolute basis, the System's high yield manager composite gained 6.7%, underperforming its benchmark, the Barclays Capital High Yield, by 60 basis points in 2013.
- The System's global bond manager, Loomis Sayles, returned (2.7)% in 2013, outperforming the Citigroup World Government Bond Index by 130 basis points. The lone emerging market debt and currency product, also managed by Loomis, underperformed the JP Morgan GBI-EM Diversified Index by 70 basis points in 2013.
- Real estate investments yielded a return of 12.7% in 2013. The System's real estate is a combination of core, value-add and opportunistic investment strategies. In 2013, the System committed \$48 million to value-add and \$38 million to opportunistic. A comparison of the real estate portfolio's performance for 2013 against the National Council of Real Estate Investment Fiduciaries (NCREIF) and National Association of Real Estate Investment Trust (NAREIT) benchmarks is shown below.



State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Required Supplementary Information

Management's Discussion and Analysis (continued)

- Private equity performance for 2013 was 9.1%. The System remains committed to the private equity portfolio and plans continued investment. During 2013, the System made additional commitments of \$10 million to mezzanine, \$10 million to distressed and an additional \$20 million to buyouts.
- The System's hedge fund composite returned 12.4% in 2013. For the same period, the Hedge Fund Research Indices Fund of Funds Index returned 8.8%.
- During 2013, the PRIT Core Fund returned 15.2%, outperforming the 50% MSCI All Country World Index/50% Citi World Government Bond Index blended benchmark by 180 basis points. At year end, the estimated fair value of the PRIT investment was \$1.446 billion.

**Other Information**

This financial report is designed to provide a general overview of the System's finances. Questions concerning the information provided in this report or requests for additional financial information should be addressed to the Boston Retirement Board, Boston City Hall, Room 816, Boston, Massachusetts 02201.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Statement of Plan Net Position

December 31, 2013  
(In Thousands)

<b>Assets</b>	
Cash and cash equivalents	\$ 174,657
Investments, at fair value:	
Short-term:	
Domestic	58,289
International	8,770
Equity:	
Domestic	1,116,781
International	1,008,692
Fixed income:	
Domestic	694,066
International	230,413
PRIT pooled fund	1,346,939
Real estate	346,517
Alternative	521,093
Total investments, at fair value	<u>5,331,560</u>
Securities lending collateral investment pool	185,269
Receivables:	
Receivable for securities sold	25,154
Accrued interest and dividends	6,971
Other receivables	7,592
Contributions receivable from employers:	
City of Boston	1,920
Other employers	9,924
Total contributions receivable from employers	<u>11,844</u>
Total receivables	<u>51,561</u>
Total plan assets	<u>5,743,047</u>
<b>Liabilities</b>	
Payable for securities purchased	51,466
Accounts payable, accrued expenses and other liabilities	14,745
Obligation to return securities lending collateral	185,639
Total plan liabilities	<u>251,850</u>
Plan net position held in trust for pension benefits	<u>\$ 5,491,197</u>

*See accompanying notes.*

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Statement of Changes in Plan Net Position

December 31, 2013  
(In Thousands)

**Additions**

Contributions:

Employers	\$ 188,926
Commonwealth of Massachusetts	99,532
Employees	<u>136,612</u>
Total contributions	<u>425,070</u>

Investment income:

Interest and dividends	112,225
Net appreciation in fair value of investments	599,794
Less: management and related fees	<u>(21,060)</u>
Net investment income	<u>690,959</u>

Securities lending activities:

Securities lending income	1,590
Less borrower rebates and fees	<u>(423)</u>
Net income from securities lending activities	<u>1,167</u>
Total net investment gain	692,126

Intergovernmental

	<u>9,258</u>
Total additions	<u>1,126,454</u>

**Deductions**

Benefit payments to plan members and beneficiaries	508,689
Reimbursements to other systems	10,946
Refunds of contributions and transfers to other systems	18,132
Administrative and other expenses	<u>8,001</u>
Total deductions	<u>545,768</u>

Net increase in net plan position	580,686
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Plan net position held in trust for pension benefits:

Beginning of year	<u>4,910,511</u>
End of year	<u>\$ 5,491,197</u>

*See accompanying notes.*

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

December 31, 2013

**1. Plan Description**

The following description of the State-Boston Retirement System (the System or the Plan) is provided for general information purposes only. Participants should refer to Chapter 32 of the Massachusetts General Law for more detailed information. The five member Board of Trustees is primarily responsible for the administration of the System.

