

PMRS

**Pennsylvania Municipal
Retirement System**

Comprehensive Annual Financial Report 2002

**For the Year Ended
December 31, 2002**



On the Cover: Commonwealth, a 17' 8", 3 ton, gilded bronze statue, was originally placed on the dome of the capitol Building on May 25, 1905. She is the "symbolic embodiment of the Commonwealth of Pennsylvania". The statue's right arm is outstretched in the symbol of mercy, and her left arm is raised and grasping a ribbon-garland staff, the symbol of justice surmounted by a traditional Federal eagle.

Excerpt from the Department of General Services website

Pennsylvania Municipal Retirement System

**Comprehensive Annual Financial Report
For the Year Ended December 31, 2002**

Douglas K. Bowen

Chairman

Pennsylvania Municipal Retirement Board

James B. Allen

Secretary

Pennsylvania Municipal Retirement System

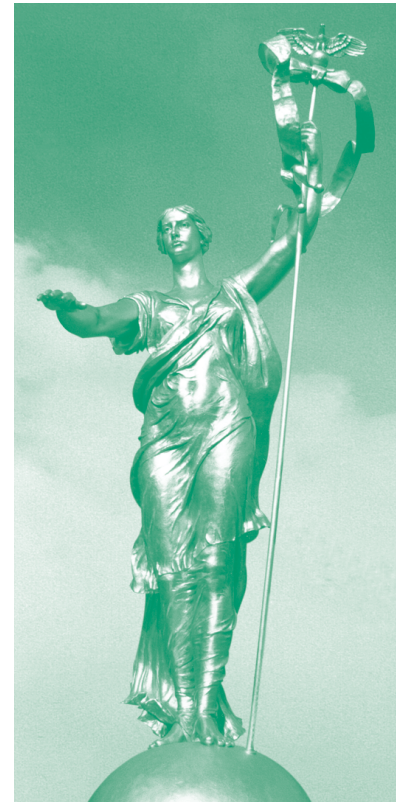
Report prepared by the Pennsylvania Municipal Retirement System staff

Table of Contents

	Page		Page
Introductory Section:		Actuarial Section:	
Letter of Transmittal	2	Actuary's Certification Letter	50
Administrative Organization:		Exhibit I - Funded Status of Actuarial	
Pennsylvania Municipal Retirement		Accrued Liabilities	51
Board	8	Exhibit II - Actuarial Present Value of	
Administrative Staff	9	Accumulated Plan Benefits	52
Professional Consultants	9	Exhibit III - Actuarial Assumptions	53
Organization Chart	10	Exhibit IV - Actuarial Methods	56
Chairman's Report	11	Schedule of Active Member Valuation Data	57
Summary of Plan Provisions	12	Schedule of Retirees and Beneficiaries	58
		Analysis of Financial Experience	58
		Solvency Test	58
Financial Section:		Statistical Section:	
Report of Independent Auditors	16	Part I - Financial	
Management's Discussion and Analysis	17	Revenues by Source and Expenses by	
Basic Financial Statements:		Type	62
Statements of Plan Net Assets	21	Graph - Revenues by Source - Six-Year	
Statements of Changes in Plan		Trend	63
Net Assets	22	Graph - Expenses by Type - Six-Year	
Notes to Financial Statements	23	Trend	63
Schedules:		Graph - Revenues vs. Expenses - Six-	
GASB No 25 Required Supplementary		Year Trend	64
Information	31	Graph - Components of Total Revenues	
Schedule 1 - Funding Progress	31	and Expenses - 2002	64
Schedule 2 - Required Employer		Graph - Total Investments -	
Contributions	31	Six-Year Trend	65
Notes to Required Supplementary		Part II - Membership	
Schedules	32	Graph - Active Members - Six-Year	
Supplemental Schedules	33	Trend	66
Schedule 3 - Administrative Expenses .	33	Graph - Retired Members - Six-Year	
Schedule 4 - Investment Expenses	34	Trend	66
Schedule 5 - Payments to Consultants.	34	Pensions in Payment Status on January 1,	
		2002 by Type and by Monthly Amount.	67
		Pensions Awarded Each of the Last Ten	
		Years by Type and Amount	68
		Schedule of Total Membership - Six-Year	
		Trend	68
		Graph - Total Membership Six-Year	
		Trend	69
		Schedule of Participating Pension Plans ..	70
Investment Section:			
Report on Investment Activity	36		
Investment Performance	39		
Graph - Portfolio Distribution - Five-Year			
Trend	39		
Asset Allocation	40		
Graph - Asset Allocation	40		
Investment Summary	41		
Portfolio Summary	41		
Portfolio Quality	41		
Portfolio Rates of Return	42		
Ten Largest Common Stock Holdings	43		
Summary of Fees Paid to Investment			
Advisors	43		
Summary of Commissions Paid to Brokers..	44		
Investment Guidelines	47		

Introductory Section

- Letter of Transmittal
- Administrative Organization
 - Pennsylvania Municipal Retirement Board
 - Administrative Staff
 - Professional Consultants
 - Organization Chart
- Chairman's Report
- Summary of Plan Provisions



Letter of Transmittal

Pennsylvania Municipal Retirement System Commonwealth of Pennsylvania



P. O. Box 1165, Harrisburg PA 17108-1165
Phone: (717) 787-2065 (800) 622-7968
Fax: (717) 783-8363
www.pmrs.state.pa.us ra-staff@state.pa.us

July 31, 2003

Members of the Pennsylvania Municipal Retirement Board
Pennsylvania Municipal Retirement System
P.O. Box 1165
Harrisburg, Pennsylvania 17108-1165

As part of our continuing commitment to full financial reporting for the Pennsylvania Municipal Retirement System (the System), we are honored to submit the System's Comprehensive Annual Financial Report for the fiscal year ended December 31, 2002. Consistent with the requirements of the Pennsylvania Municipal Retirement Law, Act of 1974, P.L. 34, No. 15 (the Act) as amended, the System distributes the Comprehensive Annual Financial Report to our governing board, to the members of the General Assembly of Pennsylvania, to each participating municipal employer, and to all other interested parties upon request.

The System is solely responsible for the accuracy of the data in this report. As the two individuals responsible for the System's financial record as of December 31, 2002, we offer our assurances that we have made every effort to present a comprehensive report. To the best of our knowledge, the enclosed information is accurate in all material respects.

Overview of the System

The Pennsylvania Municipal Retirement System, which is an agent multiple-employer system, is headquartered in Harrisburg, Pennsylvania. The System is a state retirement agency created by the Pennsylvania General Assembly in 1974. Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board (the Board).

The System administers sound, cost-effective pension plans on a contracted basis for local government employees throughout the Commonwealth. Our services include accounting services, actuarial valuations, employee consultation and record keeping, and asset management. Any Pennsylvania county, city, town, township, borough, municipal authority, or institution supported and maintained by a municipality may participate. All participating plans as of December 31, 2002 are listed in the Statistical Section of this report.

The System offers various plan designs: defined benefit, defined contribution, and hybrid. The annual benefit is dependent upon the individual municipality's contracted benefit package because each pension plan is designed based on each municipality's individual needs. Benefits provided to participants in the System are typically dependent upon both age and service requirements. In addition to standard monthly pension benefits, plans routinely include provision for vesting, disability benefits, survivor benefits, and death benefits. The plan cost is determined by individual plan characteristics. The

Letter of Transmittal (*Continued*)

System's individual plans may have a municipal contribution and an employee contribution or just an employer charge. Municipal contributions typically range from 4% to 12% of projected payroll for municipal employees and from 12% to 20% for police and firefighters. The employee contribution is determined by plan contract. In 2002, plan requirements ranged from no employee contribution to as high as 7.5% of earnings.

2002 CAFR

The 2002 Comprehensive Annual Financial Report (CAFR) format follows the required Governmental Accounting Standards Board (GASB) Statement No. 25. The annual report is presented in five sections: introductory, financial, investment, actuarial, and statistical. The Introductory Section contains this Letter of Transmittal, the System's administrative organization, the Chairman's Report, and a summary of plan provisions; the Financial Section presents the opinion of the System's independent auditors, Clifton Gunderson LLP, and the financial statements of the System with accompanying notes and schedules, including management discussion and analysis (MD&A) on page 17, which describes the financial performance of the plan; the Investment Section contains an overview of the System's investment activities and policies and an overview of the System's revenues by source, expenses by type, administrative expenses, and investments; the Actuarial Section presents the opinion of the System's independent actuarial firm, The Segal Company, and the results of its annual actuarial valuation; and the Statistical Section includes significant financial and demographic data presented on a multi-year basis and the Schedule of Participating Employers.

Economic Environment

For the whole of 2002 the economic prognosticators spent their efforts predicting a strengthening of the United States economy and the return of strong financial markets. Thanks to the consumer, the year did see a growth rate of 2.8%. Low mortgage rates, record level home loan refinancing and new purchases were estimated to have added \$135 billion in wealth to the economy. This was seen as a significant offset to the continued loss of wealth caused by the decline in the equity markets.

The weak recovery, some pretty outrageous financial scandals (Enron, WorldCom, Adelphia, and Tyco to name a few), and the uncertainty in the geopolitical arena caused confidence in the equity market to be severely damaged. U.S. stocks declined for a third consecutive year, an experience that had not occurred in more than 60 years. To add to the disappointing trend, the U.S. economy's "weak" 2002 performance was typically cited as one of the major causes for the poor returns in the international markets.

The Federal Reserve Board caused several ripples in the financial community at the end of 2002. The first announcement was a change in its policy bias towards easing with the ultimate surprise being a larger than expected 50-basis point cut in early November. Secondly, the Fed suggested that for the first time in 70 years there was some reason to seriously consider the possibility of deflation. While continuing to suggest the threat is a minor one, nevertheless the comments re-introduced a new concern for the long-term economic stability of the country.

Financial Information

The system's financial statements were prepared in accordance with generally accepted accounting principles of government accounting and reporting as adopted by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants. The financial statements and the required supplementary information in the report have been prepared in accordance with the standards for disclosure following GASB Statement No. 25, 34, and 37 guidelines. The accrual basis of accounting is used to record all financial transactions including assets, liabilities, revenues, and expenses. Gains and losses on sales and exchanges of investments are recognized on the transaction date. Significant accounting policies are detailed in the Financial Section under "Notes to Financial Statements."

Letter of Transmittal (*Continued*)

The System's assets totaled \$959,600,032 as of December 31, 2002. In 2002, the System's assets decreased by \$75,742,777. Investment-related losses reduced the portfolio by \$82,539,549. The decrease was offset in part by contribution income of \$42,735,867. Additional information on the System's assets is detailed in the Financial Section ("Statements of Plan Net Assets" and "Statements of Changes in Plan Net Assets").

The System has established internal computerized control policies and procedures for the review and verification of all receipts and payments made to and from the fund. In addition, the System's staff prepares a yearly budget which must be adopted by the Board. The budget is also presented to and reviewed by the Local Government Committees of the Pennsylvania House and Senate at least two months prior to the beginning of the fiscal year. The committees can approve the budget, reject it, or take no action by the end of the year in which case the proposed budget becomes final. Budgetary controls include monthly review and presentation by management with bimonthly Board reviews. The 2002 administrative budget was adopted in September 2001 and set at \$2.703 million exclusive of investment fees. Expenditures (exclusive of investment fees and depreciation) in 2002 amounted to \$2,327,054. More information on the System's expenses are included in the Financial Section of this report ("Schedule 3 - Administrative Expenses").

Revenues

The System was established by law to pay pension benefits when due. It accumulates sufficient funds to pay benefits through employee contributions, employer contributions, and investment earnings. The following schedule presents a summary of revenues for the fiscal year ended December 31, 2002, and also shows the amount and percentage of increases and decreases in relation to December 31, 2001 revenues.

Additions to Plan Net Assets	2002 Amount	Percent of Total	2001 Amount	Increase (Decrease) from 2001	Percent of Increase (Decrease)
Member Contributions	\$ 13,639,485	(34.27)%	\$ 13,007,863	\$ 631,622	1.89%
Municipal Contributions	28,836,362	(72.45)	21,010,322	7,826,040	23.43
Assessments	260,020	(0.65)	248,960	11,060	0.03
Investment Income	(82,539,549)	207.37	(40,673,725)	(41,865,824)	(125.36)
Total	\$ (39,803,682)	100.00%	\$ (6,406,580)	\$ (33,397,102)	

Municipal contributions are based upon an actuarial valuation, using the Entry Age Normal Actuarial Cost Method, computed as a percentage of the total compensation of all active members during the period for which the amount is determined.

Member contributions vary according to the type of pension plan. Under Articles II and III of the Act, members are required to contribute 3% to 8% of their salary. The amount a member contributes under Article IV of the Act is based upon contracted plan provisions and is principally expressed as a percent of compensation or salary.

Investment revenues are a combination of earnings from bonds, equities, real estate, and a short-term cash management fund. During the 2002 fiscal year, the fair value of the System's investment portfolio decreased from \$1,022,312,073 to \$946,930,403. The largest portions of the investment revenue decrease came from domestic and international equities.

The final portion of revenue is derived from assessments. Each municipality is charged a \$20 assessment per member to help cover administrative expenses incurred by the System. Any fluctuation in assessments is caused by the number of

Letter of Transmittal (*Continued*)

members per municipality and can be affected by employee turnover or new plans being added or plans leaving the System in previous years.

Six-year historical trend information listing the System's revenues by source is presented in Part I of the Statistical Section of this report.

Expenses

The System's primary expense represents the purpose for which it was created: payment of benefits. The following schedule presents a summary of the System's expenses for the fiscal year ended December 31, 2002, and shows the percentage of increases and decreases in relation to December 31, 2001 amounts.

Deductions from Plan Net Assets	2002 Amount	Percent of Total	2001 Amount	Increase (Decrease) From 2002	Percent of Increase (Decrease)
Annuity benefits	\$ 28,674,963	70.83%	\$ 28,035,208	\$ 639,755	2.28%
Disability benefits	900,762	2.22	906,591	(5,829)	(0.64)
Terminations	8,502,709	21.00	11,686,001	(3,183,292)	(27.24)
Administrative	2,406,732	5.94	2,555,114	(148,382)	(5.81)
Total	<u>\$40,485,166</u>	<u>100.00%</u>	<u>\$43,182,914</u>	<u>\$(2,697,748)</u>	

The major expense-related items for 2002 were payment of benefits, refunds of withdrawing plans, refunds of contributions due to termination or death, and administrative expenses. The System processed three plan withdrawals with returns of over \$2.5 million. This payout did reflect itself in a reduction of System assets and slower growth in municipal contributions.

A breakdown of the System's expenses including six-year historical trend information is presented in Part I of the Statistical Section of this report.

Investment Highlights

The Board's investment objective is to benefit the System's member municipalities by adding value to their assets through prudent monitoring of the investments and careful guarding of the principal. Recognizing that inflation can erode value, the Board's goal is to have the fund earn at least 2% more annually than the average annual inflation rate over a long period of time. The System invests its assets in order to maximize current and future income yield and to provide long-term stability.

On December 31, 2002, the fair value of the System's investments was \$946,930,403. This represents a decrease of \$75,381,670 over the previous year. For the last five years, the System's annualized return was 3.9%. On December 31, 2002, the System's investment portfolio was distributed as follows: 45.6% in domestic equities, 13.4% in international equities, 26.0% in bonds, 11.5% in real estate, and 3.5% in cash equivalents.

Additional information concerning the System's investments is provided in the Investment Section of this report.

Funding

The System's level of funding is based on the actuarial reserve method. Funds are derived from the excess of revenues over expenses and are accumulated by the System in order to meet current and future benefit obligations to retirees and beneficiaries. As the funding level increases, the assets accumulate and strengthen the investment income potential. Net

Letter of Transmittal (*Continued*)

operating income for the 2002 fiscal year was (\$80,288,849). This represents a decrease in the fund balance of 8.1% over the 2001 fund balance.

To comply with GASB Statement No. 25 disclosure requirements, the "Schedule of Funding Progress" was calculated based on the most recent actuarial valuation dated January 1, 2002. As illustrated in the schedules under "Required Supplementary Information," the System's funded ratio in relation to the System's current actuarial value of assets is adequate to fund the System's actuarial accrued liabilities. Additional information on the System's actuarial value, liabilities, and funding progress can be found in the Actuarial and Financial Sections of this report.

As an agent multiple-employer Public Employee Retirement System (PERS), the System reports to each of the trustees of the plans it administers, providing the governing authority of the member plans with complete actuarial, accounting, and funding data. Detailed information on the System's plan funding can be found in the Financial Section (Schedules 1 and 2) and the Actuarial Section of this report under Exhibit I.

Major Initiatives

The System's trustees spent considerable time in 2002 examining the agency's structure and resources in an effort to assess customer satisfaction and the delivery of product. The significant growth experienced in the agency's customer base, the demand for better, faster, and more comprehensive services, along with a bedeviling transition to a new computer platform and software package left many board members and staff questioning the agency's preparedness for the expected future growth.

In May, the board directed the hiring of a management consultant, the undertaking of three different customer satisfaction surveys and a renewed commitment for the completion of the transition to the new computer software base. By year's end not only were the consultants hired, they had prepared a preliminary finds report for the board's examination. The customer satisfaction surveys revealed a rather high level of approval but a disturbing weakness in responsiveness to financial reporting and plan benefit design consulting.

Steps were implemented and processes redesigned to address the apprehensions identified in the survey responses. The board also took a proactive stance in monitoring ongoing relations with the plans enrolled in the System. One of the more decisive steps was the separation of the Membership and Municipal Services Division into two independent units. The goal is to concentrate more resources to serving both sets of clients in a more timely and concentrated fashion.

Professional Services

The financial information in this report has been audited by the independent accounting firm of Clifton Gunderson LLP, which is completing year one of a three-year contract. The actuarial information was prepared with the help of E. Greenblum, consulting actuary from The Segal Company. The Segal Company is in year two of a five-year competitively bid contract. The investment information was prepared with the cooperation of the System's independent investment consultant, R. Dahab of Dahab Associates. This firm is completing year three of a five-year contract that was competitively bid. The Board and staff sincerely appreciate the cooperation and commitment of these three advisors in providing information for the preparation of this report.

Acknowledgments

We must recognize and express our sincere appreciation to the individuals who are so instrumental to the operations of the System. First and foremost, we salute our Board members for their dedicated service to the System. Their dependability,

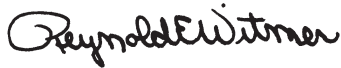
Letter of Transmittal (*Continued*)

commitment to serving the System's members, dedication, and guidance are most appreciated. Board members serve the System without financial remuneration other than travel expenses for Board meetings, seminars, and conferences.

We also thank the System's staff for providing materials and information needed to compile this financial report. The staff is commended for its teamwork and concerted efforts to meet deadlines without detracting from the quality or accuracy of the report.

The third and most important thank you goes to our individual plan members, contact persons, and governing boards. We appreciate your continued support and trust. Thank you for the privilege of administering your pension needs.

Respectfully submitted,



Reynold E. Witmer
Chief of Accounting



James B. Allen
Secretary

Administrative Organization

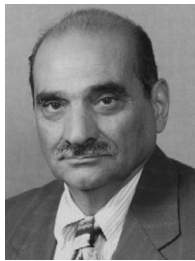
Pennsylvania Municipal Retirement Board as of December 31, 2002



Douglas K. Bowen
Chairman
serves until replacement named
represents Pennsylvania
municipal authorities



Robert T. Umstead
Vice-Chairman
serves until replacement named
represents Pennsylvania boroughs



Victor A. Cicero
serves until replacement named
represents Pennsylvania
police officers



Dr. Richard T. Derstine
(Deceased)
represented Pennsylvania townships
of the second class



Barbara Hafer
appointed by statute
State Treasurer (ex-officio) represented by
Joseph Jardine



Dawn Knapp
term expires September 5, 2004
represents Pennsylvania firefighters



Paul S. McMillen
serves until replacement named
represents Pennsylvania counties



C. Michael Weaver
appointed by statute
Secretary of the Commonwealth
(ex-officio) represented by, John T. Henderson, Jr.,
Chief Counsel



Anthony Spagnolo
term expires January 19, 2004
represents Pennsylvania
townships of the first class

Vacant: represents Pennsylvania Municipal Retirement System retired members

Vacant: represents Pennsylvania Cities

Administrative Staff as of December 31, 2002

James B. Allen

Secretary

Edward L. Bechtel

Assistant Secretary

Reynold E. Witmer

Accounting
Division Chief

Benjamin F. Mader

Membership Services
Division Chief

Kristine Gibboney

Municipal Services
Division Chief

William R. McGill

Operations
Division Chief

Professional Consultants as of December 31, 2002

Actuary

The Segal Company
Washington, DC
Eli Greenblum
A.S.A., M.A.A.A., E.A.

Auditor

Clifton Gunderson LLP
Timonium, MD
Independent Auditors
William F. Blair

Comptroller

Commonwealth of Pennsylvania
Harrisburg, PA
Central Services
Shirley McCormick

Investment Consultant

Dahab Associates, Inc.
Bay Shore, NY
Richard E. Dehab, C.F.A.
President

Legal Counsel

Commonwealth of Pennsylvania
Harrisburg, PA
Thomas E. Ross
Chief Counsel

Master Custodian
Mellon Bank Corporation
Pittsburgh, PA

Investment Advisors

Black Rock Financial Management, Inc.

Philadelphia, PA
Wayne Archambo, Managing Director

The Boston Company Asset Management, Inc.

Boston, MA
Paul Lehy, Vice President

Chase Investment Counsel Corporation

Charlottesville, VA
Derwood S. Chase, Jr., President

CIGNA Investment Management

Hartford, CT
John M. Hurley, Vice President

Emerald Advisers, Inc.

