

**MASSACHUSETTS WATER RESOURCES AUTHORITY  
EMPLOYEES' RETIREMENT SYSTEM**

**INDEPENDENT AUDITORS' REPORT ON  
FINANCIAL STATEMENTS AND  
REQUIRED SUPPLEMENTARY INFORMATION**

**FOR THE YEAR ENDED DECEMBER 31, 2012**



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TABLE OF CONTENTS

	Page
Independent Auditors' Report.....	1
Management's Discussion and Analysis .....	4
Basic Financial Statements.....	9
Statement of Plan Net Position .....	10
Statement of Changes in Plan Net Position.....	11
Notes to Basic Financial Statements .....	12
Required Supplementary Information.....	19
Schedules of Funding Progress.....	20
Schedule of Employer Contributions.....	20
Supplementary Information.....	21
Schedule of Administrative Expenses.....	22
Schedule of Investments and Consultants' Expenses .....	23

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# *Independent Auditors' Report*

## Independent Auditors' Report

To the Honorable Retirement Board  
Massachusetts Water Resources Authority Employees' Retirement System

### Report on the Financial Statements

We have audited the accompanying financial statements of the Massachusetts Water Resources Authority Employees' Retirement System (the System), as of and for the year ended December 31, 2012, and the related notes to the financial statements, as listed in the table of contents.

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

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

#### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America 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 from material misstatement.

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

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

#### *Opinion*

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of December 31, 2012, and the respective change in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (located on pages 4 through 8) and historical pension information (located on page 20) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the System's financial statements. The supplementary information is presented for purposes of additional analysis and is not a required part of the financial statements.

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

### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated June 23, 2014 on our consideration of the System' 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 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.



**CliftonLarsonAllen LLP**

Boston, Massachusetts  
June 23, 2014

# *Management's Discussion and Analysis*



MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
DECEMBER 31, 2012

As management of the Massachusetts Water Resources Authority Employees' Retirement System (System), we offer readers of these financial statements this narrative overview and analysis of the System's financial activities for the year ended December 31, 2012.

### **Financial Highlights**

The System's funding objective is to meet long-term benefit obligations through contributions and investment income. As of January 1, 2013, the latest actuarial valuation, the funded ratio was 88.6% based on the actuarial value of assets (adjusted by accounts payable and receivables) at that date.

The System's net position increased by \$48,703,989, or 16.1%, when compared to the prior year's net position. Net position is the residual of the System's assets in excess of the System's liabilities as of the statement date. The System's assets are held in trust to meet future benefit payments.

### **Overview of the Financial Statements**

The basic financial statements are comprised of a Statement of Plan Net Position, Statement of Changes in Plan Net Position, Notes to the Financial Statements and Required Supplementary Information.

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 is calculated using the following formula: Assets - Liabilities = 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 Plan Net Position reports the financial position of the System at December 31, 2012. Over time, the increase or decrease in net position serves as a useful indicator of the System's financial health.

The **statement of changes in plan net position** presents information showing how the System's net position changed during the year ended December 31, 2012. It reflects contributions by its individual members and participating employer along with deductions for retirement benefits, refunds, withdrawals, and administrative expenses. Investment income during the period is also presented showing income from investing activities.

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 historical data regarding the schedules of funding progress and employer contributions.

The **supplementary information** includes a schedule of administrative expenses and a schedule of investment and consultants' expenses.

### **Financial Analysis**

The System's total assets as of December 31, 2012 were \$351,227,157 and were comprised of cash and cash equivalents, investments, accrued interest and dividends, and receivables.

Total liabilities as of December 31, 2012 were \$362,175 and represent accounts payable, accrued expenses and due to MWRA.

The following tables present current year data on the System's financial statements. Subsequent years' financial statements will include comparative data.

