

Comprehensive Annual Financial Report

for the years ended December 31, 2015 and 2014

PENNSYLVANIA MUNICIPAL RETIREMENT SYSTEM



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The Pennsylvania Municipal Retirement System

Comprehensive Annual Financial Report
for the Years Ended December 31, 2015 and 2014

Paul Corbin, Chairman

Pennsylvania Municipal Retirement Board

Stephen W. Vaughn, Secretary

Pennsylvania Municipal Retirement System

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Prepared by the Investment and Financial Management Division
of the Pennsylvania Municipal Retirement System



Introduction

Vision and Mission Statements

Vision Statement

To be Pennsylvania local governments' pension administrator *of choice*.

Mission Statement

The Pennsylvania Municipal Retirement System seeks to help Pennsylvania's local governments, regardless of size or resources, secure the future retirement of their employees by providing comprehensive, cost-efficient and professional pension administration services through a pension plan tailored to the participants' and sponsors' requirements.

Letter of Transmittal

June 27, 2016

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

Consistent with the agency's commitment to full financial disclosure, we are honored to submit the Pennsylvania Municipal Retirement System's (PMRS, the System, the Fund) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended December 31, 2015. As required by the Pennsylvania Municipal Retirement Law, Act of 1974, P.L. 34, No. 15 (the Act) as amended, the System distributes the CAFR to our governing board, the members of the General Assembly of Pennsylvania, each participating municipal employer, and all other interested parties upon request. The CAFR is also published on the System's website. The System is solely responsible for the accuracy of the data in this report. As the two individuals primarily responsible for the System's financial records, 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 act of the Pennsylvania General Assembly in 1974. Responsibility for the organization and administration of the System is vested in the 11-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. The Statistical Section of this report lists all participating plans as of January 1, 2015.

The System offers various plan designs: defined benefit, cash balance, and hybrid. The annual benefit is dependent upon the individual municipality's contracted benefit package. Each pension plan is designed based on the plan sponsor's specific 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 provisions for vesting, disability benefits, survivor benefits, and death benefits. A plan's cost is determined by the individual plan's benefit structure, demographics, and financial condition. The System's individual plans may have an employer contribution and an employee contribution or just an employer charge. Employer contributions typically range from 2 percent to 20 percent of projected payroll for municipal employees and from 6 percent to 30 percent for police and firefighters. The employee contribution is determined by plan contract. In 2015, plan requirements ranged from no employee contribution to 7.5 percent of employee compensation.

ECONOMIC ENVIRONMENT

Going into the sixth year of a recovery, the first quarter had meager economic growth; the Gross Domestic Product (GDP) rose only 0.6 percent. Other indicators such as unemployment and inflation continued to remain positive while housing prices were up more than 5.5 percent on a year-over-year basis. The dollar continued to gain strength against other currencies; the dollar was up more than 10 percent against the Euro in the first quarter alone.

The specter of the Federal Reserve raising short-term interest rates began to be persistent. PMRS investment returns continued the positive trend from the fourth quarter of 2014 with a 3.3 percent portfolio return; all of the major asset classes were up with the developed international and domestic small and mid-cap equities increasing 4.0 percent or more. It was an excellent beginning for 2015.

The second quarter had even better economic growth; the economy grew at a 2.3 percent rate. Success in other economic indicators was evident again, but investors chose to focus on looming concerns in the international sector with Greek debt, market bubbles in some sectors in China, and a continued slowdown in several emerging market countries. The dollar gave back some of its first quarter gains giving some calming influence to U.S exporters. While every common market sector showed solid growth in the first quarter, only one asset class, real estate, had any significant positive performance in the second quarter. Domestic equities had gains of less than 0.5 percent with mid-caps down 1.5 percent. On the international side, both developed and emerging markets had positive returns but they were both less than 1.0 percent. Bonds were volatile throughout the quarter as sentiments changed about the Federal Reserve rate increases; in the end, the bond market was the biggest loser of the quarter at -1.7 percent.

Things came tumbling down in the third quarter. Most of the surprises with both domestic and international economic news were on the downside, with one negative surprise after another building bearish sentiment. GDP, job growth, and commodity prices were all down more than expected. While housing continued to show positive strength, it took a breather in the third quarter and didn't materially contribute to any type of upside momentum. The economic negativity was clearly illustrated in both the international and domestic equity markets where there were no safe havens. The biggest decline was in emerging markets where even the best markets such as Mexico and South Korea were down 10 percent to 13 percent, while some of the largest emerging markets such as Brazil and China were down 20 percent to 35 percent. The U.S. equity market by comparison was a "beacon of tranquility" with large cap stock down "only" 6.4 percent while small caps were down twice that much at 12 percent to 13 percent. For equities, a string of quarterly increases came crashing down. It was the worst in a long while. The PMRS portfolio did not escape the downdraft; it declined 6.2 percent leaving it in

negative territory at -2.2 percent for the year with only three months to go.

The best thing about the fourth quarter was that the Federal Reserve's rate hike finally happened ... seven years after the last one. Big employment numbers, continued housing price increases, and declining gas prices seemed to give the market confidence that consumer optimists outnumbered pessimists. The equity markets had positive performance both domestic and international, though not enough to recover from the third quarter. The only equity segment to come close to recovering the third quarter losses was the S&P 500 where it returned 7 percent.

For the year, between solid first and fourth quarters, the middling second quarter, and the disastrous third quarter, the PMRS portfolio's return was barely positive at 0.1 percent, with double-digit losses of -15.1 percent in emerging market equities offset by positive double-digit returns of 11.2% in real estate. The remaining 65 percent of PMRS' investments averaged less than 1.0 percent return for 2015. For all the ups and downs, the PMRS portfolio ended 2015 just about where it began in 2015.

FINANCIAL INFORMATION

The System's financial statements were prepared in accordance with generally accepted accounting principles of the United States of America. The financial statements and the required supplementary information in the report have been prepared in accordance with governmental accounting standards. The independent auditors' report is located in the Financial Section on page 15 and the Management's Discussion and Analysis commences on page 18.

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."

The System's net assets totaled \$1.994 billion as of December 31, 2015. In 2015, the System's net assets decreased by \$51.5 million, excluding the decrease for the effect of change in accounting principle for \$3.6 million. Investment-related losses decreased the portfolio by \$5.2 million. Contributions and miscellaneous income increased the total assets by \$69.0 million. Benefit payments and administrative expenses reduced the total assets by \$115.3 million. Additional information is detailed in the Financial Section ("Statement of Fiduciary Net Position" and

“Statement of Changes in Fiduciary Net Position”) located on pages 21 and 22.

The System has established internal 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 2015 administrative budget was adopted in September 2014 and set at \$5.3 million exclusive of investment fees. Expenditures (exclusive of investment fees) in 2015 amounted to \$5.0 million. More information on the System’s expenses is included in the Financial Section of this report (“Schedule 2 – Administrative Expenses”).

REVENUES

The System was established by law to pay pension benefits when due. It accumulates sufficient funds to pay benefits through employer contributions, employee contributions, and investment income. The following schedule presents a summary of revenues for the year ended December 31, 2015, and also shows the amount and percentage of increases and decreases in relation to December 31, 2014 revenues. Municipal contributions are based upon an actuarial valuation, using the Entry Age Normal Actuarial Cost Method, computed as a percentage of the total

employee 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 percent to 8 percent of their salaries. 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.

Net investment income is a combination of earnings from equities, real estate, bonds, and a short-term cash management fund less investment expenses. The fair value of the System’s investment portfolio decreased from \$2.050 million in 2014 to \$1.994 million in 2015. The largest decrease of net investment income came from depreciation of 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 members per municipality and can be affected by employee turnover or new plans being added or plans leaving the System.