Lancaster, PA
Kenneth G. Mertz II, President

Forest Investment Associates, Inc.

Atlanta, GA
L. Richard Doelling, Director of Client Relations

Heitman Capital Management

Chicago, IL
Mary Ludgin, President

Mercator Asset Management, L.P.

Boca Raton, FL
James E. Chaney, President, JXC Corp.

Prudential Real Estate Investors (PRISA)

Parsippany, NJ
Lester F. Lockwood, President

Seix Investment Advisors

Woodcliff Lake, NJ
Christina Seix, Chariman

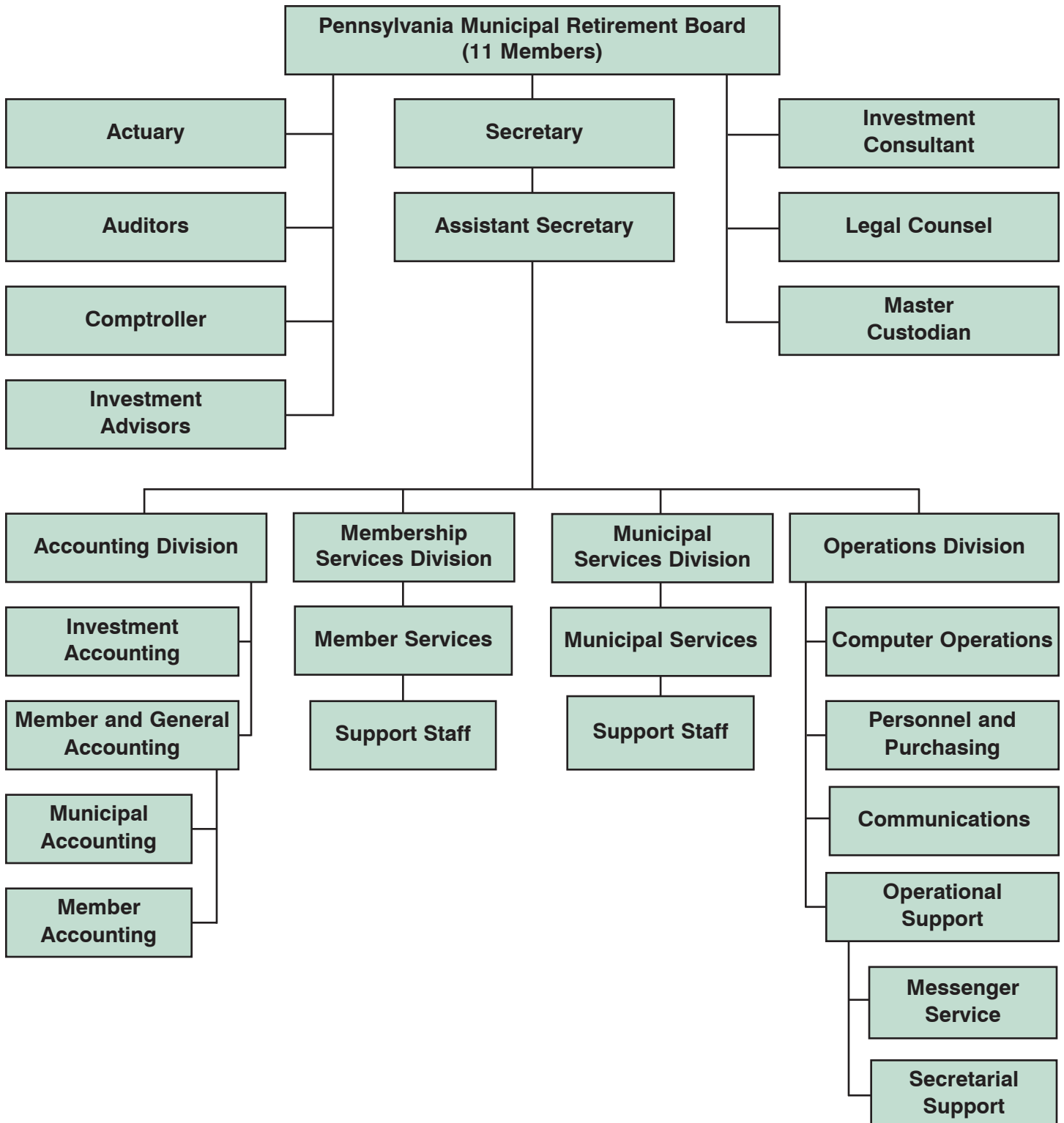
State Street Global Advisors

Boston, MA
James Thorsen, CFA

Wadell & Reed Investment Management Corp.

Overland Park, KS
Thomas Mingel, Senior Vice President

Organization Chart



Chairman's Report

Pennsylvania Municipal Retirement System

Commonwealth of Pennsylvania



P. O. Box 1165, Harrisburg PA 17108-1165
Phone: (717) 787-2065 (800) 622-7968
Fax: (717) 783-8363
www.pmrs.state.pa.us ra-staff@state.pa.us

July 31, 2003

Members of the Pennsylvania Municipal Retirement System
Pennsylvania Municipal Retirement System
PO Box 1165
Harrisburg, Pennsylvania 17108-1165

Dear PMRS Members:

The Pennsylvania Municipal Retirement Board is honored to share with you the Pennsylvania Municipal Retirement System's eighteenth Comprehensive Annual Financial Report. We believe that full and comprehensive disclosure is the only way to secure the trust of our members. In preparing the report, our goal was to provide a complete history of the 2002 financial activities of the System.

As of December 31, 2002, the System's assets were valued at \$905,113,792, a decrease from the December 31, 2001 balance of approximately \$85 million. The decrease was caused in large measure by a continuing deterioration of the investment markets. We are very comforted to observe that while many trusts have been devastated by the turmoil in the equity markets, the System has weathered what appears to be the worst of the storms with relatively minor damage. The System enrolled 30 new member plans in 2002 and now serves over 12,000 employees, pensioners and survivor beneficiaries.

While the world financial markets have seen some very traumatic events unfold during the past two years, I can share as PMRS Board Chair, that those responsible for safeguarding the future benefit payments to our member plans have worked hard and feel secure in knowing that the PMRS has been and will continue to be successful in our efforts to meet those needs. We believe the turn about in the equity markets at the end of 2002 portend nothing but good news.

There was one change in Board membership in 2002. It is with sincere sympathy that the Board acknowledges the untimely death of Dr. Richard T. Derstine, who represented Pennsylvania townships of the second class. In his brief tenure on the Board, he quickly gained the respect and admiration of those with whom he served.

On behalf of the Board and staff, we thank all governing boards, local government staffs, and each individual plan member for your cooperation and support. We appreciate the trust you have placed in our hands.

Sincerely,

A handwritten signature in black ink, appearing to read "Douglas K. Bowen".

Douglas K. Bowen
Chairman

Summary of Plan Provisions⁽¹⁾

The System offers a variety of alternative pension plans. Municipalities may design their own pension benefit structures. Most municipalities select this option and work with the System to create a combination of benefits that meet the individual needs of the municipality and its employees. Additionally, the System has two basic benefit plans designed by the State General Assembly: one for municipal employees and one for police and firefighters.

Superannuation and Early Annuity Eligibility Benefits

Under the basic plans, the minimum normal retirement age is 65 for municipal employees and 55 for police and firefighters. A member may retire early at any age after 24 years of service. Under an optional plan design, a municipality may choose any age or service requirement permitted under its particular municipal code. Early retirement under the optional plan may also be designed to meet the needs of the municipality.

There are two approaches to accumulating retirement benefits. Under the defined contribution approach, the benefit accrues based on the level of contributions and the investment earnings credited to the fund. The defined benefit approach depends upon the individual's age, years of credited service, and an actual benefit formula which usually includes a salary factor.

Disability Annuity Eligibility Benefits

A member who is unable to work because of serious injury or illness may apply for a disability annuity. The application and required medical documentation will be reviewed by the Board and the System's medical examiners to determine whether the member is eligible for the disability benefit.

A disability that results directly from doing one's job is classified as a service-connected disability. A disability that is not caused by one's work is termed a nonservice disability.

Conditions for disability benefits are defined in the municipality's contract. The System's basic plans provide for (1) a service connected disability annuity of 50% of the disabled individual's final average salary offset by worker's compensation, and (2) a nonservice disability with a minimum of 10 years' service and a 30% final average salary annuity.

Vesting Annuity Eligibility Benefits

Conditions for vesting are defined in the municipality's contract. The basic plans have a 12-year service requirement for vesting.

A member who terminates service before retirement may elect to leave the member's accumulated contributions in the System and defer receipt of benefits until normal retirement age. Then when the member receives the vested benefits, checks will include the member contributions and the municipal contributions.

Benefit Payment Options

Depending on the municipality's contractual agreement, employees may choose individual alternatives for the monthly retirement allowance or may select one from a list of options. Typical options are as follows:

- **Single Life Annuity:** Provides a continual income throughout the annuitant's lifetime with no beneficiary benefit
- **Option 1:** Reduced lifetime benefit with remaining lump sum value of account to beneficiary
- **Option 2:** Joint and 100% survivorship annuity
- **Option 3:** Joint and 50% survivorship annuity

⁽¹⁾ Descriptions are not identical to those in the audit report. Information has been rewritten for ease of understanding.

Summary of Plan Provisions (*Continued*)

Death Benefit Eligibility

A death benefit provides some continuation of payment or presentation of benefits to a beneficiary given certain eligibility requirements of the covered individual. If an active member or vestee with minimum years of service dies, the death benefit goes into effect provided the municipality has included this feature in its plan.

Termination of Service

A member always receives the accumulated deductions and interest earned at the regular rate of interest, currently 6.5%. Depending upon the municipality's contract structure, the member might also receive excess investment monies upon withdrawal.

If a member terminates employment and goes to work for another municipality which is a member of the System, the employee may transfer the service credits unimpaired to the new municipal employer.

Financial Section

- Report of Independent Auditors
- Management's Discussion and Analysis
- Basic Financial Statements
 - Statements of Plan Net Assets
 - Statements of Changes in Plan Net Assets
 - Notes to Financial Statements
- Required Supplementary Information
 - Schedule of Funding Progress
 - Schedule of Required Employer Contributions
 - Notes to Required Supplementary Schedules
- Supplemental Schedules
 - Administrative Expenses
 - Investment Expenses
 - Payment to Consultants



Report of Independent Auditors



Board of Directors
Pennsylvania Municipal Retirement System
Harrisburg, Pennsylvania

We have audited the accompanying basic financial statements of the Pennsylvania Municipal Retirement System (the System) as of and for the year ended December 31, 2002, as listed in the table of contents. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of the System as of December 31, 2001 were audited by other auditors whose report dated November 20, 2002, expressed an unqualified opinion on those financial statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 System's plan net assets as of December 31, 2002, and the changes in its plan net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The Management's Discussion and Analysis and Supplemental Schedules of Funding Progress and Required Employer Contributions (Schedules 1 and 2) are not a required part of the basic financial statements but are supplementary information required by the Government Accounting Standards Board. 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 made for the purpose of forming an opinion on the basic financial statements taken as a whole. The Introductory, Investment, Actuarial and Statistical sections, as well as Supplemental Schedules 3 through 5, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Supplemental Schedules 3 through 5 have been subjected to the auditing procedures applied in the audit of the basic financial statements, and, in our opinion, are presented fairly, 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 subject to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

Clifton Gunderson LLP

Baltimore, Maryland
July 2, 2003

Management's Discussion and Analysis

This section presents management's discussion and analysis of the Pennsylvania Municipal Retirement System's (PMRS, the System) financial performance for the fiscal year ended December 31, 2002. It is presented as required supplemental information to the financial statements.

Overview of Financial Statements

PMRS administers sound, cost-effective pension plans on a contracted basis for local government employers throughout the Commonwealth. Any Pennsylvania county, city, town, township, borough, municipal authority, or institution supported and maintained by a municipality may participate.

The Statements of Plan Net Assets provide a snapshot of the financial position of PMRS at December 31, 2002, including comparative amounts for the prior year.

The Statements of Changes in Plan Net Assets summarize PMRS' financial activities that occurred during the fiscal period from January 1, 2002 to December 31, 2002, including comparative amounts for the prior year.

The Notes to Financial Statements provide additional information that is essential to a full understanding of the financial statements. The notes are an integral part of the financial statements and include detailed information not readily evident in the basic financial statements.

The Required Supplementary Information immediately following the Notes to Financial Statements provide two schedules showing historical information concerning the funded status of PMRS and the employers' contributions.

The remaining supplementary schedules provide additional detailed information concerning the operating expenses, investment expenses, and payments to noninvestment consultants. All of this supplemental information is considered useful in understanding and evaluating the financial activities of PMRS.

Financial Highlights

- PMRS' plan net assets decreased by \$80 million from \$997 million at December 31, 2001 to \$917 million at December 31, 2002. The decrease is primarily attributable to a net loss on investments and the payouts of several plans that withdrew from the System.
- The funded ratio as of the latest actuarial valuation dated January 1, 2001 increased from 111.0% to 118.1%. The increase is due to actuarial experience gains.
- The rate of return for the year ended December 31, 2002 was a net loss of (8.9)% compared to the year ended December 31, 2001 which was a net loss of (3.9%).
- Total employee and employer contributions increased from \$34 million in 2001 to \$43 million in 2002.
- Total pension plan benefit payouts decreased by 6.2% from \$40.6 million during 2001 to \$38.1 million during 2002. The decrease is primarily due to the payouts of fewer plans that withdrew from the system in 2002.
- Administrative expenses decreased by 8% from \$2.6 million during 2001 to \$2.4 million during 2002 and were within PMRS' budgeted amounts for both years.

Funded Status

PMRS uses an actuarial reserve of funding that is financed by member contributions, employer contributions, and earnings from invested assets. An independent actuarial valuation of PMRS' actuarial assets and liabilities is performed bi-annually. As part of this valuation, the progress toward funding pension obligations of the retirement system is measured by comparing the actuarial value of assets to the actuarial accrued liability. This measurement is referred to as the funded ratio or funded status. PMRS is 100% funded, which is one indicator of the financial soundness of the plan. The most recent actuarial valuation reports that PMRS is 118.1% funded as of January 1, 2001. The results of operations for 2002 and 2001 will be reflected in the next actuarial valuation as of January 1, 2003. Due to the normal lag time for completion of the actuarial valuation, the resulting funded status will be available at the end of the calendar year and will be reported in the financial statements for the fiscal year ended December 31, 2003.

Management's Discussion and Analysis (Continued)

Summary of Plan Net Assets

as of December 31, 2002 and 2001

Analysis of Plan Assets

	<u>2002</u>	<u>2001</u>	<u>Change</u>
	(In Thousands)		
Assets			
Receivables	\$12,277	\$12,595	\$(318)
Investments	915,096	998,165	(83,069)
Securities Lending Collateral Pool	31,834	24,147	7,687
Fixed assets	393	436	(43)
Total assets	<u>\$959,600</u>	<u>\$1,035,343</u>	<u>\$(75,743)</u>
Liabilities	<u>42,926</u>	<u>38,380</u>	<u>4,546</u>
Total plan assets	<u><u>\$916,674</u></u>	<u><u>\$996,963</u></u>	<u><u>\$(80,289)</u></u>

Summary of Changes in Plan Net Assets

	<u>2002</u>	<u>2001</u>	<u>Change</u>
	(In Thousands)		
Additions:			
Contributions	\$42,736	\$34,267	\$8,469
Net investment gain (loss)	<u>(82,540)</u>	<u>(40,674)</u>	<u>(41,866)</u>
Total additions	<u>(39,804)</u>	<u>(6,407)</u>	<u>(33,397)</u>
Deductions:			
Benefit payments and terminations	38,078	40,628	(2,550)
Administrative expenses	<u>2,407</u>	<u>2,555</u>	<u>(148)</u>
Total deductions	<u>40,485</u>	<u>43,183</u>	<u>(2,698)</u>
Total changes in plan net assets	<u><u>\$(80,289)</u></u>	<u><u>\$(49,590)</u></u>	<u><u>\$(30,699)</u></u>

See accompanying notes to financial statements.

Management's Discussion and Analysis (*Continued*)**Investments**

PMRS is a long-term investor and the Board manages the Fund with long-term objectives in mind. A primary element of PMRS' investment philosophy is that diversification among various asset classes is the best way to achieve its goals. PMRS makes estimates of future long-term market returns and establishes an asset allocation plan taking into account the risk associated with each asset class as well as the financial objectives of the Fund.

For 2002, PMRS' rate of return on investments was a net loss of (8.9%), which is primarily attributable to downturns in the domestic and international equity markets. The annualized rate of return over the past three and five years ended December 31, 2002 was a net loss of (3.7)% and a net profit of 3.9%, respectively. The Fund's long-term actuarial investment return assumption is 6.5%.

The asset distribution of PMRS' investment portfolio at December 31, 2002 and 2001, at fair market value was:

Asset Class	<u>2002</u>	<u>%</u>	<u>2001</u>	<u>%</u>
	(In Thousands)			
Short term	\$32,730	3.5%	\$34,467	3.5%
Fixed income	237,785	26.0	224,762	22.5
Common and preferred stock	450,588	49.3	624,893	62.6
International stock	88,565	9.7	-	-
Real estate equity	<u>105,428</u>	<u>11.5</u>	<u>114,043</u>	<u>11.4</u>
Total	<u><u>\$915,096</u></u>	<u><u>100.0%</u></u>	<u><u>\$998,165</u></u>	<u><u>100.0%</u></u>

Fixed Income

Fixed income increased approximately \$13 million from December 31, 2001 to December 31, 2002, primarily due to income earned during 2002.

Common and Preferred Stock

Common and preferred stock including international stock decreased approximately \$86 million from December 31, 2001 to December 31, 2002, primarily due to negative returns in the domestic and international equity markets.

Real Estate Equity

Real estate equity decreased approximately \$9 million from December 31, 2001 to December 31, 2002 due to the sales of properties in 2002.

Contributions and Investment Income

During 2002, contributions from employers and members total \$42.7 million compared to \$34.3 million during 2001. Net investment losses during 2002 were \$(83) million compared to net investment losses of \$(41) million during 2001. Investment losses were primarily attributable to downturns in the domestic and international equity markets during the last two years. Net investment loss also includes investment expenses as a deduction. See the "Pension Plan Benefits and Express" section that follows for an analysis of investment expenses.

Management's Discussion and Analysis (*Continued*)**Pension Plan Benefits and Expenses**

The primary source of expense during 2002 was for payment of pension benefits totaling \$38.1 million compared to \$40.6 million during 2001. Pension benefits decreased \$2.5 million due to a decrease in plan terminations in 2002 compared to 2001. Investment expenses increased \$.2 million from \$2.2 million during 2001 to \$2.4 million during 2002 due to the hiring of two active international investment managers. Administrative expenses totaled \$2.4 million during 2002 as compared to \$2.6 million during 2001.

Financial Contact

The System's financial statements are designed to present users with a general overview of the System's finances and to demonstrate the trustee's accountability. If you have any questions about the report or need additional information, contact the Chief, Accounting Division of Commonwealth of Pennsylvania, Pennsylvania Municipal Retirement System at P. O. Box 1165, Harrisburg, PA 17108-1165.

STATEMENTS OF PLAN NET ASSETS

December 31, 2002 and 2001

ASSETS	<u>2002</u>	<u>2001</u>
Receivables:		
Plan members	\$1,843,145	\$1,748,761
Municipal employers	1,863,530	1,019,311
Accrued investment income	2,489,980	2,404,293
Investment sales receivable	6,080,017	7,422,931
Total receivables	<u>12,276,672</u>	<u>12,595,296</u>
Investments, at fair value:		
Short-term and other investments	32,729,664	34,466,884
U.S. Government bonds	153,066,556	151,857,536
Corporate bonds	84,718,668	72,904,694
Common and preferred stocks	450,588,043	624,892,652
Real estate equity	105,427,871	114,043,308
International equities	88,564,928	-
Total investments	<u>915,095,730</u>	<u>998,165,074</u>
Securities lending collateral pool	31,834,674	24,146,999
Fixed assets, (net of accumulated depreciation of \$580,009 and \$500,322, respectively)	392,956	435,441
Total assets	<u>959,600,032</u>	<u>1,035,342,810</u>
LIABILITIES		
Accounts payable and accrued expenses	896,762	829,037
Investment purchases payable	10,194,917	13,404,246
Collateral held under securities lending program	31,834,674	24,146,999
Total liabilities	<u>42,926,353</u>	<u>38,380,282</u>
Net Assets Held in Trust For Pension Benefits	<u>\$916,673,679</u>	<u>\$996,962,528</u>

(A schedule of funding progress is presented in the Required Supplementary Information section.)

These financial statements should be read only in connection with the
accompanying notes to financial statements.

STATEMENTS OF CHANGES IN PLAN NET ASSETS

Years Ended December 31, 2002 and 2001

	<u>2002</u>	<u>2001</u>
Additions:		
Contributions:		
Plan members	\$13,639,485	\$13,007,863
Municipal employers	28,836,362	21,010,322
Assessments	260,020	248,960
Total contributions	<u>42,735,867</u>	<u>34,267,145</u>
Investments income:		
Net depreciation in fair value of investments	(51,069,123)	(74,283,053)
Short-term and other investments	960,504	1,483,258
U.S. Government bonds	4,247,329	8,941,293
Corporate bonds	3,314,126	1,633,155
Common and preferred stocks	(41,426,967)	16,506,045
Real estate equity	6,955,318	6,837,016
International equities	(3,665,121)	-
Securities lending collateral pool	564,458	420,362
Less investment expenses	(2,420,074)	(2,211,800)
Net investment loss	(82,539,550)	(40,673,724)
Total additions	<u>(39,803,683)</u>	<u>(6,406,579)</u>
Deductions:		
Annuity benefits	28,674,963	28,035,208
Disability benefits	900,762	906,591
Terminations	8,502,709	11,686,000
Administrative expenses	2,406,732	2,555,115
Total deductions	<u>40,485,166</u>	<u>43,182,914</u>
Net decrease	<u>(80,288,849)</u>	<u>(49,589,493)</u>
Net assets held in trust for pension benefits:		
Balance, beginning of year	<u>996,962,528</u>	<u>1,046,552,021</u>
Balance, end of year	<u><u>\$916,673,679</u></u>	<u><u>\$996,962,528</u></u>

(a schedule of funding progress is presented in the Required Supplementary Information section.)

