Worcester Retirement System
Worcester, Massachusetts

(A Component Unit of the
City of Worcester, Massachusetts)

Comprehensive Annual Financial Report

Fiscal Year Ended December 31, 2004

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For the Fiscal Year Ended December 31, 2004

Prepared by the Staff of the
Worcester Retirement System

Table of Contents

Introductory Section:

Financial Section:

Investment Section:

Actuarial Section:

Statistical Section:

Introductory Section

Worcester Retirement System

Room 103 City Hall Worcester Massachusetts 01608 Phone (508) 799 1062

Chairman's Letter

June 3, 2005

Dear Members of the Worcester Retirement System:

On behalf of the Worcester Retirement Board (Board), I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Worcester Retirement System (WRS) for the year ended December 31, 2004. The report is designed to provide a detailed look at the financial, investment and actuarial aspects of the WRS.

This is the second year that the WRS has issued a CAFR. A comprehensive report is being issued in the interest of full disclosure to WRS members and to demonstrate the diligent stewardship and internal controls that are in place to protect assets and maintain financial integrity. Last year's report was awarded a Certificate of Achievement for Excellence in Financial Reporting making WRS one of only three retirement systems in New England to receive this prestigious award, a fact of which we are all very proud.

The only reason the WRS exists is to pay pensions. The Board typically meets at least twice a month. There is one meeting to discuss benefit issues and at least one other to discuss investment issues and conduct due diligence on those investments. It is the fiduciary responsibility of retirement board members to insure that current and future pensions will be paid. Therefore, safeguarding the WRS investment portfolio is a top priority. In that regard the WRS has a policy that incorporates an asset allocation with a 20 year time horizon that contains asset classes that involve investment risk to reap the rewards of stellar returns and diversify those assets to withstand the inevitable times when certain asset classes will experience sub-par returns. Last year, WRS further diversified by increasing its allocation to hard assets (timber) to 3-percent of the portfolio and plans to invest another 2-percent to absolute return strategies (hedge fund of funds) on July 1, 2005.

The last two years have seen a rebound in several asset classes. This rebound has come on the heels of the longest and most severe bear market in over 60 years, which occurred during the three previous years. These stellar returns have accommodated both an increase in the WRS's funded ratio and return to asset values that are stated at market rather than actuarial value.

In the three previous years the funding scheme approved by the Board involved asset smoothing and therefore stated assets at actuarial rather than market values. This funding scheme accommodated the City by reducing its legally required annual contribution to the WRS during a time when local aid was drastically reduced and the City was on the verge of a fiscal crisis. The WRS and the City were both rewarded for this patience by the fact that by so doing the City was able to avoid what would have been unnecessary layoffs and members of the WRS were able to avoid personal turmoil. Further, in 2000 the WRS and the City agreed that the annual contribution would all be made on July 1 instead of being prorated on a monthly basis. This strategy has reduced the annual assessment to the City since then and will reduce the assessment by $944,000 in fiscal 2006 alone. These policies were implemented so that the City would be able to achieve cost savings and avoid budget volatility while at same time providing responsible funding to the WRS.

I would like to thank the other members of the Board for their diligence on retirement matters, the Board's investment consultant, actuary and independent auditors for assistance with the preparation of this report and advice on other matters. I would also like to thank the Board's legal representatives for their counsel and the Public Employee Retirement Administration Commission for their oversight of our actions.

Finally, I would like to commend the staff of the WRS for their diligent work in preparing this report and their commitment to continually improve administrative operations. I encourage members to carefully review this report, as it contains a wealth of information about your retirement system.

Sincerely,

James DelSignore, CPA
Chairman

Worcester Retirement System

Room 103 City Hall Worcester Massachusetts 01608 Phone (508) 799 1062

June 3, 2005

Worcester Retirement Board
City Hall Room 103
455 Main Street
Worcester, MA 01608

Dear Mr. Chairman and Members of the Board:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the Worcester Retirement System (WRS) for the year ended December 31, 2004. The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the WRS for its CAFR for the year ended December 31, 2003. This was the first year that the WRS has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the WRS must publish an easily readable and efficiently organized CAFR. This report must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements. Management accepts responsibility for the contents of the report.

A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Report Structure

This CAFR is presented in five sections as follows:

Introductory Section, which contains this letter of transmittal, information on the administrative organization, and a letter from the Chairman of the Board.

Financial Section, which contains the report of the Independent Auditors, Management's Discussion & Analysis (MD&A), the basic financial statements of the WRS, related notes and disclosures, required supplementary information, and other supplementary information.

Investment Section, which contains an investment report prepared by the investment consultant, investment policies, investment results, broker fees and schedules.

Actuarial Section, which contains the independent actuary's certification, results of the annual actuarial valuation, and an outline of actuarial assumptions.

Statistical Section, which contains significant data pertaining to the WRS.

History of the WRS

The Commonwealth of Massachusetts Commissioner of Insurance, Charles J. Harrington, issued a certificate declaring the establishment of a contributory retirement system on June 12, 1944 after the City Council approved acceptance of Chapter 32 section 31 (I) of the General Laws and the Mayor approved acceptance of sections 26 to 31 (H) inclusive with amendments.

The WRS became operative as of January 1, 1945. The WRS is a contributory defined benefit plan that covers eligible employees of the City of Worcester (except Worcester Public School teachers) and the Worcester Housing Authority (WHA). The WRS is administered by a five member Board consisting of the City Auditor, two representatives elected from the membership, a City Manager representative and a fifth member chosen by the other four who cannot be an employee, retiree or official of the City. One of these five board members is elected by the other four to serve as Chairman.

Major Initiatives

Benefits

A cost of living adjustment (COLA) was provided for retirees and survivors effective July 1, 2004. The 3% COLA was paid on a base of $12,000 (maximum $360), the most allowed by law. The WRS has granted the maximum increase every year since enactment of the legislation in 1997.

In November 2004 the city council also approved funding, an increase under Chapter 32 Section 90 A and C, for public safety retirees (police and fire) effective January 1, 2005. The increase was granted to public safety retirees with an annual pension less than $25,000. The maximum annual increase allowed by this vote was $2,000 per retiree.

Administration

The WRS strives to provide quality service and information to active and retired members and their beneficiaries. To assist in this effort, we have maintained and continually update our Internet site through the City web page, which includes our CAFR, at www.ci.worcester.ma.us/ret.

Internal and Budgetary Controls

The WRS management is responsible for maintaining a system of internal controls designed to provide reasonable assurance that the financial statements are fairly stated in accordance with accounting principles generally accepted in the United States of America while adequately safeguarding the assets. We believe the current internal controls accomplish this goal.

The WRS budget is presented to and approved by the board each year. All the expenditures are reviewed by the board at its monthly meeting.

Accounting

This report has been prepared in accordance with accounting principals generally accepted in the United States of America. The basic financial statements are presented in accordance with the principles of the Government Accounting Standards Board (GASB), including guidelines established by GASB Statements No. 25, *Financial reporting for defined benefit plans*; No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*; No. 37, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments: Omnibus*, No. 38, *Certain Financial Statement Note Disclosures*; and No. 40 *Deposit and Investment Risk Disclosures (an amendment of GASB No. 3).*

Sullivan, Rogers & Company, LLC, a firm of licensed certified public accountants, performed the audit for the WRS. The goal of the independent audit is to provide reasonable assurance that the financial statements for the year ended December 31, 2004 are free of material misstatements. The report of the independent auditors is included in the Financial Section of this report. Sullivan, Rogers & Company, LLC has issued an unqualified opinion on the WRS's basic financial statements for the year ended December 31, 2004.

GASB Statement No. 34 requires that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to compliment the MD&A and should be read in conjunction with it. The WRS's MD&A can be found immediately following the report of the independent auditor.

Asset Allocation

An integral part of the overall investment policy is the asset allocation policy. This is designed to provide an optimal mix of asset classes to both preserve principal and provide adequate funds to pay pension benefits. Both traditional assets (cash, bonds, domestic stocks, domestic fixed income and mortgages) and nontraditional assets (real estate, international stock and fixed income, venture capital, mezzanine financing, timber and leveraged buyouts) are part of the mix. For the year ended December 31, 2004 the WRS had an investment return of 12.1%.

Please refer to the Investment Report in the Investment Section for additional performance information.

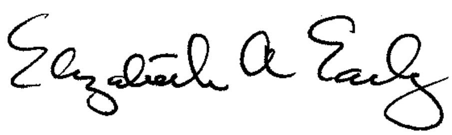
Actuarial Funding

The WRS has retained the services of The Segal Company, an independent actuarial firm, to conduct an annual actuarial valuation of the WRS. The funded ratio is one measure of the financial condition of the WRS. The funded ratio is calculated by dividing the net assets of the WRS by the projected pension liability. The projected pension liability is a measure of the present value of total pension benefits estimated to be payable in the future to both current and future retirees and/or beneficiaries. A higher funding ratio gives the members a greater degree of assurance that their pension benefits are secure. As of January 1, 2005 the funded ratio of the WRS was calculated at 78.52%, a slight increase from the prior year.

Acknowledgements

The publication of this report represents the combined efforts of the WRS Board, staff, Sullivan, Rogers & Company, LLC and consultants. We are proud to present this report to our members. We feel it is important to provide a CAFR for our members and other interested parties to follow the progress of the WRS.

Respectfully submitted,



Elizabeth A. Early
Executive Secretary

Retirement Board Members

		Terms
James DelSignore	Ex-Officio Member	N/A
Stephen F. Wentzell	City Manager Appointee	Indefinite
Elizabeth A. Early	Elected Member	11/01/2004 -10/31/2007
Raymond F. McGrath	Elected Member	01/01/2003 -12/31/2005
Thomas Wade	Appointed Member	01/10/2003 -01/09/2006

Administrative Staff

Elizabeth A. Early	Executive Secretary
Judith McMillen	Executive Assistant
Donald McLaren	Principal Accountant
Kim Laino	Retirement Analyst
Barbara Zecco	Head Clerk
Eileen Powers	Principal Clerk

Organizational Chart

Worcester Retirement Board

Executive Secretary

Executive Assistant

Principal Accountant | Retirement Analyst | Head Clerk | Principal Clerk

CONSULTANTS AND PROFESSIONAL SERVICES

DOMESTIC EQUITY MANAGERS

The Boston Company Asset Management, LLC
Boston, MA

Columbia Management Advisors, Inc.
Hartford, CT

Hutchens Investment Management, Inc.
New London, NH

Enhanced Investment Technologies, LLC
Palm Beach Gardens, FL

Loomis Sayles & Company, L.P.
Boston, MA

State Street Global Advisors
Boston, MA

DOMESTIC FIXED MANAGERS

OPUS Investment Management, Inc.
Worcester, MA

Loomis Sayles & Company, L.P.
Boston, MA

Merrill Lynch, Pierce, Fenner & Smith
Worcester, MA

The Northern Trust Company
Chicago, IL

INTERNATIONAL EQUITY MANAGERS

The Boston Company Asset Management, LLC
Boston, MA

Bank of Ireland Asset Management
Greenwich, CT

State Street Global Advisors
Boston, MA

ALTERNATIVE CAPITAL INVESTMENT MANAGERS

Ascent Venture Management
Boston, MA

Boston Capital Ventures
Boston, MA

Boston Millennia Partners
Boston, MA

Charlesbank Capital Partners
Boston, MA

Concord Partners L.P.
Wellesley, MA

Duke Street Capital
London, England

Invesco Private Capital, Inc.
New York, NY

New England Partners Capital L.P.
Boston, MA

Northstar Capital, LLC
Minneapolis, MN

Standard Life Investments Limited
Edinburgh, EH2 2LL

The Riverside Company
New York, NY

REAL ESTATE MANAGERS

Bailard Fund Services, Inc.
Foster City, CA

Heitman Investment Management
Chicago, IL

Intercontinental Real Estate Corp.
Boston, MA

L&B Realty Advisors, Inc.
Dallas, TX

RMK Timberland a div. of Regions Bank
Winston-Salem, NC

SSR Realty Advisors, Inc.
San Francisco, CA

VEF Advisors, LLC
New York, NY

LEGAL ADVISORS

Kirkpatrick & Lockhart Nicholson Graham, LLP
Boston, MA

INDEPENDENT AUDITORS

Sullivan, Rogers & Company, LLC
Burlington, MA

INVESTMENT ADVISORS

Meketa Investment Group
Braintree, MA

ACTUARIAL CONSULTANT

The Segal Company
Boston, MA

CUSTODIAN

Investors Bank & Trust Company
Boston, MA

COMMISSION RECAPTURE BROKERS

Donaldson & Company
Atlanta, GA

Lynch, Jones & Ryan, Inc.
New York, NY

SECURITIES LENDING

UBS Securities, LLC
Boston, MA

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Worcester Retirement System, Massachusetts

For its Comprehensive Annual Financial Report for the Fiscal Year Ended December 31, 2003

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

President

Executive Director

Financial Section

Independent Auditors' Report

To the Honorable Retirement Board
Worcester Retirement System

We have audited the accompanying basic financial statements of the Worcester Retirement System (WRS), a component unit of the City of Worcester, Massachusetts, as of and for the year ended December 31, 2004, as listed in the table of contents. These financial statements are the responsibility of the WRS's management. Our responsibility is to express an opinion on these financial statements based on our audit. The basic financial statements of the WRS as of December 31, 2003, were audited by other auditors whose report dated June 11, 2004, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the WRS as of December 31, 2004, and the respective changes in financial position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated May 25, 2005, on our consideration of the WRS'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 and should be considered in conjunction with this report in considering the results of our audit.