Ten-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 year ended December 31, 2015, and shows the percentage of increases and decreases in relation to December 31, 2014

REVENUES

ADDITIONS TO PLAN NET ASSETS	2015 AMOUNTS	PERCENT OF TOTAL	2014 AMOUNTS	\$ INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)
Contributions, net of refunds	\$ 68,740,888	107.7	\$ 89,762,417	(\$ 21,021,529)	(23.4)
Net investment income (loss)	(5,197,261)	(8.1)	100,443,382	(105,640,643)	(105.2)
Miscellaneous income	253,740	0.4	10,176	243,564	2,393.5
Total	\$ 63,797,367	100.0	\$ 190,215,975	(\$ 126,418,608)	(66.5)

EXPENSES

DEDUCTIONS FROM PLAN NET ASSETS	2015 AMOUNTS	PERCENT OF TOTAL	2014 AMOUNTS	\$ INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)
Annuity benefits and terminations	\$ 89,855,588	78.0	\$ 84,025,435	(\$ 5,830,153)	6.9
Transfers to other plan administrators	20,448,089	17.7	3,411,316	17,036,773	499.4
Administrative expenses	4,984,399	4.3	4,411,462	571,937	13.0
Total	\$ 115,287,076	100.0	\$ 91,848,213	\$ 23,438,863	25.5

amounts. The major expense-related items for 2015 were annuity benefits and terminations and refunds of withdrawing plans. A breakdown of the System's expenses including 10-year historical trend information is presented in Part I of the Statistical Section of this report.

INVESTMENT HIGHLIGHTS

The time-weighted rate of return for the System's investments for the year ended December 31, 2015 was 0.1 percent, ranking in the 43rd percentile of the Investment Metrics (IM) Public Fund Universe. The cumulative 10-year return was 5.7 percent on an annualized basis and ranked in the 56th percentile.

The return by asset class and their weighting in the portfolio are as follows: Large Cap Domestic Equity returned 1.8 percent (Class as percentage of portfolio: 26.1 percent); Real Estate returned 11.2 percent (18.0 percent); Fixed Income returned 0.6 percent (16.5 percent); Small Cap Domestic Equity had a negative return of 5.2 percent (14.8 percent); International Equity returned 0.3 percent (14.1 percent); and the International Emerging Markets asset class had a negative return of 15.1 percent (8.8 percent). At the year-end, the portfolio had a commitment in cash equivalents representing 1.7 percent of the portfolio.

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. The System's plan net assets decreased by \$55.1 million or 2.7 percent from \$2.050 billion at December 31, 2014 to \$1.994 billion at December 31, 2015.

The "Schedule of Funding Progress" was calculated based on the most recent actuarial valuation dated January 1, 2015. The funded ratio increased from 98.4 percent at January 1, 2014 to 100.7 percent as of the last valuation date of January 1, 2015. As a result, the deficit last year has increased from \$32.9 million as of January 1, 2014 to a surplus of \$14.2 million as of January 1, 2015. 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 actu-

arial, accounting, and funding data. Detailed information on the System's plan funding can be found in the Actuarial Section of this report on page 47.

MAJOR INITIATIVES

2015 was a year that ended up focusing on one major program implementation and three significant business decisions:

- Implementation of GASB 68 and development of financial reports for our municipalities,
- Decisions relating to the enhancement of our plan administration and accounting systems,
- Future staffing for the receipt of essential but non-core retirement plan administration services, and
- Future location of the PMRS headquarters.

GASB 68 IMPLEMENTATION

The implementation of GASB 68, first proposed in 2012 and applicable to all government financial reports with a fiscal year ending on or after June 15, 2015, became the most complex project undertaken by PMRS since the implementation of Act 205 in the late 1980s. Involving the PMRS actuarial consultant, the PMRS independent auditor, and the input of the public retirement plan auditing community, PMRS had to develop a new report that complied with the new accounting and financial reporting requirements of the Governmental Accounting Standards Board (GASB) and represented an accurate depiction of each municipal retirement plan's financial status in accordance with the provisions of the Pennsylvania Municipal Retirement Law and other applicable regulatory and legal standards. Finally, in addition to the report structure and content, the timing of the reports presented a logistical challenge due to the numerous fiscal year end dates of our Authority-sponsored retirement plans and the implementation of new processes and audit requirements as it relates to census data and the allocation of retiree assets, investment income, and administrative expenses.

The initial GASB 68 reports based on a measurement date of December 31, 2014 were completed and distributed to approximately 1,000 municipalities over the course of late 2015 through April 2016. After this first year of implementation, it is anticipated that some modifications will be made to provide greater focus and clarity to certain sections of the report and improve turnaround time. PMRS will begin preparing the GASB 68 reports based on a measurement date of December 31, 2015 in July 2016 and anticipates that these reports will be distributed to all municipalities by December 31, 2016.

PLAN ADMINISTRATION AND ACCOUNTING SOFTWARE SYSTEM ENHANCEMENTS

In 1998, PMRS implemented a comprehensive plan administration software system and completed a significant enhancement in 2007. In 2015, the Board approved a \$1 million, 18-month project for a second enhancement that will provide our municipalities and our plan members with new online features along with internal PMRS processing improvements that will allow PMRS to reduce completion times for customer requests and broaden communication to our clients. With an implementation completion in the second half of 2017, PMRS will be providing more specific feature information as the project progresses.

One of the features of the new plan administration software enhancement will be to separate the PMRS accounting system from the plan administration system. With the advent of GASB 68, it became clear that a more robust accounting structure and software system was needed to maintain and disseminate plan level financial information to both our municipalities, their internal and external auditors, and to the public at large. In addition, when the State Treasurer updated and implemented a new software system in 2014, our current accounting infrastructure was unable to easily integrate with the new State system. For these two primary reasons, the Board approved the purchase of a comprehensive accounting software platform. It is anticipated that the project will begin in the 2nd half of 2016 with a targeted completion of the first half of 2017.

STAFFING REALIGNMENT FOR SELECT NON-CORE OPERATIONS

In October 2015, the retirement of PMRS' Operations Director allowed for discussion about how PMRS can receive essential non-core services through inter-agency contractual agreements. Initially focused on the need for broad-based human resource/personnel services, the need was expanded to include information technology maintenance and support services along with procurement support services for the procurement of external professional services and major capital expenditures. For PMRS, a Commonwealth agency with less than 50 employees, the costs and resources associated with hiring and maintaining employees with specific talent and expertise that is often needed only on a part-time or intermittent basis, could be more effectively deployed by contracting for those specialized services to be available when needed. With respect to information technology hardware and network management, security and reliability could be improved by contracting with the

Commonwealth's Office of Information Technology for services related to technology security, network management, and hardware support and service.

By reducing the need for personnel in these difficult to recruit and retain areas, PMRS will be able to focus its employment efforts on recruiting personnel in areas related to retirement plan administration, customer relations and communications, and investment management. It is anticipated that interagency agreements will be finalized during 2016.

PMRS HEADQUARTERS RELOCATION

During 2015, PMRS, with the assistance of Pennsylvania's Department of General Services Real Estate Division, issued a Solicitation for Leasing Office Space to determine the current office space market conditions related to moving the PMRS headquarters. By the end of 2015, the proposals received by PMRS were not considered optimal to commit to the relocation of PMRS' headquarters.

In early 2016, the Board was made aware of the possibility that a suitable office building was available for purchase. The Board authorized further review of the building both as a suitable and appropriate portfolio investment and for the relocation of PMRS' headquarters. In May 2016, the Board authorized the staff to make an offer of purchase. The building owner accepted the offer and the Purchase Agreement will be presented to the building owner in late June. If accepted, it is anticipated that the building will be ready for occupancy in early 2017.

PROFESSIONAL SERVICES

The financial information in this report has been audited by the independent accounting firm of CliftonLarsonAllen LLP, which is completing year one of a five-year contract. The actuarial information was prepared by Cheiron. Cheiron has completed year four 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 two 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.

INTERNAL CONTROLS

The management of the System is responsible for and has implemented internal controls which are designed to provide reasonable but not absolute assurances for the safeguarding of assets and the reliability of financial records. It should be recog-

nized, however, that all internal controls have inherent limitations. These limitations exist because of several factors, including cost and the potential for controls to be overridden by management. To mitigate the risk caused by these inherent limitations, the System monitors the adequacy and effectiveness of the System's internal control structure. We believe that the internal accounting controls currently in place are adequate to meet the purpose for which they were intended. We also believe the financial statements, supporting schedules and statistical tables to be fairly presented in all material respects. Also, our independent external auditor CliftonLarsonAllen LLP, conducts an annual audit of the financial statements in accordance with generally accepted auditing standards. Their audit includes tests and procedures designed to provide reasonable assurance that the financial statements are fairly presented.