These financial statements should be read only in connection with the accompanying notes to financial statements.

Notes to Financial Statements as of December 31, 2002

(1) Organization and Description of the System

Organization

The Pennsylvania Municipal Retirement System (the System) was created by the Pennsylvania General Assembly in 1974 with the passage of the Pennsylvania Municipal Retirement Law, Act of 1974, P.L. 34, No. 15 (the Act). The System is an agent multiple-employer system, and its designated purpose is to administer sound, cost-effective pensions for local government employees. Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board (the Board). Under the Act, each individual municipality has authority to establish or amend its respective benefits and employee contribution rates subject to Board approval. Employer contributions are actuarially determined by the System's actuary.

Membership in the System is optional for Pennsylvania's local governments. When a municipality joins the System, its permanent employees contractually become members. Seasonal and temporary employees as well as elected officials may also become members through contractual agreement. As of December 31, 2002, there were 656 municipalities with defined benefits and 154 with defined contributions. Membership consisted of:

Participating Local Government Employees

	Defined Benefits	Defined Contributions
Counties	4	0
Cities.....	18	0
Boroughs.....	145	22
Townships of the First Class.....	19	1
Townships of the Second Class	138	83
Authorities and Other Units	154	41
Police.....	168	7
Firefighters.....	10	0
Total.....	656	154

Notes to Financial Statements (Continued)

Individual Membership**Active Members**

Defined Benefit Plans:	
Municipal.....	7,398
Police	725
Firefighters	167
Total	8,290
Defined Contribution Plans:	
Municipal.....	778
Police	8
Firefighters	0
Total	786
Total active members	9,076

Retirees and Beneficiaries

Retirees	2,531
Beneficiaries.....	394
Total retirees and beneficiaries	2,925

Inactive participants with rights to deferred pension (vested)

Defined benefit.....	371
Defined contribution	97
Total vested.....	468

Inactive participants (nonvested)

Defined benefit.....	58
Defined contribution	0
Total nonvested	58
Total individual memberships.....	12,527

Pension Benefits

The System has the board authority of enabling a municipality to design its own retirement benefit structure. As an alternative, the System has two basic benefit structures: one for municipal employees (Article II of the Act) and one for uniformed employees (police and fire fighters) (Article III of the Act). Certain elected officials are not permitted to become System members, as outlined in individual municipal ordinances. Members are eligible for monthly retirement benefits upon reaching the age of 65 and 55, under Articles II and III, respectively, or upon accumulating 24 years of service. Under Articles II and III of the Act, vesting occurs after 12 years of service.

Such benefits under Articles II and III are generally equal to (a) the actuarial value of the members' contributions and (b) a municipal annuity that is based upon a percentage of a member's salary or compensation.

The benefit structures also provide death, disability, and early retirement benefits. These benefit provisions and all other requirements are established under Articles II and III of the Act.

Under Article IV of the Act, municipalities may provide for benefits different from those available under Articles II and III. Vesting provisions, if any, under Article IV may vary.

Automatic postretirement benefit increases are optional in plan contracts. Some plan member municipalities include the automatic increase; others occasionally grant an ad hoc cost-of-living (COLA) increase. The most common method of granting a COLA is through the System's excess interest award. (See Note 3 for an explanation of excess interest.)

Notes to Financial Statements (*Continued*)

Member municipalities interested in amending benefits contact the System's staff to discuss desired amendments and to obtain a cost study. Amendments are submitted to the System's staff, reviewed by the Chief Counsel's Office to be certain everything is in order, and submitted to the Board for formal approval.

(2) Significant Accounting Policies

Basis of Accounting

The System's financial statements are prepared on the accrual basis of accounting. Employee and employer contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. Expenses are recorded when the corresponding liabilities are incurred.

Use of Estimates in Preparing Financial Statements

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 and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reported period. Actual results could differ from those estimates.

Investments

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgage-backed securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals every three years. In years for which an appraisal is not performed, real estate investments and investments that do not have an established market value are reported at estimated fair values. Purchases and sales of investments are recorded on a trade-date basis.

Fixed Assets

Fixed assets, primarily office furniture and equipment, are recorded at cost. Depreciation is provided on the straight-line method over the estimated useful lives of the assets, typically three to eight years.

New Accounting Pronouncement

In June 1999, the Government Accounting Standards Board (GASB) issued Statement No. 34, Basic Financial Statements - and Management's Discussion and analysis - for State and Local Governments. In June 2001, GASB issued Statement No. 37, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments: Omnibus, which amended certain provisions of Statement No. 34. Although not required to implement Statement No. 34 until fiscal year 2002, the System elected to adopt the new pronouncement, as amended, for the year ended December 31, 2001. The adoption of Statement No. 34 required the System to present Management's Discussion and Analysis as required supplementary information preceding the financial statements. The adoption of Statement No. 34 did not have an impact on the net assets of the System.

Notes to Financial Statements (Continued)

(3)
Contributions and Reserves

Contributions

Contributions to the System are made by members and municipalities. Under Articles II and III of the Act, members are required to contribute 3% to 8% of their salary. The amount a member contributes under Article IV of the Act is based upon contracted plan provisions and is principally expressed as a percent of compensation or salary. The contributions required of municipalities are based upon an actuarial valuation, using the Entry Age Normal Actuarial Cost Method, computed as a percentage of the total compensation of all active members during the period for which the amount is determined. The required contributions from municipalities for the year ended December 31, 2002 consisted of the following:

Municipality normal cost	\$21,540,832
Amortization of unfunded actuarial accrued liability	5,895,054
Total⁽¹⁾	<u><u>\$27,435,886</u></u>

Total contributions to the System during 2002 amounted to \$42,735,867 of which \$13,639,485 and \$29,096,382 were made by its members and municipalities, respectively and \$260,020 were from assessments.

The difference between the municipalities' required and actual contributions is due to the municipalities transferring state aid money to the System as required under the Municipal Pension Plan Funding Standard and Recovery Act of 1984 (Act 205).

Each municipality is also charged a \$20 assessment per member to help cover administrative expenses incurred by the System.

Contributions Required and Contributions Made

The System's funding policy requires actuarially determined annual required contributions (ARC) of plan member municipalities at rates that accumulate sufficient assets to pay benefits when due. The System's actuary used the Entry Age Normal Cost Method to determine plan liabilities and normal cost. Under this method, a normal cost is calculated that would fund each employee's benefits during the employee's career as a level percent of pay.

At each valuation date, the unfunded actuarial accrued liability is calculated as the present value of all plan benefits, less the present value of future normal cost accruals, less current assets (actuarial value).

The normal cost rate is applied to the projected payroll, and projected employee contributions are deducted. Actuarial gains (or losses) are reflected by decreases (or increases) in the unfunded actuarial accrued liability. Under Act 205, the unfunded accrued liability is being amortized as a level dollar amount over the lesser of:

1. a. 30 years with respect to the initial liability as of January 1, 1985 (or first valuation);
- b. 20 years with respect to changes due to plan provisions and actuarial assumptions;
- c. 15 years with respect to actuarial gains and losses; or
2. the average assumed working lifetime of active employees as of the date the liability was established.

Significant actuarial assumptions used to compute the actuarially determined contribution requirement include (a) a rate of return on the investment of present and future assets of 6.5% a year (net of investment and certain administrative expenses) compounded annually, (b) projected salary increases of 3.5% a year compounded annually for inflation, with an

⁽¹⁾Total does not include \$20 per member administrative charges to municipalities.

Notes to Financial Statements (*Continued*)

additional age-based component to reflect merit/seniority, (c) postretirement cost-of-living increases of 3.5% per annum until the maximum is reached (optional in contracts), and (d) pre- and postretirement mortality based on the 1983 Group Annuity Mortality Table for Males, set back six years for females, and an additional set forward of 10 years for disabled lives.

Reserve Descriptions

The Act defines the following funds to be maintained by the System:

Members' Reserve Account

The Members' Reserve Account is credited with all contributions made by active members of the System. Interest is added to each member's individual account at an annual rate determined by the Board. The System's current interest rate is 6.5%

Upon retirement or disability of an active member, the member's accumulated contributions plus interest are transferred to the Retired Members' Reserve Account or the Disability Reserve Account for subsequent benefit payments. Withdrawals of members' contributions not eligible for benefits are paid from this reserve.

As of December 31, 2002, the balance in the Members' Reserve Account was \$268,610,764. The account is fully funded.

Municipal Accounts

Separate municipal accounts are maintained for each municipality. The Municipal Reserve Account is credited with each municipality's contributions toward the superannuation retirement and death benefits of its members. Annual interest is added to each separate municipal account at the current rate of 6.5%.

As of December 31, 2002, the balance in the Municipal Reserve Account was \$521,492,641. The account is fully funded.

Retired Members' Reserve Account

The Retired Members' Reserve Account represents the amounts transferred from the Members' Reserve Account, the Municipal Accounts, and the Disability Reserve Account. All retirement and retirees' death benefits plus voluntary and involuntary early retirements are paid from this reserve. Annual interest is credited to the Retired Members' Account at the current rate of 6.5%.

As of December 31, 2002, the balance in the Retired Members' Reserve Account was \$305,822,265. The account is fully funded.

Disability Reserve Account

The Disability Reserve Account is credited with the contributions made by municipalities toward the disability retirement of member employees. The disability reserves are limited to 150% of the largest value of transfers to retired reserves over the most recent three years.

As of December 31, 2002, the balance in the Disability Reserve Account was \$664,884. The account is fully funded.

Undistributed Earnings Designation

In addition to regular interest, the System may also award excess interest. Excess interest is investment earnings on the System's assets in excess of that required for allocation to regular interest and administrative expenses. Rates for excess interest are determined annually by the Board with advice from the System's actuary. The excess interest is distributed to the member accounts, the municipal accounts, and the retiree accounts as directed by the municipality.

The System did not distribute excess interest during 2002 and 2001. Such calculation, as described in Note 2, would have been prepared in accordance with a Board-approved formula and would have been based on the actuarial value (fair

Notes to Financial Statements (*Continued*)

value) of the System's assets as of December 31, 2002 and 2001, respectively, and the expected cash flows of the System for 2002 and 2001 if excess interest had been distributed.

As of December 31, 2002, the Undistributed Earnings Designation Account had a deficit of \$179,916,875.

(4) Investments

Members of the Board are trustees of the System's assets. They have exclusive responsibility for the management of such assets and have full power to invest the System's assets, subject to the term, conditions, limitations, and restrictions imposed by law upon fiduciaries.

The Board has authorized investments in U.S. Government and agency securities, foreign government bonds denominated in U.S. dollars and rated "AA," corporate bonds rated "A" or better, equity securities, and real estate commingled funds allowing for equity participation. The Board specifically prohibits investments in commodities, mineral rights, and options. Additionally, short-selling and margin purchase transactions are prohibited.

The Board achieves day-to-day management of the investment portfolio through the use of investment advisors. Restrictions concerning diversification within each advisor and among advisors are provided by adopted investment policy.

The System invests in the Commonwealth of Pennsylvania Treasury Department's short-term cash management fund. The fund comprises various short-term investments, including repurchase agreements. Restrictions on these repurchase agreements are outlined below.

Repurchase agreements with nonbanking institutions are allowable if (a) the institution has a minimum of \$50 million in capital; (b) the collateral that is pledged to the Treasury is composed of U.S. Government securities with a maturity of four years or less; (c) the collateral's fair value equals or exceeds the amount invested by the Treasury; and (d) the collateral is delivered to Treasury's Book Entry Account at the Philadelphia Federal Reserve Bank.

Repurchase investments in banking institutions are subject to identical restrictions as those noted above for nonbanking institutions.

The System also invests in mortgage-backed securities such as GNMA and FNMA obligations. These securities are sensitive to prepayments by mortgagees, which may result from a drop in interest rates. The fair value of such securities, which are reported with Bonds in the System's Statements of Plan Net Assets, approximated \$62.6 million at December 31, 2002 and \$57.1 million at December 31, 2001.

The System's investments are categorized below to give an indication of the level of risk assumed by the System at December 31, 2002. In accordance with a contractual relationship between the Commonwealth's Treasury Department and a custodial agent, substantially all investments subject to categorization, except those subject to securities lending, are held in book entry form via a unique account so as to be identified at all times as the possession of the Commonwealth. Therefore, all such investments are reflected in Category 1, which is defined as investments that are insured or registered, or securities held by the System or its agent in the System's name. Investments may also be categorized as Category 2, which is defined as investments that are uninsured and unregistered, with the securities held by the counterparty's trust department (bank) or agent. The System has no investments that would be classified in Category 2.

Category 3 is defined as investments that are uninsured and unregistered, with the securities held by the System's master custodian (bank) or agent but not in the System's name. The System also has investments that are not in any of the three defined categories, because securities are not used as evidence of the investment. Such investments are separately identified.

The System's exposure to the risk of loss of investments due to errors and omissions on behalf of its advisors is covered by the contractual obligation for the advisors to maintain errors and omissions insurance. The investment managers also must provide proof of a fidelity bond covering the advisor, the office, and its employees.

In accordance with a contract between the Treasurer of the Commonwealth of Pennsylvania and the Treasurer's custodial agent, the System participates in a securities lending program. Under this program, the custodial agent, acting as the lending agent, lends securities (equities, fixed income, and money market instruments) to independent brokers and dealers

Notes to Financial Statements (Continued)

in exchange for collateral in an amount not less than 102% of the fair value of any securities lent except equity securities of non-U.S. corporations for which 105% of the fair value is required. Collateral is marked-to-market daily. If the fair value of the collateral held falls below the minimum guidelines for securities lent, additional collateral is obtained. In lieu of securities or cash, the borrower may deliver to the lending agent irrevocable bank letters of credit, government securities, or repurchase agreements as collateral. If the collateral obtained consists in whole or in part of cash, the lending agent may use or invest the cash in accordance with reinvestment guidelines approved by the State Treasurer.

All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in the lending agent's short-term investment pool. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the securities loans made by other entities that use the lending agent's pool, which the System cannot determine. The System cannot pledge or sell collateral securities received unless the borrower defaults.

As of December 31, 2002, the System had no credit risk exposure to borrowers because the amounts the System owes the borrowers exceed the amounts the borrowers owe the System. Under the securities lending program, the lending agent provides indemnification to the Commonwealth if the borrowers fail to return the underlying securities (and the collateral is inadequate to replace the securities lent) or fail to pay income distribution on them. As of December 31, 2002 and December 31, 2001, the System's carrying value and fair value of lent securities was \$31,454,587 and \$24,926,130, respectively. The fair value of associated collateral was \$31,834,674 as of December 31, 2002 and \$24,146,999 as of December 31, 2001. The System's income, net of expenses, from securities lending was \$96,879 for 2002 and \$202,560 for 2001. Securities lent at year-end 2002 for cash collateral are presented as unclassified in the following schedule of custodial credit risk.

The System had \$31,834,674 and \$24,146,999 of cash collateral invested in the custodial agent's short-term collateral investment pool as of December 31, 2002 and 2001, respectively.

Investments (Fair Value)	Category 1	Not Categorized	Total
U.S. government bonds	\$22,348,541	\$130,718,015	\$153,066,556
Corporate bonds	39,507,020	45,211,648	84,718,668
Common and preferred stocks	353,144,627	186,008,344	539,152,971
Real estate equity	0	105,427,871	105,427,871
State Treasury short-term investment fund	0	32,729,664	32,729,664
Grand Total	\$415,000,188	\$500,095,542	\$915,095,730

Investments (other than those issued or guaranteed by the U.S. government) in any one organization that represented 5% or more of the plan's net assets at December 31, 2002 and 2001 were:

Security	Fair Value
2002	
State Street Index Fund	\$299,320,745
2001	
State Street Index Fund	\$405,055,479

Notes to Financial Statements (*Continued*)

(5)
Relationships with Other Commonwealth Agencies

Responsibility for the organization and administration of the System is vested in the eleven-member Pennsylvania Municipal Retirement Board. The State Treasurer and the Secretary of the Commonwealth serve on the Board by virtue of statute. Eight Board members are also appointed by the Governor after being nominated by their respective organizations. One member each represents the Chiefs of Police Association, Pennsylvania League of Cities, Pennsylvania Municipal Authorities Association, Pennsylvania State Association of Boroughs, Pennsylvania State Association of County Commissioners, Pennsylvania State Association of Township Commissioners, Pennsylvania State Association of Township Supervisors, and the Pennsylvania State Fire Fighters Association. In addition, one Board position is filled by a retired member of the System. Interested individuals submit an application, and then the Governor appoints someone from the list of applicants.

The System is not included as a component unit of the Commonwealth of Pennsylvania for financial reporting purposes because the System is not financially accountable to the Commonwealth as there is no imposition of will, no financial benefit/burden, nor fiscal dependency associated with the System toward the Commonwealth.

(6)
Litigation and Contingencies

The System is subject to various threatened and pending lawsuits that generally deal with issues concerning upgrading of benefits. Management does not anticipate that the ultimate liability arising from such litigation and threats of litigation will have a material effect on the financial statements of the System.

(7)
Plan Termination

Member municipalities may withdraw from the System if the conditions for withdrawal under the Act have been met. Requirements include a minimum of five years of membership and approval of the Board. In the event of withdrawal, a municipality is entitled to receive a net refund of the amount then standing to the credit of the municipality in the municipal account, the member employees' account, and the retired members' reserve account. In no event shall the municipality refund exceed the pro rata interest of the withdrawing municipality in the net assets of the entire fund based on market value of the fund investments as of the date of receipt of the application for permission to withdraw. Liability for any continuation of retirement or disability benefits being paid from the System shall attach to the withdrawing municipality.

(8)
Risk Management

Exposure of the System through Board or staff activity is covered by various means. The System acts under the cover of sovereign immunity, participation in the Employee Liability Self-Insurance Program of the Commonwealth of Pennsylvania, the Commonwealth's fidelity bond, and the State Insurance Fund. There have been no significant reductions in insurance coverage from the prior year. Settlements did not exceed insurance coverage for the past three fiscal years.

Required Supplementary Information

Schedule 1 Schedule of Funding Progress⁽¹⁾

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) --Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
1/1/01	\$959,454,800	\$812,645,100	\$(146,809,700)	118.1%	\$282,113,600	(52.0%)
1/1/99	\$768,038,700	\$692,084,400	\$(75,954,300)	111.0%	\$267,134,600	(28.4%)
1/1/97	\$601,852,000	\$592,427,000	\$(9,425,000)	101.6%	\$244,678,500	(0.9%)

See accompanying notes to required supplementary schedules.

Schedule 2 Schedule of Required Employer Contributions for Last Six Years⁽²⁾

Year Ended December 31	Annual Required Contribution (ARC)	Actual Employer Contribution	Percentage Contributed ⁽²⁾
2002	\$27,435,886	\$28,836,362	105%
2001	20,941,868	21,010,322	101
2000	19,033,043	22,932,542	120
1999	17,954,107	20,054,018	112
1998	19,905,096	23,003,675	116
1997	19,166,488	22,512,647	117

See accompanying notes to required supplementary schedules.

⁽¹⁾ Historical trend information for years prior to 1997 is unavailable because of changing the reporting format from GASB Statement No. 5 to GASB Statement No. 25 in 1997. As the System has chosen to have actuarial valuations performed biannually for purposes of calculating the actuarial accrued liability as allowed by GASB Statement No. 25, no actuarial valuation was performed as of January 1, 2002, January 1, 2000 or January 1, 1998 except for 10 plans sponsored by distressed municipalities and 4 plans sponsored by counties that are required to redetermine contribution levels as of January 1, 2002 under the applicable Commonwealth statutes (Act 205 of 1984 and Act 293 of 1972).

⁽²⁾ The difference between the municipalities' required contributions and the percentage contributed is due to various factors including plan takeovers and the municipalities transferring state aid money to the System as required under the Municipal Pension Plan Funding Standard and Recovery Act of 1984 (Act 205).