The management's discussion and analysis (located on pages 14 through 19) and historical pension information (located on pages 30 through 31) are not a required part of the basic financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the WRS's basic financial statements. The supplementary information, introductory section, investment section, actuarial section, and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. The supplementary information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

Sullivan, Reeves & Company, LLC

May 25, 2005

Management's Discussion & Analysis

Our discussion and analysis of the Worcester Retirement System's (WRS) financial performance provides an overview of the WRS's financial activities for the fiscal year ended December 31, 2004. Please read it in conjunction with the transmittal letter in the Introductory Section, at the front of this report and the basic financial statements that follow this discussion. The Management's Discussion and Analysis (MD&A) is intended to serve as an introduction to the WRS's basic financial statements, as well as to offer readers of the WRS's financial statements a narrative view and analysis of the WRS's financial activities.

Financial Highlights

The WRS's funding objective is to meet long-term benefit obligations through contributions and investment income. As of December 31, 2004, the funded ratio was 78.52% based on the market value of assets at that date.

Net assets increased during the year by $47.6 million, or 8.5%, because of strong investment returns. Net assets are the residual of the WRS's assets in excess of the WRS's liabilities as of the statement date. The WRS's assets are held in trust to meet future benefit payments.

Total investment gains were $66.5 million. The investment rate of return was 12.1% compared with a positive return of 25.5% in the previous year (refer to the "Investment Results" table in the Investment Section).

Overview of the Financial Statements

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

The ***Statement of Plan Net Assets*** presents information on the WRS's assets and liabilities and the resulting net assets held in trust for pension benefits. This is calculated using the following formula: Assets – Liabilities = Net Assets held in trust for pension benefits. This statement reflects the WRS's investments at fair value, as well as cash, receivables and other assets and liabilities. The Statement of Plan Net Assets reports the financial position of the WRS at December 31, 2004. Over time, the increase or decrease in net assets serves as a useful indicator of the WRS's financial health.

The ***Statement of Changes in Plan Net Assets*** presents information showing how the WRS's net assets held in trust for pension benefits changed during the year ended December 31, 2004. It reflects contributions by members and participating employers along with deductions for retirement benefits, refunds, and withdrawals, and administrative expenses. Investment income during the period is also presented showing income from investing and securities lending activities.

Management's Discussion & Analysis

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 this MD&A and schedules of funding progress and employers' contributions.

Financial Analysis

The WRS's total assets as of December 31, 2004 were $628 million and were primarily comprised of cash and cash equivalents, receivables, and investments. Total assets increased $60.5 million, or 10.7%, from the prior year primarily due to investment gains.

Total liabilities as of December 31, 2004 were $21.9 million and were primarily comprised of payables for securities purchased as well as payables to other state retirement plans and collateral held under securities lending arrangements. Total liabilities increased by $12.9 million, or 143%, over the period.

The following tables present current and prior year data on the WRS's financial statements.

Management's Discussion & Analysis

Net Assets

Net assets of the WRS totaled $606.1 million at the close of the fiscal year and are summarized as follows:

Plan Net Assets
(In thousands of dollars)

Assets		2004		2003
Cash	$	10,057	$	7,941
Investments		595,736		551,525
Securities lending short-term collateral investment pool		18,860		5,254
Receivables:				
Interest due and accrued		1,259		1,146
Due from Commonwealth of Mass and other systems		2,039		325
Receivable for securities sold		-		1,336
Other		83		-
Total assets		628,034		567,527
Liabilities				
Accounts payable and accrued expenses		555		519
Due to Commonwealth of Massachusetts and other systems		1,849		1,560
Payable for securities purchased		670		1,678
Collateral held on securities lending transactions		18,860		5,253
Total liabilities		21,934		9,010
Net assets held in trust for pension benefits	$	606,100	$	558,517

Management's Discussion & Analysis

Changes in Net Assets

The WRS's total net assets increased by $47.6 million during the current fiscal year and are summarized as follows:

Changes in Net Assets

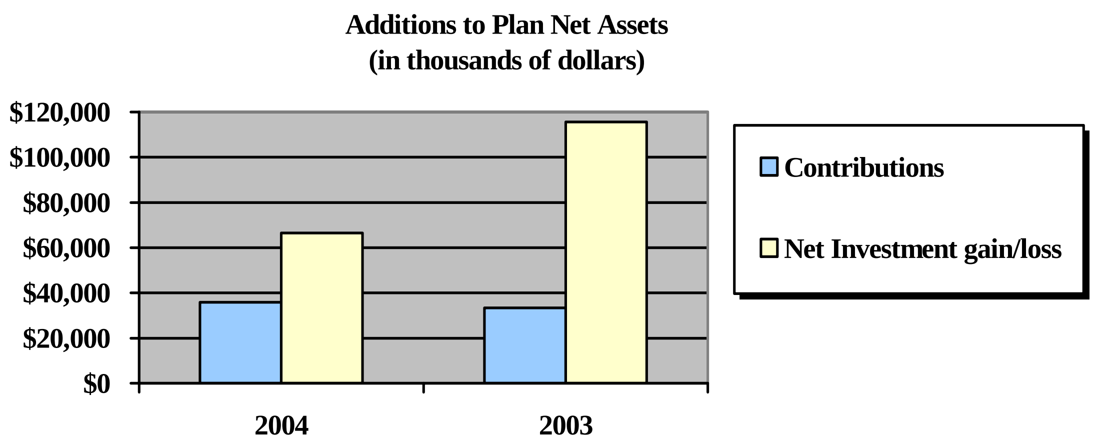
(in thousands of dollars)

		2004		2003
Additions				
Contributions:				
Employers	$	20,150	$	18,928
Employees		12,187		11,692
Reimbursements from Commonwealth of Massachusetts		3,141		2,458
Reimbursements from other Systems		390		325
Net investment income:				
Interest and dividends		9,861		10,786
Securities lending income		296		70
Net realized and unrealized gains (losses)		60,029		107,885
Less: management fees		(3,457)		(3,068)
Less: borrower rebates & fees		(274)		(58)
Total additions		102,323		149,018
Deductions				
Benefits payments to plan members and beneficiaries		50,517		47,849
Reimbursements to other systems		1,873		1,559
Refunds and transfers of plan member accounts to other systems		1,832		2,307
Administrative expenses		518		440
Total deductions		54,740		52,155
Net increase in plan net assets		47,583		96,863
Net assets held in trust for pension benefits:				
Beginning of year		558,517		461,654
End of year	$	606,100	$	558,517

Management's Discussion & Analysis

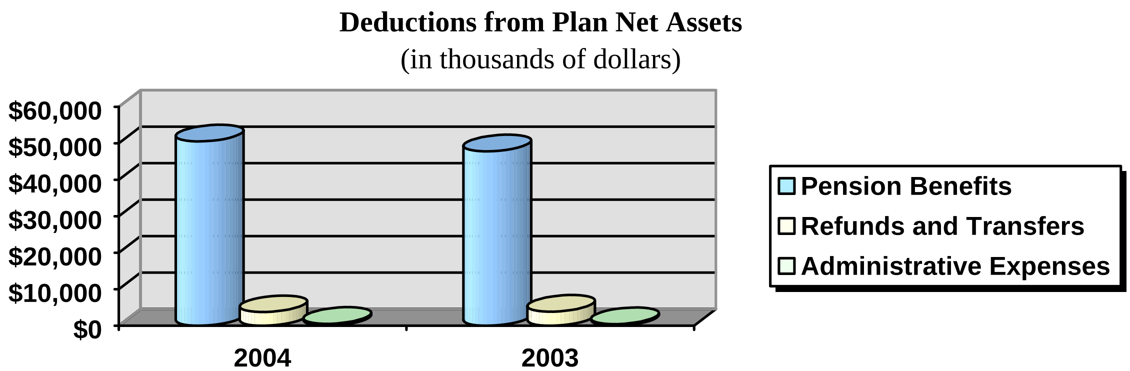
Additions to Plan Net Assets

The amount needed to finance benefits is accumulated through the collection of employers' and employees' contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA's and through earnings on investments. Contributions and net investment gain for calendar year 2004 resulted in a net increase of $102.3 million. Employers' contributions increased by $1.3 million in 2004. The WRS had a net investment gain of $66.5 million in 2004 versus a gain of $115.6 million in 2003.



Deductions from Plan Net Assets

The primary deductions of the WRS include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the WRS. Total deductions for 2004 were $54.7 million, which represents an increase of 4.8% over deductions of $52.2 million in 2003. The payment of pension benefits increased by $2.7 million, or 5.6%, over the previous year. The increase in these expenses resulted from an increase in benefit payments to newer retirees with higher average compensation offset by a slight decrease in the number of pensioners and beneficiaries (2,996 in 2003 versus 2,964 in 2004).



Management's Discussion & Analysis

Overall Financial Position of WRS

Due to a continuous improvement in the financial markets, the WRS has experienced an increase in its investment portfolio for the fiscal year ending December 31, 2004. Management believes the WRS is in a solid financial position and will be able to meet its obligations.

Contacting WRS's Financial Management

This financial report is designed to provide the Retirement Board, our membership, taxpayers, investors, and creditors with a general overview of the WRS's financial results and to demonstrate WRS's accountability for the funding it receives. If you have any questions about this report or need additional financial information, contact the Worcester Retirement System, City Hall Room 103, 455 Main Street, Worcester, Massachusetts 01608.

Statement of Plan Net Assets

December 31, 2004

Assets		
Cash & Cash Equivalents	$	10,057,275
Investments:		
Equities		249,236,483
Fixed Income		95,134,334
Pooled Equities		113,711,946
Pooled Fixed Income		57,939,203
Real Estate		52,479,214
Alternative Investments		27,234,799
Total investments		595,735,979
Securities lending short-term collateral investment pool		18,859,680
Receivables:		
Accrued interest and dividends		1,258,943
Due from Commonwealth of Massachusetts and other systems		2,038,988
Other receivables		82,830
Total receivables		3,380,761
Total plan assets		628,033,695
Liabilities		
Accounts payable and accrued expenses		555,235
Due to Commonwealth of Massachusetts and other systems		1,849,210
Payable for securities purchased		669,954
Collateral held on securities lending transactions		18,859,680
Total plan liabilities		21,934,079
Net assets held in trust for pension benefits		
(see schedule of funding progress on page 30)	$	606,099,616

See accompanying notes to financial statements.