ACKNOWLEDGMENTS

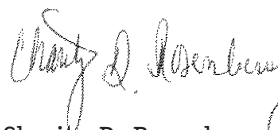
The preparation of the CAFR falls upon the signatories of this Letter of Transmittal and we have accepted that responsibility with the gravitas that is warranted. However, our roles are meaningless with-

out the support of the agency's governing Board and the support staff who pull all the pieces together for us to draw upon. We are indebted to the Board which has given us the leadership and support to help us fulfill our roles. We are indebted to the staff of the Pennsylvania Municipal Retirement System for their diligence, professionalism, and determination; without them the CAFR could not have been prepared.

In addition to the staff, however, we rely on several third-party contractors and consultants who have the expertise, resources, and knowledge to help us compile the data and to format it in the most professional way possible. We recognize first the team at CliftonLarsonAllen LLP. The support and guidance provided is nothing less than excellent. We appreciate your efforts beyond what you can imagine. Two other firms that serve our Board and make this CAFR possible are the specialists at the actuarial firm of Cheiron, Inc. and the team at our investment-consulting firm of Dahab Associates, Inc. Their experience and contributions have been indispensable in helping us to prepare this document and in managing the agency.



Stephen W. Vaughn
Secretary



Charity D. Rosenberry
Chief Financial Officer

Certificate of Achievement



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Pennsylvania Municipal Retirement System

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2014

Executive Director/CEO

Administrative Organization

Pennsylvania Municipal Retirement Board

as of December 31, 2015



Paul Corbin, Chair
*Represents Pennsylvania
State Association of
County Commissioners*



Cory S. Adams
*Represents Pennsylvania
State Association of
Township Supervisors*



Steven T. Heinly
*Represents active police
officers enrolled in PMRS*



George Milakovic
*Represents Pennsylvania
State Association of
Township Commissioners*



Barry Sherman, Vice Chair
*Represents retired members
enrolled in PMRS*



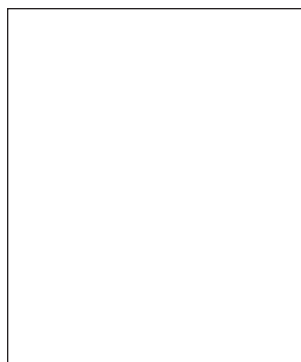
Pedro Cortés
Secretary of the Commonwealth



William J. Junkin III
*Represents active firefighters
enrolled in PMRS*



Salvatore J. Panto Jr.
*Represents Pennsylvania
Municipal League*



Vacant
*Represents Pennsylvania
Municipal Authorities Association*



Timothy A. Reese
*State Treasurer (ex-officio)
represented by Sandy Leopold*



David S. Perruso
*Represents Pennsylvania State
Association of Boroughs*

Staff, Consultants, and Managers

as of December 31, 2015

ADMINISTRATIVE STAFF

Secretary

Stephen W. Vaughn

Assistant Secretary

Kristine M. Cline

Investment and Financial Management Division Chief Financial Officer

Charity D. Rosenberry

Technology Services Division Chief

Vacant

Membership Services Division Chief

Sean E. Christine

Municipal Services Division Chief

Anthony M. Pinto

Operations Division Chief

Vacant

PROFESSIONAL CONSULTANTS

Actuary

Cheiron | McLean, Va.

Kenneth Kent, FSA, FCA, MAAA, EA

Auditor

CliftonLarsonAllen LLP | Timonium, Md.

Owen Ward, CPA, Principal

Comptroller

Commonwealth of Pennsylvania | Harrisburg, Pa.

Anna Maria Kiehl, Chief Accounting Officer

Investment Consultant

Dahab Associates, Inc. | Bay Shore, N.Y.

Richard E. Dahab, CFA, President

Legal Counsel

Commonwealth of Pennsylvania | Harrisburg, Pa.

Michele Ferencz, Chief Counsel

Custodian

State Treasurer

Sub-Custodian

BNY Mellon | Pittsburgh, Pa.

Gordon Sapko, Relationship Manager

INVESTMENT MANAGERS

BMO Global Asset Management

Milwaukee, Wi.

Thomas J. Nolte, Senior Vice President

Brandywine Global Investment Management, LLC

Philadelphia, Pa.

Bill Roach, Group Product Specialist

DePrince, Race, & Zollo, Inc.

Winter Park, Fl.

Katie Syrme, Portfolio Manager–Client Services

Emerald Advisors, Inc.

Leola, Pa.

John V. Thompson, Senior Vice President

Federated Investors, Inc.

Pittsburgh, Pa.

Amy Michalyszyn, Senior Vice President

Forest Investment Associates

Atlanta, Ga.

V. Scott Bond, Director–Marketing and Client Relations

HGK Asset Management, Inc.

Jersey City, N.J.

Matthew Kosara, Client Portfolio Manager

Jarislowsky, Fraser Limited

Montreal, QC

Dario Mazzarello, Partner

Johnston Asset Management

Stamford, Ct.

James Pontone, Director and Portfolio Manager

LSV Asset Management

Chicago, Il.

Keith W. Bruch, Director of Client Portfolio Services

Polen Capital Management

Boca Raton, Fl.

Jim Haymes, Director of Institutional Relations

Prudential Financial, Inc.

Madison, N.J.

Larry Teitelbaum, Executive Director–Business Development

State Street Global Advisors

Boston, Ma.

Gregory Balewicz, Vice President

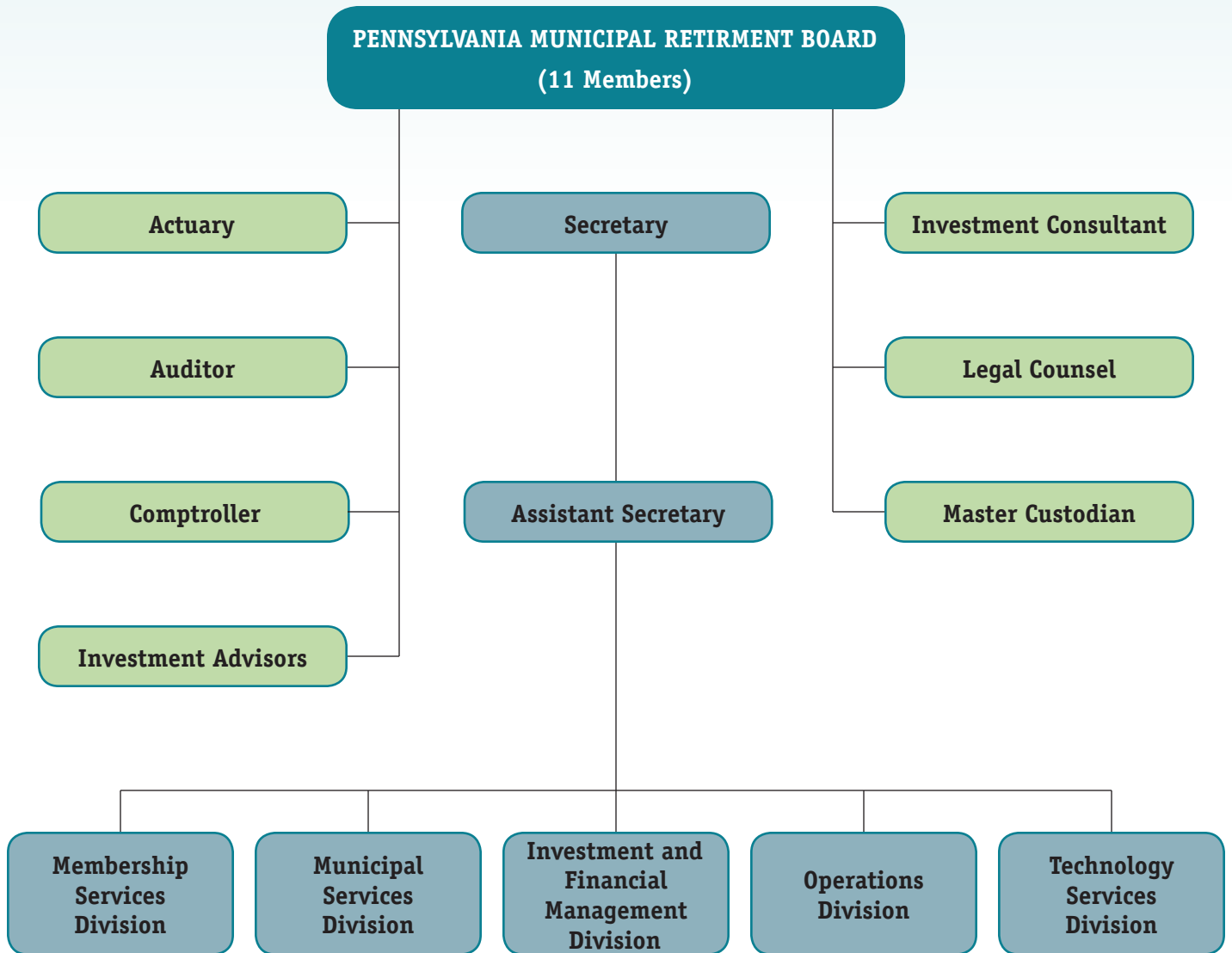
TIAA-CREF Global Real Estate

New York, N.Y.