Note to Required Supplemental Schedules as of December 31, 2002 and 2001

(1) Actuarial Methods and Significant Assumptions

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date:	January 1, 2001
Actuarial cost method:	entry age normal
Amortization method:	level dollar open
Remaining amortization period:	30 years with respect to the initial liability as of January 1, 1985 (or first valuation) 20 years with respect to changes due to plan provisions and actuarial assumptions 15 years with respect to actuarial gains and losses, or the average assumed working lifetime of active employees as of the date the liability was established 10 years with respect to changes in benefits for currently retired members
Asset valuation method:	sum of all audited reserve accounts plus any additional investment income to be distributed as excess interest
Actuarial assumptions:	
Investment rate of return:	6.5% compounded annually (net of investment and certain administration expenses)
Projected salary increases:	3.5% inflation and age-related scale for merit/seniority (e.g., age 30 - 6.5%; age 40 - 5.0%; age 50 - 4.6%)
Inflation at:	3.5%
Post-retirement cost-of-living adjustments:	3.5% per annum until maximum is reached (optional in contracts)

Supplemental Schedules
Schedule 3 - Administrative Expenses
Comparative Two-Year Schedule
Years Ended December 31, 2002 and 2001

	<u>2002</u>	<u>2001</u>
Personnel costs:		
Salaries and wages.....	\$1,150,597	\$1,097,222
Social security contributions	86,967	82,143
Retirement contributions	-	4,784
Insurance contributions	245,923	224,450
Other employee benefits	4,386	8,289
Total personnel costs.....	<u>1,487,873</u>	<u>1,416,888</u>
Professional costs:		
Performance evaluation.....	95,000	95,000
Actuarial	282,010	297,965
Data processing.....	11,390	13,637
Audit	28,000	94,905
Legal.....	74,550	72,196
Miscellaneous professional	85,977	242,073
Total professional costs.....	<u>576,927</u>	<u>815,776</u>
Communication costs:		
Printing.....	11,646	9,630
Telephone.....	12,721	17,948
Postage	28,412	36,073
Travel.....	30,501	29,527
Advertising	2,605	3,278
Total communication costs.....	<u>85,885</u>	<u>96,456</u>
Other services and charges:		
Office space rental.....	109,263	104,250
Equipment leasing	10,933	11,072
Supplies	18,542	17,616
Maintenance.....	34,250	12,309
Bonding and insurance	351	989
Dues and subscriptions.....	3,030	2,112
Total other services and charges.....	<u>176,369</u>	<u>148,348</u>
Depreciation.....	79,678	77,647
Total administrative expenses.....	<u><u>\$2,406,732</u></u>	<u><u>\$2,555,115</u></u>

Supplemental Schedules (Continued)

Schedule 4 - Investment Expenses
Comparative Two-Year Schedule
Years Ended December 31, 2002 and 2001

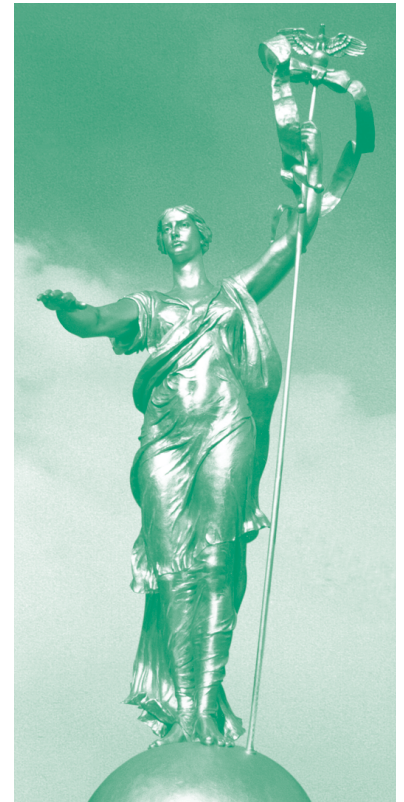
	<u>2002</u>	<u>2001</u>
Investment management fees.....	\$2,420,074	\$2,211,800
Custodial fees (included in administration expenses for financial statement purposes)	6,954	7,393
Total investment expenses	<u><u>\$2,427,028</u></u>	<u><u>\$2,219,193</u></u>

Schedule 5 - Payments to Consultants
Comparative Two-Year Schedule
Years Ended December 31, 2002 and 2001

<u>Firm Name</u>	<u>Nature of Service</u>	<u>2002</u>	<u>2001</u>
Dahab Associates, Inc.	Investment Consultant	\$95,000	\$95,000
Ernst & Young LLP.....	Auditor	28,000	51,560
The Segal Company.....	Actuary	282,010	257,255
Total		<u><u>\$405,010</u></u>	<u><u>\$403,815</u></u>

Investment Section

- Investment Performance
Portfolio Distribution
- Asset Allocation
- Investment Summary
 - Portfolio Summary
 - Portfolio Quality
 - Portfolio Rates of Return
 - Ten Largest Common Stock Holdings
 - Summary of Fees Paid to Investment Advisors
 - Summary of Commissions Paid To Brokers
- Investment Guidelines



Report on Investment Activity

Investment Return

On December 31, 2002, the Pennsylvania Municipal Retirement Board's investment assets were valued at \$905,113,792 which was a decrease of \$85,296,064 from the December 31, 2001 valuation of \$990,409,856. The System recorded aggregate net withdrawals totaling \$2,917,757 and a net investment return of (\$88,213,821).

During the five years covered by this report, the System posted net withdrawals totaling \$77.2 million and net investment returns totaling \$162.1 million. If the System had earned a compound 6.5% rate of return during the cumulative period, the fund would have been worth \$1.0 billion or \$117.2 million *more* than the actual value at the end of the year.

Economic Environment

The economy slowed during the fourth quarter, growing at a 0.7% rate. While that is still a positive figure, it represents a weakening recovery. For the past year, the force behind any growth was consumer spending. Zero percent financing and other incentives enticed consumers to buy automobiles boosting sales during the month of December by 14%. However, autos were the exception in industrial production. Most corporate investment activity was still very weak, although there was a modest improvement in computer and technology spending from the very low levels of the past two years.

Record low rates for home financing and refinancing kept home sales up. It is estimated that consumers have taken \$135 billion out of the equity in their homes by refinancing in the past two years. Couple that with the reduction in monthly interest payments, and you at least partially compensate for the loss of wealth in the stock market. It is estimated that the effects of the refinancing have been to add roughly .5% to the GDP growth rate.

The GDP growth rate of 0.7% was the weakest of the year. However, taken as a whole 2002 produced a growth rate of 2.8% which is quite respectable. (The first quarter rate was 5.0%, the second 1.3%, and the third 4.0%.)

On November 6th, the Federal Reserve surprised the market by dropping interest rates .5%. While there was some speculation that rates might be cut that day by .25%, the size of the cut was unusual. The logic behind such a large cut is that the Federal Government, for the first time in 70 years is worried about deflation. A steady decline in the prices of goods and service undermines the ability of businesses to invest in inventory and new plants and equipment. That creates an ever-increasing spiral of cost cutting and price cutting that could lead to a depression. The Federal Reserve takes such a cycle as a very serious threat to the long-term economic stability of the country.

The dollar resumed its slide during the year. It now takes \$1.04 to buy one euro compared to \$0.86 on January 1, 2002. That translates into a 20.9% drop in relative purchasing power. The trade deficit set a new record of \$40.1 billion in November as a result of continued imports, high oil prices, and weak sales abroad. For the calendar year, inflation (CPI-U) rose only 1.5%. European inflation remains steady at about 2%.

Industrial output declined by 0.2% in December. Interestingly, the decline was almost entirely attributable to a 4.7% drop in auto production. Auto sales were in fact up 14%, so it appears that the manufacturers were getting rid of inventory. Capacity utilization is still fairly low at 75.4% down from 76.1% in September, but still higher than the 75.2% level in March. American businesses can therefore produce far more output without inflation or a strain on capabilities.

Japan's weak deflationary economy appears to be slipping again. Without strong demand from the U.S. and a fairly strong yen hurting exports in general, economic growth in the world's second largest economy is nonexistent.

Report on Investment Activity *(Continued)*

Equity Market

All stocks, value and growth, large and small, rebounded for the fourth quarter, but not nearly enough to overcome their losses for the first nine months of 2002. Large cap value stocks beat growth stocks, returning 9.2% versus 7.2%. The trend reversed for small caps, small cap value rose 4.9% while small cap growth returned 7.5%.

The S&P 500 was down 22.1% for the year. The best performing sector of the market was Utilities, returning 26.9%. Albeit small, the S&P 500 suffered a negative five-year annualized return of -0.6%.

International Equities

Abroad, equity markets were generally up in dollar terms. Except for Greece and Japan, down 1.8% and 5.7% respectively, all of the developed markets posted positive returns. Leading the way were Portugal, up 25.9%, and Spain, up 20.7%. The majority of emerging markets followed the lead of the developed markets. The Philippines and Sri Lanka were down while Pakistan and Brazil returned north of 40%.

The international equities markets (as represented by the capitalization-weighted EAFE index) rose 6.5% during the fourth quarter but fell 15.7% for the trailing year. On an equal weighted basis the EAFE index rose 10.6% for the quarter but fell 13.2% for the trailing year.

Bond Market

The Lehman Brothers Aggregate Bond Index produced a trailing year return of 10.26%. Intermediate and long treasuries returned 9.28% and 16.79% respectively. The U.S. Government Index as a whole was up 11.50% for 2002. The Investment Grade Credit Index lagged for the year (10.52%). High yield corporates (junk bonds) lost 1.41%.

Emerging market bonds fared well for 2002, gaining 12.26%. Highlighting the volatility of emerging market bonds, although the fourth quarter was strong for Uruguay bonds, they are still down 40.84% for the year. Russian bonds continued to perform very well, returning 35.50% for 2002.

Cash Equivalents

Short-term yields fell during the fourth quarter as a result of the Fed funds rate cut in November. The "risk-free" Treasury note return was 0.42%, producing a trailing 12-month total return on cash and equivalents of 1.80%.

Relative Performance

Total Fund

For the calendar year, the fund lost 8.9%, ranking in the 50th percentile of the ICC balanced fund universe. For the cumulative five-year period, the fund earned 20.9% (3.9% annualized), and ranked in the 47th percentile.

Equities

For the 2002 calendar year, the equity segment lost 18.1%, beating the S&P 500 by 4.0%, and ranked in the 36th percentile. For the cumulative five-year period, the segment returned 14.1% (2.7% annualized), and ranked in the 32nd percentile, 3.3% ahead of the annualized S&P 500 loss of 0.6%.

Report on Investment Activity *(Continued)***Bonds**

For the past 12-month period, the fixed income segment returned 10.6% and ranked in the 23rd percentile. For the cumulative five-year period, the segment returned 42.4% (7.3% annualized), ranking it in the 56th percentile, 0.2% off of the annualized Lehman Aggregate bond index return of 7.5% for the same period.

Real Estate

For the trailing year, the real estate segment returned 4.6%, 1.2% below the NCREIF index. Over the cumulative five-year period, the segment earned 60.5% (9.9% annualized), lagging the index return by 1.5%.

International

For the past year, the international equity segment lost 6.6% and ranked in the 67th percentile. The 12-month return was 1.7% ahead of the Salomon Smith Barney Worldwide index return of -18.3%. For the cumulative five-year period, the segment returned -18.0% (-3.9% annualized), ranking it in the 97th percentile, 3.0% behind the annualized index return for the period.

Small Cap

For the year to date period, the small cap segment lost 22.0%, versus a loss of 20.5% for the Russell 2000 index. During the cumulative five-year period, the segment returned -1.0% (-0.2% annualized), compared to an annualized return of -1.3% for the index during the same period.

Asset Allocation

On December 31, 2002, the allocation of assets was as follows:

Domestic equities	33.0%	\$298,782,259
Small cap equities	13.0%	\$118,074,693
International equities	13.5%	\$122,295,678
Total equities	59.5%	\$539,152,630 (of the overall aggregate portfolio)
Fixed income	25.1%	\$227,523,918
Real estate	11.7%	\$105,678,001
Cash and equivalents	3.6%	\$ 32,759,175

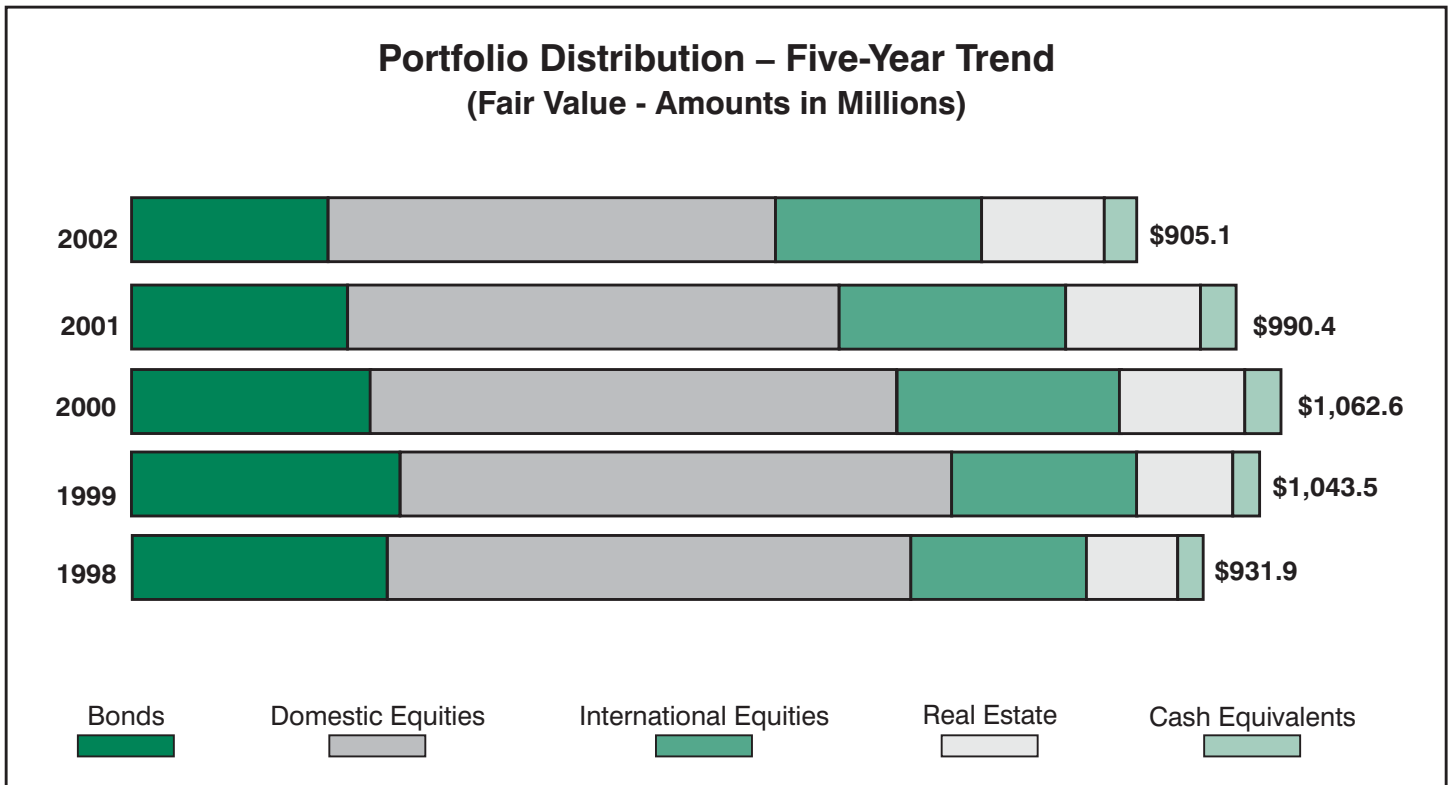
Prepared by
DAHAB ASSOCIATES, INC.

(1) Amounts in the Investment Section do not include the securities lending collateral pool.

Investment Performance

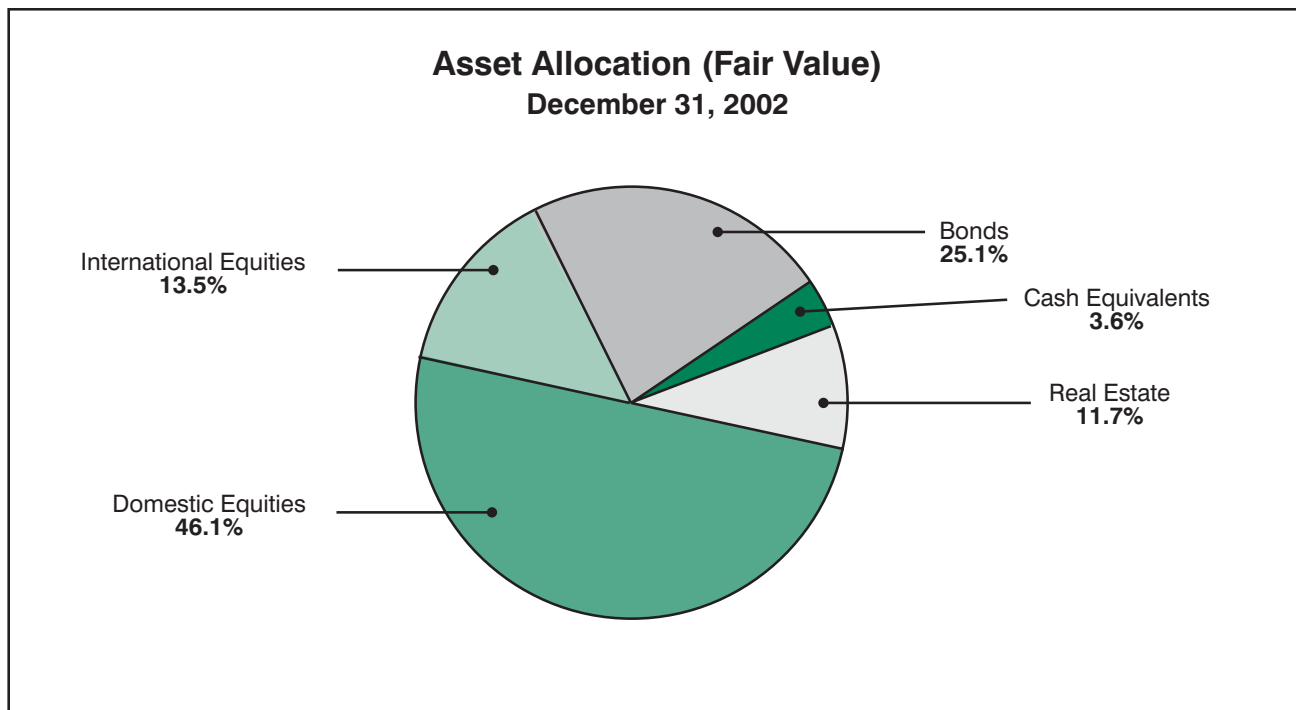
On December 31, 2002, the System's investment assets were valued at \$905,113,792,⁽¹⁾ a decrease in value of \$85,296,064 over the December 31, 2001 valuation of \$990,409,856.

During the last five years, the System has decreased from \$931.9 million to \$905.1 million. The following graph shows the System's five-year trend of investment assets at fair value.



Asset Allocation

The System's asset allocation as of December 31, 2002 was \$416.9 million committed to domestic equities, \$122.3 million to international equities, \$227.5 million to bonds, \$105.7 million to real estate, and \$32.8 million to cash equivalents. The percentage distribution is illustrated below.



The time-weighted rate of return for the System's investments during the fiscal year ended December 31, 2002 was -8.9%, ranking at the median in the 50th percentile of all balanced funds as measured by the ICC (Independent Consultant Cooperative) universe. This performance level was equal to the median balanced fund's return of -8.9%. The cumulative five-year return for December 1997 through December 2002 of 20.9% (3.9% per year) ranked in the 47th percentile.

For the year ended December 31, 2002, equities lost 18.1% and ranked in the 36th percentile, performing 4.0% above the Standard and Poor's 500 return of -22.1%. For the last five years, the System's stock return of 14.1% (2.7% annualized) ranked in the 32nd percentile, 3.3% per year above the Standard and Poor's 500 return of -0.6% for the same time period.

Bonds returned 10.6% for the year, ranking in the 23rd percentile, performing 0.4% above the Lehman Aggregate bond index return of 10.2%. For the five-year period, the cumulative bond return of 42.4% (7.3% per year) ranked in the 56th percentile, 0.2% behind the Lehman Aggregate bond index return of 7.5% for the same period.

The real estate segment of the portfolio earned 4.6% for the fiscal year. For the cumulative five-year period, the real estate portfolio earned 60.5% (9.9% per year).

Investment Summary

Portfolio Summary As of December 31, 2002

Type of Investment	Par Value	Cost Value	Fair Value	% of Total Fair Value
Corporate and government bonds:				
U.S. Government bonds.....	\$127,000,000	\$128,800,000	\$153,100,000	17%
Corporate bonds	66,300,000	67,700,000	84,700,000	9%
Total	193,300,000	196,500,000	237,800,000	26%
Common stock:				
Domestic.....	427,100,000	427,100,000	416,900,000	46%
International	137,600,000	137,600,000	123,100,000	13%
Total	564,700,000	564,700,000	540,000,000	59%
Other investments:				
Real estate equity	105,400,000	105,400,000	105,400,000	12%
Cash equivalents	31,900,000	31,900,000	31,900,000	3%
Total	137,300,000	137,300,000	137,300,000	15%
Grand total	\$895,300,000	\$898,500,000	\$915,100,000	100%

Portfolio Quality Two-Year Comparative Analysis Years Ended December 31, 2002 and 2001

Bond Rating	Fair Value	% of Total Fair Value	% of Total Carrying Value
December 31, 2002			
AAA	\$209,100,000	88%	86%
AA	7,400,000	3%	4%
A	21,300,000	9%	10%
Total bonds	\$237,800,000	100%	100%
December 31, 2001			
AAA	\$198,000,000	88%	87%
AA	11,900,000	5%	6%
A	14,900,000	7%	7%
Total bonds	\$224,800,000	100%	100%

Investment Summary (Continued)

Portfolio Rates of Return⁽¹⁾

The following table compares rates of return for the System's total investment portfolio with standard indexes for the last five years. The calculations of yields were prepared using a time weighted rate of return based on the market rate in accordance with AIMA's performance presentation standards. The System's returns have been competitive with other professionally managed funds.