Statement of Changes in Plan Net Assets

Year ended December 31, 2004

Additions:		
Contributions:		
Employers	$	20,150,377
Employees		12,187,208
Reimbursements from Commonwealth of Massachusetts		3,141,385
Reimbursements from other systems		389,308
Total contributions		35,868,278
Investment income (loss):		
Interest and dividends		9,860,787
Securities lending income		296,238
Net realized and unrealized gains		60,028,442
Less: management fees		(3,457,022)
Less: borrower rebates and fees under securities lending program		(273,505)
Net investment income		66,454,940
Total additions		102,323,218
Deductions:		
Benefit payments to plan members and beneficiaries		50,517,094
Reimbursements to other systems		1,872,944
Refunds and transfers of plan member accounts to other systems		1,831,964
Administrative expenses		518,078
Total deductions		54,740,080
Change in plan net assets		47,583,138
Net assets held in trust for pension benefits:		
Beginning of year		558,516,478
End of year	$	606,099,616

See accompanying notes to financial statements.

Notes to Financial Statements
December 31, 2004

1. _Summary of Significant Accounting Policies

(a) Financial Reporting Entity

Because of the significance of its operational and financial relationship with the City of Worcester, Massachusetts (City), the Worcester Retirement System (WRS) is included as a blended component unit in the City's financial statements.

(b) Basis of Accounting

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

(c) Revenue Recognition

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

(d) Benefits and Refunds

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

(e) Cash and Investments

Cash 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, venture capital 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.

Venture Capital

Venture capital 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.

(f) 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.

(g) 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 venture capital funds 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.

2. Plan Description

(a) General

The WRS is a cost-sharing multiple-employer public employee retirement system established by the City on June 12, 1944, under Chapter 32 of the Massachusetts General Laws (MGL) and is regulated by the Massachusetts Public Employee Retirement Administration Commission (PERAC). The WRS is a defined benefit pension plan that covers certain eligible employees of the City and the Worcester Housing Authority.

Membership in the WRS is mandatory immediately upon the commencement of employment for all permanent full-time employees working at least 20 hours weekly, except for City schoolteachers, who participate in the Massachusetts Teachers' Retirement System.

Membership in the WRS was as follows at December 31, 2004:

Active employees	3,498
Pensioners and beneficiaries	2,964
Inactive employees with vested rights	1,017
Total members	7,479
Number of participating employers	2

The WRS is administered by a five-person Retirement Board (the Board) consisting of the City Auditor, who serves *ex-officio*; two members who are elected by the participants in or retired from the service of the WRS; a fourth member appointed by the City Manager; and a fifth member appointed by the other members.

(b) Significant Plan Provisions and Requirements

Benefit provisions and state law establishes contribution requirements of the WRS. Members of the WRS become vested after 10 years of creditable service. Normal retirement occurs at age 65 except for employees of the City's Police and Fire departments, whose normal retirement age is 55. Retired employees receive an allowance based upon the average of their three highest average salary years of service 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.

Employees 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 Chapter 32 Section 3(8)(c), of the MGL, the WRS is reimbursed for benefits paid to eligible participants with previous service in other Chapter 32 plans. Conversely, the WRS is obligated to pay a proportionate share of benefits for participants entitled to benefits for subsequent participation in other Massachusetts Municipal plans.

Also under Chapter 32 of the MGL, for members leaving the City's employment to work for other Massachusetts governmental units, the WRS 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 WRS for employees coming to work for the City or the Worcester Housing Authority.

3. Deposits and Investments

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

Deposits - Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the WRS's deposits may not be recovered. The WRS's policy for custodial credit risk of deposits is to rely on FDIC insurance coverage for the first $100,000 of deposits held at each financial institution. As of December 31, 2004, $582,023 of the WRS's bank balance of $688,413 was uninsured and uncollateralized.

Investments Summary

The WRS's investments at December 31, 2004 are presented below. All investments are presented by investment type, with debt securities presented by maturity.

		Investment Maturities (in Years)			
Investment Type	Fair Value	Less Than 1	1 - 5	6 - 10	More Than 10
Debt Securities:					
U.S. Treasuries..................	$ 34,038,608	$ 149,895	$ 7,557,070	$ 15,844,691	$ 10,486,952
U.S. Agencies....................	15,699,613	846,770	2,356,760	270,832	12,225,251
Corporate bonds.................	46,242,883	654,394	7,584,009	24,155,814	13,848,666
Money market mutual funds...	41,307,385	41,307,385	-	-	-
Mutual bond funds.............	25,780,410	25,780,410	-	-	-
Total debt securities...........	163,068,899	$ 68,738,854	$ 17,497,839	$ 40,271,337	$ 36,560,869
Other Investments:					
Equity securities.................	144,176,722				
Equity mutual funds.............	218,771,707				
Real estate investments.........	52,479,214				
Alternative investments........	27,234,798				
Total other investments.......	442,662,441				
Total investments................	$ 605,731,340				

Investments (Debt Securities) - Interest Rate Risk

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 WRS's policies for interest rate risk intend that the average duration of investments remain fairly stable over time and be focused in the intermediate range. The WRS's debt security managers are not permitted to make large-scale changes in portfolio duration in an attempt to anticipate interest rate changes. However, they are permitted to shift portfolio duration within a limited range (defined by their guidelines) in an effort to enhance performance.

Investments - Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the WRS will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The WRS's policy for custodial credit risk of investments intends that all investments are either insured and/or registered in the name of the WRS. As of December 31, 2004, none of the WRS's investments were subject to custodial credit risk.

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 WRS's policies for credit risk of debt securities sets minimum average quality requirements for investment strategies employed, among other limitations. In monitoring credit risk, the WRS relies on credit ratings assigned by Moody's and Standard & Poor's. As of December 31, 2004, the credit quality ratings of the WRS's debt securities are as follows:

Quality Ratings	Corporate Bonds	Money Market Mutual Funds	Mutual Bond Funds	Total
	Fair Value			
AAA	$ 11,502,352	$ -	$ 10,512,137	$ 22,014,489
AA	2,300,466	-	727,005	3,027,471
A	4,817,041	-	2,469,755	7,286,796
Baa	-	-	2,276,402	2,276,402
BBB	10,012,308	-	575,475	10,587,783
BB	9,124,163	-	3,888,592	13,012,755
B	6,619,751	-	3,171,614	9,791,365
CCC	1,214,325	-	418,422	1,632,747
Unrated	652,477	41,307,385	1,741,008	43,700,870
Total	$ 46,242,883	$ 41,307,385	$ 25,780,410	$ 113,330,678

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 WRS's policy is to limit investments in non-U.S. dollar-denominated securities to not exceed 10% of the total market value of investments at all times. As of June 30, 2005, the WRS's exposure to foreign currency risk is as follows:

Deposit/Investment Type	U.S. Dollar Balances	Currency
U.S. Agencies	$ 674,706	Singapore dollar
Corporate bonds	1,127,918	British pound sterling
Corporate bonds	1,115,022	Mexican peso
Corporate bonds	613,291	Singapore dollar
Corporate bonds	246,535	Canadian dollar
Corporate bonds	31,773	Colombian peso
Alternative investments	7,355,710	Euro
Total	$ 11,164,955	

Investments – Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the WRS's investment in a single issuer. The WRS's policy for concentration of credit risk instructs investment managers not to invest more than 5% of their portfolio at market value in a single security, or in the securities of a single issuer or its subsidiaries. Obligations of the U.S. Treasury, U.S. government agencies and money market funds are exempted from this restriction. As of June 30, 2005, the WRS's investments with a single issuer that represent 5 percent or more of the WRS's total investments are as follows:

Issuer	Fair Value	Percentage of Total Investments
SSGA S&P 500 Flagship SL Provisional Fund………………….	$ 70,571,354	11.7%
Boston Co. Int. ACWI Equity Fund…………………………….	62,779,009	10.4%
Boston Co. Premier Value Equity Daily Pooled Fund…………..	43,140,592	7.1%
SSGA MSCI EAFE Index Fund……………………...…………	42,280,753	7.0%
Bailard Fund Services, Inc.…………...…………………………	35,695,566	5.9%
Merrill Lynch RET PRES Trust Fund……………….…………..	32,158,794	5.3%

4. Securities Lending Transactions

PERAC has issued supplemental regulations that permit the WRS to engage in securities lending transactions. These transactions are conducted by the WRS's custodian, who lends certain securities owned by the WRS to other broker-dealers and banks pursuant to a form of loan agreement. The WRS and the borrowers maintain the right to terminate all securities lending transaction on demand.

The custodian lends, at the direction of the lending agent, the WRS's securities and cash received (including both U.S. and foreign currency), U.S. government securities, sovereign debt of foreign countries, and irrevocable bank letters of credit as collateral. The custodian does not have the ability to pledge or sell collateral unless the borrower defaults. Borrowers are required to deliver cash collateral in amounts equal to not less than 105% of the market value of foreign securities on loan and 102% of the market value of domestic securities on loan (Required Collateral Level). If at any time the market value of the collateral for any loan decreases to 100% or less of the market value of the loaned securities, borrowers are required to provide additional collateral sufficient to increase the market value of the collateral to at least the Required Collateral Level.

The WRS 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, nor were there any losses from default of the borrowers or the custodian for the year ended December 31, 2004. The cash collateral received 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 WRS could not determine. At December 31, 2004, the WRS had no credit risk exposure to borrowers because the amounts the WRS owed the borrowers exceeded the amounts owed the WRS. The cash collateral held and the fair value of the securities on loan for the WRS at December 31, 2004 and 2003 was $18,859,680 and $18,814,108, and $5,253,730 and $5,026,204, respectively. Borrower rebates and fees paid to the broker were $273,505 for the year ended December 31, 2004.

5. Funding Policy

Depending on their employment date, active System members must contribute 5%, 7%, 8% or 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. Administrative costs are financed from investment income.

Except for a portion of benefits owed due to cost-of-living adjustments granted through June 30, 1998, member employers are required to contribute the remaining amounts necessary to finance benefits. Member employer contributions are determined by the annual actuarial valuation.

COLA's granted through June 30, 1998 are reimbursed by the Commonwealth of Massachusetts (the Commonwealth). COLA's granted subsequent to June 30, 1998 must be granted by the Board and are the responsibility of the WRS. The WRS has granted the maximum increase every year since June 30, 1998.

6. Legally Required Reserve Accounts

The balances in the WRS' legally required reserves as of December 31, 2004 are as follows:

Description	Amount	Purpose
Annuity Savings Fund	$122,748,771	Active members' contribution balance
Annuity Reserve Fund	49,481,573	Retired members' contribution account
Military Service Fund	16,937	Members' contribution account while on military leave
Pension Reserve Fund	310,651,479	Amounts appropriated to fund future retirement
Pension Fund	123,200,856	Remaining net assets
Total	$606,099,616	

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

Required Supplementary Information

The following reflects the Schedule 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. The WRS believes that this method of valuation more clearly reflects the actual funding status of the WRS.

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Plan Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Annual Covered Payroll	UAAL as a Percent of Annual Covered Payroll
	(a)	(b)	(b - a)	(a/b)	(c)	(b -a)/c
1/1/2000	614,894,920	598,179,134	(16,715,786)	102.79	130,376,689	(12.82)
1/1/2001	630,714,618	628,681,483	(2,033,135)	100.32	136,000,517	(1.49)
1/1/2002	620,814,307	671,876,943	51,062,636	92.40	148,764,543	34.32
1/1/2003	554,190,090	715,855,564	161,665,474	77.42	142,802,508	113.21
1/1/2004	577,123,067	743,570,440	166,447,373	77.62	138,796,895	119.92
1/1/2005	606,099,616	771,948,311	165,848,695	78.52	147,126,606	112.73

Schedule of Employer Contributions

Year Ended December 31	Annual Required Contributions	Percentage of Annual Required Contributed
1999	$ 8,205,319	100%
2000	8,280,410	100
2001	9,480,000	100
2002	12,956,778	100
2003	18,928,252	100
2004	20,150,377	100

Notes to Required Supplementary Information
December 31, 2004

Valuation Date	January 1, 2005
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Payments increase 1.50% per year on the 2002 ERI liability, level payments on the 2003 ERI liability and the Section 90 ACD liability, and 4.50% on the remaining unfunded liability
Remaining amortized period	The remaining effective amortization period is 16 years and the period is closed
Asset valuation method	Sum of actuarial value at beginning of the year, contributions and investments earnings based on the actuarial interest assumption less benefit payments and operating expenses plus 20% of market value at end of year in excess of that sum, plus additional adjustment toward market value as necessary so that final actuarial value is within 20% of market value. Similar formula used for negative adjustment toward market value if actuarial value exceeds market value.