Cameron Jones, Director

⁽¹⁾ Manages the long-term portfolio of investments reported on the Statement of Fiduciary Net Position. All information in the Investment Section pertains to the activity of these investment managers. Summary of investment expenses is on page 42.

Organizational Chart



Chairman's Report

June 27, 2016

Dear Members:

As the new chairman of the Pennsylvania Municipal Retirement System, I am pleased to share with you the System's 2015 Comprehensive Annual Financial Report. The report identifies the System's strong financial status as of the end of 2015 along with the numerous activities conducted by the System throughout the year on your behalf. I want to recognize our previous outgoing chairman, Jefferson County Commissioner Paul L. Corbin. After many years of public service, 11 years as a Board member with his final two years as the Board chairman, Paul successfully oversaw the transition of its long-time Secretary, Jim Allen, to new leadership under Steve Vaughn. As Vice Chairman under Paul for the past two years, I had the opportunity to learn and understand the balance between providing consistent policy leadership among the Board members and facilitating the goals and objectives of the new System management team. Along with new Vice Chairman George Milakovic, I am looking forward to guiding the System as we confront the challenges and opportunities to provide sustainable retirement programs to Pennsylvania's dedicated local government employees.

PMRS also lost the significant contributions of an experienced Board member, Duane L. Filchner, when he retired as a Board member of the Northampton Water Authority and was required by law to resign from the PMRS Board in the fall of 2015. As an enthusiastic Board participant, Duane could be counted on to provide wise counsel during Board deliberations. We wish him the best in retirement.

2015 was a year of mixed success with enhanced financial management but a second straight year of underwhelming investment returns. In June, PMRS significantly strengthened its financial management by hiring its first Chief Financial Officer, Charity Rosenberry. The CFO position is the first additional senior management position authorized by the Board since the System's creation. As an experienced CFO, Ms. Rosenberry has been a welcome addition. For the System's investments, their performance was varied throughout the year and even with a rebound in the 4th quarter, 2015 returns were barely positive at 0.1 percent. Although the investment returns were not what we had hoped, PMRS's 2015 Actuarial Valuation continued its string of improved performances. Increasing its market value funding ratio from 97 percent to 99 percent, it continues to be one of the best funded local government systems in the United States.

I encourage you to read this report in full. I know its transparency will allow you to learn more about, and better yet appreciate more, the System's strengths. I believe you will, above all else, be pleased by the openness and candor with which the agency's operations are revealed. We believe that the more you know about the agency, the more you will appreciate it. I encourage you to contact us with your inquiries, comments, and suggestions. We welcome your involvement and appreciate your support. I thank you for allowing us to serve you.

Sincerely,



Chairman

Phone: (717) 787-2065

(800) 622-7968

Fax: (717) 783-8363

Our Vision: To be Pennsylvania local governments' pension administrator *of choice*.

Summary of Plan Provisions⁽¹⁾

INTRODUCTION

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 cash balance 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

The majority of plans have a disability benefit that allows a member who is unable to work because of serious injury or illness to 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 non-service 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 percent of the disabled individual's final average salary offset by worker's compensation, and (2) a non-service disability with a minimum of 10

years' service and a 30 percent 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 elect to receive their monthly retirement allowance 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 percent survivorship annuity
- **Option 3:** Joint and 50 percent survivorship annuity

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 interest rate which is currently at 5.5 percent. 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.

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



Financial

Independent Auditors' Report



CliftonLarsonAllen

Independent Auditor's Report

CliftonLarsonAllen LLP
CLAconnect.com

Pennsylvania Municipal Retirement Board
Pennsylvania Municipal Retirement System
Harrisburg, Pennsylvania

Report on the Financial Statements

We have audited the accompanying financial statements of the Pennsylvania Municipal Retirement System (the System), which comprise the statements of fiduciary net position as of December 31, 2015 and 2014, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits 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 from material misstatement.

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

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



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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of December 31, 2015 and 2014, and the respective changes in its financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of a Matter

During the year ended December 31, 2015, the System adopted GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* and the related GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68*. As a result of the implementation of these standards, the System reported a restatement for the change in accounting principle (see Note 2). Our auditors' opinion was not modified with respect to the restatement.

Other Matters

Required Supplementary Information

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

Supplementary and Other Information

Our audits were conducted for the purpose of forming an opinion on the System's financial statements. The supplementary schedules, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the financial statements.

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

The introduction, investments, actuarial and statistical sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audits of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.



CliftonLarsonAllen LLP

Harrisburg, Pennsylvania
June 27, 2016

Management's Discussion and Analysis

This section presents management's discussion and analysis of the Pennsylvania Municipal Retirement System's (PMRS, the System, the Fund) financial performance for the years ended December 31, 2015 and 2014. It is presented as required supplementary information to the financial statements.

OVERVIEW OF FINANCIAL STATEMENTS

The System administers sound, cost-effective pension plans on a contracted basis for local government employers 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. The Statistical Section of this report lists all participating plans as of January 1, 2015.

The Statement of Fiduciary Net Position provides a snapshot of the financial position of PMRS at December 31, 2015, including comparative amounts for the prior year.

The Statement of Changes in Fiduciary Net Position summarizes the System's financial activities that occurred for the year ended December 31, 2015, 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 following the Notes to Financial Statements provides a schedule of investment returns.

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

FINANCIAL HIGHLIGHTS

- The System's plan net assets decreased by \$55.1 million or 2.7 percent from \$2.050 billion at December 31, 2014 to \$1.994 billion at December 31, 2015. The System's plan net assets increased by \$98.4 million or 5.0 percent from \$1.951 billion at December 31, 2013 to \$2.050 billion at December 31, 2014. The changes in market value are recognized as part of the net appreciation/depreciation in the fair value of investments.
- The funded ratio increased from 98.4 percent at January 1, 2014 to 100.7 percent as of the last valuation date of January 1, 2015. As a result, the

deficit last year has increased from \$32.9 million as of January 1, 2014 to a surplus of \$14.2 million as of January 1, 2015.

- The portfolio gross rate of return for the year ended December 31, 2015 was 0.1 percent compared to 5.7 percent and 19.4 percent for the years ended December 31, 2014 and 2013, respectively.
- Contributions decreased by \$21.0 million or 23.4 percent from \$89.8 million in 2014 to \$68.7 million in 2015. Contributions increased by \$28.7 million or 46.9 percent from \$61.1 million in 2013 to \$89.8 million in 2014. The fluctuation in contributions is primarily due to a one-time payment of \$27.4 million from one municipality towards its unfunded liability in 2014.
- Annuity benefits and terminations increased by \$5.8 million or 6.9 percent from \$84.0 million in 2014 to \$89.9 million in 2015. Annuity benefits and terminations increased by \$5.8 million or 7.4 percent from \$78.2 million in 2013 to \$84.0 million in 2014. The fluctuation in annuity benefits and terminations is primarily due to increased annuity benefits from 2013 to 2015.
- Transfers to other plan administrators increased from \$3.4 million in 2014 to \$20.4 million in 2015 due to increased plan withdrawals. No plans withdrew in 2013.
- Administrative expenses increased by \$0.6 million or 13.0 percent from \$4.4 million in 2014 to \$5.0 million in 2015. Administrative expenses increased by \$0.7 million or 18.5 percent from \$3.7 million in 2013 to \$4.4 million in 2014. Administrative expenses were within PMRS' budgeted amounts for all three years.