**Rates of Return
Last 5 Years**

Rates of Return - (Dollar-Weighted)	Year Ended 12/31/02	Period From 1/1/98 to 12/31/02 (Annualized)
Total	-8.9%	3.9%
(Rank) ⁽²⁾	(50)	(47)
Equities	-18.1	2.7
(Rank) ⁽³⁾	(36)	(32)
Bonds	10.6	7.3
(Rank) ⁽⁴⁾	(23)	(56)
Real Estate	4.6	9.9
International	-16.6	-3.9
(Rank)	(67)	(97)
Small Cap	-22.0	-0.2
Inflation Rate -		
Consumer Price Index	2.8	3.6
Market Indicators -		
Standard and Poor's 500	-22.1	-0.6
Russell 2000	-20.5	-1.3
Lehman Aggregate Bond Index	10.2	7.5
Salomon World (international)	-18.3	-0.9
91-Day Treasury Bills	1.2	3.4
ICC Universe⁽⁵⁾ Median Rate of Return - (Time-Weighted)	-10.5	2.5

⁽¹⁾ Rate of return is a mathematical measure of the rate of change in the asset value of a fund. All rates of return are based on the fair value of the assets. Rates of return reflect both realized and unrealized capital gains and losses as well as total earnings from interest and dividends received.

⁽²⁾ Ranked against balanced funds.

⁽³⁾ Ranked against equity oriented funds.

⁽⁴⁾ Ranked against fixed income oriented funds.

⁽⁵⁾ The Independent Consultants Cooperative (ICC) Universe contains the returns of over 14,000 portfolios with an aggregate asset value of approximately \$600 billion. This universe provides as accurate a standard for evaluating a manager's performance as any available through any service in the country.

Investment Summary (Continued)

**Ten Largest Common Stock Holdings
(Fair Value)
As of December 31, 2002**

Stock	Shares	Fair Value	% of Stock Portfolio
Microsoft Corp. Com.	142,900	\$7,387,930	1.37%
Johnson & Johnson Com.	118,200	6,348,522	1.18
SLM Corp Com.	52,800	5,483,808	1.02
Proctor & Gamble Co. Com.	61,900	5,319,686	.99
Merck & Co Inc. Com.	91,200	5,162,832	.96
Lowe's Cos. Inc. Com.	127,900	4,796,250	.89
SYSCO Corp. Com.	147,000	4,379,130	.81
Dell Computer Corp. Com.	159,600	4,267,704	.79
AFLAC Inc. Com.	140,600	4,234,872	.79
Wells Fargo & Co. New Com.	88,800	4,162,056	.77

A complete list of portfolio holdings can be obtained from the System.

**Summary of Fees Paid to Investment Advisors
Comparative Two-Year Schedule
Years Ended December 31, 2002 and 2001**

Firm Name	2002	2001
BlackRock	\$242,133	\$242,766
Boston Company Asset Management	219,691	223,372
Chase Investment Counsel Corporation	639,375	673,636
Emerald Advisers	191,577	217,600
Forest Investment Associates	198,468	199,437
Globalt Investments	90,084	197,523
Mercator	251,627	
Seix Investment Advisors	234,487	222,340
State Street Global Advisors	122,136	235,126
Waddell & Reed	230,496	
Total	\$2,420,074	\$2,211,800

Investment Summary (Continued)

Summary of Commissions Paid to Brokers Year Ended December 31, 2002

Broker Name	Commissions Paid
A. G. Edwards & Sons Inc., St. Louis.....	\$3,551
Adams Harkness & Hill Inc., Boston	3,535
Advest Co., Hartford	2,002
B Trade Services LLC, New York	47,495
Baer (Julius) Securities Inc., New York	16,823
Baird, Robert W. & Co. Inc., Milwaukee	8,910
Banc of America Securities LLC, Charlotte	29,514
BancBoston Robertson Stephens, San Francisco.....	2,115
Banco Bilbao Vizcaya, New York.....	4,272
Banque Pictet and Cie, Geneva	2,512
Bear Sterns & Co. Inc., New York.....	42,145
Bernstein Sanford C. & Co., New York.....	48,360
BHF Securities Corp, New York.....	27,742
BNY Clearing Services, LLC, Milwaukee.....	10,984
Boston Institutional Services, Inc., Boston.....	1,134
Brick Securities, New York.....	5,080
Bridge Trading Co., St. Louis	8,844
Brooks Securities Inc., Cleveland.....	714
Buckingham Research Group, Inc. Brooklyn.....	3,769
C. L. Glazer & Co. Inc., Greenwich	1,143
Cantor Fitzgerald & Co., New York.....	745
Capital Institutional Services, Dallas.....	10,188
Carnegie Inc., New York	4,632
CJS Securities, Brooklyn	910
Commerce Capital Markets	9,093
Correspondent Services Corp., New York	7,814
Credit Lyonnais Securities, Paris	80,206
Credit Suisse First Boston (Europe), London	1,497
Credit Suisse First Boston Corp., New York	69,704
Credit Suisse, New York	2,070
CSFB & Donaldson Lufkin, New York	3,870
Dain Rauscher Inc., Minnesota.....	5,167
Daiwa Securities American Inc., New York	1,385
Davidson (DA) & Co. Inc., New York.....	3,058
Davy Stockbrokers, New York	532
Dean Witter Reynolds Inc., New York.....	4,950
Dematted Monness LLC, New York.....	396
Deutsche Banc Alex Brown Inc., New York.....	37,998
Deutsche Bk Securities Inc., New York	2,043
Deutsche Morgan Grenfell/CJ Lawrence, New York.....	3,101
Dexia Securities, New York	195
Donaldson Lufkin & Jenerette Securities, New York.....	2,210
Dresdner Kleinwort Benson, New York	19,956
Dresdner Kleinwort Wasserstein, London	1,708
Enskilda Securities, London	4,702
Enskilda Securities, New York	105
Exane, New York	6,664

Continued on next page

Investment Summary (Continued)

Broker Name	Paid
Execution Services Inc., New York	35,537
Fahnestock & Company, New York.....	815
Ferris Baker Watts Inc., Silver Springs	5,052
First Clearing Corp., Richmond	438
First Tennessee Securities Co., Jersey City	12,476
First Union Cap Markets, Charlotte	10,253
Fortis, New York	16,788
Fox-Pitt Kelton Inc., New York.....	2,541
Fox-Pitt Kelton, London.....	191
Fulcrum Global Partners LLC, New Jersey	865
Gerard Klauer Mattison & Co., New York	690
Goldman Sachs & Co., New York	42,579
Greentree Brokerage Services, Jersey City	150
Gruntal & Company Inc., New York.....	250
Howard Weil Labouisse Friedrichs, New Orleans	2,350
Instinet Corp., New York	29,578
Investec Ernst & Company, New York.....	1,385
Investment Technology Groups, New York	23,489
J B Were & Son Inc., New York	1,745
J P Morgan Securities Ltd., London.....	1,215
Janney Montgomery Scott, Philadelphia	8,919
Jefferies & Co. Inc., New York	12,855
Johnson Rice & Co., New Orleans.....	3,562
Jones & Associates, Westlake Village.....	4,038
Keefe Bruyette & Woods, Jersey City.....	2,735
King (CL) & Associates, Albany.....	6,806
Kleinwort Benson Securities Ltd., London	205
Knight Securities Broadcort, Jersey City.....	8,276
LA Branche Financial Services HBI, New York	39,393
Ladenburg Thalman & Co., Weehawken	5,225
Lazard Freres & Company, New York	870
Legg Mason Wood Walker, Inc., Baltimore	12,145
Lehman Bros, Inc., New York	35,898
Liquidnet Inc., Brooklyn	558
Mainfirst Bank AG, Frankfurt.....	13,811
McDonald	5,293
Merrill Lynch Pierce Fenner Smith, Inc., New York	20,630
Metzler Securities Corp., New York	896
Morgan J.P. Securities, Inc., New York	25,845
Morgan Stanley & Co. Inc., New York.....	61,545
National Financial Services Corp., New York.....	352
Needham & Company, New York.....	8,869
Nomura Securities International Inc., New York.....	986
Non-Broker Corporation Actions, Boston.....	404
NZB Neue Zurcher Bank, Switzerland.....	9,920
Oppenheimer & Co. Inc., New York	12,134
Paulsen, Dowling Securities, Boston.....	4,169
PCS Securities, Inc., Brooklyn.....	965
Percival Financial Partners Ltd., Baltimore.....	934
Pershing Division of Donaldson, Jersey City	528

Continued on next page

Investment Summary (Continued)

Broker Name	Paid
Piper Jaffray & Hopwood, Inc., Minneapolis	6,138
Prudential Securities, Inc., New York.....	16,055
Pulse Trading LLC, Boston	26,814
Putnam Lovell, Brooklyn	7,534
Quaker Securities, Inc., Philadelphia.....	1,020
Quantitative Analysis.....	1,240
Raymond James & Associates Inc., St. Petersburg	5,546
RBC Dominion Securities Inc. (T002, Doma).....	7,997
Robesco USA LLC, New York.....	438
Robinson Humphrey	475
RTX Securities Corp., Brooklyn	1,516
Salomon Brothers, Inc., New York.....	3,861
Scott Stringfellow, Inc., Richmond.....	3,830
SG Cowen Securities, London	287
SG Cowen Securities Corp., New York	25,632
Simmons & Company International, Houston	610
Smith Barney, Inc., New York	70,859
Spear Leeds & Kellog, New York.....	4,692
Standard & Poors Securities, Inc., New York.....	3,192
State Street Brokerage Services, Boston	36,383
Suntrust Capital Markets, Inc., Atlanta	2,206
Thomas & Weisel, Inc., San Francisco.....	150
Toronto Dominion Securities, Toronto	482
Troster Singer Stevens, Jersey City.....	15
Tucker Anthony & R.L. Day, Inc., New York	1,044
UBS AG, London.....	12,901
UBS PaineWebber Inc., Weehawken	2,296
UBS, Stamford	8,844
Union Bank Switzerland Securities, London	225
Warburg Dillon Read, LLC, New York.....	25,176
Wedbush Morgan Securities, Inc., Los Angeles	2,965
Weeden & Co., New York	507,981
Wellington & Co., New York.....	1,086
Westminster Research Associates, New York.....	1,860
Total Brokerage Commissions Paid.....	\$1,844,061

Investment Guidelines

Introduction

The following represents highlights from the Board's investment guidelines adopted on January 24, 2002. These guidelines, which set forth the Board's expectations, restrictions, and policy decisions, were developed to assist the System's staff and consultants in the day-to-day management of the System's assets.

Background

The System is currently experiencing a positive cash flow and expects no change in this posture for the foreseeable future. The System assumes that all benefit payouts can be made from incoming revenue as opposed to any depletion of invested assets.

Philosophy

The Board considers itself a conservative fiduciary, placing the greatest emphasis on quality of investments and consistency in return. Despite this conservative posture, the Board still believes that the five-year rate of return on investments should exceed the recognized market indices for the various asset vehicles.

After consideration of the System's 2000 asset allocation study, the Board adopted its allocation goals as follows:

Equities (large capitalized firms)	35%
Equities (small capitalized firms).....	15%
Equities (non-US domiciled firms)	15%
Fixed income	25%
Real estate.....	10%

Objective

The Board's investment objective is to benefit our member municipalities by adding value to their assets. Recognizing that inflation can erode value, the Board's goal is to have the fund earn at least 2% more annually than the average annual inflation rate over a long period of time. While this is the System-wide goal, individual investment advisors' performance measures rely on other characteristics which are specifically spelled out in the individual contractual service agreement.

Portfolio Construction

Short-Term Considerations - It is the Board's desire to remain as fully invested as possible. Therefore, any advisor in a cash or cash equivalent position must either invest in vehicles authorized by the System or utilize the System's depository relationship with the State Treasurer who will, in turn, invest all cash on a daily basis. No management fee will be paid by the System for any portion of a manager's average assets in excess of 5% remaining in cash equivalents at Treasury after the end of any given quarter.

Fixed Income Considerations - The Board seeks to bring income and stability to the overall portfolio through fixed income vehicles. The bond portfolio must be invested in quality vehicles, and it is expected to be diversified from a geographic and industrial standpoint. No single holding of an investment advisor other than a U.S. government bond is to account for more than 5% of the fair value of an investment advisor's bond portfolio. The System shall not hold as assets more than 10% of any one bond issue nor more than 5% of the bonds of any one issuing agent. Corporate bonds of any given industry are not to account for more than 25% of the fair value of the bond portfolio.

Equity Investment Policy - The System's equity portfolio reflects the Board's desire to include growth through market appreciation. The Board requires an equity portfolio with diversification, quality potential, and underlying value. No single equity holding may account for more than 7.5% of the fair value of the System's equity portfolio, nor are the securities of any single industry to account for more than 20% of the value of an individual manager's portfolio. No more than 1% of the capitalization of any company is to be held by the System. The cumulative holdings of a manager of all of that manager's clients shall account for no more than 5% of the outstanding voting common stock of the corporation.

Investment Guidelines (*Continued*)

Real Estate Policy - The Board believes that diversification in investment vehicles should enhance the potential return on investments without significantly altering the overall risk of the portfolio. Investment decisions regarding the real estate portfolio shall be guided by the objectives to preserve capital, maximize cash distributions and income, achieve a total return competitive with the other asset classes, and maintain a broad diversification of assets and managers. Real estate vehicles may be both direct equity participation and participation in commingled funds that involve equity participation with consideration given to types of properties and geographic location. The investment process and specific limitations shall be detailed in each real estate advisor's contract.

Prohibited Transactions

The Board prohibits (1) purchasing of commodities, mineral rights, and warrants except those previously authorized; (2) short selling and the purchasing of securities on margin; and (3) selling or buying options or futures contracts on either fixed income or equity instruments. Leveraged derivatives of any nature or the use of derivatives to create leverage are strictly prohibited.

Execution and Operation

The System utilizes Mellon Bank, N. A. as a master custodian and the Pennsylvania State Treasury as the depository. Mellon Bank is authorized to engage in security lending. It is not expected that this operation will have an impact on the discretion of the investment advisors.

Investment advisors are directed to execute orders on the best net execution/price basis. Transactional costs and the rate of turnover will be monitored. Active equity advisors are expected to execute trades on the auction market at a rate close to the execution-only cost (currently averaging 3 cents per share or less).

The investment advisors may enter into agreements with certain brokerage houses in order to participate in a recapture program whereby a designated percentage of the System's trades handled by these brokerage firms will be returned as cash to the System and be treated as new income for the benefit of the membership. It is expected that under such an arrangement, the average execution cost of all trades will approximate the execution-only price.

The Board assumes full responsibility for exercising the voting privilege contained in proxy solicitations and has adopted specific guidelines for staff guidance. These guidelines as adopted and hereafter amended are an integral part of the System's investment guidelines.

Communications

The Board expects an open and constant line of communication between the System's staff and investment advisors. Reports required of investment advisors to the Board and staff include a timely confirmation of all transactions, a monthly summary of transactions, a quarterly statement of asset values at cost and fair value, any explanation of contemplated major shifts in investment strategy or manager style before implementation, and an explanation of major changes in organization or the personnel associated with the System's account. In addition to written reports, the investment advisors are obligated to make periodic personal appearances before the Board as specifically spelled out in the investment advisor's contract.

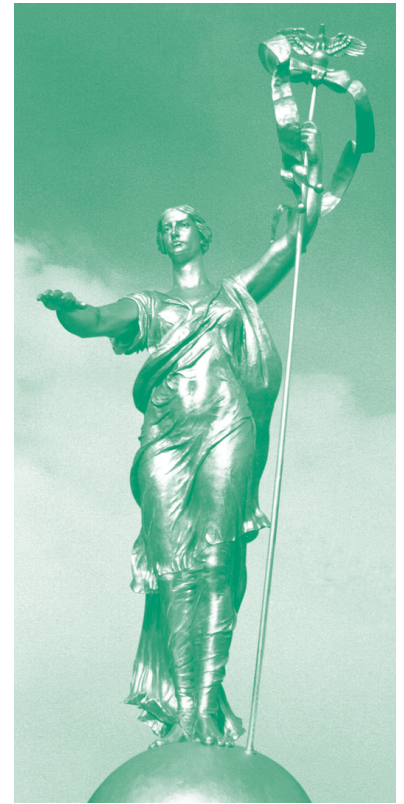
Investment advisors' fees will be paid in hard dollars. The cost for each investment advisor will be based on the fair value of the firm's assets in the System's portfolio at the end of each quarter.

Monitoring

The System will monitor the performance of its investment advisors through direct involvement of the Board, the System's staff, and any consultant hired for this purpose by the Board.

Actuarial Section

- Actuary's Certification Letter
 - Funded Status of Actuarial Accrued Liabilities
 - Actuarial Present Value of Accumulated Plan Benefits
 - Actuarial Assumptions
 - Actuarial Methods
- Membership Data
 - Active Members
 - Retired Members
- Analysis of Financial Experience
- Solvency Test



Actuary's Certification Letter



THE SEGAL COMPANY

1920 N Street, N.W., Suite 400 Washington, DC 20036-1659

T 202.833.6400 F 202.833.6490 www.segalco.com

April 23, 2003

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM

Certificate of Actuarial Valuation

This is to certify that we have prepared an annual actuarial valuation of the System as of January 1, 2002, in accordance with generally accepted actuarial principles and practices. This certificate includes the following attached exhibits:

- EXHIBIT I** - Funded Status of Actuarial Accrued Liabilities
- EXHIBIT II** - Actuarial Present Value of Accumulated Plan Benefits
- EXHIBIT III** - Actuarial Assumptions
- EXHIBIT IV** - Actuarial Methods

Individual municipality actuarial valuation results as of January 1, 2002, have been provided separately for 10 plans sponsored by distressed municipalities and 4 plans sponsored by counties that are required to redetermine contribution levels as of January 1, 2002 under the applicable Commonwealth statutes (Act 205 of 1984 and Act 293 of 1972). We have calculated (1) the unfunded liability; (2) the amortization required; and (3) the normal cost as a percentage of payroll. State law delegates to the governing authority the determination of payroll that is to be applied to the normal cost percentage. Other municipalities have been included in the actuarial results reported in this certificate, but individual plan funding requirements for those plans were not required and not redetermined; contribution requirements for such municipalities are determined on a biennial basis, most recently as of January 1, 2001.

The valuation was based on information supplied by the System's auditor with respect to assets, and by the System's administrative staff with respect to reserve accounts; age, service and compensation of employees; and age, benefit form and amount for inactive participants and pensioners. We have not verified and customarily would not verify such information, but we have examined the data for reasonableness and have no reason to doubt its substantial accuracy. The actuarial assumptions employed in this valuation were adopted by the Pennsylvania Municipal Retirement Board based on our recommendations.

To the best of my knowledge, the information supplied in this actuarial certificate is complete and accurate, and in my opinion the assumptions used in the aggregate are reasonably related to the experience of the various plans and to reasonable expectations of anticipated experience.

Eli Greenblum, ASA, MAAA
Senior Vice President & Actuary
Enrolled Actuary No. 02-3636

Attachments

Benefits, Compensation and HR Consulting ATLANTA BOSTON CHICAGO CLEVELAND DENVER HARTFORD HOUSTON LOS ANGELES MINNEAPOLIS
NEW ORLEANS NEW YORK PHILADELPHIA PHOENIX SAN FRANCISCO SEATTLE TORONTO WASHINGTON, DC



Multinational Group of Actuaries and Consultants AMSTERDAM BARCELONA GENEVA HAMBURG LONDON MELBOURNE MEXICO CITY OSLO PARIS

Actuary's Certification Letter (Continued)

**Exhibit I - Funded Status of Actuarial Accrued Liabilities
GASB Statement No. 25 Disclosure**

Actuarial Valuation Date	Actuarial Value of Assets ⁽¹⁾ (a)	Actuarial Accrued Liability (AAL) -- Entry Age (b)	Unfunded AAL (UAL) (b-a)	Funded Ratio (a/b)
1/1/02	\$242,905,700	\$196,473,500	\$(46,432,200)	123.6%
1/1/01	959,454,800	812,645,100	(146,809,700)	118.1
1/1/00	202,070,300	167,273,700	(34,796,600)	120.8

The actuarial assumptions as of January 1, 2002 are shown in Exhibit III. The above information was derived from the following membership data, as provided by the System, regarding:

- 573 defined benefit plans and 91 defined contributions-only plans as of January 1, 1997;
- 18 defined benefit plans required to redetermine contribution levels as of January 1, 1998;
- 600 defined benefit plans and 116 defined contribution-only plans as of January 1, 1999;
- 16 defined benefit plans required to redetermine contribution levels as of January 1, 2000;
- 630 defined benefit plans and 139 defined contribution-only plans as of January 1, 2001.
- 14 defined benefit plans required to redetermine contribution levels as of January 1, 2002.

	As of January 1	
	<u>2002</u>	<u>2001</u>
a. Retirees currently receiving benefits.....	487	2,324
b. Beneficiaries currently receiving benefits.....	112	363
c. Terminated vested employees entitled to future benefits - defined benefit plans	73	331
d. Terminated nonvested employees entitled to contribution refunds - defined benefit plans	57	168
e. Active employees in defined benefit plans	1,900	7,911
i. aggregate salary	\$67,861,900	\$264,346,000
ii. vested	915	4,005
iii. nonvested	985	3,906
f. Participants in defined contribution-only plans	-	785
i. aggregate salary	-	\$17,767,600
ii. active vested.....	-	683
iii. inactive vested.....	-	102

⁽¹⁾ According to method described in Exhibit IV, but excluding one-year administration expense reserve and excess interest allocation, if any, to be credited at year-end. For even-numbered year valuations of plans required to redetermine contribution requirements, excludes Disability Reserves, and Retired Reserve allocation is based on current actuarial present value.

Actuary's Certification Letter (Continued)

Exhibit II - Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated Plan benefits, calculated in conformity with FASB Statement No. 35, is shown below as of January 1, 2002 and, for comparative purposes, as of January 1, 2001.