**General**

The Plan is a cost-sharing, multiple-employer qualified defined benefit governmental pension plan established under Chapter 32 of the Massachusetts General Laws (M.G.L.). The Plan provides pension benefits for participating employees of the following Plan member governmental units:

- City of Boston (the City)\*
- Commonwealth of Massachusetts (Other contributing entity – contributing towards City of Boston Teachers pensions)
- Boston Redevelopment Authority\*
- Boston Housing Authority\*
- Boston Water and Sewer Commission\*
- Boston Public Health Commission\*
- Sheriff of Suffolk County (Retirees as of December 31, 2009, funded by the City)\*

\* Indicates participating employer of the Plan

At December 31, 2013, System membership consisted of:

Active plan members	20,767
Retirees and beneficiaries receiving benefits	14,228
Terminated members entitled to, but not yet receiving benefits	<u>15,247</u>
Total membership	<u><u>50,242</u></u>
Number of participating employers	6

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**1. Plan Description (continued)**

The Commonwealth of Massachusetts (the Commonwealth) is responsible for funding the employer portion of all teacher pensions in the Commonwealth. All teachers in the Commonwealth are members of the Massachusetts Teachers Retirement System, with the exception of teachers employed by the City (Boston Teachers), who are members of the System. Although Boston Teachers are members of the System, the Commonwealth is the responsible contributing entity.

**Significant Provisions and Requirements**

Participation in the System is mandatory for all permanent, full-time, and certain part-time employees immediately upon the commencement of employment. Participants who resign from employment or are receiving workers' compensation benefits and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total deductions. In addition, those participants that resign voluntarily with less than ten years of service are entitled to receive 3% per year interest; all others receive interest which has accrued on their cumulative deductions at the regular interest rate (0.1% at December 31, 2013).

Employees with ten or more years of service having attained age 55 are entitled to pension benefits; an earlier retirement is allowed upon completion of 20 years of service. The System provides for retirement allowance benefits up to a maximum of 80% of a participant's highest consecutive three-year average annual rate of regular compensation (highest consecutive five-year average for those members who join the System on or after April 2, 2013). Benefit payments are based upon a participant's age, length of creditable service, regular compensation, and group classification. Participants become vested after ten years of creditable service. Effective July 1, 1998, Chapter 32 of the M.G.L. assigned the authority to establish and amend benefit provisions and grant cost-of-living increases for the Plan to the Boston Retirement Board.

If a member in service dies due to causes unrelated to his or her job, the surviving spouse and/or surviving dependent children may receive retirement allowance benefits, either in a lump sum or in the form of an annuity based on the length of service, contributions and age. In the event there are no spouse and/or dependent children named, other beneficiaries may be entitled to a lump-sum distribution. Participants who become permanently and totally disabled from further duty may be eligible to receive accidental or ordinary disability retirement benefits.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**1. Plan Description (continued)**

Accidental disability is provided to members with incapacitation resulting from a work-related injury or hazard. Generally, annual pension benefits are provided based on 72% of the annual rate of regular compensation a member earned while an active employee on date of injury or average annual rate of regular compensation. Ordinary disability is available to any member whose permanent incapacitation is not work-related and has attained ten years of creditable service. Such benefits are provided as if the member had attained the age of 55 (or actual age if over 55) based on the amount of creditable service actually earned. Limits are placed on how much a disability employee can earn from other sources while collecting a disability retirement pension.

**2. Summary of Significant Accounting Policies**

**Financial Reporting Entity**

Because of the significance of its operational and financial relationship with the City, the System is included as a pension trust fund in the City's basic financial statements.

**Basis of Accounting**

The accompanying financial statements are presented on the accrual basis of accounting.

**Cash Equivalents**

Highly liquid investments with maturities of three months or less at date of purchase are considered to be cash equivalents.

**Short-Term Investment Funds**

Cash balances maintained by investment managers are recorded as short term investments on the statement of plan net position.

**Revenue Recognition**

Contributions are recognized as additions in the period when they become due pursuant to formal statutory obligations. Investment income is recognized when earned.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**2. Summary of Significant Accounting Policies (continued)**

**Benefit Payments and Refunds of Contributions**

Benefits and refunds to Plan members and beneficiaries are recognized as expenses when due and payable in accordance with the terms of the Plan.