GASB STANDARDS

PMRS implemented GASB Statement 68 effective January 1, 2015. The 2014 and 2014 amounts presented have not been restated to reflect the implementation of GASB 68 because the information is not available. Due to the implementation of GASB 68, the beginning net position restricted for pension benefits has been restated by (\$3,634,167). The purpose of the restatement was to record the beginning net pension liability of (\$3,777,141), the beginning deferred inflows of resources of (\$2,146), and the beginning deferred outflows of resources of \$145,120.

FUNDED STATUS

PMRS uses an actuarial reserve method of funding that is financed by member contributions, employer contributions, and earnings from invested assets. The System has historically chosen to have actuarial valuations performed bi-annually. The January 1, 2015 actuarial valuation was derived from actual values for the 717

defined benefit plans that are required to redetermine contribution levels bi-annually on odd years and actuarial adjustments to the January 1, 2014 liabilities for the four municipalities that are required to redetermine contribution levels bi-annually on even years. The January 1, 2014 liabilities were adjusted to reflect January 1, 2015 actual active counts to estimate the liabilities for these plans to provide an overall measure of the funded status of the System.

As part of a 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. The most recent actuarial valuation reports that PMRS is 100.7 percent funded as of January 1, 2015.

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 2015, the System's gross rate of return on investments was 0.1 percent. The gross rate of return over the past three and five years ended December 31, 2015 was 8.1 percent and 7.1 percent, respectively.

SHORT-TERM

Short-term investments decreased by \$21.3 million or 36.3 percent from \$58.7 million in December 31, 2014 to \$37.4 million in December 31, 2015. Short-term investments increased by \$4.2 million or 7.7 percent from \$54.5 million in December 31, 2013 to \$58.7 million December 31, 2014. Neither the decrease for 2015 nor the increase for 2014 were intentional but rather represented the normal cash flow necessary to meet expenses and to fund managers.

FIXED INCOME

Fixed income increased by \$28.7 million or 9.53 percent from \$301.6 million in December 31, 2014 to \$330.3 million in December 31, 2015. Fixed income increased by \$30.0 million or 11.0 percent from \$271.6 million in December 31, 2013 to \$301.6 million in December 31, 2014, primarily due to changes in fair value.

COMMON AND PREFERRED STOCK

Common and preferred stock including international stock decreased by \$89.2 million or 6.6 percent from \$1.361 billion in December 31, 2014 to \$1.272 billion in December 31, 2015. Common and preferred stock including international stock increased by \$29.7 million or 2.2 percent from \$1.331 billion in December

31, 2013 to \$1.361 billion in December 31, 2014 due to changes in fair value in domestic and international markets.

REAL ESTATE

Real estate increased by \$29.5 million or 9.0 percent from \$328.4 million in December 31, 2014 to \$357.9 million in December 31, 2015. Real estate increased by \$34.0 million or 11.6 percent from \$294.4 million in December 31, 2013 to \$328.4 million in December 31, 2014. The increases were due to gains in fair value and net purchases to additional real estate.

CONTRIBUTIONS AND INVESTMENT INCOME

Contributions decreased by \$21.0 million or 23.4% from \$89.8 million in 2014 to \$68.7 million in 2015. Contributions increased by \$28.7 million or 46.9% from \$61.1 million in 2013 to \$89.8 million in 2014. The fluctuation in contributions is primarily due to a one-time payment of \$27.4 million from one municipality towards its unfunded liability in 2014.

Net investment loss was \$5.2 million in 2015 compared to net investment income of \$100.4 million in 2014 and \$309.7 million in 2013. Investment income (loss) is primarily attributable to appreciation (depreciation) in fair values in the equity and real estate markets.

Investment expenses increased by \$1.2 million or 15.8 percent from \$7.9 million in 2014 to \$9.1 million in 2015. Investment expenses increased by \$0.1 million or 1.3 percent from \$7.8 million in 2013 to \$7.9 million in 2014. The investment expenses are based on the fair value of the quarterly average balance of investments under management.

PENSION PLAN BENEFITS AND EXPENSES

Annuity benefits and terminations were \$89.9 million in 2015, compared to \$84.0 million in 2014 and \$78.2 million in 2013. Annuity benefits and terminations increased in all three years primarily due to an increased number of retirees and annuity benefits as well as annuity increases (COLA adjustments) that may be applied each year. Annuity benefits excluding death payments were \$78.2 million in 2015, compared to \$74.0 million in 2014 and \$67.3 million in 2013.

Transfers to other plan administrators increased from \$3.4 million in 2014 to \$20.4 million in 2015 due to increased plan withdrawals. No plans withdrew in 2013.

Administrative expenses were \$5.0 million in 2015, compared to \$4.4 million in 2014 and \$3.7 million in 2013.

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 there are questions about the report or additional information is required, contact

SUMMARY OF FIDUCIARY NET POSITION

as of December 31, 2015, 2014, and 2013
(amounts in thousands)

ANALYSIS OF FIDUCIARY POSITION	2015	2014	2013
Assets			
Receivables	\$ 16,845	\$ 4,648	\$ 4,494
Investments	1,997,183	2,049,464	1,951,675
Capital assets	121	134	145
Total assets	\$ 2,014,149	\$ 2,054,246	\$ 1,956,314
Deferred outflows of resources related to pensions	453	–	–
Liabilities			
Deferred inflows of resources related to pensions	2	–	–
Total fiduciary net position	\$ 1,994,491	\$ 2,049,615	\$ 1,951,247

SUMMARY OF CHANGES IN FIDUCIARY NET POSITION

as of December 31, 2015, 2014, and 2013
(amounts in thousands)

ANALYSIS OF FIDUCIARY POSITION	2015	2014	2013
Additions			
Contributions, net of refunds ⁽¹⁾	\$ 68,741	\$ 89,763	\$ 61,092
Net investment income (loss)	(5,197)	100,443	309,729
Miscellaneous income	253	10	469
Total additions	\$ 63,797	\$ 190,216	\$ 371,290
Deductions			
Annuity benefits and terminations ⁽²⁾	89,856	84,025	78,245
Transfers to other plan administrators ⁽³⁾	20,448	3,411	–
Administrative expenses	4,983	4,412	3,724
Total deductions	\$ 115,287	\$ 91,848	\$ 81,969
Total fiduciary net position	(\$ 51,490)	\$ 98,368	\$ 289,321

ASSET DISTRIBUTION AT FAIR MARKET VALUE

as of December 31, 2015, 2014, and 2013
(amounts in thousands)

Asset class	2015	PERCENT	2014	PERCENT	2013	PERCENT
Short term ⁽⁴⁾	\$ 37,390	1.9	\$ 58,712	2.9	\$ 54,535	2.8
Fixed income	33,327	16.5	301,574	14.7	271,645	13.9
Common preferred stock	816,383	40.9	873,000	42.6	892,301	45.7
International stock	455,212	22.8	487,819	23.8	438,838	22.5
Real estate	357,871	17.9	328,359	16.0	294,355	15.1
Total	\$ 1,997,183	100.0	\$ 2,049,464	100.0	\$ 1,951,674	100.0

⁽¹⁾ Contributions include a one-time payment of \$27.4 million from one municipality towards its unfunded liability in 2014.

⁽²⁾ Annuity payments increased by \$4.2 million, \$6.7 million, and \$5.5 million in 2015, 2014, and 2013, respectively. Average number of annuitants receiving benefits increased by 181 in 2015 (3.6 percent increase), 296 in 2014 (6.2 percent increase), and 262 in 2013 (5.8 percent increase).

⁽³⁾ Three plans withdrew with total assets of \$20.4 million in 2015. One plan withdrew with total assets of \$3.4 million in 2014. No plans withdrew in 2013.

⁽⁴⁾ Short-term includes cash and equivalents held by investment managers and the Pennsylvania Treasury Department.

Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION

as of December 31, 2015 and 2014

ASSETS	2015	2014
Receivables		
Plan members	\$ 2,125,173	\$ 1,832,661
Municipal employers	1,741,796	240,903
Accrued investment income	1,119,459	1,310,518
Investment sales receivable	11,858,823	1,264,099
Total receivables	16,845,251	4,648,181
Investments, at fair value		
Short-term and other investments	37,389,514	58,712,288
U.S. government fixed income pooled funds	226,339,921	206,849,517
Corporate bond pooled funds	103,986,876	94,724,352
Equity index funds, common and preferred stocks	816,383,502	872,999,594
Real estate	357,870,568	328,359,467
International equities	455,212,477	487,818,617
Total investments	1,997,182,858	2,049,463,835
Capital assets (net of accumulated depreciation of \$133,257 and \$133,344 at 2015 and 2014, respectively)	120,799	134,402
Total assets	2,014,148,908	2,054,246,418
Deferred outflows of resources related to pensions	453,473	-
Liabilities		
Accounts payable and accrued expenses	7,857,322	2,749,092
Investment purchases payable	12,252,123	1,882,194
Total liabilities	20,109,445	4,631,286
Deferred inflows of resources related to pensions	1,680	-
Net position restricted for pensions	\$ 1,994,491,256	\$ 2,049,615,132

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

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

as of December 31, 2015 and 2014

ADDITIONS	2015	2014
Contributions, net of refunds		
Municipal employers	\$ 47,504,803	\$ 67,249,330
Plan members	19,605,687	18,441,437
Transfers from other plan administrators	1,424,284	3,908,410
Assessments	206,114	163,240
Total contributions, net of refunds	68,740,888	89,762,417
Investment income		
From investing activities:		
Net appreciation (depreciation) in fair value of investments	(27,307,292)	73,174,459
Short-term and other investments	103,688	104,102
Common and preferred stocks	11,973,079	9,739,317
Real estate	14,466,205	20,528,588
International equities	4,669,589	4,760,130
Total investment income	3,905,269	108,306,596
Less investment expenses	(9,102,530)	(7,863,214)
Total net investment income (loss)	(5,197,261)	100,443,382
Other miscellaneous	253,740	10,176
Total additions	63,797,367	190,215,975
Deductions		
Annuity benefits and terminations	89,855,588	84,025,435
Transfers to other plan administrators	20,448,089	3,411,316
Administrative expenses	4,983,399	4,411,462
Total deductions	115,287,076	91,848,213
Net increase (decrease)	(51,489,709)	98,367,762
Net position restricted for pensions		
Balance, beginning of year	2,049,615,132	1,951,247,370
Effect of change in accounting principle	(3,634,167)	-
Balance, beginning, as restated	2,045,980,965	-
Balance, end of year	\$ 1,994,491,256	\$ 2,049,615,132

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

Notes to Financial Statements

(1) ORGANIZATION AND DESCRIPTION OF THE SYSTEM

Organization

The Pennsylvania Municipal Retirement System (PMRS, the System, the Fund) 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 11-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 full-time employees contractually become members. Part-time, seasonal, and temporary employees as well as elected officials may also become members through contractual agreement. As of January 1, 2015, there were 721 municipalities with defined benefit plans and 286 with cash balance plans. The tables (on the following page) reflect municipal membership and individual membership.

Pension Benefits

The System has the broad 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 firefighters) (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 member municipalities include the automatic increase; others occasionally grant an ad hoc cost-of-living (COLA) increase. The most common method of granting a postretirement benefit increase is through the System's excess interest award. (See Note 3 for an explanation of excess interest.)

Member municipalities interested in amending benefits contact the System's staff to discuss desired amendments and to obtain a cost study. Amendments are drafted by the System's staff, reviewed by the Chief Counsel's Office, adopted by the municipality, 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, 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.

Reclassifications

Certain 2014 amounts have been reclassified in conformity with the 2015 presentation. These reclassifications had no effect on net position restricted for pensions or the changes in net position restricted for pensions.

PARTICIPATING LOCAL GOVERNMENT EMPLOYERS

	DEFINED BENEFITS	CASH BALANCE
Counties	4	0
Cities	18	0
Boroughs	146	52
Townships of the first class	18	3
Townships of the second class	165	141
Authorities and other units	170	75
Police	191	14
Firefighters	9	1
Total*	721	286

* Total includes plans with no active members.

INDIVIDUAL MEMBERSHIP

ACTIVE MEMBERS	
Defined benefit plans	
Municipal	6,702
Police	752
Firefighters	126
Total	7,580
Cash balance plans	
Municipal	1,200
Police	13
Firefighters	1
Total	1,214
Total active members	8,794
RETIRES AND BENEFICIARIES	
Retirees	4,566
Beneficiaries	542
Total retirees and beneficiaries	5,108
INACTIVE PARTICIPANTS WITH RIGHTS TO DEFERRED PENSION (VESTED)	
Defined benefit	779
Cash balance	248
Total vested	1,027
Defined benefit	8
Cash balance	0
Total non-vested	8
Total individual memberships	14,937

Investments

Investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. 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. Equity index funds are valued at the net asset value of units held based upon the value of the underlying investments as determined by quoted market prices. Fixed income pooled funds are valued at the net asset value of units held based on yields currently available on comparable securities of issuers with similar credit ratings of the underlying investments. The fair value of real estate investments are 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. Interest income is recorded on the accrual basis and dividends are recorded on the ex-dividend date.

Capital Assets

Capital 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 eight years for software and office furniture and equipment.

Pensions for Employees of the System

Employees of PMRS are members of the Pennsylvania State Employees' Retirement System (SERS).

For purposes of measuring the net pension liability, deferred outflows of resources, deferred inflows of resources, and pension expense information about the fiduciary net position of SERS and additions to/ deductions from SERS' fiduciary net position have been determined on the same basis as they are reported by SERS. *(Please refer to Note 6 for additional information regarding SERS.)* PMRS' net pension liability for its employees to SERS is reported in accounts payable and accrued expenses. The pension expense is reported in administrative expenses and is detailed on the Schedule of Administrative Expenses Supplementary Schedule.

Compensated Absences

The System uses the accrual basis of accounting for measuring vacation leave, sick leave, and other compensated absences liabilities. Employees of the System are paid for accumulated vacation leave upon termination or retirement. Retiring employees of the System that meet service, age, or disability requirements are paid between 30 percent and 100 percent of sick days available at retirement, up to 161 maximum days paid. As of December 31, 2015 and 2014, \$195,055 and \$188,049, respectively, were accrued for unused vacation and sick leave for the System's employees and are included in accounts payable and accrued expenses on the Statement of Fiduciary Net Position.

Federal Income Taxes

The System is a qualified trust fund under Section 401(a) of the Internal Revenue Code (IRC). As a result of the qualified status, the trust fund is entitled to an exemption, under Section 501(a) of the IRC, from federal income taxation on its investment earnings. Additionally, the trust fund and any benefits accruing to the members of PMRS are exempt from Pennsylvania state and municipal taxes.

It should be noted that the Internal Revenue Service (IRS) announced and initiated a renewed focus on the tax qualification of public pension funds in 2008. PMRS continues to work proactively to address this IRS initiative.

New Accounting Pronouncements Adopted

During the year ended December 31, 2014, the System adopted GASB Statement No. 67, "Financial Reporting for Pension Plans," which replaces requirements of Statement No. 25 and No. 50 related to pension plans that are administered through trusts or equivalent arrangements.

During the year ended December 31, 2015, the System adopted GASB Statement No. 68, "Accounting and Financial Reporting for Pensions" which replaces the requirements of Statement No. 27 and No. 50 related to pension plans that are administered through trusts or equivalent arrangements.

During the year ended December 31, 2015, the System adopted GASB Statement No. 71 "Pension Transition for Contributions Made Subsequent to the Measurement Date" which is to be applied simultaneously with the provisions of Statement No. 68.

New Accounting Pronouncements— to Be Adopted

The GASB issued Statement No. 72 “Fair Value Measurement and Application” in February 2015. This Statement provides guidance for determining a fair value measurement for financial reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2015.

The GASB issued Statement No. 73 “Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68,” and “Amendments to Certain Provisions of GASB Statements No. 67 and No. 68” in June 2015. The objective of this Statement is to improve the usefulness of information about pensions included in the general purpose external financial reports of state and local governments for making decisions and assessing accountability. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2016.

The GASB issued Statement No. 75 “Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions” in June 2015. The primary objective of Statement No. 75 is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2017.

The GASB issued Statement No. 76 “The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments” in June 2015. Statement No. 76 identifies—in the context of the current governmental financial reporting environment—the hierarchy of generally accepted accounting principles (GAAP). The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2015.

The GASB issued Statement No. 78 “Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans” in December 2015. The requirements of this Statement are effective for financial statements for fiscal years beginning after December 15, 2015.