	Benefit Information Date	
	January 1, 2002	January 1, 2001
Actuarial present value of accrued vested benefits:		
Participants currently receiving benefits.....	\$272,081,900	\$240,117,600
Other vested benefits.....	379,632,500	360,497,000
Total vested benefits	\$651,714,400	\$600,614,600
Actuarial present value of nonvested accumulated plan benefits.	49,860,700	49,269,800
Total actuarial present value of accumulated plan benefits...	\$701,575,100	\$649,884,400

The amounts shown above have been calculated in accordance with Interpretations 1 and 2 promulgated by the Actuarial Standards Board for calculating such values. The actuarial assumptions used are as shown in Exhibit III.

The factors that affected the change in the actuarial present value of accumulated Plan benefits from the preceding to the current benefit information date are as follows:

Factor	Change in Actuarial Present Value of Accumulated Plan Benefits
Withdrawn municipalities.....	\$(6,056,400)
Newly entered municipalities.....	3,525,000
Benefits accumulated, net experience gain or loss, changes in data, upgrades	44,834,700
Benefits paid (including contribution refunds).....	(34,571,400)
Interest.....	43,958,800
Total	\$51,690,700

Actuary's Certification Letter (Continued)

Exhibit III - Actuarial Assumptions

The following actuarial assumptions were adopted by the PMRS Board in November 1999 for first use in the January 1, 1999 actuarial valuation:

Mortality rates: 1983 Group Annuity Mortality Table for Males, with ages set back 6 years for females

Disability mortality: Mortality under stipulated table for a healthy life 10 years older

The following chart presents life expectancies that result from the application of the 1983 Group Annuity Mortality Table for Males for healthy lives aged 50 to 80.

Termination rates before retirement: For all plans with 25 or more active members, the termination rates indicated below were used; for municipalities with between 6 and 24 members, a percentage of the indicated rates was used where such percentage equals 100% less 5% x (25 - number of members); for municipalities with 5 or fewer members, no terminations were assumed.

Termination Rates Before Retirement

Years of Service	Rate of Termination ⁽¹⁾ (%)		
	Uniformed Members Male and Female	Municipal Members	
		Male	Female
fewer than 1	10%	12%	16%
1 but fewer than 2	8	10	14
2 but fewer than 3	8	9	12
3 but fewer than 4	7	8	10
4 but fewer than 5	6	7	9
5 but fewer than 6	5	7	8
6 but fewer than 7	4	6	7
7 but fewer than 8	3	5	6
8 but fewer than 9	3	4	5
9 but fewer than 10	2	3	4
10 or more	2	2	3

Disability rates: 50% of 1964 OASDI (Social Security) Experience for Males. Sample rates are as follows:

Disability Rate Assumptions

Age	Rate of Disablement (%)
25	0.043%
35	0.074
45	0.180
55	0.504
65	1.160

⁽¹⁾No termination rates are applied once the employee becomes eligible for voluntary early or normal retirement.

Actuary’s Certification Letter (Continued)

Disability rates - Uniformed plans: 100% of 1964 OASDI (Social Security) Experience for Males. Sample rates are as follows:

Disability Rate Assumptions

Age	Rate of Disablement (%)
25	0.085%
35	0.147
45	0.360
55	1.009
65	2.321

Type of disability: Municipal plans - 15% of disablements are assumed to be service related.
 Uniformed plans - 50% of disablements are assumed to be service related.

Workers Compensation: Service related disability benefits payable from municipal plans are offset by 25% of final average salary

Salary scale: 3.5% inflation and age related scale for merit/seniority. Plans that calculate benefits based on final rate of pay at time of retirement or on the final year’s actual salary have an additional 6% increase applied at time of assumed retirement. Sample rates are as follows:

Sample Salary Scale Rates

Age	Total Rate (%) (including inflation)
30	6.5%
40	5.0
50	4.6
60	4.2

Retirement age: Active members are assumed to retire no earlier than the age at which unreduced benefits are available. No early retirement is assumed. Specific assumptions regarding retirement age are as follows:

- (a) Uniformed Members: (i) Members first eligible to retire at age 57 or younger will defer their retirement four years; (ii) members first eligible to retire at ages 58, 59, 60, or 61 will retire at age 62; and (iii) members first eligible to retire at ages 62 or older will retire when first eligible.
- (b) Municipal Members: Members are assumed to retire over a range of ages. The probability that a member retires at a given age (if still active and eligible for unreduced benefits at that age) is shown on next page:

Retirement age (continued):

Age	Rate of Normal Retirement ⁽¹⁾
61 and younger	10%
62	35
63-64	20
65	45
66-74	20
75	100

Inactive vested members are assumed to retire when first eligible for unreduced benefits.

⁽¹⁾ Rates indicated are adjusted by adding 5% for the year in which the member is first eligible for normal retirement.
⁽²⁾ If applicable.

Actuary's Certification Letter *(Continued)*

Marital status and spouse's age⁽²⁾: 85% of members will be married at time of retirement and wives are four years younger than their husbands.

Social Security⁽²⁾: (a) The Social Security Taxable Wage Base will increase by 4.0% compounded annually.
(b) The Consumer Price Index will increase by 3.5% compounded annually.
(c) The Average Total Wages of All Workers will increase by 4.0% compounded annually.

Post-retirement cost-of-living increases⁽²⁾: 3.5%

Net investment return: 6.5% compounded annually (net of investment and certain administration expenses) for funding purposes.
6.5% compounded annually (net of investment expenses) for calculation of values intended to comply with FASB Statement No. 35.

Actuary's Certification Letter (*Continued*)**Exhibit IV - Actuarial Methods**

Contribution requirements are individually determined for each participating municipality, on an actuarial basis as described below, at least biannually. The frequency of actuarial valuation is determined by applicable Commonwealth statute (Act 205 of 1984 and Act 293 of 1972). The following actuarial methods were adopted effective January 1, 1985, unless indicated otherwise.

Actuarial Value of Assets (adopted effective January 1, 1991)

Sum of all audited reserve accounts as of the valuation date, including Members, Municipal, Retired, and Disability Reserves, and a one-year administration expense reserve, plus the portion of any additional investment income to be distributed as "excess interest." The actuarial value can never be less than 90% of fair market value.

Each year, municipalities may receive an excess interest allocation derived as a portion of new surplus created during the prior year. "Surplus" refers to the excess of fair market value over the actuarial value of assets. Once the preliminary actuarial asset value has been determined, a formula⁽¹⁾ is used to allocate the new surplus. Generally, depending on the relative size of surplus to fair market value, between 10% and 90% of new surplus will become excess interest. However, there was no excess interest allocation in 2002 because the new surplus in 2001 was negative.

Actuarial Cost Method -- Entry Age Normal Actuarial Cost Method

Entry age is defined as attained age less credited service. The normal cost rate is derived as a level percent of future compensation of current employees, on an individual basis. This rate is applied to the projected payroll and projected employee contributions are deducted. Actuarial gains (or losses), including the effect of contributions greater or less than the previously determined actuarial level, are reflected by decreases (or increases) in the unfunded actuarial accrued liability. Under Act 205 of 1984, the unfunded actuarial accrued liability is amortized as a level dollar amount⁽²⁾ over the lesser of:

- (a) i. 30 years, with respect to the initial liability as of January 1, 1985 (or first valuation);
- ii. 20 years, with respect to changes due to plan provisions and actuarial assumptions;
- iii. 10 years, with respect to changes in benefits for currently retired members;
- iv. 15 years, with respect to actuarial gains and losses; or
- (b) the average assumed working lifetime of active employees as of the date the liability was established⁽³⁾.

With the two exceptions which follow, the funding method is applied individually with respect to each municipality:

Retired and disabled members are paid monthly benefits from the System's Retired Members' Reserve Account, which at the time of retirement receives a transfer from the municipal and member accounts in an amount actuarially determined to be sufficient to pay all future benefits for the member (and, if applicable, a surviving beneficiary). Thus, post-retirement experience is pooled within the System. (However, this procedure does not apply to the legislated ad hoc adjustments which became effective January 1, 1989.)

A disabled member's pension is met in part from the amount that can be provided by the member's own accumulated contributions and from the amount that can be provided by the value of that portion of the member's accrued benefit attributable to municipal contributions, with the balance of the pension being provided by the appropriate transfer from the Disability Reserve Account. The amount of annual transfer from accumulated municipal contributions to the Disability Reserve Account is determined on the one-year term cost basis, i.e., the expected cost of disabilities in the coming year.

⁽¹⁾ The portion of investment income to be distributed as excess interest is based on a complicated algebraic formula adopted by the Board with the advice of the System's actuary effective January 1, 1985.

⁽²⁾ In certain instances, distressed municipalities may use "level percent of payroll" amortization of the initial liability, where the assumed payroll increase is 4.0%.

⁽³⁾ If there are no active employees, the unfunded actuarial liability is amortized for one year from the date that the liability was established. If a municipality attains certain levels of distressed status under applicable Commonwealth statute, part (b) will not be applied.

Actuary's Certification Letter (Continued)

Schedule of Active Member Valuation Data for Last Seven Years

Defined Benefit Plans

Valuation Date 1/1	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll	Percentage Increase in Payroll	Average Annual Salary	Percentage Increase in Average Annual Salary
2002	7,834	(1.0%)	644	2.2%	\$272,000,000	2.9%	\$34,720	3.9%
2001	7,911	0.5	630	3.1	264,346,000	4.4	33,415	3.9
2000	7,875	(0.7)	611	1.8	253,300,000	0.4	32,163	1.1
1999	7,933	0.7	600	2.0	252,438,000	3.9	31,821	3.1
1998	7,874	1.9	588	2.6	243,012,000	4.1	30,863	2.1
1997	7,725	0.8	573	2.3	233,510,200	5.4	30,228	4.6
1996	7,664	1.8	560	2.8	221,506,900	4.1	28,902	2.3

Defined Contribution Plans

Valuation Date 1/1	Number of Active Members	Percentage Change in Membership	Number of Participating Employers	Percentage Increase in Number of Participating Employers	Total Annual Payroll	Percentage Increase in Payroll	Average Annual Salary	Percentage Increase in Average Annual Salary
2002	739	8.2%	154	10.8%	\$19,128,300	7.7%	\$25,884	(0.5)%
2001	683	9.1	139	12.1	17,767,000	11.2	26,014	1.9
2000	626	5.2	124	6.9	15,974,000	8.7	25,518	3.3
1999	595	9.0	116	11.5	14,696,600	14.4	24,700	5.0
1998	546	12.6	104	14.3	12,846,000	15.0	23,527	2.2
1997	485	13.1	91	12.3	11,168,300	15.5	23,028	2.2
1996	429	15.6	81	19.1	9,665,900	18.6	22,531	2.6

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls for Last Seven Years

Valuation Date 1/1	Added to Roll	Deleted from Roll	Number on Roll	Annual Annuities	Percentage Increase in Annuities	Average Annual Annuities	Percentage Increase in Average Annual Annuities
2002	250	138	2,799	\$27,566,700	11.4%	\$9,849	6.9%
2001	209	100	2,687	24,748,000	17.4	9,210	12.6
2000	179	241	2,578	21,087,300	0.2	8,180	2.6
1999	185	132	2,640	21,054,200	8.5	7,975	5.9
1998	199	139	2,587	19,404,000	9.1	7,530	6.5
1997	201	106	2,527	17,779,200	12.2	7,036	8.0
1996	219	85	2,432	15,841,300	9.4	6,514	3.4

Analysis of Financial Experience

The System does not conduct an extensive experience study by individual plan because the magnitude of any change in plans of average size becomes misleading and irrelevant. A comprehensive experience study is performed once every five years on the overall assumptions used by the System, but this data is not relevant to individual plan experience.

Solvency Test

A short term solvency test, which is one means of determining a system's progress under its funding program, compares the plan's present assets with:

1. active member contributions on deposit,
2. the liabilities for future benefits to present retired lives⁽¹⁾, and
3. the actuarial accrued liability for service already rendered by active members.

In a system that has been following the entry age normal actuarial cost method financing discipline, the obligation for active member contributions on deposit (Item A) and the liabilities for future benefits to present retired lives⁽¹⁾ (Item B) will be fully covered by present assets with the exception of rare circumstances. The actuarial accrued liability for active members (Item C) will be partially covered by the remainder of present assets. If the system has been using level cost financing, the funded portion of Item C usually will increase over a period of time. Item C being fully funded is rare.

Prior to 1997, the solvency test was shown on the basis of the Pension Benefit Obligation computed under GASB Statement No. 5.

⁽¹⁾ Includes terminated employees not yet receiving benefits.

Actuary's Certification Letter (Continued)

Valuation Date 1/1	Actuarial Accrued Liability				Portion of Actuarial Accrued Liability Covered by Assets		
	(A)	(B)	(C)	Valuation Assets ⁽²⁾			
	Active Member Contributions	Retirees and Beneficiaries ⁽¹⁾	Active Members (Employer Financed Portion)		(A)	(B)	(C)
2001	\$201,814,300	\$263,171,300	\$347,659,500	\$959,454,800	100%	100%	100%
1999	170,495,100	224,089,800	297,499,500	768,038,700	100%	100%	100%
1997	130,006,000	182,762,700	279,659,500	601,852,000	100%	100%	100%

Valuation Date 1/1	Pension Benefit Obligation				Portion of Actuarial Accrued Liability Covered by Assets		
	(A)	(B)	(C)	Valuation Assets ⁽²⁾			
	Active Member Contributions	Retirees and Beneficiaries ⁽¹⁾	Active Members (Employer Financed Portion)		(A)	(B)	(C)
1996	\$111,462,700	\$162,864,500	\$190,440,900	\$561,536,000	100%	100%	100%
1995	103,727,900	149,161,100	180,651,600	446,189,000	100	100	100
1994	89,611,100	128,996,500	160,030,900	406,894,000	100	100	100
1993	84,581,000	115,232,000	153,279,100	361,937,000	100	100	100

⁽¹⁾ Includes terminated employees not yet receiving benefits.

⁽²⁾ Sum of Member, Municipal, Retirement, and Disability Reserve Accounts as shown in audited financial statements - Prior to 1997 includes one-year administration expense reserve and excess interest allocation, if any, to be credited at year-end.

Statistical Section

- Financial
 - Revenue by Source
 - Expenses by Type
 - Revenues vs. Expenses
 - Components of Total Revenues and Expenses
 - Total Assets

- Membership
 - Active Members
 - Retired Members
 - Average Benefit Payments by Retirement Type
 - Average Benefit Payments
 - Total Membership
 - Participating Pension Plans



Part I - Financial

Revenues by Source and Expenses by Type for Last Six Years

Revenues by Source

Fiscal Year	Member Contributions	Municipal Contributions ⁽¹⁾	Municipal Assessments ⁽²⁾	Investment Income	Total Revenue
2002	\$13,639,485	\$28,836,362	\$260,020	(\$82,539,549)	(\$39,803,682)
2001	13,007,863	21,010,322	248,960	(40,673,724)	(6,406,579)
2000	12,180,952	22,932,542	245,740	33,429,407	68,788,641
1999	11,456,483	20,054,018	233,905	132,452,017	164,196,423
1998	11,372,676	23,003,675	240,580	136,023,868	170,640,799
1997	10,358,715	22,512,647	233,720	124,610,902	157,715,984

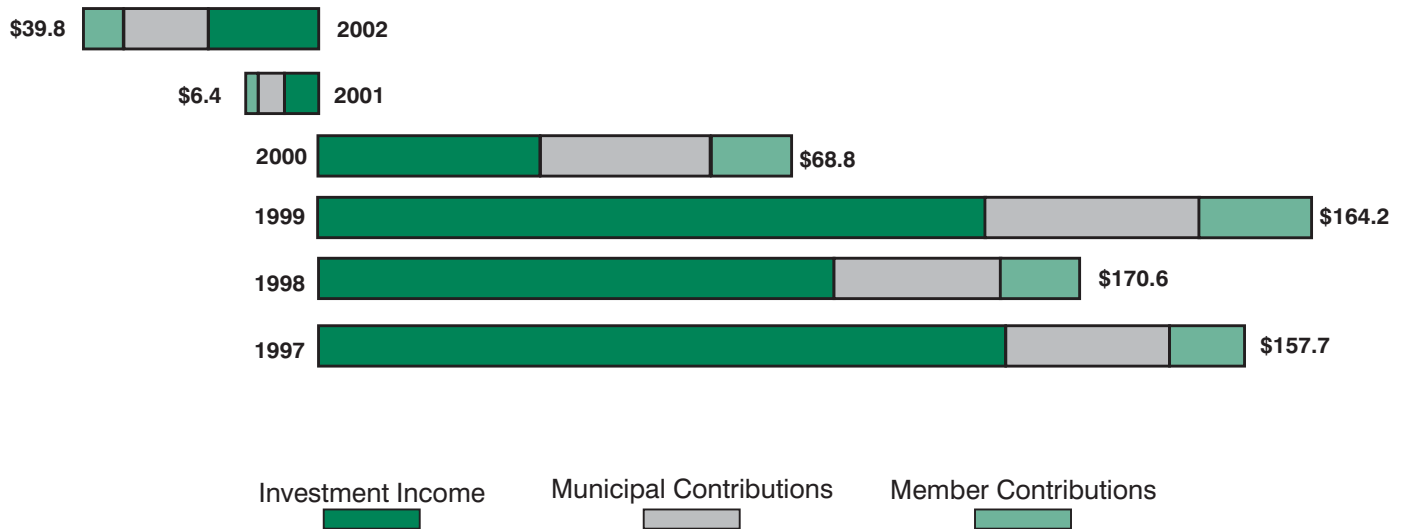
Expenses by Type

Fiscal Year	Benefit Expenses			Administrative Expenses	Total Expenses
	Annuity	Disability	Termination	Operational	
2002	\$28,674,963	\$900,762	\$8,502,709	\$2,406,732	\$40,485,166
2001	28,035,208	906,591	11,686,001	2,555,114	43,182,914
2000	22,617,449	905,621	9,949,213	2,134,593	35,606,876
1999	20,260,700	826,591	62,536,769	1,919,161	85,543,221
1998	19,541,577	1,031,601	38,519,546	1,861,306	60,954,030
1997	18,743,647	1,265,473	5,658,634	1,659,840	27,327,594

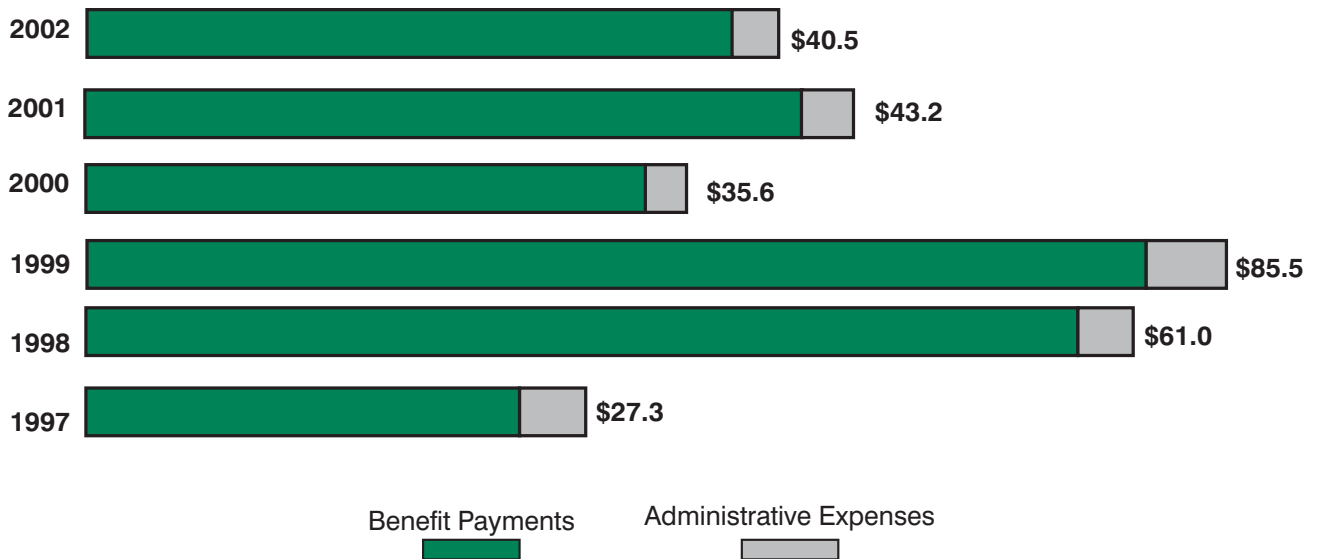
⁽¹⁾ Contributions were made in accordance with actuarially determined contribution requirements.

⁽²⁾ Municipal assessments are receipts but not assets of the plans.