**Intergovernmental, Reimbursements and Transfers to Other Systems**

When members transfer to or from other Massachusetts public retirement systems, their cumulative contributions are transferred from the prior employer to the respective Massachusetts public retirement system, and are recognized as receipts or expenses when paid. Additionally, the prior employer reimburses the respective system for a pro-rata portion of such members' pension benefits (based on years of service) upon retirement.

**Valuation of Investments**

Investments are reported at fair value. Fair values of securities held directly are based on quotations from national securities exchanges, except for pooled funds, alternative investments, and real estate, for which fair values are estimated as detailed below.

*Pooled Funds*

The fair value of shares in managed investment pools is based on unit values reported by the funds.

*Alternative Investments*

Alternative investments include hedge funds, holdings through commingled limited partnerships of venture capital funds, including equity interests in early, middle, and later stage companies, as well as debt and equity interests in buyouts, acquisitions, restructurings, mezzanine structures and special situations, such as litigation or spin off activities. These investments are carried at the limited partnership interest or redemption value, the equivalent of net asset value, which approximates fair value. Values assigned to such investments are based on available information and do not necessarily represent amounts that may ultimately be realized in liquidation. Liquidation values depend largely on future circumstances, including marketability, and frequently cannot reasonably be estimated until at, or near, the liquidation date.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**2. Summary of Significant Accounting Policies (continued)**

*Real Estate*

Real estate investments consist of interests in commercial properties held by various partnerships and other limited liability entities, some of which utilize debt financing. Fair values of such holdings are reported based on the net asset values of the entities, which are estimated using third-party appraisals and other information provided by property managers.

**Basis of Investment Transactions**

Purchases and sales of investments are recorded on the trade date. Transactions unsettled as of the measurement date are recorded as payables for securities purchased and as receivables for securities sold.

**Use of Estimates**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from estimates. Fair values of real estate and alternative investment holdings are generally estimated absent readily available market values, and such estimates may be materially different from values that would have been used if a ready market existed.

**Foreign Currency Contracts**

The System's investment policy permits it to enter into forward foreign currency contracts for the purpose of hedging foreign currency fluctuations. A forward foreign currency contract is an agreement between two parties to buy or sell a fixed quantity of currency at a set price on a future date. The System may enter into forward foreign currency contracts to hedge its exposure to the effect of changes in foreign currency exchange rates upon its non-U.S. dollar-denominated investments. The contracts are valued daily, and the changes in fair value are recorded by the System as unrealized gains or losses. When the contract is closed, the System records a realized gain or loss equal to the difference between the cost of the contract at the time it was opened and the value at the time it was closed.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**2. Summary of Significant Accounting Policies (continued)**

**Recent Accounting Pronouncements**

In 2013, the Plan adopted Government Accounting Standards Board (GASB) Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position* (the Statement). The objective of this Statement is to provide guidance for reporting deferred outflows of resources, deferred inflows of resources and net position in a statement of financial position. Amounts that are required to be reported as deferred outflows should be reported in a statement of financial position in a separate section following assets. Similarly, amounts to be reported as deferred inflows of resources should be reported in a separate section following liabilities. The statement of financial position should report the residual amount as a net position, rather than net assets.

The adoption of this Statement resulted in a change in the presentation of the Statement of Plan Net Assets to what is now referred to as the Statement of Plan Net Position and the term “net assets” is changed to “net position” throughout the financial statements.

In June 2013, the GASB issued Statement No. 67, *Accounting for Pension Plans*. The objective of this Statement is to improve financial reporting by state and local governmental pension plans. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for pensions with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency.

This Statement replaces the requirements of Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and Statement No. 50, *Pension Disclosures*, as they relate to pension plans that are administered through trusts or similar arrangements meeting certain criteria. The Statement builds upon the existing framework for financial reports of defined benefit pension plans, which includes a statement of fiduciary net position (the amount held in a trust for paying retirement benefits) and a statement of changes in fiduciary net position.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**2. Summary of Significant Accounting Policies (continued)**

This Statement enhances note disclosures and required supplementary information (RSI) for both defined benefit and defined contribution pension plans. This Statement also requires the presentation of new information about annual money-weighted rates of return in the notes to the financial statements and in ten-year RSI schedules. The requirements of Statements 25 and 50 remain applicable to pension plans that are not administered through trusts covered by the scope of this Statement and to defined contribution plans that provide postemployment benefits other than pensions.