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
DECEMBER 31, 2012

Plan Net Position

Net position was \$350,864,982 at the close of the year and is summarized as follows:

	<u>2012</u>
<b>Assets</b>	
Cash and cash equivalents.....	\$ 8,472,815
Investments.....	342,664,380
Receivables, interest and dividends.....	<u>89,962</u>
 Total assets.....	 <u>351,227,157</u>
 <b>Liabilities</b>	
Accounts payable and accrued expenses.....	301,193
Due to MWRA.....	<u>60,982</u>
 Total liabilities.....	 <u>362,175</u>
 <b>Plan Net Position</b>	
Net position held in trust for pension benefits.....	\$ <u><u>350,864,982</u></u>

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
DECEMBER 31, 2012

Changes in Plan Net Position

The System's net position increased by \$48,703,989 during the year and is summarized as follows:

	2012
<b>Additions</b>	
<i>Contributions:</i>	
Employer.....	\$ 12,341,893
Plan members.....	7,855,760
Reimbursements and transfers from other systems.....	938,285
<i>Net investment income:</i>	
Net realized and unrealized gains (losses).....	33,365,351
Interest and dividends.....	7,237,330
Less investment expense.....	(1,903,787)
Total additions.....	59,834,832
<b>Deductions</b>	
Benefits and refunds paid to plan members and beneficiaries....	10,502,731
Reimbursements and transfers to other systems.....	244,310
Administrative expenses.....	383,802
Total deductions.....	11,130,843
Change in plan net position.....	48,703,989
Plan net position - beginning of year.....	302,160,993
Plan net position - end of year.....	\$ 350,864,982

**Additions to Plan Net Position**

The amount needed to finance benefits is accumulated through the collection of employer and member contributions, earnings on investments and reimbursements and transfers from other systems. These additions resulted in an increase to net position totaling \$59,834,832 during the year.

**Deductions from Plan Net Position**

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the System. Total deductions to net position for the year totaled \$11,130,843.

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
DECEMBER 31, 2012

**Overall Financial Position**

Due to a continuous improvement in the financial markets, the System has experienced an increase in its investment portfolio for the fiscal year ending December 31, 2012. Management believes the System is in a solid financial position and will be able to meet its obligations.

**Requests for Information**

This financial report is designed to provide the Board, our membership, taxpayers, investors, and creditors with a general overview of the System's financial results and to demonstrate the System's accountability for the funding it receives. If you have any questions about this report or need additional financial information, contact the Executive Director at 2 Griffin Way, Chelsea, Massachusetts 02150.

# *Basic Financial Statements*

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
STATEMENT OF PLAN NET POSITION  
DECEMBER 31, 2012

<b>Assets</b>	
Cash and cash equivalents.....	\$ <u>8,472,815</u>
Investments:	
Fixed income.....	103,778,595
Equities.....	135,872,611
Real estate.....	6,978,941
Alternative.....	67,207,613
PRIT (external investment pool).....	<u>28,826,620</u>
Total investments.....	<u>342,664,380</u>
Receivables:	
Accrued interest and dividends.....	115
Receivable for investments sold.....	<u>89,847</u>
Total receivables.....	<u>89,962</u>
Total plan assets.....	<u>351,227,157</u>
<b>Liabilities</b>	
Accounts payable and accrued expenses.....	301,193
Due to MWRA.....	<u>60,982</u>
Total plan liabilities.....	<u>362,175</u>
<b>Net position held in trust for pension benefits .....</b>	<b>\$ <u><u>350,864,982</u></u></b>

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

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
STATEMENT OF CHANGES IN PLAN NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2012

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**Additions:**

Contributions:	
Employer.....	\$ 12,341,893
Plan members.....	7,855,760
Reimbursements and transfers from other systems.....	<u>938,285</u>
Total contributions.....	<u>21,135,938</u>
Investment income (loss):	
Interest and dividends.....	7,237,330
Net realized and unrealized gains.....	33,365,351
Less: investment fees.....	<u>(1,903,787)</u>
Net investment income.....	<u>38,698,894</u>
Total additions.....	<u>59,834,832</u>

**Deductions:**

Benefits and refunds paid to plan members and beneficiaries.....	10,502,732
Reimbursements and transfers to other systems.....	244,309
Administrative expenses.....	<u>383,802</u>
Total deductions.....	<u>11,130,843</u>
Change in plan net position.....	48,703,989

Net position held in trust for pension benefits:

Beginning of year.....	<u>302,160,993</u>
<b>End of year.....</b>	<b><u>\$ 350,864,982</u></b>

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

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO THE FINANCIAL STATEMENTS  
DECEMBER 31, 2012

**NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**A. Reporting Entity**

The Massachusetts Water Resources Authority Employees' Retirement System (System) was established to provide pension benefits to Massachusetts Water Resources Authority (Authority or MWRA) employees and their beneficiaries. The System is governed by a five-member board comprised of the Secretary of the Authority's Board (ex-officio), two members elected by the System's participants, one member appointed by the Authority's Board and one member appointed by the System's Board members.

**B. Basis of Accounting**

The accompanying financial statements are presented on the accrual basis of accounting as prescribed by the Governmental Accounting Standards Board (GASB).

**C. Cash, Cash Equivalents and Investments**

Cash and cash equivalents is considered to be cash on hand, demand deposits and short-term investments with an original maturity of three months or less from the date of acquisition.

Investments are reported at fair value. Fair values of investments are based on quotations from a national securities exchange except for pooled funds, alternative and real estate investments, 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 are recorded at fair value as determined in good faith by the general partners of the venture capital firms after consideration of pertinent information, including current financial position and operating results, price-earnings multiples and available market prices of similar companies' securities, the nature of securities, marketability, restrictions on disposition and other appropriation and do not necessarily represent amounts which might ultimately be realized, since such amounts depend on future circumstances and cannot reasonably be determined until individual securities are liquidated.

Real Estate

The fair value of real estate funds is based on independent third-party appraisals. The investment managers of the funds are responsible for the reported value of those investments. However, because of the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the real estate existed, and the differences could be material.

**D. Basis of Investment Transactions**

Purchases and sales of investments are recorded on the trade date. Transactions remaining unsettled as of year-end are recorded as payables for securities purchased and as a receivable for securities sold.



MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO THE FINANCIAL STATEMENTS  
DECEMBER 31, 2012

**E. Revenue Recognition**

Contributions are recognized as additions in the period when they become due pursuant to formal commitments, statutory or contractual requirements. Investment income is recognized when earned.

**F. Benefits and Refunds**

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

**G. Administrative Expenses**

Administrative expenses are financed by investment income.

**H. Due to MWRA**

The MWRA pays the System's employees' weekly payroll. At December 31, 2012, \$60,982 is owed to MWRA from the System for these costs.

**I. 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 financial statements and the reported amounts of additions and deductions during the reporting period. Fair values of real estate funds and alternative investments have been estimated in the absence of readily available market values, and these estimates may be materially different than values that would have been used had a ready market existed.

**NOTE 2 - PLAN DESCRIPTION**

**A. General**

The System is a single employer public employee retirement system established by the Authority on July 1, 1985, under Massachusetts General Laws (MGL), Chapter 32, and is regulated by the Massachusetts Public Employee Retirement Administration Commission (PERAC). The System is a defined benefit pension plan that covers employees of the Authority.

Membership in the System is mandatory immediately upon the commencement of employment for all permanent full-time employees working at least 18.75 hours weekly.

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
 NOTES TO THE FINANCIAL STATEMENTS  
 DECEMBER 31, 2012

Membership in the System was as follows at December 31, 2012:

Active members.....	1,092
Inactive members.....	107
Disabled members.....	56
Retirees and beneficiaries currently receiving benefits.....	<u>340</u>
Total.....	<u><u>1,595</u></u>

**B. Significant Plan Provisions and Requirements**

Benefit provisions and state law establishes contribution requirements of the System. Members of the System become vested after 10 years of creditable service. Normal retirement occurs at age 65.

For employees hired prior to April 2, 2012, the annual amount of the retirement allowance is based on the member's final three-year average salary multiplied by (1) the number of years and full months of creditable service at the time of retirement and (2) a percentage based on age at retirement in accordance with a schedule provided by state law. Assuming normal retirement at age 65, this percentage is 2.5%, which is reduced for individuals who retire prior to age 65 to reflect the longer pay out period.