Actuarial assumptions:

Investment rate of return	8.50%
Projected salary increases	5.00%
Rate of Inflation	4.00%
Cost of living adjustments	3.00% for the first $12,000 of retirement income.

Supplementary Information

Schedule of Administrative Expenses

The composition of administrative expenses for the year ended December 31, 2004 is as follows:

Personal Services:	
Staff Salaries	$ 304,712
Board Member Compensation	15,000
Insurance	29,484
Total Personal Services	349,196
Professional Services:	
Legal Expenses	95,859
Actuarial Fees	22,500
Audit Fees	25,550
Computer Consultant Fees	300
Medical Fees	235
Total Professional Services	144,444
Miscellaneous:	
Travel	7,372
Printing	2,610
Administrative Expenses	14,456
Total Miscellaneous	24,438
Total Administrative Expenses	$ 518,078

Schedule of Investment and Consultants' Expenses

Investment Expenses	
Management Fees:	
Domestic & Equity Managers	$ 1,072,123
Venture Capital Funds	671,105
Domestic Fixed Income Managers	265,533
International Investments Managers	537,870
Real Estate Investments Managers	457,213
Consultant Fees	128,897
Custodial Fees	324,281
	3,457,022
Securities Lending Fees:	
Borrowers Rebates	263,786
Fees	9,719
	273,505
Total Investment Expenses	$3,730,527
Consultant Expenses:	
Independent Audit Fees	$25,550
Actuarial Fees	22,500
Legal Fees	95,859
	$143,909

Investment Section

Report on Investment Activity

The information contained in the Investment Section of the Comprehensive Annual Financial Report (CAFR) has been prepared by Meketa Investment Group, acting as the investment consultant for the Worcester Retirement System (WRS). All investment information herein has been reconciled between the WRS, the investment managers hired by the WRS, and Meketa Investment Group. The investment returns presented herein were calculated in a manner consistent with that specified in the Association for Investment Management and Research (AIMR) presentation standards.

Outline of Investment Policies

The purpose of this document is to set forth the goals and objectives of the WRS, and to establish guidelines for the implementation of investment strategy.

The Board of the WRS recognizes that a stable, well-articulated investment policy is crucial to the long-term success of the WRS. As such, the Board has developed this Investment Policy Statement with the following goals in mind:

- To clearly and explicitly establish the objectives and constraints that govern the investment of the WRS's assets,
- To establish a long-term target asset allocation with a high likelihood of meeting the WRS's objectives given the explicit constraints, and
- To protect the financial health of the WRS through the implementation of this stable long-term investment policy.

I. Worcester Retirement System Goals

The WRS was established to provide retirement income for the City of Worcester and WHA employees and their families. The WRS's assets are structured to provide real growth from capital gains and income, while maintaining sufficient liquidity to meet the WRS's benefit payments.

II. Investment Objectives

The investment strategy of the WRS is designed to ensure the prudent investment of funds in such a manner as to provide real growth of assets over time while protecting the value of the assets from undue volatility or risk of loss.

Risk Objectives

- To accept a level of market risk consistent with moderate interim volatility without sacrificing the potential for long-term real growth of assets.
- To use extensive diversification to minimize or eliminate completely exposure to company and industry-specific risks in the aggregate investment portfolio.
- To avoid extreme levels of volatility that could adversely affect WRS's portfolio.

- To limit the likelihood of investment return patterns that could negatively impact the funded status of the WRS.

Return objective

- Within the risk constraints outlined above, to achieve the highest real return possible.

- To achieve, over long time periods, investment returns consistent with the actuarial return on assets of 8.5%.

III. Investment Constraints

Legal and Regulatory

The WRS is a qualified defined benefit pension plan governed by the Massachusetts General Laws, Chapter 32. Investment procedures and restrictions stipulated under these regulations must be followed.

The Board intends to manage the assets of the WRS at all times in accordance with the provisions of the Public Employee Retirement Administration Commission (PERAC) and the Massachusetts General Laws, Chapter 32. The Board will retain legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

Time Horizon

The WRS will be managed on a going-concern basis. The assets of the WRS will be invested with long-term time horizon (twenty years or more), consistent with the participant demographics and the purpose of the WRS.

Liquidity

The WRS exhibits a moderate need for interim liquidity. Cash outflows for benefit payments are expected to grow from approximately $50.5 million to close to $78 million over the next ten years, while cash flows are expected to rise from approximately $34.9 million to $50.2 million (covering normal costs and expenses) over the same period. This pattern results in a net negative cash flow of up to 4% of WRS assets, based on the WRS's year-end asset value and the actuarial assumed rate of return of 8.5% per year.

Tax Considerations

The WRS is a tax-exempt entity. Therefore, investments and strategies will be evaluated only on the basis of expected risks and potential returns.

IV. Risk and Return Considerations

The WRS's Board recognizes that a persistent positive relationship exists between risk and return, whether risk is described as possibility of loss or as interim volatility. The Board also recognizes that investors are rarely compensated for risks that can be eliminated through diversification. Within the risk and return parameters discussed above, the Board accepts the risks associated with investing in the capital markets (market risks), but will minimize wherever possible those risks for which the WRS is unlikely to be compensated (non-market or diversifiable risks).

V. Diversification

The WRS's Board recognizes that a primary element of risk control is diversification. Therefore, investments will be allocated across multiple classes of assets, chosen in part for their low correlation of returns. Within each asset type, investments will be distributed across many individual holdings, thus further reducing volatility. In addition, each investment manager's guidelines will specify the largest permissible investment in any one asset, and the largest permissible investment in any group of related assets.

The WRS's aggregate equity portfolio will be diversified by individual issue, capitalization, and industry (international equity portfolios will also be diversified by country). The WRS's aggregate fixed income portfolio will, at a minimum, be diversified by individual issue, by issuer, by maturity, and by industry. Residual cash will be swept by the custody bank into a short-term fixed income investment pool that is broadly diversified across individual issue and issuer. The WRS's aggregate real estate portfolio will be invested across a spectrum of geographic regions and property types.

The specific degrees of diversification within the above asset classes will be addressed in each manager's investment guidelines.

VI. Asset Allocation

The Board recognizes that the allocation of monies to various asset classes will be the major determinant of the WRS return and risk experience over time. Therefore, the WRS will allocate investments across those asset classes that, based on historical and expected returns and risks, provide the highest likelihood of meeting the WRS's investment objectives.

A. Permissible Asset Classes

Because investment in any particular asset class may or may not be consistent with the objectives of the WRS, the Board has specifically indicated those asset classes that may be utilized when investing the WRS's assets, and are summarized as follows:

Asset Type	Asset Class	Purpose
Equity	Large U.S. Common Stocks	Total Return Potential
Equity	Small U.S. Common Stocks	Total Return Potential
Equity	Non-U.S. Common Stocks	Total Return Potential Diversification
Equity	Private Markets	Total Return Potential Diversification
Fixed Income	High Grade Bonds	Return Stability Income
Fixed Income	High Yield Bonds	Total Return Potential Diversification Income
Real Estate	Real Estate	Total Return Potential Diversification Income
Timber	Timber	Total Return Potential Diversification
Hedge Funds	Absolute Return Strategies	Return Stability Diversification
Cash	Cash Equivalents	Liquidity Return Stability

B. Expected Returns, Risks, and Correlations for Permissible Asset Classes

The risk and return behavior of the WRS will be driven primarily by the allocation of investments across asset classes. In determining the appropriate allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio must be examined.

C. Long-Term Target Allocations

Based on the investment objectives and constraints of the WRS, and on the expected behavior of the permissible asset classes, the Board will specify a long-term target allocation for each class of permissible assets. These targets will be expressed as a percentage of the WRS's overall market value, surrounded by a band of permissible variation resulting from market forces.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall System's asset allocation to deviate from the long-term target, as would likely occur during manager transitions, asset class restructurings, and other temporary changes in the WRS. Deviations from targets that occur due to capital market changes are discussed below.

ASSET ALLOCATION TARGETS

	Target	Range
Equity[1]	57%	52% – 62%
Domestic Equity: Large Cap	34	29 - 39
Domestic Equity: Small Cap	8	6 – 10
Non-U.S. Common Stocks	15	13 – 17
Fixed Income	25	20 – 30
Investment Grade (excl. TIPS)	15	12 – 18
TIPS	5	3 – 7
High Yield	5	3 – 7
Real Estate[2]	13	11 – 15
Private Equity	5	3 – 7
Cash[3]	0	<5

Based upon the expected asset returns, risks, and correlations determined by Meketa Investment Group, this target allocation exhibits an expected annual return of 8.8% and an expected annual standard deviation of 13%.

[1] The Board has adopted a long-term target of 2% to Absolute Return Strategies (hedge funds). This is to be funded by reallocating assets from equities.

[2] WRS is restricted by PERAC to target allocations of 10% for real estate, and 5% for private equity. WRS will make reasonable attempts to maintain those allocations, recognizing that market fluctuations and the funding requirements of alternative investments may result in short-term deviations from the targets. The Real Estate target includes a strategic allocation to Timber of 3%.

[3] The cash target of zero defines WRS's objective of keeping cash balances as low as possible, at least below 5% at all times. The Board is aware, however, that a certain cash balance is needed for the efficient operation of WRS and its various portfolios.

D. Rebalancing

In general, cash flows to and from the WRS will be allocated in such a manner as to move each asset class toward its target allocation.

The Board recognizes that, periodically, market forces may move the WRS's allocations outside the target ranges. The Board also recognizes that failing to rebalance the allocations would unintentionally change the WRS's structure and risk posture. However, the Board understands that constant rebalancing would result in a significant increase in explicit and implicit trading costs to the WRS. Consequently, the Board has established a process to rebalance the allocations periodically.

On at least an annual basis, if any strategic allocation is outside the specified target range, assets will be shifted to return the strategy to the target range. The specific plan for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

E. Changes to Asset Allocation

Once established, permanent changes in the WRS's target asset allocation will take place only in response to significant changes in the objectives and constraints of the WRS, or in response to material changes in the fundamental nature or appropriateness of the asset classes themselves.

VII. Review of Investment Policy, Asset Allocation, and Performance

The Investment Policy Statement will be reviewed at least annually, and specifically upon each actuarial valuation, to ensure that the objectives and constraints remain relevant. However, the Board recognizes the need for a stable long-term policy for the WRS, and major changes to this policy statement will be made only when significant developments in the circumstances of the WRS occur. The Board will notify PERAC of any changes to this document within ten days of the effective date of those changes.

The asset allocation of the WRS will be reviewed on an on-going basis, and at least annually. When necessary, such reviews may result in a rebalancing of asset allocations. In general, the Board intends that the WRS will adhere to its long-term target allocations, and that major changes to these targets will be made rarely and only in response to significant developments in the circumstances of the WRS.

The Board will specifically evaluate the performance of the WRS relative to its objectives and to the returns available from the capital markets during the period under review. In general, the Board will utilize relative, rather than absolute, benchmarks in evaluating performance.

VIII. Trading and Proxy Voting by Investment Managers

In accordance with the fiduciary and other obligations imposed on investment managers by their agreements with the Board, all trades executed by managers must be for the exclusive benefit of the WRS's participants and beneficiaries. Managers are expected to seek best execution on all trades.

The Board recognizes that the right to vote proxies for securities held represents an asset of the WRS.