For defined benefit pension plans, this Statement establishes standards of financial reporting for separately issued financial reports and specifies the required approach to measuring the pension liability of employers and nonemployer contributing entities for benefits provided through the pension plan (the net pension liability), about which information is required to be presented.

The provisions of this Statement are effective for financial statements for fiscal years beginning after June 15, 2013. The System is in the process of evaluating the impact of the adoption of GASB Statement No. 67 on its financial statements.

**3. Cash Deposits, Investments, Securities Lending, and Derivatives**

The following disclosures represent essential risk information about the System's deposits and investments.

**Custodial Credit Risk – Deposits**

Custodial credit risk is the risk that in the event of bank failure, the System's deposits may not be returned. The System carries deposits that are fully insured by FDIC insurance or collateralized with securities held by the System or the System's agent in the System's name. As of December 31, 2013, all of the System's deposits were insured or collateralized.

**Investment Policy**

The provisions of M.G.L. chapter 32 § 23(2); 840 C.M.R. 16-19, 21, 23, 26; and, the Plan's own investment regulations (stated at <http://www.mass.gov/perac/investsup/bostonintsup.html>) govern the System's investment practice.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

Diversification is attained through varied investment management styles that comply with Massachusetts state law. This is accomplished through the retention of investment managers that adhere to M.G.L. chapter 32, § 3(3), the Prudent Person rule.

The System has retained an investment consultant to work with The Boston Retirement Board in a fiduciary capacity to assure that strategic investment diversification is attained, to employ investment managers with expertise in their respective asset classes, and to closely monitor the implementation and performance of the respective investment strategies.

The System is currently invested in stocks (domestic and foreign), fixed income securities (domestic and foreign), real estate, private equity, the Commonwealth's Pension Reserve Investment Trust (PRIT) and hedge funds.

**Interest Rate Risk**

The following is a listing of the System's fixed income investments (in thousands) and related maturity schedule (in years) as of December 31, 2013:

Investment Type	Fair Value	Less than 1	1 – 5	6 – 10	More than 10
U.S. Treasury notes and bonds	\$ 77,139	\$ 7,130	\$ 42,444	\$ 10,317	\$ 17,248
U.S. agencies	61,495	–	745	836	59,914
Domestic corporate	466,434	18,251	57,775	148,075	242,333
Municipal	2,445	–	119	104	2,222
International corporate	196,440	2,014	12,366	17,209	164,851
International government	51,866	1,655	16,460	23,439	10,312
Asset-backed:					
CMOs	35,688	–	749	4,412	30,527
Other	32,972	27	15,041	8,971	8,933
	<u>\$ 924,479</u>	<u>\$ 29,077</u>	<u>\$ 145,699</u>	<u>\$ 213,363</u>	<u>\$ 536,340</u>

The System's guidelines do not specifically address limits on maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. The managers of each fixed income portfolio are responsible for determining the maturity and commensurate returns of their portfolio.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

The collateralized mortgage obligations (CMOs) held by the System as of December 31, 2013 are highly sensitive to changes in interest rates.

**Credit Risk**

The System allows investment managers to apply discretion under the Prudent Person rule. Investments are made, as a prudent person would be expected to act with discretion and intelligence, to seek reasonable income, preserve capital and, in general, avoid speculative investments.

The System's fixed income investments as of December 31, 2013 were rated by Standard & Poor's and/or an equivalent national rating organization and the ratings are presented below (in thousands) using the Standard & Poor's rating scale:

Investment Type	Fair Value	AAA	AA	A	BBB	BB	B	CCC	Not Rated
U.S. agencies	\$ 61,496	\$ -	\$ -	\$ 427	\$ -	\$ -	\$ -	\$ -	\$ 61,069
Domestic									
corporate	466,435	955	13,387	78,197	45,078	48,523	59,210	1,746	219,339
Municipal	2,445	-	746	1,699	-	-	-	-	-
International									
corporate	196,440	1,052	2,866	11,293	9,468	6,438	3,210	-	162,113
International									
government	51,864	6,495	1,749	6,183	4,095	-	-	-	33,342
Asset-backed:									
CMOs	35,689	13,113	1,399	385	1,153	-	-	-	19,639
Other	32,973	18,150	3,992	2,273	-	-	12	-	8,546
	<u>\$847,342</u>	<u>\$ 39,765</u>	<u>\$ 24,139</u>	<u>\$ 100,457</u>	<u>\$ 59,794</u>	<u>\$ 54,961</u>	<u>\$ 62,432</u>	<u>\$ 1,746</u>	<u>\$ 504,048</u>

In addition to the above schedule, the System has approximately \$77.1 million invested in U.S. government securities, which are explicitly guaranteed by the U.S. government.