For employees hired on or after April 2, 2012, the annual amount of the retirement allowance is based on the member's final five-year average salary multiplied by (1) the number of years and full months of creditable service at the time of retirement and (2) a percentage based on age at retirement in accordance with a schedule provided by state law. Assuming normal retirement at age 67, this percentage is 2.5%.

Employees hired prior to April 2, 2012, may elect early retirement after 20 years of service or at any time after attaining age 55 with 10 years of eligible service. Plan members who become permanently and totally disabled may be eligible to receive a disability retirement allowance. The amount of benefits to be received depends on several factors, including the member's age, compensation, veteran status, years of service and whether or not the disability is work-related. In addition, certain death benefits exist for beneficiaries of employees who die in active service.

Under MGL, Chapter 32 Section 3(8)(c), members leaving the Authority's employment to work for other Massachusetts governmental units requires the System transfers their accumulated account balances and creditable service to the retirement system of their new employer. Other such retirement systems are in turn required to make comparable transfers to the System for employees coming to work at the Authority. Per statute, the PERAC actuary shall consider length of service as well as acceptance of military service credit and salary cap provisions if applicable in calculating the liability.

**NOTE 3 - DEPOSITS AND INVESTMENTS**

Deposits and investments made of the System are governed by Chapter 32 of the MGL. The System has the ability to invest in equity securities, corporate bonds, annuities and other specified investments in accordance with state laws and regulations.

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO THE FINANCIAL STATEMENTS  
DECEMBER 31, 2012

Deposits - Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the System's deposits may not be recovered. The System's policy for custodial credit risk of deposits is to rely on FDIC insurance. As of December 31, 2012, the System was not exposed to custodial credit risk.

Investments Summary

The System's investments at December 31, 2012 are presented below. All investments are presented by investment type, with debt securities presented by maturity.

Investment Type	Fair Value	Investment Maturities (in Years) <u>Less Than 1</u>
<u>Debt Securities:</u>		
Money market mutual funds.....	\$ 8,462,815	\$ 8,462,815
Fixed income securities.....	103,778,595	103,778,595
External investment pools.....	28,826,620	28,826,620
Total debt securities.....	141,068,030	\$ 141,068,030
<u>Other Investments:</u>		
Equity securities.....	135,872,611	
Real estate investments.....	6,978,941	
Alternative investments.....	67,207,613	
Total other investments.....	210,059,165	
Total investments.....	\$ 351,127,195	

Investments - Interest Rate Risk of Debt Securities

Interest rate risk for debt securities is the risk that changes in interest rates of debt securities will adversely affect the fair value of an investment. The System's policy for interest rate risk is the duration of the portfolio should be consistent with the appropriate indices. Unless otherwise agreed to, the duration of the portfolio must be within 25% of the appropriate benchmark.

Investments - Custodial Credit Risk

Custodial credit risk for investments 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 investments or collateral securities that are in the possession of an outside party. The System's policy for custodial credit risk of investments intends that all investments are either insured and/or registered in the name of the System. As of December 31, 2012, the System was not exposed to custodial credit risk.

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO THE FINANCIAL STATEMENTS  
DECEMBER 31, 2012

Investments - Credit Risk of Debt Securities

Credit risk for debt securities is the risk that an issuer or other counterparty to a debt security will not fulfill its obligations. The System's policies for credit risk of debt securities include the minimum quality rating at the time of purchase cannot be below a rating of CCC. Non-rated securities may comprise 10% of the portfolio, provided that the applicable manager determines that, if such an issue was rated, it would be allowed under the above limitation and that the non-rated issue is deemed to be below BAA (investment grade). Compliance with credit ratings provided by Moody's, Standard & Poor's and Fitch is not sufficient for an issue to be deemed an appropriate investment. The managers are responsible for making an independent analysis of the credit-worthiness of securities.

As of December 31, 2012, the credit quality ratings of the System's debt securities are unrated by the rating scale of Standard & Poors, a national credit rating organization.