As such, the Board has specifically delegated the responsibility for voting all security proxies to the individual managers. The Board believes that the voting of proxies constitutes an investment decision by the managers, and that prudent voting of proxies is important to the overall performance of the WRS. Investment managers are expected to execute all proxy votes in a timely fashion and to provide a full written accounting of proxy votes on an annual basis.

IX. Management Structure

To diversify the WRS's assets so as to minimize the risk associated with dependence on the success of one enterprise, the Board Members have decided to employ a multi-manager team approach to investing System assets.

A consultant will be employed whose responsibilities will be to: 1) provide risk and return assumptions for various asset classes, 2) to diversify WRS so as to minimize risk, while enhancing the probability of achieving the WRS's return objectives, and 3) to evaluate the performance and compliance of investment managers.

Investment managers will be employed to utilize individual expertise within their assigned area of responsibility. Each manager will be governed by individual investment guidelines.

X. Implementation

All monies invested for the WRS after the adoption of this investment policy statement shall conform to this statement.

Investment Results*

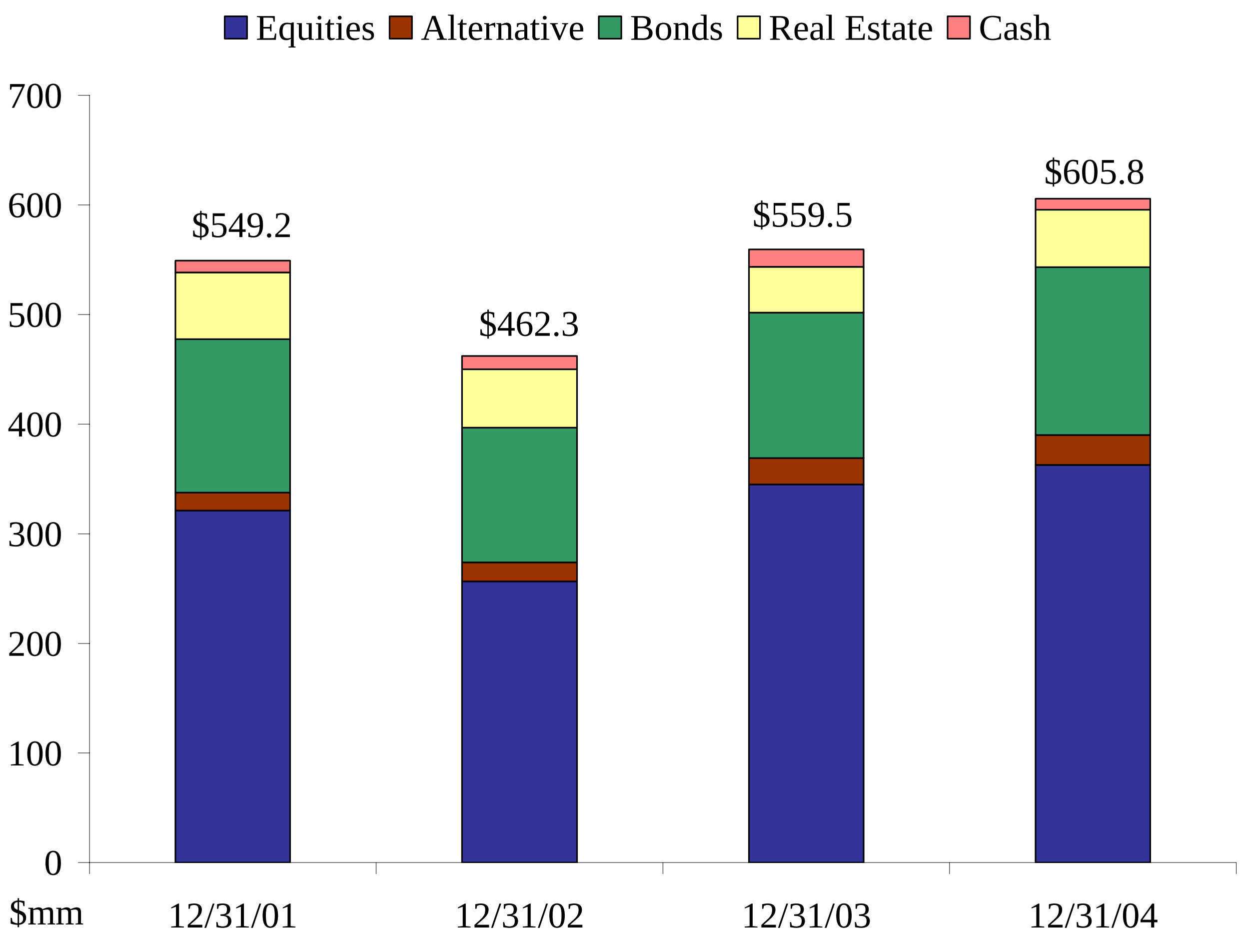
	4Q04	1 YR	3 YR	5 YR	Since 10/1/95
Total Portfolio	**8.1%**	**12.1%**	**7.1%**	**3.6%**	**9.4%**
CPI (inflation)	0.2	3.3	2.5	2.5	2.4
Total Equity	**11.9**	**15.0**	**7.1**	**1.1**	**NA**
Russell 3000	10.2	11.9	4.8	(1.2)	9.9
S&P 500	9.2	10.9	3.6	(2.3)	10.0
MSCI EAFE	15.4	20.7	12.3	(0.8)	5.7
Total Fixed Income	**2.6**	**7.8**	**8.4**	**8.3**	**NA**
Lehman Universal	1.3	5.0	6.9	7.9	7.1
Total Real Estate	**0.9**	**7.9**	**4.2**	**6.7**	**NA**
NCREIF Property	3.4	12.4	8.6	9.5	10.8
Total Alternative Assets**	**5.5**	**11.1**	**0.9**	**2.4**	**NA**

* The WRS's policy is a time weighted average of the representative asset class benchmarks.

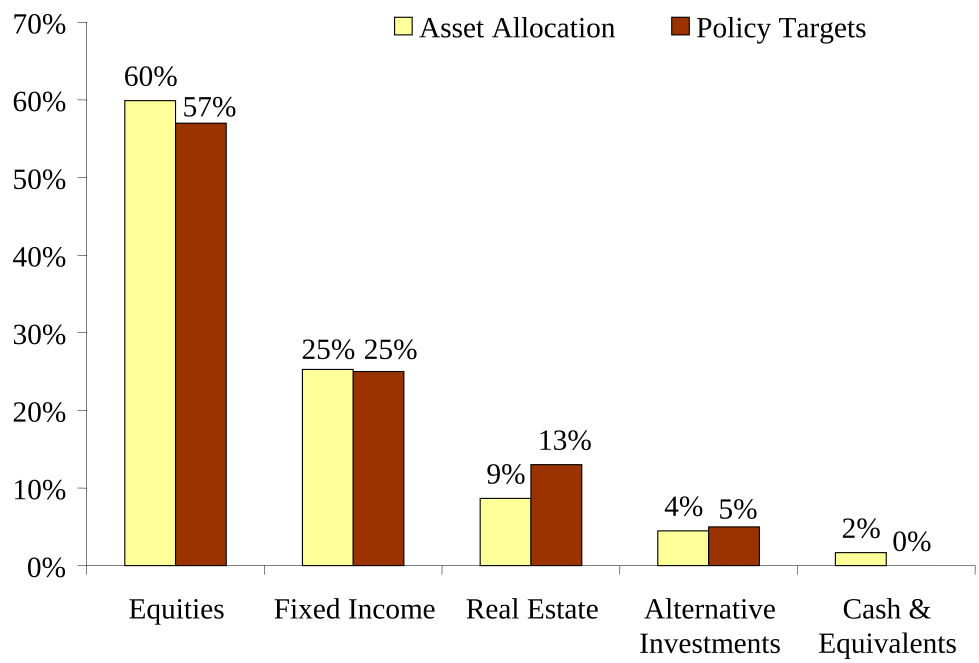
** Returns for some private market assets, specifically fund of funds private equity, are lagged by one quarter.

Manager returns include the effects of cash and equivalents; returns for all periods greater than one year are annualized. For pooled investments, returns are reported by the manager. Throughout this report, numbers may not sum due to rounding.

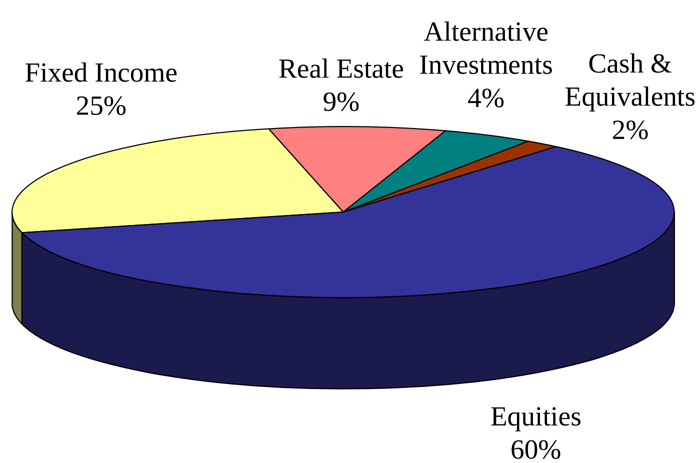
Asset Allocation



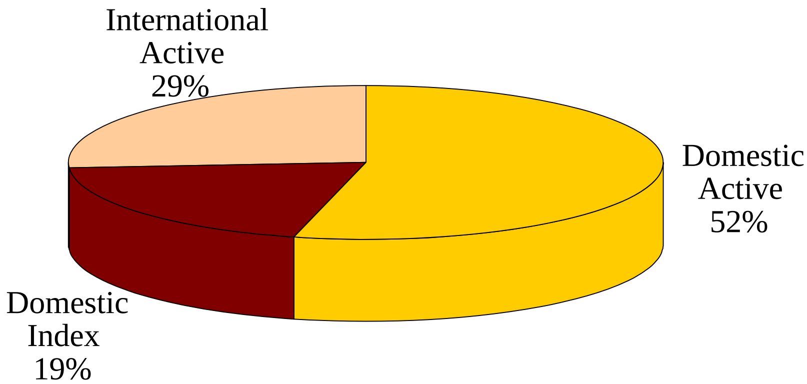
Aggregate Asset Allocation vs. Policy Targets



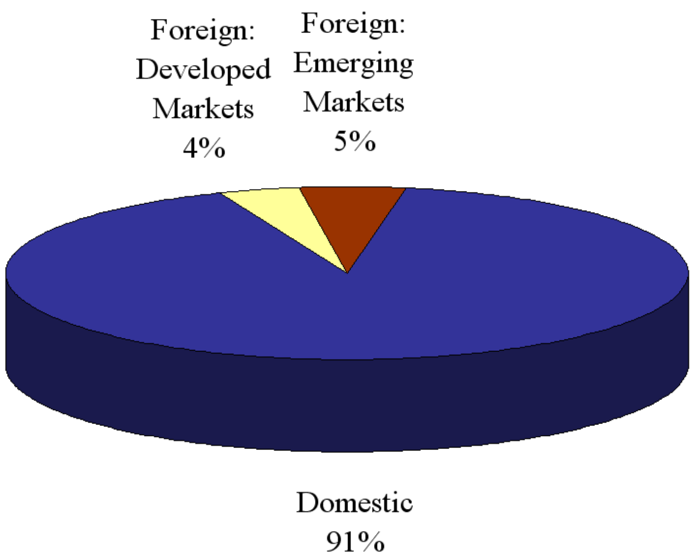
Aggregated Asset Allocation



Equity Allocation



Fixed Income Allocation



Ten Largest Stock Holdings by Fair Value

Company	Number of Shares	Fair Value ($mm)	% of Domestic Stock	Industry
1.General Electric	129,089	$4.7	1.9%	Capital Goods
2.Citigroup	65,128	3.4	1.3	Diversifies Financials Tech. Hardware
3.Procter & Gamble	48,787	2.7	1.1	Products
4.IBM	27,728	2.7	1.1	Equipment Household & Personal
5.JP Morgan Chase	66,852	2.6	1.0	Diversifies Financials
6.Pfizer	93,314	2.5	1.0	Pharmaceuticals
7.PepsiCo	47,489	2.5	1.0	Food, Beverages & Tobacco
8.Microsoft	91,152	2.4	1.0	Software & Services
9.AIG	36,463	2.4	1.0	Insurance
10.Chevron Texaco	41,773	2.1	0.9	Energy

Ten Largest Fixed Income Holdings by Fair Value

Security	Coupon	Maturity Date	Number of Shares	Market Value ($mm)	% of Bonds
1. U.S. Treasury Note Inflation Index	2.0%	01/15/2014	5,242,374	$5.43	5.6%
2. U.S. Treasury Note Inflation Index	1.9	07/15/2013	5,081,786	5.23	5.4
3. U.S. Treasury Bond Inflation Index	3.6	04/15/2028	3,080,035	4.04	4.2
4. U.S. Treasury Bond Inflation Index	3.9	04/15/2029	2,496,236	3.43	3.5
5. U.S. Treasury Note Inflation Index	3.9	01/15/2009	3,055,054	3.42	3.5
6. U.S. Treasury Note Inflation Index	3.4	01/15/2007	2,578,058	2.73	2.8
7. U.S. Treasury Note Inflation Index	3.5	01/15/2011	1,370,825	1.56	1.6
8. U.S. Treasury Note Inflation Index	4.3	01/15/2010	1,106,099	1.28	1.3
9. FNMA	3.0	03/02/2007	1,200,000	1.19	1.2
10. Mexican Bonds	9.0	12/20/2012	129,000	1.12	1.2

A complete portfolio is available upon request.