**Concentration Risk**

Other than the PRIT fund, the System has no investments at fair value that exceed 5% of the System's total investments as of December 31, 2013.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

The System adheres to the provisions of M.G.L. chapter 32 § 23(2); 840 C.M.R. 16-19, 21, 23, 26; and, the Plan's own investment regulations when managing concentration risk.

**Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Similar to the investments in domestic equities, the System employs or encourages its investment advisor to employ diversification, asset allocation, and quality strategies.

**State-Boston Retirement System**  
(A Component Unit of the City of Boston, Massachusetts)

**Notes to Financial Statements**

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

Risk of loss arises from changes in currency exchange rates. The System's exposure to foreign currency risk is presented on the following table (in thousands):

<b>Currency</b>	<b>Cash and Short-Term Investments</b>	<b>Fixed Income</b>	<b>Equity</b>	<b>Alternative</b>	<b>Total</b>
Australian dollar	\$ 150	\$ 1,712	\$ 30,264	\$ 1,557	\$ 33,683
Brazilian real	–	581	–	–	581
Canadian dollar	203	2,546	3,719	–	6,468
Danish krone	–	–	11,753	–	11,753
Euro currency	7,637	21,782	213,531	7,399	250,349
Hong Kong dollar	116	–	24,069	–	24,185
Indonesian rupiah	12	–	519	–	531
Israeli shekel	1	–	1,408	–	1,409
Japanese yen	432	10,745	117,149	304	128,630
Malaysian ringgit	280	1,116	726	–	2,122
Mexican peso	566	2,529	–	–	3095
New Taiwan dollar	117	–	2,215	–	2,332
New Zealand dollar	193	–	–	–	193
Norwegian krone	139	2,846	4,027	–	7,012
Philippine peso	–	703	–	–	703
Polish zloty	197	626	–	–	823
Pound sterling	195	6,071	142,360	685	149,311
Singapore dollar	71	785	8,437	–	9,293
South African rand	75	513	1,041	–	1,629
South Korean won	101	2,348	9,810	–	12,259
Swedish krona	97	159	15,587	–	15,843
Swiss franc	23	826	61,333	–	62,182
Thailand Baht	49	489	972	–	1,510
Turkish lira	54	510	1,228	–	1,792
Total securities subject to foreign currency risk	10,708	56,887	650,148	9,945	727,688
U.S. dollars (securities held by international investment managers)	–	34,161	36,614	–	70,775
Total international investment securities	\$ 10,708	\$ 91,048	\$ 686,762	\$ 9,945	\$ 798,463

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

**PRIT Pooled Fund**

The Massachusetts legislature enacted Section 17 of Chapter 112 of the Acts of 2010 that requires the System to invest all assets, current and future, related to Boston Teachers in the PRIT pooled fund. The PRIT pooled fund is an external investment pool that is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the Pension Reserves Investment Management Board (the PRIM Board). The PRIM Board was created by legislation to provide general supervision of the investments and management of PRIT. PRIT is not a rated fund.

The fair value of the PRIT pooled fund is based on unit value as reported by management of the PRIT pooled fund. The PRIT fund issues separately available audited financial statements with a year end of June 30.

On July 1, 2010, the System transferred 27% of its assets, or \$1.1 billion, to the PRIT pooled fund. As of December 31, 2013, the System had the following amounts invested in the PRIT fund (in thousands):

General allocation account	\$ 1,346,939
Cash fund	99,536
Total membership	<u>\$ 1,446,475</u>

As of December 31, 2013, the general allocation account is diversified into the following:

<u>Asset Class</u>	<u>Percentage</u>
Core fixed income	12.6
Domestic equity	20.6
Emerging markets	7.0
Hedge funds	8.5
International equity	18.4
Private equity	11.4
Real estate	8.3
Cash overlay	0.7
Distressed debt	2.3
Timber natural resources	3.9
Value-added fixed income	6.3
Total	<u>100.0%</u>

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

**Securities Lending Transactions**

The Public Employee Retirement Administration Commission (PERAC) has issued supplemental regulations that permit the System to engage in securities lending transactions. Securities lending is an investment management enhancement that utilizes certain existing securities of the Plan to earn additional income. These transactions are conducted by the System's custodian, who lends certain securities owned by the System to broker-dealers and banks pursuant to a form of loan agreement. The System and the borrowers maintain the right to terminate all securities lending transactions on demand.