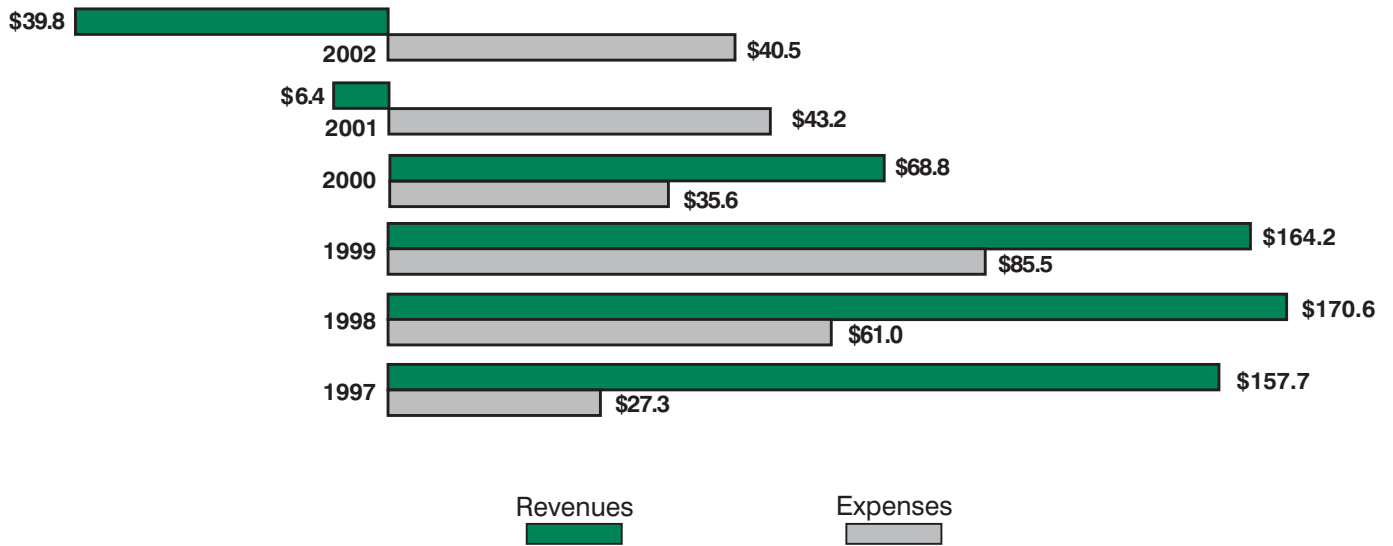
Revenues by Source – Six-Year Trend (Amounts in Millions)



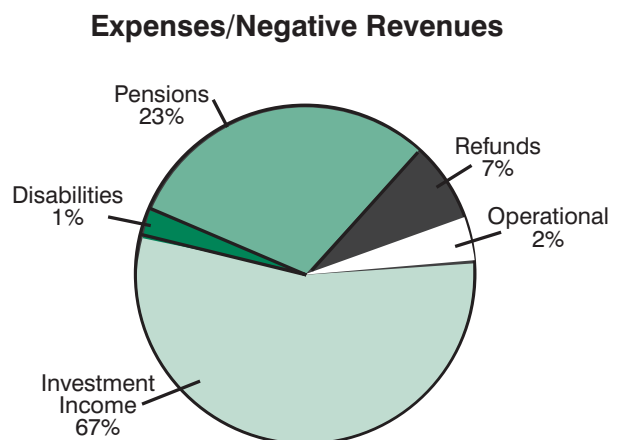
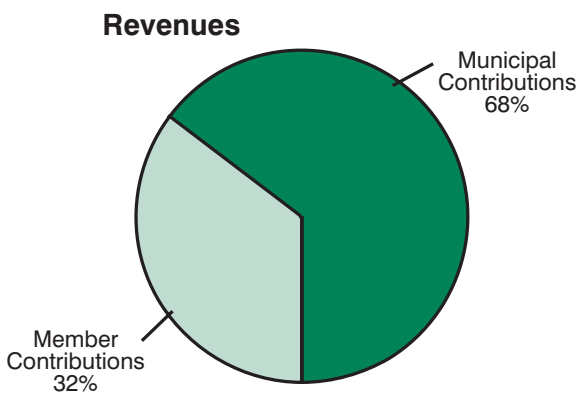
Expenses by Type – Six-Year Trend (Amounts in Millions)



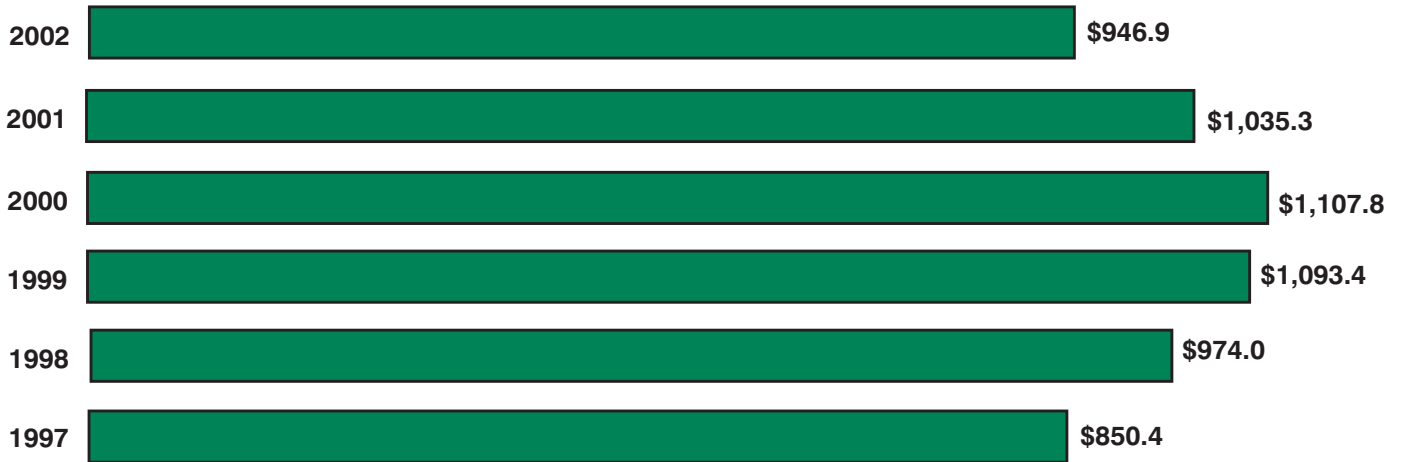
Revenues vs. Expenses – Six-Year Trend (Amounts in Millions)



Components of Total Revenues and Expenses – 2002

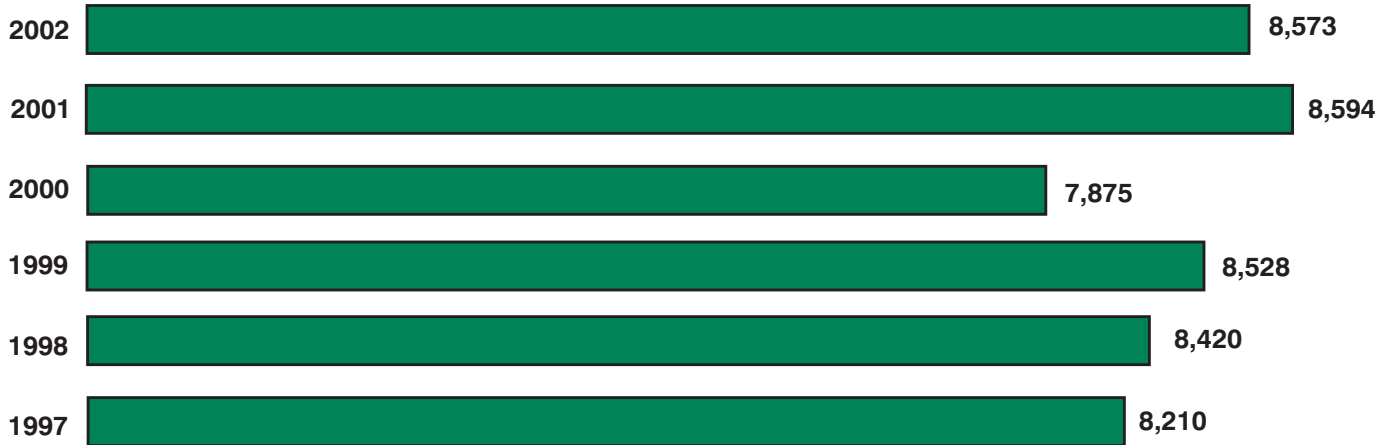


Total Investments – Six-Year Trend
(Fair Value – Amounts in Millions)

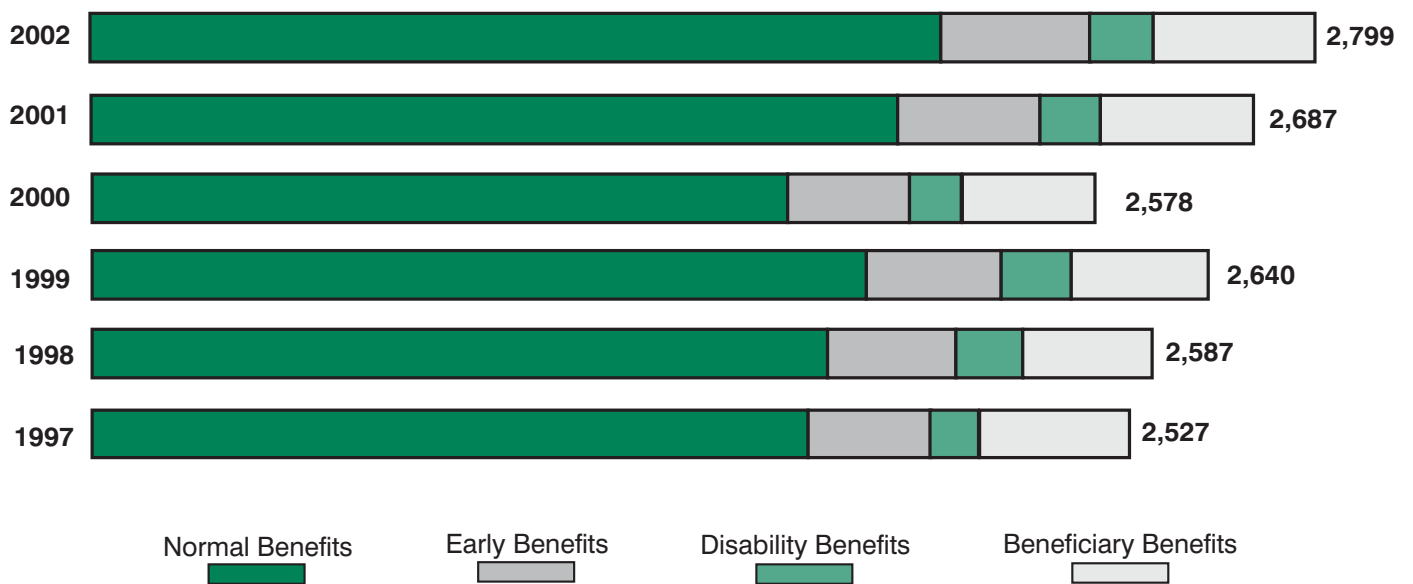


Part II -- Membership

Active Members – Six-Year Trend
Valuation Date 1/1



Retired Members – Six-Year Trend
Valuation Date 1/1



Pensions in Payment Status on January 1, 2002 by Type and by Monthly Amount

Monthly amount	Total	Type of pension				
		Normal	Involuntary early	Voluntary early	Service disability	Non-service disability
Total	2,428	1,968	238	134	18	70
Under \$100	98	73	9	13	1	2
\$100 - \$199	166	114	19	32	1	--
200 - 299	216	169	20	24	--	3
300 - 399	192	155	20	11	--	6
400 - 499	171	135	22	7	2	5
500 - 599	188	148	22	9	1	8
600 - 699	164	129	15	10	--	10
700 - 799	156	122	19	4	--	11
800 - 899	144	108	22	3	2	9
900 - 999	129	107	12	8	1	1
1,000 - 1,199	244	200	23	6	5	10
1,200 - 1,399	139	119	14	2	1	3
1,400 - 1,599	125	113	6	3	3	--
1,600 - 1,799	70	67	2	--	1	--
1,800 - 1,999	61	56	3	--	--	2
2,000 - 2,199	49	46	3	--	--	--
2,200 - 2,399	33	31	2	--	--	--
2,400 - 2,599	25	23	2	--	--	--
2,600 - 2,799	22	21	--	1	--	--
2,800 - 2,999	11	9	2	--	--	--
3,000 - 3,499	12	11	1	--	--	--
3,500 - 3,999	6	5	--	1	--	--
4,000 and over	7	7	--	--	--	--

Pensions Awarded, Each of the Last Ten Years, by Type and Amount

Year ended January 1:	Total		Type of Pension							
			Normal		Involuntary early		Voluntary early		Disability	
	Number	Average monthly amount	Number	Average monthly amount	Number	Average monthly amount	Number	Average monthly amount	Number ⁽¹⁾	Average monthly amount
1993	176	665	142	716	12	407	7	239	15(1)	586
1994	154	784	133	822	4	617	9	217	8 (0)	874
1995	162	734	139	736	12	831	4	275	7 (3)	780
1996	182	727	141	757	19	648	12	395	10 (2)	855
1997	165	819	133	811	15	877	6	144	11 (4)	1,194
1998	169	782	142	831	10	594	9	337	8 (4)	647
1999	152	939	122	1,006	13	785	6	347	11 (2)	698
2000	179	869	152	912	22	647	3	345	2 (0)	850
2001	185	954	147	1,028	25	736	8	423	5(1)	702
2002	246	1,277	206	1,346	30	957	6	945	4(0)	655

Schedule of Total Membership - Six-Year Trend

Valuation Date 1/1	Active Members Defined Benefit Plans	Active Members Defined Contribution Plans	Retirees	Beneficiaries	Deferred Pensions ⁽²⁾	Inactive Members ⁽³⁾	Total
2002	7,834	739	2,428	371	453	182	12,007
2001	7,911	683	2,324	363	433	158	11,872
2000	7,875	626	2,228	350	386	51	11,516
1999	7,933	595	2,253	387	344	145	11,657
1998	7,874	546	2,211	376	311	128	11,446
1997	7,725	485	2,163	364	271	125	11,133

⁽¹⁾ Number of service-related disability pensions are shown in parentheses.

⁽²⁾ Inactive participants with rights to deferred pension (vested)

⁽³⁾ Inactive participants with rights to return of contributions (nonvested)

Total Membership – Six-Year Trend
Valuation Date 1/1



Schedule of Participating Pension Plans ⁽¹⁾ as of December 31, 2002

Counties

Adams	Adams-Green Acres	Forest	Jefferson
-------	-------------------	--------	-----------

Cities

Allentown (Lehigh)	Farrell (Mercer)	Lebanon (Lebanon)
Bethlehem (Northampton)	Greensburg (Westmoreland)	Lower Burrell (Westmoreland)
Clairton (Allegheny)	Harrisburg, Plan A (Dauphin)	New Kensington (Westmoreland)
Connellsville (Fayette)	Harrisburg, Plan B (Dauphin)	Sharon (Mercer)
DuBois (Clearfield)	Hermitage (Mercer)	Sunbury (Northumberland)
Easton (Northampton)	Jeannette (Westmoreland)	Uniontown (Fayette)

Boroughs

Adamstown (Lancaster)	Conneautville (Crawford)	Homer City (Indiana)
Ashland (Schuylkill)	Conshohocken (Montgomery)	Hughestown (Luzerne)
Atglen (Chester)	Conway (Beaver)	Hummelstown (Dauphin)
Avonmore (Westmoreland)	Coopersburg (Lehigh)	Huntingdon (Huntingdon)
Bally (Berks)	Cressona (Schuylkill)	Hyndman (Bedford)
Bangor (Northampton)	Dalton (Lackawanna)	Jim Thorpe (Carbon)
Bedford (Bedford)	Delmont (Westmoreland)	Johnsonburg (Elk)
Bellefonte (Centre)	Derry (Westmoreland)	Kenhorst (Berks)
Bellwood (Blair)	Doylestown (Bucks)	Kennett Square (Chester)
Bentleyville (Washington)	Dravosburg (Allegheny)	Kittanning (Armstrong)
Berlin (Somerset)	Dublin (Bucks)	Kulpmont (Northumberland)
Big Beaver (Beaver)	Dubois (Lycoming)	Kutztown (Berks)
Biglerville (Adams)	Duncannon (Perry)	Latrobe (Westmoreland)
Bloomfield (Perry)	East Berlin (Adams)	Lehighton (Carbon)
Brackenridge (Allegheny)	East Rochester (Beaver)	Lewistown (Mifflin)
Bridgeville (Allegheny)	East Stroudsburg (Monroe)	Lykens (Dauphin)
Brockway (Jefferson)	East Washington (Washington)	Marcus Hook (Delaware)
Brookville (Jefferson)	Emlenton (Venango)	Martinsburg (Blair)
California (Washington)	Emporium (Cameron)	Marysville (Perry)
Cambridge Springs (Crawford)	Etna (Allegheny)	Matamoras (Pike)
Camp Hill (Cumberland)	Everett (Bedford)	Mayfield (Lackawanna)
Carnegie (Allegheny)	Falls Creek (Jefferson)	Mercer (Mercer)
Carroll Valley (Adams)	Ferndale (Cambria)	Meyersdale (Somerset)
Castle Shannon (Allegheny)	Forest City (Susquehanna)	Middleburg (Snyder)
Centerville (Indiana)	Fountain Hill (Lehigh)	Middletown (Dauphin)
Central City (Somerset)	Franklin (Cambria)	Millersburg (Dauphin)
Charleroi (Washington)	Franklintown (York)	Millerstown (Perry)
Claysville (Washington)	Freeburg (Snyder)	Minersville (Schuylkill)
Clymer (Indiana)	Freedom (Beaver)	Monaca (Beaver)
Cochranon (Crawford)	Freeland (Luzerne)	Monroeville Municipality (Allegheny)
Collegetown (Montgomery)	Greenville (Mercer)	Mont Alto (Franklin)
Collingdale (Delaware)	Hollidaysburg (Blair)	Montrose (Susquehanna)

⁽¹⁾ County names are in parentheses.

Schedule of Participating Pension Plans (*Continued*)

Moosic (Lackawanna)	Prospect Park (Delaware)	Summit Hill (Carbon)
Morrisville (Bucks)	Renovo (Clinton)	Tarentum (Allegheny)
Mount Gretna (Lebanon)	Ridley Park (Delaware)	Telford (Montgomery)
Mount Jewett (McKean)	Roaring Spring (Blair)	Topton (Berks)
Mount Pleasant (Westmoreland)	Rochester (Beaver)	Trainer (Delaware)
Mount Union (Huntingdon)	Rouseville (Venango)	Turbotville (Northumberland)
Nanty-Glo (Cambria)	Royersford (Montgomery)	Turtle Creek (Allegheny)
Narberth (Montgomery)	Rural Valley (Armstrong)	Verona (Allegheny)
Nesquehoning (Carbon)	Salisbury (Somerset)	Versailles (Allegheny)
New Eagle (Washington)	Sandy Lake (Mercer)	Waterford (Erie)
New Stanton (Westmoreland)	Saxton (Bedford)	Waynesburg (Greene)
Newport (Perry)	Schuylkill Haven (Schuylkill)	West Conshohocken (Montgomery)
Newtown (Bucks)	Selinsgrove (Snyder)	West Grove (Chester)
Norristown (Montgomery)	Sellersville (Bucks)	West Middlesex (Mercer)
North East (Erie)	Shamokin Dam (Snyder)	West Newton (Westmoreland)
Northumberland (Northumberland)	Sharpsburg (Allegheny)	Wheatland (Mercer)
Orwigsburg (Schuylkill)	Sharpsville (Mercer)	White Haven (Luzerne)
Palmerton (Carbon)	Shenandoah (Schuylkill)	Williamstown (Dauphin)
Pen Argyl (Northampton)	Slippery Rock (Butler)	Wilmerding (Allegheny)
Pennsburg (Montgomery)	Souderton (Montgomery)	Wilson (Northampton)
Perkasie (Bucks)	South Waverly (Bradford)	Windsor (York)
Pine Grove (Schuylkill)	Southmont (Cambria)	Wyomissing Hills (Berks)
Portage (Cambria)	Springdale (Allegheny)	York Springs (Adams)
Pottstown (Montgomery)	Stewartstown (York)	Youngwood (Westmoreland)

Townships of the First Class

Butler (Butler)	Hopewell (Beaver)	Upper Moreland (Montgomery)
Caln (Chester)	North Huntingdon (Westmoreland)	Vanport (Beaver)
Collier (Allegheny)	North Versailles (Allegheny)	Whitehall (Lehigh)
Crescent (Allegheny)	Ridley (Delaware)	Wilkins (Allegheny)
Darby (Delaware)	Rochester (Beaver)	
East Deer (Allegheny)	Salisbury (Lehigh)	
Elizabeth (Allegheny)	Springdale (Allegheny)	
Harrison (Allegheny)	Swatara (Dauphin)	

Townships of the Second Class

Allegheny (Westmoreland)	Boggs (Clearfield)	Canton (Washington)
Antrim (Franklin)	Brecknock (Lancaster)	Center (Greene)
Athens (Crawford)	Briar Creek (Columbia)	Center (Indiana)
Bald Eagle (Clinton)	Brighton (Beaver)	Center (Snyder)
Bedminster (Bucks)	Brown (Mifflin)	Centre (Berks)
Bell (Westmoreland)	Buckingham (Bucks)	Centre (Perry)
Bethel (Armstrong)	Buffalo (Washington)	Cherrytree (Venango)
Black Creek (Luzerne)	Burnside (Clearfield)	Clarion (Clarion)
Blair (Blair)	Burrell (Indiana)	Clearfield (Cambria)
Bloomfield (Crawford)	Caernarvon (Lancaster)	Concord (Delaware)
Blooming Grove (Pike)	Cambria (Cambria)	Conemaugh (Indiana)
Boggs (Centre)	Cambridge (Crawford)	Conewago (Dauphin)

Schedule of Participating Pension Plans (Continued)

Townships of the Second Class (Continued)