Schedule of Fees & Commissions

Investment Fees December 31, 2004	
Ascent Venture Management Inc IV	$98,229
Ascent Venture Management, Inc. II	42,190
Ascent Venture Management, Inc. III	103,259
Bailard, Biehl & Kaiser	235,878
Bank of Ireland Asset Mgt. Limited	145,494
Boston Capital Ventures	3,265
Boston Company Asset Mgt. (Premier)	312,713
Boston Company Asset Mgt. LLC(ACWI)	374,376
Boston Millennium Partners	79,200
Charlesbank Capital Partners	92,439
Columbia Management Adv. Inc.	243,127
Concord Partners LP	927
Duke Street Capital	7,700
Enhancement Investment Tech. LLC	196,815
Heitman Investment Management	52,596
Hutchens Investment Mgt. Inc.	186,930
Intercontinental Real Estate Corp.	33,390
Invesco Private Capital, Inc.	37,500
L&B Realty Advisors Inc.	19,773
Loomis Sayles & Company, L.P.	154,696
Loomis Sayles & Company, L.P.	102,756
New England Partners Capital I	65
New England Partners Capital II	42,812
Northern Trust Company	19,433
Northstar Capital LLC	42,608
OPUS Investment Mgt. Inc.	59,277
OPUS Investment Mgt. Inc. (Tips)	32,127
Riverside Company 2000	25,149
Riverside Company 2004	50,045
RMK Timberland a div. Of Regions Bank	66,614
SSR Realty Advisors, Inc.	3,830
Standard Life Investments Limited	45,717
State Street Global Advisors Index	18,000
State Street Global Advisors S&P 500	29,782
VEF Advisors II	10,863
VEF Advisors III	14,302
VEF Advisors IV	19,967
Total Investment Managers Fees	**3,003,844**
IBT (Custodian Bank Fee)	324,281
Meketa Investment Consultant Fee	128,897
Security Lending Fees	273,505
Total Other Fees	**726,683**
Total Investment Fees	**$3,730,527**

Commissions to Brokers

	Shares	Total Commission	Commissions Per Share
A G EDWARDS & SONS INC	40,900	$ 1,695	$0.05
ADAMS HARKNESS INC	38,900	1,940	$0.05
ADAMS, HARKNESS & HILL, INC	24,700	1,235	$0.05
ADVEST INC	18,175	871	$0.05
AMERICAS GROWTH CAPITAL	44,075	2,028	$0.05
ARCHIPELAGO	168,800	2,532	$0.02
AVONDALE PARTNERS LLC	975	46	$0.05
B RILEY AND CO INC.	20,500	943	$0.05
BAIRD ROBERT W. & CO, INC	53,930	2,691	$0.05
ROBERT W BAIRD & CO INC	65,800	3,290	$0.05
BANC OF AMERICA SECURITIES LLC	64,300	2,792	$0.05
BANC/AMERICA SECUR-MONTGOMERY	7,300	365	$0.05
WESTMINSTER (BANC OF AMERICA SECURITIES	4,200	210	$0.05
ISI (BANC OF AMERICA SECURITIES INC)	1,050	53	$0.05
BANK OF NEW YORK	150,830	2,262	$0.02
BB&T CAPITAL MARKETS	2,825	141	$0.05
BEAR STEARNS & CO INC	27,050	1,353	$0.05
BEAR STEARNS & CO.	37,600	1,753	$0.05
BEAR, STEARNS SECURITIES CORP	4,600	230	$0.05
ISI (BEAR STEARNS & CO INC)	11,075	554	$0.05
BERNSTEIN, SANFORD & CO. INC	3,000	150	$0.05
BLOOMBERG TRADEBOOK (WESTMINSTER)	591,192	12,083	$0.02
BRIDGE TRADING CO	1,300	65	$0.05
BUCKINGHAM RSRCH GRP	1,725	86	$0.05
C E UNTERBERG TOWBIN	29,800	1,478	$0.05
C.I.S.	313,677	6,274	$0.02
CANTOR FITZGERALD & CO INC	11,875	528	$0.04
CHARLES SCHWAB & CO INC (RETAIL)	16,425	821	$0.05
CIBC WORLD MARKETS CORP	92,500	4,448	$0.05
WESTMINSTER (CIBC WORLD MARKETS)	34,650	1,733	$0.05
CITIGROUP	8,500	425	$0.05
CITIGROUP GLOBAL MARKETS	85,225	4,096	$0.05
CL KING & ASSOCIATES	46,200	2,280	$0.05
COWEN & CO	48,850	2,193	$0.04

(continued)

	Shares	Total Commission	Commissions Per Share
CRAIG-HALLUM CAPITAL GROUP LP	21,000	1,050	$0.05
CRAIG-HALLUN CAP GROUP	27,700	1,385	$0.05
CREDIT SUISSE FIRST BOSTON	47,500	1,900	$0.04
CREDIT SUISSE FIRST BOSTON CORPORATION	45,907	2,175	$0.05
D A DAVIDSON & CO	7,175	359	$0.05
DEUTSCHE BANC ALEX BROWN	4,300	215	$0.05
DEUTSCHE BANK SECURITIES	199,916	3,998	$0.02
DEUTSCHE BANK SECURITIES INC	43,875	2,036	$0.05
WESTMINSTER (DEUTSCHE BANK)	8,350	418	$0.05
DONALDSON & CO INC	9,475	322	$0.03
DOUGHERTY AND CO	30,600	1,530	$0.05
FACTSET DATA SYSTEMS INC./BCC CLRG	10,425	521	$0.05
FERRIS BAKER WATTS	15,000	350	$0.02
FIDELITY CAPITAL MARKETS	1,144,425	57,221	$0.05
FIRST ALBANY CORP	64,800	2,178	$0.05
FIRST ANALYSIS SECURITIES CORP	12,500	625	$0.05
FIRST CLEARING CORP	35,800	1,764	$0.05
FLEET INSTITUTIONAL TRADING	939,548	46,933	$0.05
FOX-PITT, KELTON INC	4,700	235	$0.05
FRIEDMAN BILLINGS RAMSEY & CO	1,150	58	$0.05
FTN MIDWEST SECURITIES CORP	125	6	$0.05
FULCRUM GLOBAL PARTNERS	21,100	1,055	$0.05
GOLDMAN SACHS	225,900	4,518	$0.02
GOLDMAN SACHS & CO	127,592	5,494	$0.05
GUZMAN & CO	207,600	4,152	$0.02
HARBORSIDEPLUS	24,775	496	$0.02
HARRIS NESBITT CORP	5,500	275	$0.05
HIBERNIA SOUTHCOAST CAPITAL INC	2,275	114	$0.05
INSTINET	212,700	4,254	$0.02
INSTINET C/T NEWBRIDGE SECS.	76,425	2,018	$0.03
INSTINET LLC	3,000	60	$0.02
J P MORGAN SECURITIES INC	31,550	1,578	$0.05
JEFFERIES & CO	396,425	7,947	$0.02
JEFFERIES_& COMPANY, INC	57,100	2,758	$0.05
WESTMINSTER (JEFFERIES & CO)	7,150	358	$0.05
I.T.G C/T JEFFRIES (0019)	26,500	530	$0.02
JMP SECURITIES LLC	19,125	956	$0.05
JOHNSON RICE & CO	9,600	480	$0.05
JONES & ASSOC/NATL FINC'L	1,100	55	$0.05

(continued)

	Shares	Total Commission	Commissions Per Share
KAUFMAN BROTHERS LP	14,075	704	$0.05
KEEFE BRUYETTE AND WOODS INC	11,225	561	$0.05
KEEFE,BRUYETTE,WOODS/PERSHING	53,200	2,010	$0.04
KNIGHT SECURITIES	8,700	377	$0.04
KNIGHT SECURITIES LP	100,525	2,452	$0.02
WESTMINSTER (KNIGHT SECURITIES)	16,375	819	$0.05
LEERINK SWANN & CO	15,125	700	$0.05
LEGG MASON WOOD WALKER INC	26,480	1,324	$0.05
LEGG MASON WW/EQUITIES	8,200	364	$0.04
LEHMAN BROTHERS INC	131,740	5,611	$0.05
LIQUIDNET INC	219,624	4,392	$0.02
WESTMINSTER (LIQUIDNET)	59,915	1,498	$0.03
LYNCH JONES & RYAN	1,134,725	36,048	$0.02
MCADAMS WRIGHT RAGEN	14,600	620	$0.04
MCDONALD & CO SECURITIES_INC	23,300	635	$0.03
MCDONALD INVESTMENT INC	18,350	805	$0.04
MERRILL LYNCH	16,060	803	$0.05
MERRILL LYNCH & CO INC	121,875	4,443	$0.05
MERRILL LYNCH PROFESS CL CORP	2,500	125	$0.05
WESTMINSTER (MERRILL LYNCH)	8,975	449	$0.05
MERRIMAN CURHAN FORD & CO	3,450	173	$0.05
MIDWOODSECURITIES	473,003	23,650	$0.05
MILLER TABAK HIRSCH C/T B STEA	1,900	95	$0.05
WESTMINSTER (MONTGOMERY SECURITIES)	7,825	391	$0.05
MORGAN KEEGAN & CO, INC	29,000	1,450	$0.05
MORGAN STANLEY	42,376	1,760	$0.05
MORGAN STANLEY & CO, INC	8,500	375	$0.04
MORGAN, J.P SECURITIES	1,800	90	$0.05
NED DAVIS (BEAR STEARNS & CO INC)	3,875	194	$0.05
NEEDHAM & CO C/T BEAR STEARNS	5,400	270	$0.05
NEEDHAM & CO INC	62,525	3,119	$0.05
NYFIX (WESTMINSTER)	1,675	34	$0.02
OPPENHEIMER & CO INC	19,850	960	$0.05
PACIFIC CREST SECURITIES	25	-	$0.00
PACIFIC GROWTH EQUITIES INC	22,875	1,074	$0.05
PAULSEN, DOWLING SECURITIES	700	35	$0.05
PERSHING DIVISION OF DLJ	29,314	1,104	$0.04
PIPER JAFFRAY & CO	73,300	3,196	$0.05
WESTMINSTER (PIPER JAFFRAY & CO)	7,175	359	$0.05

(continued)