Securities lending involves the loaning of securities to approved banks and broker-dealers. In return for the loaned securities, the custodian, prior to or simultaneous with delivery of the loaned securities to the borrower, receives collateral in the form of cash (including both U.S. and foreign currency) or U.S. government securities, sovereign debt of foreign countries, and irrevocable bank letters of credit as collateral to serve as a safeguard against possible default of any borrower on the return of the loan. The custodian does not have the ability to pledge or sell collateral unless the borrower defaults. Borrowers are required to deliver collateral in amounts equal to not less than 100% of the market value of the loaned securities. The collateral is marked to market on a daily basis. In the event the counterparty is unable to meet its contractual obligation under the securities lending arrangement, the Plan may incur losses equal to the amount by which the market value of the securities differs from the amount of collateral held. The Plan mitigates credit risk associated with securities lending arrangements by monitoring the fair value of the securities loaned on a daily basis, with additional collateral obtained or refunded as necessary. At December 31, 2013, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts owed to the System.

The System does not impose any restrictions on the amount of securities lent on its behalf by the custodian. There were no failures by any borrowers to return loaned securities or pay distributions thereon, and there were no losses from a default of the borrowers or the custodian for the year ended December 31, 2013. The cash collateral received by the custodian on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. The relationship between the average maturities of the investment pool and loans was affected by the maturities of the loans made by other plans that invested cash collateral in the collective investment pool, which the System could not determine.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**3. Cash Deposits, Investments, Securities Lending, and Derivatives (continued)**

The Plan maintains full ownership rights to the securities loaned and, accordingly, classifies loaned securities as investments. At December 31, 2013, the fair value of securities loaned by the System amounted to \$197,319,435, against which was held collateral at fair value of \$202,717,726 as follows (in thousands):

Short-term collateral investment pool	\$ 185,639
Noncash collateral	17,079
	<u>\$ 202,718</u>

**Commitments**

At December 31, 2013, the System had contractual commitments to provide \$99.2 million of additional funding to private equity funds and \$53.7 million to real estate funds.

**Derivatives**

The System trades financial instruments with off-balance sheet risk in the normal course of its investing activities to assist in managing exposure to market risks. The System uses forward foreign currency contracts to hedge against the risk of future foreign currency fluctuations.

**4. Funding Policy**

Participating employers are required to pay into the System their share of the remaining actuarially determined contribution and plan administration costs, which are apportioned among the participating employers based on an actuarial computation.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**4. Funding Policy (continued)**

The participating employers' budgeted contributions to the System for the employer fiscal years ended June 30 were as follows (in thousands):

	<u>2014</u>	<u>2013</u>	<u>2012</u>
City of Boston	\$ 147,511	\$ 127,322	\$ 119,660
Commonwealth of Massachusetts (Boston Teachers)	99,532	94,846	90,399
Sheriff of Suffolk County	3,875	3,924	3,924
Boston Housing Authority	12,038	11,217	9,183
Boston Public Health Commission	15,261	15,482	13,294
Boston Redevelopment Authority	2,139	1,965	1,975
Boston Water and Sewer Commission	8,102	7,187	6,845
	<u>\$ 288,458</u>	<u>\$ 261,943</u>	<u>\$ 245,280</u>

As a condition of participation, employees are required to contribute 5% of their salary if hired prior to January 1, 1975; 7% if hired after January 1, 1975, and before January 1, 1984; 8% if hired after January 1, 1984, and before July 1, 1996; and, 9% if hired after July 1, 1996. Employees hired after January 1, 1979 contribute an additional 2% of earnings in excess of \$30,000 per year. Additionally, teachers who became members of the System after June 30, 2001, or other teachers who elect this option, are required by law to contribute 11% of their salary. Overtime and certain additional earnings are not subject to these assessments and are not considered in the determination of final average salary.