Deposits and Investments - Foreign Currency Risk

Foreign currency risk is the risk that fluctuations in exchange rates will adversely affect the fair value of an investment or a deposit. The System does not have a policy regarding foreign currency risk. As of December 31, 2012, the System was not exposed to foreign currency risk

Investments - Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer. The System's policy for concentration of credit risk is that not more than 5% of the market value of the System's portfolio can be invested in the debt obligations of any one issuer, with the exception of securities issued by the U.S. Government, or its agencies, which may be held without limitation. As of December 31, 2012, the System was not exposed to concentration of credit risk.

**NOTE 4 - FUNDING POLICY**

Chapter 32 of the MGL governs the contributions of plan members and the Authority. Depending on their employment date, active System members must contribute anywhere between 5%-9% of their gross regular compensation. Members hired after December 31, 1978 must contribute an additional 2% of regular compensation in excess of \$30,000. These deductions earn interest at a rate determined by PERAC that vests based upon years of service. The Authority is required to pay into the System 100% of the actuarially determined contribution.

Cost-of-living adjustments (COLA's) must be granted by the Board and are the responsibility of the System. COLA may be approved in excess of the Consumer Price Index but not to exceed 3% of the base retirement allowance.

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO THE FINANCIAL STATEMENTS  
DECEMBER 31, 2012

The funded status of the System at January 1, 2013, the most recent actuarial valuation date, is as follows:

**Schedule of Funding Progress**

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) Entry Age (B)	Unfunded AAL (UAAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll (C)	UAAL as a Percentage of Covered Payroll ((B-A)/C)
01/01/13	\$ 341,515,023	\$ 385,296,073	\$ 43,781,050	88.6%	\$ 84,829,033	51.6%

The schedules of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, present multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the AAL for benefits.

The significant methods and assumptions of the latest actuarial valuation are as follows:

Valuation date:	January 1, 2013
Actuarial cost method:	Entry age normal
Amortization method:	4.50% increasing
Remaining amortization period:	11 years as of July 1, 2013
Asset valuation method:	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the expected return and the actuarial investment rate on a market value is recognized over a five-year period. The actuarial value of assets is adjusted, if necessary, to be within 10% of the market value.

Actuarial assumptions:

Investment rate of return:	8.00%
Projected salary increases:	Based on years of service, ranging from 7.00% decreasing to 4.75% after 9 year of service
Cost of living adjustments:	3.00% of first \$12,000 of retirement income

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
 NOTES TO THE FINANCIAL STATEMENTS  
 DECEMBER 31, 2012

**NOTE 5 - LEGALLY REQUIRED RESERVE ACCOUNTS**

The balances in the System's legally required reserves as of December 31, 2012 are as follows:

Description	Amount	Purpose
Annuity Savings Fund..	\$ 108,978,697	Active members' contribution balance
Annuity Reserve Fund..	18,201,178	Retired members' contribution account
Military Service Fund...	135,335	Members' contribution account while on military leave
Pension Reserve Fund...	183,927,344	Amounts appropriated to fund future retirement
Pension Fund.....	<u>39,622,428</u>	Remaining net assets
Total.....	<u>\$ 350,864,982</u>	

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

**NOTE 6 - COMMITMENTS**

As of December 31, 2012, the System had commitments totaling approximately \$32,000,000 to 24 private equity markets funds. Of the 24 funds in the System's private markets portfolio, 10 funds are in the investing stage, 11 funds are in the harvesting stage, and 3 funds are in the liquidation stage.

**NOTE 7 - FUTURE IMPLEMENTATION OF GASB PRONOUNCEMENTS**

In June of 2012, the GASB issued Statement No. 67, *Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25*, which is required to be implemented for periods beginning after June 15, 2013. Key changes required by the Statement include:

- Incorporating ad-hoc projected postemployment benefit changes, including COLA, into projections of benefit payments if the employer's past practice and future expectations of granting them are substantively automatic.
- Using a discount rate that reflects (1) the expected long-term rate of return on pension plan investments to projected benefit payments for which plan assets are expected to be available to make projected benefit payments and (2) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale), to the extent that the conditions in (1) are not met

The implementation of this Statement will also expand note disclosures and required supplementary information.

This pronouncement will be implemented in 2014.

This information is an integral part of the accompanying financial statements.