	Shares	Total Commission	Commissions Per Share
POSIT (ITG)	15,050	301	$0.02
PRITCHARD CAPITAL PARTNERS LLC	33,925	1,620	$0.05
PRUDENTIAL EQUITY	14,300	715	$0.05
PRUDENTIAL SECURITIES INC	59,925	2,771	$0.05
RAYMOND JAMES & ASSOCIATES INC	96,375	3,128	$0.05
RBC CAPITAL MARKETS	25,475	1,178	$0.05
RBC DOMINION SECURITIES CORP	4,200	210	$0.05
REDIPLUS INC	35,000	700	$0.02
RICHARD ROSENBLATT	99,750	1,995	$0.02
ROTH CAPITAL PARTNERS	63,175	1,987	$0.03
S G COWEN SECURITIES CORP	26,424	1,089	$0.05
SANDLER O'NEIL & PARTNERS LP	9,075	451	$0.05
SBC WARBURG-DILLON	185,916	3,718	$0.02
SCHWAB SOUNDVIEW CAPITAL MRKTS	10,300	499	$0.05
SCOTT & STRINGFELLOW INV CORP	7,100	355	$0.05
SIDOTI & CO	24,200	1,210	$0.05
SOUTHWEST	143,825	2,877	$0.02
SOUTHWEST SECURITIES	27,925	1,376	$0.05
SPEAR LEEDS & KELLOGG	6,100	305	$0.05
STANFORD GROUP COMPANY	3,825	191	$0.05
STATE STREET GLOBAL MARKETS LLC	1,125	45	$0.04
STEPHENS & CO	23,300	1,165	$0.05
STIFEL NICOLAUS & CO	1,550	78	$0.05
STIFEL, NICOLAUS & CO, INC	600	-	$0.00
SUNTRUST CAPITAL MARKETS, INC.	10,100	455	$0.05
SUNTRUST ROBINSON-HUMPHREY CO	22,800	1,138	$0.05
THE SOLEIL GROUP	10,550	493	$0.05
THINK EQUITY	39,625	1,755	$0.04
THOMAS WEISEL PARTNERS LLC	60,225	2,679	$0.05
WESTMINSTER (THOMAS WEISEL PARTNERS)	43,575	2,179	$0.05
UBS SECURITIES LLC	79,950	2,965	$0.05
WESTMINSTER (UBS SECURITIES LLC)	8,275	414	$0.05
W R HAMBRECHT & CO	43,550	2,092	$0.05
WACHOVIA CAPITAL MARKETS LLC	10,500	485	$0.05
WACHOVIA CORP	34,100	1,705	$0.05
WACHOVIA SECURITIES	13,100	655	$0.05
WESTMINSTER (WACHOVIA SECURITIES INC)	22,250	1,113	$0.05
WEDBUSH MORGAN SECURITIES	1,100	55	$0.05
WEEDEN AND CO	437,065	8,741	$0.02
WELLS FARGO SECURITIES LLC	23,950	1,198	$0.05
WILLIAM BLAIR & COMPANY LLC	28,250	1,262	$0.04
TOTALS	**10,809,734**	**$ 386,438**	

(concluded)

INVESTMENT SUMMARY

	Assets ($mm)	% of System	% of Aggregate
Total System	**$605.8**	**100%**	**100%**
Total Domestic Equities	**257.8**	**100**	**43**
Information Technology	40.6	16	7
Financials	37.9	15	6.5
Health Care	38.4	14	6
Consumer Discretionary	37.9	14	6
Industrials	33.0	13	5.5
Energy	24.5	10	4
Consumer Staples	18.3	7	3
Materials	13.7	5	2
Utilities	6.8	3	1.5
Telecommunications Services	6.7	3	1.5
Total Fixed Income	**153.1**	**100**	**25**
Credit	48.6	32	8
U.S. Treasury	39.4	26	6.5
Cash Equivalent	36.9	24	6
Mortgage Backed	20.2	13	3
U.S. Agency	5.1	3	1
Commercial Mortgage Backed	2.2	1	.25
Asset Backed	0.7	1	.25
Total International Equities	**105.1**	**100**	**17**
Europe - Developed	63.7	61	10
Pacific Rim/Australasian - Developed	29.9	28	5
Other (Non-EAFE)	7.2	7	1
Americas (Non-EAFE)	4.3	4	1
Total Real Estate & Alternative Investments	**79.7**	**100**	**13**
Real Estate	52.5	66	9
Private Markets	27.2	34	4
Cash & Equivalents	**10.1**	**100**	**2**

LIQUIDITY PROFILE

Benefits payments totaled approximately $50.5 million during the year and along with other payments of $4.2 million resulted in total cash outflows of $54.7 million in 2004. These payments were partially offset by a contribution of approximately $20.2 million from employers and other cash receipts of $15.7 million for a total of $35.9 million in 2004. This resulted in a negative cash flow of approximately $18.8 million for the fiscal year. Note that these figures do not incorporate expected income and asset gains from the WRS's investments. The WRS's portfolio is structured with a long-term expected return of 8.8%

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Actuarial Section

THE SEGAL COMPANY
116 Huntington Avenue, 8th Floor Boston, MA 02116
T 617.424.7336 F 617.424.7390 www.segalco.com

Kathleen A. Riley, FSA, MAAA, EA
Senior Vice President & Actuary
kriley@Segalco.com

May 4, 2005

City of Worcester Retirement Board
City Hall, Room 103
455 Main Street
Worcester, MA 01608

Dear Board Members:

The Segal Company has performed a January 1, 2005 actuarial valuation of the Worcester Retirement System. This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Retirement Board are reasonably related to the experience of and the expectations for the WRS.

As part of performing the valuation, The Segal Company was furnished member data by the City of Worcester Retirement System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary. In addition, the administrative staff furnished financial statements that were not audited by the actuary.

The funding objective of the plan is to provide for the current cost of benefits (*i.e.*, normal cost) and to reduce the unfunded liability to zero by June 30, 2023. The normal cost is expected to remain at a level percentage of payroll. The remaining liability of the 2002 ERI is amortized over a 13-year period in payments, which increase at the rate of 1.5% per year. The 2003 ERI liability is amortized over a 14-year period with level payments. The Section 90 ACD liability is amortized over a 9-year period with level payments. The remaining unfunded liability is amortized over an 18-year period with payments increasing at the rate of 4.5% per year. The contribution will increase by approximately 4% per year, except for years when the ERI and Section 90 ACD liabilities are fully amortized.

The funding objective as of the prior valuation was to reduce the unfunded liability, including the Section 90 ACD liability, to zero by June 30, 2025.

Actuarial valuations have been performed annually. This is consistent with the guidelines promulgated by PERAC and GASB. The last valuation was performed as of January 1, 2005.

The assumptions and methods used for funding purposes met the parameters set for the disclosures presented in the financial section by GASB Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*

The Segal Company has prepared, and included as part of this report, all the supporting schedules for the Actuarial Section and Statistical Section of the CAFR. In addition, we have prepared the Schedules of Funding Progress and the Schedule of Employer Contributions found in the Financial Section of the CAFR.

Please let us know if you have any questions on this material.

Sincerely,

THE SEGAL COMPANY

By: Kathleen A. Riley

Kathleen A. Riley, FSA, MAAA
Senior Vice President and Actuary

I. Summary of Actuarial Assumptions and Actuarial Cost Method

The actuarial assumptions, as set forth in the accompanying supporting schedules, were selected by the Worcester Retirement Board and actuary.

Mortality Rates

Healthy	1994 Group Annuity Mortality Table
Disabled	1994 Group Annuity Mortality Table set forward 10 years

Termination Rates before Retirement

Rate (%)

	Mortality		Groups 1 and 2	
Age	**Male**	**Female**	**Disability**	**Withdrawal**
20	0.05	0.03	0.02	12.00
25	0.07	0.03	0.03	8.78
30	0.08	0.04	0.04	5.55
35	0.09	0.05	0.05	3.93
40	0.11	0.07	0.07	2.31
45	0.16	0.10	0.13	1.89
50	0.26	0.14	0.19	1.46
55	0.44	0.23	0.29	0.00
60	0.80	0.44	0.38	0.00

Notes: *55% of the disability rates shown represent accidental disability.*
20% of the accidental disabilities will die from the same cause as the disability.
55% of the death rates shown represent accidental death.

	Mortality		Group 4	
Age	**Male**	**Female**	**Disability**	**Withdrawal**
20	0.05	0.03	0.08	2.10
25	0.07	0.03	0.12	1.88
30	0.08	0.04	0.17	1.65
35	0.09	0.05	0.41	1.11
40	0.11	0.07	0.65	0.56
45	0.16	0.10	0.89	0.28
50	0.26	0.14	1.13	0.00
55	0.44	0.23	1.33	0.00
60	0.80	0.44	1.53	0.00

Notes: *90% of the disability rates shown represent accidental disability.*
60% of the accidental disabilities will die from the same cause as the disability.
90% of the death rates shown represent accidental death

Retirement Rates

	Rate (%)		
Age	**Groups 1 and 2**	**Age**	**Group 4**
55	12.55	50	32.00
56	3.21	51	7.21
57	3.10	52	5.90
58	3.34	53	8.00
59	3.48	54	7.71
60	7.84	55	15.51
61	6.92	56	9.11
62	15.11	57	9.09
63	10.71	58	11.90
64	10.37	59	11.42
65	35.68	60	23.95
66	22.14	61	13.60
67	21.59	62	19.50
68	21.64	63	12.53
69	25.36	64	18.73
70	100.00	65	100.00

Unknown Data for Participants

Same as those exhibited by participants with similar known characteristics.

Age of Spouse

Female (or male) spouses 3 years younger (or older) than their spouses.

Percent-Married 80%

Net Investment Return 8.50%

Salary Increases

Age	Present salary as a percent of salary at 65	Annual increase rate (%)
20	11.13	5.00
25	14.20	5.00
30	18.13	5.00
35	23.14	5.00
40	29.53	5.00
45	37.69	5.00
50	48.10	5.00
55	61.39	5.00
60	78.35	5.00

Includes allowance for inflation of 4.00%.

Administrative Expenses

$600,000 for calendar 2005

Actuarial Value of Assets

A preliminary actuarial value is first determined by taking the actuarial value of assets at the beginning of the year and adding assumed investment earnings (at the assumed actuarial rate of return) and the net new money during the year (contributions less benefit payments and administrative expenses). Twenty percent of the difference between the market value of assets and the preliminary actuarial value of assets is added to the preliminary actuarial value. In order that the actuarial value not differ too significantly from the market value of assets, the final actuarial value of assets must be within 20% of the market value of assets.

There was a one-time adjustment setting the January 1, 2005 actuarial value of assets equal to market value.

2004 Salary

The 2004 salaries were equal to salaries provided in the data, except for new hires where salaries were calculated from annualized contributions divided by the contribution rate (s) reported. All salaries were adjusted by 6%, except for School Department and Executive Management to reflect unsettled bargaining agreements. An additional adjustment was necessary due to the extra pay period in 2004.

Total Service

Total creditable service based on adjusted date of hire, except special cases where date of hire was used.

Actuarial Cost Method

Entry Age Normal Actuarial Cost Method. Entry Age is the age of the participant at the Adjusted Date of Hire. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary.

Recent Changes

The salary increase assumption was lowered January 1, 2004 from 5.50% to 5.00%. An asset smoothing method was first applied with the January 1, 2000 valuation and modified as of January 1, 2004.

There was a one-time adjustment setting the December 31, 2004 actuarial value of assets equal to market value.