The GASB issued Statement No. 82 “Pension Issues— an Amendment of GASB Statements No. 67, No. 68,

and No. 73” in March 2016. The requirements of this Statement are effective for financial statements for fiscal years beginning after June 15, 2016.

These pronouncements may have a material effect on the System’s financial statements once implemented. The System will be analyzing the effects of these pronouncements and plans to adopt them as applicable by their effective date.

Change in Accounting Principle

PMRS implemented GASB Statement No. 68 effective January 1, 2015. The 2014 and 2013 amounts presented have not been restated to reflect the implementation of GASB 68 because the information is not available. Due to the implementation of GASB Statement No. 68, the beginning net position restricted for pension benefits has been restated by (\$3,634,167). The purpose of the restatement was to record the beginning net pension liability of (\$3,777,141), the beginning deferred inflows of resources of (\$2,146), and the beginning deferred outflows of resources of \$145,120.

(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 percent to 8 percent of their salaries. 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 years ended December 31, 2015 and 2014 consisted of the following:

	2015	2014
Municipality normal cost	\$47,504,803	\$39,838,781
Amortization of unfunded actuarial accrued liability	(4,965,969)	(3,627,673)
Total⁽¹⁾	\$42,538,834	\$36,211,108

The actual contributions were 111.7 percent of the required contributions in 2015 and 110.0 percent of the required contributions in 2014.

Total contributions to the System in 2015 were \$68.7 million of which \$19.6 million and \$47.5 million were made by its members and municipalities, respectively, \$1.4 million was transferred from other

⁽¹⁾ Total does not include \$20 per member assessment fee to municipalities.

⁽²⁾ Contributions for municipal employers include a one-time payment of \$27.4 million from one municipality towards its unfunded liability in 2014. The actual contributions excluding this one-time payment are 110.0 percent of the required contributions.

plan administrators, and \$206,114 was from assessments.

Total contributions to the System in 2014 were \$89.8 million of which \$18.4 million and \$67.2 million⁽²⁾ were made by its members and municipalities, respectively, \$3.9 million was transferred from other plan administrators, and \$163,240 was from assessments.

The difference between the municipalities' required and actual contributions is generally 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).

Each municipality is also charged a \$20 assessment fee per member to help cover administrative expenses incurred by the System. The remaining costs of administering the plan are financed by investment income.

Contributions Required and Contributions Made

The System's funding policy requires actuarially determined annual required contributions 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 Actuarial 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, and amended under Act 44⁽³⁾, the unfunded accrued liability is amortized as a level dollar amount over the lesser of:

1. a. 30 years with respect to the initial liability as of 1/1/1985 (or first valuation);
- b. 20 years with respect to actuarial gains and losses;
- c. 15 years with respect to changes due to actuarial assumptions,

- d. 20 years with respect to changes due to plan provisions (if state mandated),
 - e. 10 years with respect to changes in benefits for currently active members and one year of retired members (if local benefit changes), or,
2. the average assumed working lifetime of active employees as of the date the liability was established. If there are no active employees, the unfunded liability is amortized one year after the liability was established.

Significant actuarial assumptions used to compute the actuarially determined contribution requirement include (a) an investment rate of return of 5.5 percent per year (net of investment expenses) compounded annually, (b) projected salary increases ranging from 3.0 percent to 8.3 percent with an average increase of 5.0 percent, including a 3.0 percent per year compounded annually for inflation, with an additional age-based component to reflect merit/seniority, (c) postretirement cost-of-living increases of 3.0 percent per year until the maximum is reached (optional in contracts), and (d) pre- and post-retirement mortality based on the RP2000 Mortality Table for males and females, and an additional set forward of 10 years for disabled lives.

The amortization method uses level dollar for plan bases and average for Aggregate Gain/Loss, 10 percent of surplus is credited against aggregate cost where applicable, based on an open amortization period. The remaining amortization period at December 31, 2015 and 2014 was 10–30 years.

The single amortization period is determined individually for each of our participating plans using the regular interest rate and the amortization payment and unfunded actuarial liability determined in accordance with Act 205 as of the most recent actuarial valuation dated January 1, 2015. The weighted average of the single amortization period is 9.38 years for these underfunded municipalities. This amount was determined by taking the sum of each underfunded plan's single amortization period multiplied by the plan's unfunded liability. This sum is then divided by the sum of the unfunded liability for all of the underfunded plans.

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.

⁽³⁾ Act 44 of 2009 made amendments to Act 205 which changes certain amortization periods. These changes affect the cost calculations for the System's plans as of January 1, 2011.

The System's current regular interest rate is 5.5 percent.

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

As of December 31, 2015 and 2014, the balance in the Members' Reserve Account was \$436,886,705 and \$429,263,810 (as restated), respectively. The account is fully funded as of January 1, 2015.

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 regular interest rate of 5.5 percent.

As of December 31, 2015 and 2014, the balance in the Municipal Reserve Account was \$834,525,844 and \$815,221,474 (restated), respectively. The account is fully funded as of January 1, 2015.

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 benefits and retirees' death benefits are paid from this reserve. Annual interest is credited to the Retired Members' Account at the current regular interest rate of 5.5 percent.

As of December 31, 2015 and 2014, the balance in the Retired Members' Reserve Account was \$877,706,170 and \$833,748,582, respectively. The account is fully funded as of January 1, 2015.

DROP Participant Reserve Account

Deferred Retirement Option Program ("DROP") is an optional form of payment upon a member's retirement. The DROP Participant Reserve Account is credited with all monthly annuity payments payable to a DROP Participant. The monthly DROP interest is dependent on the monthly rate of return credited to the Liquid Asset Pool as determined by the Treasurer. The DROP Interest credited each month shall not be less than zero percent (0.0%) nor more than 0.367 percent (0.367%) per month, and shall not exceed the statutory limit of four and five tenths percent (4.5%) annually. The annualized yield of the monthly interest rate for 2015 ranged from .18 per-

cent to .22 percent with .20 percent as the average for the 12-month period. The interest rate for 2014 ranged from .14 percent to .21 percent with .16 percent as the average for the 12-month period. The first DROP participant enrolled on July 31, 2012.

As of December 31, 2015 and 2014, the balance in the DROP Participant Reserve Account was \$813,394 and \$628,345. The account is fully funded as of January 1, 2015.

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 percent of the largest value of transfers to the Retired Members' Reserve Account over the most recent three years.

As of December 31, 2015 and 2014, the balance in the Disability Reserve Account was \$848,658 and \$489,967 respectively. The account is fully funded as of January 1, 2015.

Undistributed Earnings Designation Account

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 in 2015 or 2014. Such calculation would have been prepared in accordance with a Board approved formula and would have been based on the actuarial value (fair value) of the System's assets as of December 31, 2014 and 2013, respectively, and the expected cash flows of the System for 2015 and 2014 if excess interest had been distributed.

As of December 31, 2015 and 2014, the Undistributed Earnings Designation Account had a balance of (\$156,289,515) and (\$33,371,213 as restated), respectively. While this balance is of concern, historical data argues that the markets' reversion to the mean will resolve the shortfall. The long-term outlook of the System remains positive.

(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 terms,

conditions, limitations, and restrictions imposed by Commonwealth law upon fiduciaries.

The Board is governed by the “prudent investor” rule in establishing investment policy. The “prudent investor” rule requires the exercise of that degree of judgment, skill, and care under the circumstances then prevailing which investors of prudence, discretion, and intelligence, who are familiar with such matters, exercise in the management of their own affairs not in regard to speculation, but in regard to permanent disposition of the funds, considering the probable income to be derived there from, as well as the probable safety of their capital.

The Board has adopted its Statement of Investment Policy to formally document investment objectives and responsibilities. This policy, as well as applicable state law, establishes guidelines for permissible investments of PMRS. The pension plan’s policy in regard to the allocation of invested plan assets is established and may be amended by the Board. On May 16, 2013, the Board established its allocation goals as follows:

Domestic Equities (large capitalized firms)	25 percent
Domestic Equities (small capitalized firms)	15 percent
International Equities (developed markets)	15 percent
International Equities (emerging markets)	10 percent
Fixed income	15 percent
Real estate	12.5 percent
Timberland	7.5 percent

For the years ended December 31, 2015 and 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was -0.27 percent and 5.20 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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, direct real estate, 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 managers. Restrictions concerning diversification within each manager and among managers are provided by the 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 as follows.