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**5. Legally Required Reserve Accounts**

The balances in the System's legally required reserves at December 31, 2013 were as follows (in thousands):

		<u>Purpose</u>
Annuity Savings Fund	\$ 1,522,622	Active members' contribution balance
Annuity Reserve Fund	460,326	Retired members' contribution account
Military Service Fund	50	Members' contribution account while on military leave
Pension Reserve Fund	106,109	Amounts appropriated to fund future retirement benefits
Pension Fund	3,402,090	Remaining net position
	<u>\$ 5,491,197</u>	

All reserve accounts are funded at levels required by state statute.

**6. Funded Status and Funding Progress**

The funded status of the System as of January 1, 2013 is as follows (in thousands):

Actuarial accrued liability (AAL)	\$ 8,199,808
Actuarial value of plan assets	<u>5,073,098</u>
Unfunded actuarial accrued liability (UAAL)	<u>\$ 3,126,710</u>
Funded ratio (actuarial value of plan assets/AAL)	61.9%
Covered payroll (active plan members)	\$ 1,360,385
UAAL as a percentage of covered payroll	229.8%

In the January 1, 2013 actuarial update, the individual entry age normal actuarial cost method was used. The actuarial assumptions included a 7.75% investment rate of return (8.25% for Boston Teachers), projected salary increases of 5.00% (variable rate for Boston Teachers), and cost-of-living adjustments of 3.00% of the first \$13,000 of retirement income annually. The actuarial value of assets was determined using the fair value of investments. The System's unfunded actuarial accrued liability is being amortized as a level percentage of pay on an open basis. The remaining amortization period at January 1, 2013 was 13 years (28 years for Boston Teachers).

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Notes to Financial Statements

**6. Funded Status and Funding Progress (continued)**

The schedule of funding progress, presented as RSI following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. Actuarial calculations reflect a long-term perspective and are based on the benefits provided under the Commonwealth Statutes in effect at the time of each valuation and also consider the pattern of the sharing of costs between the employee and members at that point in time. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations or the pattern of cost sharing between the employee and members in the future.

**7. Contingencies**

There are various pending claims arising in the ordinary course of operations; however, management believes that the probable liability resulting from such claims and litigation would not materially affect the System's financial position.

**8. Commitments**

During fiscal year 2008, the System signed a memorandum of understanding with the City for the purpose of financing the development, design, purchase, and installation of a pension management system. Upon completion of the pension management system, the City will transfer the completed asset to the System. The System is committed to repaying the City \$20.0 million, of which approximately \$9.7 million has been paid through December 31, 2013.

**9. Tax Status**

The Plan has received a determination letter from the Internal Revenue Service dated August 20, 2010 stating that the Plan is qualified as a governmental plan under Section 414(d) of the Internal Revenue Code (the Code) and therefore, the related trust is exempt from taxation. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualified status. The plan administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and therefore, believes the Plan is qualified and the related trust is tax exempt.

The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examination for plan years prior to 2010.

## Required Supplementary Information

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Required Supplementary Information – Schedule  
of Employers’ and Other Contributing Entities’ Contributions

*(In Thousands)*

<b>Plan Year Ended December 31</b>	<b>Annual Required Contributions</b>	<b>Actual Contributions</b>	<b>Percent Contributed</b>
2008	\$ 239,039	\$ 239,039	100.0%
2009	250,823	250,823	100.0
2010	463,656	463,656	100.0
2011	245,280	245,280	100.0
2012	261,943	261,943	100.0
2013	288,458	288,458	100.0

State-Boston Retirement System  
(A Component Unit of the City of Boston, Massachusetts)

Required Supplementary Information – Schedule  
of Funding Progress

*(In Thousands)*

Actuarial Valuation Dated	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Over-funded) AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b) – (a) ÷ (c)
01/01/2008	\$ 4,458,002	\$ 6,596,148	\$ 2,138,146	67.58%	\$ 1,299,112	164.59%
01/01/2009	4,089,989	6,900,229	2,810,240	59.27	1,364,068	206.02
01/01/2010	4,270,893	7,091,018	2,820,125	60.23	1,306,060	215.93
01/01/2011	4,592,675	7,382,907	2,790,232	62.21	1,371,363	203.46
01/01/2012	4,855,200	7,902,175	3,046,975	61.45	1,301,803	234.06
01/01/2013	5,073,098	8,199,808	3,126,710	61.87	1,360,385	229.84

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