II. Schedule of Active Member Valuation Data

Valuation date	Number	Projected annual payroll	Annual average pay	% Increase in average pay
01/01/2000	3,840	$130,376,689	33,952	7.42
01/01/2001	3,910	136,000,517	34,783	2.45
01/01/2002	4,080	148,764,543	36,462	4.82
01/01/2003	3,679	142,802,508	38,816	6.45
01/01/2004	3,409	138,796,895	40,715	4.89
01/01/2005	3,498	140,287,074	40,105	(1.52)

III. Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

	Added to Rolls		Removed from Rolls		Rolls – end of year			
Year ended	Number	Annual allowances[1]	Number	Annual allowances	Number	Annual allowances[1]	% Increase in annual allowances	Average annual allowances
1999	75	$1,538,292	107	N/A	2,972	$37,104,177	2.43	$12,485
2000	106	2,338,770	128	N/A	2,950	40,034,838	7.90	13,571
2001	86	2,057,603	131	N/A	2,905	41,736,155	4.25	14,367
2002	216	6,081,952	120	N/A	3,001	47,173,651	13.03	15,719
2003	115	3,212,097	120	N/A	2,996	49,606,369	5.16	16,558
2004	77	2,031,304	109	N/A	2,964	51,566,334	3.95	17,398

[1] Annual allowances are shown for retirees in pay status at the end of the year.

IV. Solvency Test

	Actuarial Accrued Liability				Portion of Actuarial Accrued Liability Covered by Assets		
Valuation date	(1) Active member contributions	(2) Retirees and beneficiaries	(3) Active/Inactive members (Employer financed)	Actuarial value of assets	(1)	(2)	(3)
1/1/2000	$ 97,983,371	$303,781,700	$196,414,063	$614,894,920	100	100	100
1/1/2001	104,242,043	327,801,840	196,637,600	630,714,618	100	100	100
1/1/2002	111,769,704	342,266,770	217,840,469	620,814,307	100	100	77
1/1/2003	111,507,319	397,136,220	207,212,025	554,190,090	100	100	22
1/1/2004	115,779,891	418,037,422	209,753,127	577,123,067	100	100	21
1/1/2005	122,748,711	425,655,839	223,543,701	606,099,616	100	100	26

V. Analysis of Financial Experience

	Year Ended December 31,			
	2004	2003	2002	2001
1. Unfunded actuarial accrued liability as of January 1	$ 166,447,373	$ 161,665,474	$51,062,636	($2,033,135)
2. Normal cost as of January 1	19,170,321	19,902,898	21,597,468	19,661,748
3. Employer and employee contributions during year	(31,843,173)	(29,261,377)	(24,139,117)	(20,965,327)
4. Interest				
(a) For whole year on (1)+(2)	15,777,504	15,433,311	6,176,109	1,498,432
(b) For half year on (3)	(1,222,286)	(1,123,184)	(926,569)	(804,760)
(c) Total interest	14,555,218	14,310,127	524,940	693,672
5. Expected unfunded actuarial liability	168,329,739	166,617,122	53,770,527	(2,643,042)
6. Actual unfunded actuarial accrued liability	165,848,695	166,447,373	161,665,474	51,062,636
7. (Gain) or loss for the year: (6)-(5)	$ (2,481,044)	$ (169,749)	$107,894,947	$53,705,678
8. Investment (gain) or loss	$ 405,058	$ 4,639,654	$ 98,499,864	$43,913,891
9. (Gains) or losses from sources other than investments	(5,367,076)	(8,634,577)	3,781,977	9,791,787
10. Plan changes	2,797,216	3,825,174	12,987,821	-
11. Assumption changes	-	-	(7,347,715)	-

VI. Summary of Plan Provisions

The following summarizes the major provisions of Chapter 32 of the Massachusetts General Laws.

Plan Year

January 1 – December 31

Retirement Benefit

Employees covered by the Contributory Retirement Law are classified into one of four groups depending on job classification. Group 1 comprises most positions in state and local government. It is the general category of public employees. Group 4 comprises mainly police and firefighters. Group 2 is for other specified hazardous occupations. (Officers and inspectors of the State Police are classified as Group 3.)

The annual amount of the retirement allowance is based on the member's final three-year average salary multiplied by the number of years and full months of creditable service at the time of retirement and multiplied by a percentage according to the following table based on the age of the member at retirement.

Age Last Birthday at Date of Retirement

Percent	Group 1	Group 2	Group 4
2.5	65 or over	60 or over	55 or over
2.4	64	59	54
2.3	63	58	53
2.2	62	57	52
2.1	61	56	51
2.0	60	55	50
1.9	59	--	49
1.8	58	--	48
1.7	57	--	47
1.6	56	--	46
1.5	55	--	45

A member's final three-year average salary is defined as the greater of the highest consecutive three-year average annual rate of regular compensation and the average annual rate of regular compensation received during the last three years of creditable service prior to retirement. The $30,000 cap on salary used in a benefit determination for any employee hired after January 1, 1979 has been removed.

The maximum annual amount of the retirement allowance is 80 percent of the member's final three-year average salary. Any member who is a veteran also receives an additional yearly retirement allowance of fifteen dollars per year of creditable service, not exceeding three hundred dollars. The veteran allowance is paid in addition to the 80 percent maximum.

Employee Contributions

Employees hired before January 1, 1975 contribute 5 percent of their salary; employees hired after December 31, 1974 and before January 1, 1984 contribute 7 percent; employees hired after January 1, 1984 contribute 8 percent; employees hired after July 1, 1996 contribute 9 percent.

In addition, employees hired after December 31, 1978 contribute an additional 2 percent of salary in excess of $30,000.

Employees hired after 1983 who leave with less than five years of credited service receive no interest on their contributions and employees who leave with five but less than ten years receive one-half the rate of regular interest otherwise payable.

Retirement Benefits (Superannuation)

Members of Group 1, 2 or 4 may retire upon the attainment of age 55. For retirement at ages below 55, twenty years of creditable service is required.

Members who terminate before age 55 with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the WRS).

Ordinary Disability Benefits

A member who is unable to perform his job due to a non-occupational disability will receive a retirement allowance if he has ten or more years of creditable service and has not reached age 55. The annual amount of such allowance shall be determined as if the member retired for superannuation at age 55, based on the amount of creditable service at the date of disability. For veterans, there is a minimum benefit of 50 percent of the member's most recent year's pay plus an annuity based on his own contributions.

Accidental Disability Benefit

For a job-connected disability the benefit is 72 percent of the member's most recent annual pay plus an annuity based on his own contributions, plus additional amounts for surviving children. Benefits are capped at 75 percent of annual rate of regular compensation for employees who become members after January 1, 1988.

Death Benefits

In general, the beneficiary of an employee who dies in active service will receive a refund of the employee's own contributions. Alternatively, if the employee were eligible to retire on the date of his death, a spouse's benefit will be paid equal to the amount the employee would have received under Option C. The surviving spouse of a member who dies with two or more years of credited service has the option of a refund of the employee's contributions or a monthly benefit regardless of eligibility to retire, if they were married for at least one year. There is also a minimum widow's pension of $500 per month, and there are additional amounts for surviving children.

If an employee's death is job-connected, the spouse will receive 72 percent of the member's most recent annual pay in addition to a refund of the member's accumulated deductions, plus additional amounts for surviving children. However, in accordance with Section 100 of Chapter 32, the surviving spouse of a police officer, firefighter or corrections officer is killed in the line of duty will be eligible to receive an annual benefit equal to the maximum salary held by the member at the time of death.

"Heart And Lung Law" And Cancer Presumption

Any case of hypertension or heart disease resulting in total or partial disability or death to a uniformed fireman or permanent member of a police department is presumed to have been suffered in the line of duty, unless the contrary is shown by competent evidence. Any case of disease of the lungs or respiratory tract resulting in total disability or death to a uniformed fireman is presumed to have been suffered in the line of duty, unless the contrary is shown by competent evidence. There is an additional presumption for uniformed firemen that certain types of cancer are job-related if onset occurs while actively employed or within five years of retirement.

Options

Members may elect to receive a full retirement allowance payable for life under Option A. Under Option B a member may elect to receive a lower monthly allowance in exchange for a guarantee that at his death any of his contributions not expended for annuity payments will be refunded to his beneficiary. Option C allows the member to take a lesser retirement allowance in exchange for providing his survivor with two-thirds of the lesser amount. Option C pensioners will have their benefits converted from a reduced to a full retirement if the beneficiary predeceases the retiree.

Post-Retirement Benefits

The Board has adopted the provisions of Section 51 Chapter 127 of the Acts of 1999, which provide that the Retirement Board may approve an annual COLA in excess of the Consumer Price Index but not to exceed a 3% COLA on the first $12,000 of a retirement allowance. Cost-of-living increases granted prior to July 1, 1998 are reimbursed by the Commonwealth and are not reflected in this report.

Statistical Section

Schedule of Additions to Plan Net Assets by Source

Fiscal Year	Employee Contributions	Employer Contributions	Employer Contributions as % of Covered Payroll	Investment Income (a)	Other (b)	Total
1999	$9,991,998	8,606,751	7.40	101,675,377	3,008,009	123,282,135
2000	10,641,408	8,343,309	6.70	3,874,421	4,517,210	27,376,348
2001	11,875,466	9,480,000	6.52	(29,629,122)	3,442,841	(4,830,815)
2002	12,393,094	12,956,778	8.52	(67,805,128)	3,615,546	(38,839,710)
2003	11,691,887	18,928,252	13.00	115,614,944	2,783,268	149,018,351
2004	12,187,208	20,150,377	14.24	66,454,940	3,530,693	102,323,218

(a) Net of Investment expenses

(b) Includes state pension reimbursements and transfer of employee' contributions from other public pension plans as defined by Massachusetts General Law, Chapter 32.

Schedule of Deductions from Plan Net Assets by Type

Fiscal Year	Benefits	Administrative Expenses	Withdrawals(c)	Total
1999	$36,868,926	1,131,072	2,716,627	40,716,625
2000	39,696,596	1,428,037	2,659,748	43,784,381
2001	41,095,678	811,315	3,129,455	45,036,448
2002	43,540,572	561,697	3,802,339	47,904,608
2003	47,848,502	440,294	3,866,838	52,155,634
2004	50,517,094	518,078	3,704,908	54,740,080

(c) Includes amounts for employee withdrawals and employee transfers to other state agencies.

Schedule of Retired Members by Type of Benefit							
		12/31/2004	12/31/2003	12/31/2002	12/31/2001	12/31/2000	12/31/1999
Superannuation							
Group 1		1,654	1,653	1,653	1,589	1,621	1,627
Group 2&4		274	262	254	220	224	221
Total		1,928	1,915	1,907	1,809	1,845	1,848
Ordinary Disability							
Group 1		40	42	42	41	46	51
Group 2&4		5	7	6	6	6	6
Total		45	49	48	47	52	57
Accidental Disability							
Group 1		139	140	147	147	152	164
Group 2&4		319	315	319	316	313	305
Total		458	455	466	463	465	469
Benficiaries							
Group 1		416	408	417	427	438	452
Group 2&4		157	169	163	159	150	146
Total		573	577	580	586	588	598
Total Retired Members							
Group 1		2,237	2,243	2,259	2,204	2,257	2,294
Group 2&4		727	753	742	701	693	678
Total		2,964	2,996	3,001	2,905	2,950	2,972

Schedule of Benefit Expenses by Type

Fiscal Year Ended Dec. 31	Regular	Disability	Beneficiary	COLA's pd	Annuities	Total
1999	$16,157,845	$7,476,154	$3,914,648	$5,152,920	$4,167,359	$36,868,926
2000	16,423,542	7,785,392	4,352,677	6,486,457	4,648,528	39,696,596
2001	17,082,481	7,872,843	4,574,323	6,934,675	4,631,355	41,095,677
2002	18,332,032	8,532,815	4,739,722	7,088,637	4,847,366	43,540,572
2003	21,186,242	8,706,365	4,793,618	7,734,349	5,427,928	47,848,502
2004	22,505,297	9,192,940	4,919,267	8,022,033	5,877,557	50,517,094

Schedule of Average Benefit Payments

Year ended December 31	Number	Annual benefits	Annual average	% Increase
1999	2,972	$36,868,926	$12,405	2.79
2000	2,950	39,696,596	13,456	6.99
2001	2,905	41,095,677	14,147	4.88
2002	3,001	43,540,572	14,509	2.50
2003	2,996	47,848,502	15,971	9.15
2004	2,964	50,517,094	17,044	6.30

Schedule of Participating Employers

Employer Name

City of Worcester
Worcester Housing Authority