Corydon (McKean)	Hopewell (Cumberland)	Oil Creek (Crawford)
Covington (Lackawanna)	Hopewell (Washington)	Old Lycoming (Lycoming)
Cranberry (Venango)	Hopewell (York)	Oliver (Mifflin)
Cross Creek (Washington)	Horsham (Montgomery)	Paradise (Monroe)
Delaware (Mercer)	Howe (Forest)	Pennsbury (Chester)
Derry - Defined Benefit (Dauphin)	Hunlock (Luzerne)	Perry (Snyder)
Derry - Defined Contribution (Dauphin)	Huntington (Luzerne)	Pike (Berks)
Derry (Mifflin)	Huston (Clearfield)	Pine Grove (Schuylkill)
Derry (Westmoreland)	Jackson (Greene)	Pittsfield (Warren)
Dingman (Pike)	Jackson (Lebanon)	Pleasant (Warren)
Donegal (Westmoreland)	Jackson (Luzerne)	Plum Creek (Armstrong)
Dorrance (Luzerne)	Jackson (Snyder)	Plumstead (Bucks)
Douglass (Montgomery)	Jackson (Susquehanna)	Pocopson (Chester)
East Allen (Northampton)	Jenks (Forest)	Point (Northumberland)
East Coventry (Chester)	Jenner (Somerset)	Portage (Cambria)
East Fallowfield (Chester)	Keating (McKean)	Price (Monroe)
East Finley (Washington)	Kennett (Chester)	Pulaski (Lawrence)
East Hanover (Dauphin)	Lancaster (Butler)	Pymatuning (Mercer)
East Huntingdon (Westmoreland)	Lancaster (Lancaster)	Raccoon (Beaver)
East Manchester (York)	Latimore (Adams)	Rice (Luzerne)
East Marlborough (Chester)	LeBoeuf (Erie)	Richhill (Greene)
East Rockhill (Bucks)	Lehman (Pike)	Richland (Bucks)
Eldred (Jefferson)	Liberty (McKean)	Ridgway (Elk)
Eldred (Monroe)	Limestone (Lycoming)	Rome (Crawford)
Eldred (Warren)	Limestone (Union)	Rutland (Tioga)
Elizabeth (Lancaster)	Lincoln (Somerset)	Scott (Columbia)
Elk (Warren)	Liverpool (Perry)	Sewickley (Westmoreland)
Elk Creek (Erie)	London Grove (Chester)	Shade (Somerset)
Fairfield (Westmoreland)	Lower Mahanoy (Northumberland)	Sheffield (Warren)
Fairview (Erie)	Lower Yoder (Cambria)	Shippensburg (Cumberland)
Farmington (Clarion)	Loyalhanna (Westmoreland)	Slippery Rock (Butler)
Forks (Northampton)	Mahoning (Montour)	Solebury (Bucks)
Forward (Allegheny)	Manchester (York)	South Abington (Lackawanna)
Franklin (Beaver)	Mead (Warren)	South Beaver (Beaver)
Franklin (Butler)	Middle Smithfield (Monroe)	South Franklin (Washington)
Franklin (Carbon)	Middlesex (Cumberland)	South Huntingdon (Westmoreland)
Franklin (Greene)	Milford (Bucks)	South Manheim (Schuylkill)
Freedom (Blair)	Millcreek (Lebanon)	South Middleton (Cumberland)
Freehold (Warren)	Monongahela (Greene)	South Pymatuning (Mercer)
Frenchcreek (Venango)	Morris (Greene)	South Strabane (Washington)
Girard (Clearfield)	Mount Joy (Lancaster)	Southampton (Cumberland)
Glade (Warren)	Mount Pleasant (Westmoreland)	Southwest (Warren)
Greene (Beaver)	Muncy Creek (Lycoming)	Spring Creek (Warren)
Greenfield (Blair)	New Garden (Chester)	Springfield (York)
Greenfield (Erie)	Nockamixon (Bucks)	Sugar Grove (Warren)
Hamilton (Monroe)	North Buffalo (Armstrong)	Sullivan (Tioga)
Hanover (Lehigh)	North Coventry (Chester)	Summit (Butler)
Haycock (Bucks)	North Strabane (Washington)	Tinicum (Bucks)
Hemlock (Columbia)	Nottingham (Washington)	Towamensing (Carbon)
Hilltown (Bucks)	Oakland (Venango)	Tredyffrin (Chester)

Schedule of Participating Pension Plans (Continued)

Townships of the Second Class (Continued)

Tunkhannock (Wyoming)	Washington (Greene)	West Wheatfield (Indiana)
Union (Berks)	Washington (Northampton)	Westtown (Chester)
Union (Lebanon)	Washington (Schuylkill)	Wetmore (McKean)
Union (Snyder)	Washington (Wyoming)	Whiteley (Greene)
Unity (Westmoreland)	West Bradford (Chester)	Wiconisco (Dauphin)
Wallace (Chester)	West Brunswick (Schuylkill)	Williams (Northampton)
Warrington (York)	West Caln (Chester)	Windsor (York)
Warsaw (Jefferson)	West Carroll (Cambria)	Wright (Luzerne)
Warwick (Lancaster)	West Lampeter (Lancaster)	Wrightstown (Bucks)
Washington (Berks)	West Pennsboro (Cumberland)	Zerbe (Northumberland)
Washington (Dauphin)	West Rockhill (Bucks)	
Washington (Erie)	West Salem (Mercer)	

Authorities and Other Units

Allegheny Valley Joint Sewer Authority (Allegheny)	Columbia County Conservation District (Columbia)
Ambridge Borough Municipal Authority (Beaver)	Concord Township Sewer Authority (Delaware)
Avonmore Borough Municipal Authority (Westmoreland)	Connellsville Municipal Authority (Fayette)
BARTA (Berks)	Connellsville Redevelopment Authority (Fayette)
Bedford Borough Water Authority (Bedford)	Conshohocken Borough Authority (Montgomery)
Bedford Municipal Authority (Bedford)	Coplay-Whitehall Sewer Authority (Lehigh)
Belle Vernon Municipal Authority (Fayette)	Crescent South Heights Municipal Authority (Allegheny)
Bethlehem Authority (Northampton)	Cressona Borough Authority (Schuylkill)
Bethlehem City Redevelopment Authority (Northampton)	Creswell Heights Joint Authority (Beaver)
Bloomfield Township Sewer Authority (Crawford)	Curwensville Municipal Authority (Clearfield)
Bradford City Water Authority (McKean)	Delaware Valley Municipal Management Association (Montgomery)
Bradford Regional Airport Authority (McKean)	Derry Township Municipal Authority (Westmoreland)
Brighton Township Municipal Authority (Beaver)	DuBois City Redevelopment Authority (Clearfield)
Brighton Township Sewer Authority (Beaver)	East Norriton-Plymouth-Whitpain Joint Sewer Authority (Montgomery)
Bristol Township Authority (Bucks)	Eastern Regional Communications Center (Allegheny)
Brockway Area Sewage Authority (Jefferson)	Eastern Snyder County Regional Authority (Snyder)
Brockway Borough Municipal Authority (Jefferson)	Economy Borough Municipal Authority (Beaver)
Brookville Municipal Authority (Jefferson)	Elizabeth Borough Municipal Authority (Allegheny)
Bucks County Redevelopment Authority (Bucks)	Elizabeth Township Sanitary Authority (Allegheny)
Bucks County Water & Sewer Authority (Bucks)	Emlenton Area Municipal Authority (Venango)
Burrell Township Sewage Authority (Indiana)	Erie County Housing Authority (Erie)
Butler Area Public Library (Butler)	Everett Area Municipal Authority (Bedford)
Cambria County Conservation and Recreation Authority (Cambria)	Falls Township Authority (Bucks)
Cambria Township Sewer Authority (Cambria)	Fawn-Frazer Joint Water Authority (Allegheny)
Cambria Township Water Authority (Cambria)	Forward Township Municipal Authority (Allegheny)
Carbon County Conservation District (Carbon)	Franklin City Housing Authority (Venango)
Carlisle Suburban Authority (Cumberland)	Franklin Township Municipal Sanitary Authority (Westmoreland)
Carmichaels-Cumberland Joint Sewer Authority (Greene)	Franklin Township Sewer Authority (Greene)
Carroll Township Authority (Washington)	Frazer Transportation Authority (Allegheny)
Catawissa Borough Municipal Water Authority (Columbia)	Freeland Borough Municipal Authority (Luzerne)
Centerville Borough Sanitary Authority (Washington)	Greater Lebanon Refuse Authority (Lebanon)
Central Indiana County Joint Sanitary Authority (Indiana)	Greenville Municipal Authority (Mercer)
Centre County Library & Historical Museum (Centre)	
Coaldale-Lansford-Summit Hill Sewer Authority (Carbon)	

Schedule of Participating Pension Plans (Continued)

Authorities and Other Units (Continued)

Guilford Township Authority (Franklin)	Monroe County Control Center (Monroe)
Guilford Water Authority (Franklin)	Montgomery County Sewer Authority (Montgomery)
Harrison Township Water Authority (Allegheny)	Montour County Conservation District (Montour)
Hawley Area Authority (Wayne)	Moon Township Municipal Authority (Allegheny)
Hazleton Transit Authority (Luzerne)	Morrisville Borough Municipal Authority (Bucks)
Hellertown Borough Authority (Northampton)	Mount Jewett Borough Authority (McKean)
Hilltown Township Water & Sewer Authority (Bucks)	Mount Lebanon Parking Authority (Allegheny)
Horsham Township Sewer Authority (Montgomery)	Mount Pocono Municipal Authority (Monroe)
Hughesville-Wolf Township Joint Municipal Authority (Lycoming)	Myerstown Community Library Association (Lebanon)
Indiana County Conservation District (Indiana)	Myerstown Water Authority (Lebanon)
Indiana County Solid Waste Authority (Indiana)	Nanty-Glo Sanitary Sewer Authority (Cambria)
Jackson Township Water Authority (Cambria)	Nanty-Glo Water Authority (Cambria)
Jeannette Municipal Authority (Westmoreland)	Nesquehoning Borough Authority (Carbon)
Johnsonburg Municipal Authority (Elk)	New Kensington Municipal Sanitary Authority (Westmoreland)
Juniata County Conservation District (Juniata)	New Kensington Redevelopment Authority (Westmoreland)
Kiskiminetas Township Municipal Authority (Armstrong)	Newport Borough Water Authority (Perry)
Kulpmont-Marion Heights Joint Municipal Authority (Northumberland)	Norristown Municipal Waste Authority (Montgomery)
Lancaster City Parking Authority (Lancaster)	North & South Shenango Joint Municipal Authority (Crawford)
Lansford-Coaldale Joint Water Authority (Carbon)	North Coventry Municipal Authority (Chester)
Lebanon Community Library (Lebanon)	North Huntingdon Township Municipal Authority (Westmoreland)
Leetsdale Borough Municipal Authority (Allegheny)	North Strabane Township Municipal Authority (Washington)
Lehigh County Authority (Lehigh)	Northampton Borough Municipal Authority (Northampton)
Lehighon Water Authority (Carbon)	Northern Lancaster County Authority (Lancaster)
Lower Bucks County Joint Municipal Authority (Bucks)	Northern York County Regional (York)
Lower Bucks County Joint Municipal Authority Supervisors (Bucks)	Northumberland Sewer Authority (Northumberland)
Lower Indiana County Municipal Authority (Indiana)	Oil City Housing Authority (Venango)
Lower Providence Township Sewer Authority (Montgomery)	PA League of Cities (Dauphin)
Luzerne Conservation District (Luzerne)	Parks Township Municipal Authority (Armstrong)
Lycoming Sanitary Committee (Lycoming)	Penn Township Sewage Authority (Westmoreland)
Lykens Borough Authority (Dauphin)	Pennridge Regional (Bucks)
Mahanoy Township Authority (Schuylkill)	Pennridge Waste Treatment Authority (Bucks)
Mahoning Township Authority (Montour)	Perkasie Borough Authority (Bucks)
Maidencreek Township Authority (Berks)	Peters Creek Sanitary Authority (Washington)
Manor Township Joint Municipal Authority (Armstrong)	Peters Township Municipal Authority (Franklin)
Mary Meuser Memorial Library (Monroe)	Portage Area Sewer Authority (Cambria)
Matamoras Municipal Authority (Pike)	Portage Borough Municipal Authority (Cambria)
McKean County Solid Waste Authority (McKean)	Possum Valley Municipal Authority (Adams)
Mercer County Regional Planning Commission (Mercer)	Riverview Sanitary Authority (Allegheny)
Mid Mon Valley Water Authority (Washington)	Robesonia-Wernersville Municipal Authority (Berks)
Middlesex Township Municipal Authority (Cumberland)	Robinson Township Municipal Authority (Allegheny)
Middletown Township Sewer Authority (Delaware)	Rochester Area Joint Sewer Authority (Beaver)
Mifflin County Regional (Mifflin)	Rostraver Township Sewer Authority (Westmoreland)
Mifflintown Municipal Authority (Juniata)	St. Marys Area Joint Water Authority (Elk)
Milford Water Authority (Pike)	Shamokin City Redevelopment Authority (Northumberland)
Millcreek-Richland Joint Sewer Authority (Lebanon)	Shannock Valley General Services Authority (Armstrong)
Millersburg Area Authority (Dauphin)	Sheffield Township Municipal Authority (Warren)
Mon Valley Sewer Authority (Washington)	

Schedule of Participating Pension Plans (Continued)

Authorities and Other Units (Continued)

Slippery Rock Municipal Authority (Butler)	Warwick Township Municipal Authority (Lancaster)
South Fayette Township Municipal Authority (Allegheny)	Washington Area Council of Governments (Washington)
Southern Police Commission Municipal (York)	Washington Township Municipal Authority (Berks)
Southwestern PA Water Authority (Greene)	Washington Township Municipal Authority (Fayette)
Southwest Regional Dispatch Center (Allegheny)	Waterford Borough Municipal Authority (Erie)
Stroudsburg Municipal Authority (Monroe)	Wayne County Redevelopment Authority (Wayne)
Sunbury Municipal Authority (Northumberland)	Wernersville Municipal Authority (Berks)
Susquehanna Township Authority (Dauphin)	West Carroll Township Water & Sewer Authority (Cambria)
Tower City Borough Authority (Schuylkill)	Western Butler County Authority (Butler)
Tri-County Joint Municipal Authority (Washington)	Western Clinton County Municipal Authority (Clinton)
Twin Boroughs Sanitary Authority (Juniata)	Western Westmoreland Municipal Authority (Westmoreland)
Upper Allegheny Joint Sanitation Authority (Allegheny)	Westmoreland-Fayette Municipal Sewer Authority (Westmoreland)
Upper Montgomery Joint Authority (Montgomery)	White Run Regional Municipal Authority (Adams)
Upper Southampton Municipal Authority (Bucks)	Whitehall Township Authority (Lehigh)
Upper Southampton Sewer Authority (Bucks)	Williamstown Borough Authority (Dauphin)
Vanport Township Municipal Authority (Beaver)	Womelsdorf-Robeson Joint Authority (Berks)
Warren County Housing Authority (Warren)	York County Planning Commission (York)
Warren County Solid Waste Authority (Warren)	
Warrington Township Municipal Authority (Bucks)	

Police

Ashley Borough (Luzerne)	Covington Township (Lackawanna)	Forward Township (Allegheny)
Bally Borough (Berks)	Crescent Township (Allegheny)	Franklin Borough (Cambria)
Barrett Township (Monroe)	Danville Borough (Montour)	Franklin Township (Beaver)
Bedminster Township (Bucks)	Delmont Borough (Westmoreland)	Freedom Township (Blair)
Bellwood Borough (Blair)	Donegal Township (Washington)	Gilpin Township (Armstrong)
Bentleyville Borough (Washington)	Douglass Township (Berks)	Greenfield Township (Blair)
Berks-Lehigh Regional (Berks)	Douglass Township (Montgomery)	Greenville Borough (Mercer)
Big Beaver Borough (Beaver)	Dravosburg Borough (Allegheny)	Harveys Lake Borough (Luzerne)
Biglerville Borough (Adams)	Dublin Borough (Bucks)	Heidelberg Township (York)
Birmingham Township (Chester)	Duboistown Borough (Lycoming)	Hellam Township (York)
Blair Township (Blair)	Dunbar Borough (Fayette)	Hemlock Township (Columbia)
Brecknock Township (Lancaster)	Duncannon Borough (Perry)	Hilltown Township (Bucks)
Briar Creek Township (Columbia)	East Bangor Borough (Northampton)	Hummelstown Borough (Dauphin)
Brockway Borough (Jefferson)	East Berlin Borough (Adams)	Hyndman Borough (Bedford)
Buckingham Township (Bucks)	East Coventry Township (Chester)	Independence Township (Beaver)
Caernarvon Township (Lancaster)	East Deer Township (Allegheny)	Jackson Township (Luzerne)
California Borough (Washington)	East Earl Township (Lancaster)	Johnsonburg Borough (Elk)
Cambria Township (Cambria)	East Fallowfield Township (Chester)	Lancaster Township (Butler)
Cambridge Springs Borough (Crawford)	East Pennsboro Township (Cumberland)	Larksville Borough (Luzerne)
Camp Hill Borough (Cumberland)	East Washington Borough (Washington)	Liberty Borough (Allegheny)
Carroll Valley Borough (Adams)	Elizabeth Township (Allegheny)	Locust Township (Columbia)
Central City Borough (Somerset)	Ell-Co Regional (Washington)	Lower Windsor Township (York)
Centre Township (Berks)	Emlenton Borough (Venango)	Lower Yoder Township (Cambria)
Clairton City (Allegheny)	Emporium Borough (Cameron)	Lykens Borough (Dauphin)
Clymer Borough (Indiana)	Everett Borough (Bedford)	Mahoning Township (Montour)
Colebrookdale Township (Berks)	Factoryville Borough (Wyoming)	Manor Borough (Westmoreland)
Conneaut Lake Regional (Crawford)	Fairview Township (Erie)	Martinsburg Borough (Blair)
Coopersburg Borough (Lehigh)	Falls Creek Borough (Jefferson)	Marysville Borough (Perry)

Schedule of Participating Pension Plans (Continued)

Police (Continued)

Mayfield Borough (Lackawanna)	Orwigsburg Borough (Schuylkill)	South Williamsport Borough (Lycoming)
Mead Township (Warren)	Paxtang Borough (Dauphin)	Springdale Township (Allegheny)
Mercer Borough (Mercer)	Penbrook Borough (Dauphin)	Stewartstown Borough (York)
Middleburg Borough (Snyder)	Pennridge Regional (Bucks)	Summit Hill Borough (Carbon)
Middlesex Township (Cumberland)	Perkasie Borough (Bucks)	Telford Borough (Montgomery)
Millcreek Township (Lebanon)	Pine Grove Borough (Schuylkill)	Tinicum Township (Bucks)
Millersburg Borough (Dauphin)	Plumstead Township (Bucks)	Tulpehocken Township (Berks)
Montour Township (Columbia)	Point Township (Northumberland)	Tunkhannock Township (Wyoming)
Moore Township (Northampton)	Pulaski Township (Lawrence)	Upper Uwchlan Township (Chester)
Moosic Borough (Lackawanna)	Pymatuning Township (Mercer)	Vanport Township (Beaver)
Morrisville Borough (Bucks)	Red Lion (York)	Versailles Borough (Allegheny)
Moscow Borough (Lackawanna)	Richland Township (Bucks)	West Conshohocken Borough (Montgomery)
Mount Jewett Borough (McKean)	Roaring Spring Borough (Blair)	West Grove Borough (Chester)
Mount Pleasant Borough (Westmoreland)	Rochester Township (Beaver)	West Lampeter Township (Lancaster)
Mount Union Borough (Huntingdon)	Rye Township (Perry)	West Middlesex Borough (Mercer)
New Garden Township (Chester)	Sandy Lake Borough (Mercer)	West Pottsgrove Township (Montgomery)
New Wilmington Borough (Lawrence)	Saxton Borough (Bedford)	West Sadsbury (Chester)
Newport Borough (Perry)	Schuylkill Township (Schuylkill)	West Vincent Township (Chester)
Newtown Borough (Bucks)	Schwenksville Borough (Montgomery)	Westfield Borough (Tioga)
Nicholson Borough (Wyoming)	Scott Township (Columbia)	Wheatland Borough (Mercer)
Nockamixon Township (Bucks)	Scottdale Borough (Westmoreland)	White Haven Borough (Luzerne)
North Coventry Township (Chester)	Selinsgrove Borough (Snyder)	Wiconisco Township (Dauphin)
North Huntingdon Township (Westmoreland)	Shade Township (Somerset)	Williamstown Borough (Dauphin)
North Middleton Township (Cumberland)	Shamokin Dam Borough (Snyder)	Windsor Borough (York)
Northeastern Regional (York)	Sheffield Township (Warren)	Windsor Township (York)
Northern Cambria Regional (Cambria)	Shippingport Borough (Beaver)	Wrightstown Township (Bucks)
Northumberland Borough (Northumberland)	Shiremanstown Borough (Cumberland)	Youngwood Borough (Westmoreland)
Ohio Township (Allegheny)	Sinking Spring Borough (Berks)	
Old Lycoming Township (Lycoming)	Souderton Borough (Montgomery)	
Orangeville Borough (Columbia)	South Beaver Township (Beaver)	
	South Centre Township (Columbia)	
	Southern Police Commission (York)	
	South Waverly Borough (Bradford)	

Firefighters

Clairton City (Allegheny)	Larksville Borough (Luzerne)	New Garden Township (Chester)
Easton City (Northampton)	Manchester Township (York)	Upper Moreland Township (Montgomery)
Greenville Borough (Mercer)		Wilson Borough (Northampton)
Harrisburg City, (Dauphin)		

**Pennsylvania Municipal Retirement System
P.O.Box 1165
Harrisburg, PA 17108-1165**

**Telephone: 717-787-2065; 1-800-622-7968 (in PA only)
Fax: 717-783-8363**

**Website: www.pmps.state.pa.us
E-Mail: ra-staff@state.pa.us**