## *Required Supplementary Information*

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
 REQUIRED SUPPLEMENTARY INFORMATION  
 DECEMBER 31, 2012

The following reflects the Schedules of Funding Progress under the Entry-Age-Normal Actuarial Cost Method, which is the required method for all retirement systems governed by Chapter 32 of the MGL.

**Schedules of Funding Progress**

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Liability (AAL) Entry Age (B)	Unfunded AAL (UAAL) (B-A)	Funded Ratio (A/B)	Covered Payroll (C)	UAAL as a Percentage of Covered Payroll ((B-A)/C)
01/01/13	\$ 341,515,023	\$ 385,296,073	\$ 43,781,050	88.6%	\$ 84,829,033	51.6%
01/01/11	299,331,000	341,521,000	42,190,000	87.6%	82,870,000	50.9%
01/01/10	276,270,000	319,876,000	43,606,000	86.4%	81,962,000	53.2%
01/01/09	222,477,000	301,652,000	79,175,000	73.8%	82,314,000	96.2%
01/01/07	211,716,000	255,962,000	44,246,000	82.7%	75,444,000	58.6%
01/01/05	172,512,000	172,512,000	-	100.0%	65,790,000	0.0%

**Schedule of Employer Contributions**

Year Ended December 31	Annually Required Contribution (ARC)	Contribution	Percentage of ARC Contributed (%)
2007	\$ 4,233,329	\$ 4,205,152	99.33%
2008	5,314,218	15,188,791	285.81%
2009	5,586,768	5,450,496	97.56%
2010	5,342,856	8,136,240	152.28%
2011	5,488,792	5,488,792	100.00%
2012	5,750,085	12,326,022	214.36%



## *Supplementary Information*

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
SUPPLEMENTARY INFORMATION  
DECEMBER 31, 2012

**Schedule of Administrative Expenses**

The composition of administrative expenses for the year ended December 31, 2012 is as follows:

Personal services	
Salaries	<u>\$ 259,081</u>
Professional services	
Legal expenses	27,489
Medical expenses	136
Professional services	<u>6,064</u>
Total professional services	<u>33,689</u>
Other Expenses	
Fiduciary insurance	10,441
Service contracts	46,390
Education and training	3,790
Administrative expenses	17,810
Furniture and equipment	8,270
Travel	<u>4,330</u>
Total other expenses	<u>91,031</u>
Total Expenses	<u><u>\$ 383,802</u></u>

MASSACHUSETTS WATER RESOURCES AUTHORITY EMPLOYEES' RETIREMENT SYSTEM  
 SUPPLEMENTARY INFORMATION  
 DECEMBER 31, 2012

**Schedule of Investment and Consultants' Expenses**

Investment fund managers fees	
Total balanced allocation	
Prim Fund General Allocation	\$ 11,553
Wellington Opportunistic	125,560
Large cap domestic equity allocation	
Intech/Janus	102,401
MFS Institutional	116,690
Rhumblin Advisers	20,398
Small cap domestic equity	
Loomis Sayles & Co	65,643
Robeco	136,669
International equity	
Global Currents	9,143
The Boston Company	163,704
Fixed income allocation	
Invesco Core Bond	117,497
Loomis Sayles Fixed Income	326,397
Prim Hedge Fund	135,793
Real estate allocation	
Intercontinental Real Estate	21,611
Mesirow	20,846
Morgan Stanley	49,208
Prim Core Real Estate	34,252
Private equity allocation	
Ascent Venture V	530
Castile Ventures	30,000
Foundry Group 2007	46,546
Foundry Group 2010	65,822
Invesco Partnership	21,604
Prim Vintage Year 2008	29,973
Prim Vintage Year 2009	5,154
Prim Vintage Year 2010	11,805
Prim Vintage Year 2011	14,185
Prim Vintage Year 2012	2,172
Total investment fund managers' fees	<u>1,685,154</u>
Custodial fees	
State Street Bank	117,783
Investment consultant fees	
New England Pension Consultants	100,850
Total investment consultants' fees	<u><u>\$ 1,903,787</u></u>