Repurchase agreements are allowable if (a) collateralized by United States Government Obligations deemed acceptable by the Treasury Department prior to the transaction; (b) the market value of collateral equals at least 102 percent of the principal and accrued interest; and (c) the collateral is delivered to the Treasury’s bank account. For tri-party agreements, collateral shall be delivered to the Treasury’s account with an independent third-party sub-custodian (either a money center bank or a nationally recognized non-bank financial institution).

Custodial Credit Risk

Custodial credit risk is the risk of loss resulting from the failure of the custodian such that the System would not be able to recover the value of its investments or collateral securities in the possession of the custodian. Since the State Treasurer, as custodian, holds all investments in the name of the System, the System’s investments are not exposed to custodial credit risk. The Treasury Department has formally adopted a written investment policy which addresses custodial credit risk.

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 may participate 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 in exchange for collateral in amounts up to 105 percent of the fair value of securities lent. 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, 2015 and 2014, the System had no credit risk exposure to borrowers because participation in the securities lending program was halted in 2008.

Credit Risk Concentration

Credit risk concentration is the risk of loss attributed to investments (other than those issued or guaranteed by the U.S. Government) in any one organization that represented 5 percent or more of the plan's net assets. The System had no single issuer that exceeded 5 percent of total investments at December 31, 2015 and 2014. Investment in mutual funds, external investment pools and other pooled investments were excluded in accordance with GASB.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of a fixed income investment. The System had no actively managed long-term fixed income investments. The fixed-income portfolio consists of the following:

2015 INTEREST RATE RISK

SECURITY	QUALITY RATING	MODIFIED ADJUSTED DURATION	FAIR VALUE
U.S. Government fixed income pooled funds*	AAA	5.5	\$ 226,339,921
Corporate bond pooled funds*	AA	5.5	\$ 103,986,876
State Treasury STIF	NR	0.1	\$ 1,903,602

* Index is not rated as a security but the average rating of the securities held in the index is AA2.

2014 INTEREST RATE RISK

SECURITY	QUALITY RATING	MODIFIED ADJUSTED DURATION	FAIR VALUE
U.S. Government fixed income pooled funds*	AAA	5.5	\$ 206,849,517
Corporate bond pooled funds*	AA	5.5	\$ 94,724,352
State Treasury STIF	NR	0.1	\$ 28,975,634

* Index is not rated as a security but the average rating of the securities held in the index is AA2.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. As part of the System's program of diversification, the System invests in non-U.S. markets. At December 31, the System had the following non-U.S. currency exposure:

2015 FOREIGN CURRENCY RISK

CURRENCY	EQUITY	SHORT-TERM	TOTAL
European Euro	\$76,667,441	\$ -	\$76,667,441
Japanese Yen	42,201,404	-	42,201,404
British Pound Sterling	34,531,699	-	34,531,699
Swiss Franc	16,256,244	(26)	16,256,218
Hong Kong Dollar	14,109,955	-	14,109,955
Norwegian Krone	3,762,934	-	3,762,934
Swedish Krona	3,425,252	-	3,425,252
South Korean Won	2,473,852	-	2,473,852
Australian Dollar	1,886,688	-	1,886,688
Thailand Baht	1,320,119	-	1,320,119

2014 FOREIGN CURRENCY RISK

CURRENCY	EQUITY	SHORT-TERM	TOTAL
European Euro	\$59,462,977	(\$37,681)	\$59,425,296
Japanese Yen	46,133,758	59	46,133,817
British Pound Sterling	35,334,367	-	35,334,367
Swiss Franc	18,391,321	21	18,391,342
Hong Kong Dollar	8,469,310	-	8,469,310
Norwegian Krone	5,727,442	-	5,727,442
Swedish Krona	5,468,868	-	5,468,868
South Korean Won	2,432,082	-	2,432,082
Thailand Baht	2,426,492	-	2,426,492
Singapore Dollar	1,008,523	-	1,008,523
Australian Dollar	797,279	-	797,279
Israeli Shekel	606,740	-	606,740

(5) SECURITIES LENDING

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 distributions on them. As of December 31, 2015 and 2014, the System had no securities out for loan because of a continued Board policy prohibiting participation in securities lending. The System had no cash collateral invested in the custodial agent's short-term collateral investment pool as of December 31, 2015 and 2014.

(6) PENSION PLAN FOR EMPLOYEES OF THE SYSTEM

SERS' Plan Description

The System contributes to the State Employees' Retirement System (SERS), a cost-sharing multiple-employer defined benefit pension plan established by the Commonwealth to provide pension benefits for employees of state government and certain independent agencies. SERS is a component unit of the Commonwealth and is included in the Commonwealth's financial report as a pension trust fund.

Membership in SERS is mandatory for most state employees. SERS provides retirement, death, and disability benefits. Article II of the Commonwealth's constitution assigns the authority to establish and amend the benefit provision of the plan to the General Assembly.

SERS' Benefits Provided to Employees of the System

SERS member retirement benefits are generally determined by taking years of credited service times final average salary times 2 percent or 2.5 percent, depending on date of hire. The normal retirement age ranges from 50–65, depending on the membership class.

According to the State Employees' Retirement Code (SERC), all obligations of SERS will be assumed by the Commonwealth should SERS terminate.

Contributions to SERS

The contribution requirements of SERS plan members is mandated by Commonwealth statute. The member contribution rate for the majority of SERS' members is 6.25 percent.

Employer rates are calculated based on SERS full year ended December 31 and applied to the Commonwealth based on its fiscal year end of June 30; therefore, the employer contribution rates, in effect for SERS full year ended December 31, reflect a blended average of calculated rates. As of December 31, 2014 and 2013, the blended contribution rates were 18.29 percent and 13.82 percent, respectively. Contributions to SERS from PMRS for the years ended December 31, 2015 and 2014 were \$343,460 and \$282,345, respectively.

Proportionate Share of Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources from SERS

At December 31, 2015, PMRS reported a liability of \$3.8 million for its proportionate share of the

net pension liability for the SERS plan in accounts payable and accrued expenses on the Statement of Fiduciary Net Position. The net pension liability was measured as of December 31, 2014, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2014. The discount rate for SERS used to measure the total pension liability was 7.50 percent. PMRS' proportion of the net pension liability was calculated utilizing a projected-contribution method. This methodology applies the most recent calculated contribution rates for Commonwealth fiscal year 2015–2016, from the December 31, 2014 funding valuation, to the expected funding payroll for the allocation of the 2014 amounts, and the contribution rates for fiscal year 2014–2015 from the December 31, 2013 funding valuation to the expected funding payroll for the allocation of the 2013 net pension liability. At December 31, 2014, PMRS' proportion was 0.02542261 percent, which was an increase of 0.00013794 from its proportion measured as of June 30, 2013.

For the year ended December 31, 2015, PMRS recognized pension expense of \$34,641 in Administrative expenses on the Statement of Fiduciary Net Position. At December 31, 2015, PMRS reported \$453,473 of deferred outflows of resources and \$1,680 of deferred inflows of resources. Of the \$453,473 of deferred outflows of resources, PMRS recorded \$343,460 for contributions subsequent to the measurement date which will be recognized as a reduction of the net pension liability in the year ended December 31, 2016. The other amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized over 5 and 5.6 year closed amortization periods, dependent on the type of deferral.

Sensitivity of PMRS' Proportionate Share of the Net Pension Liability from SERS to Changes in the Discount Rate

If SERS' net pension liability were calculated using a discount rate that is 1-percentage point lower (6.50%), PMRS' proportionate share would result in a net pension liability of \$4.8 million. If SERS' net pension liability were calculated using a discount rate 1-percentage point higher (8.50%), PMRS' proportionate share would result in a net pension liability of \$2.9 million.

SERS' Pension Plan Fiduciary Net Position

Detailed information about SERS' fiduciary net position is available in SERS' Comprehensive Annual Financial Report which can be found on SERS' website at www.SERS.pa.gov.

(7) POSTEMPLOYMENT HEALTHCARE PLAN FOR EMPLOYEES OF THE SYSTEM

The System participates in the Commonwealth's Retired Employees Health Program (REHP). The REHP is a single-employer plan and provides certain healthcare benefits to qualifying individuals meeting specified age and/or service requirements. The Commonwealth's Office of Administration (OA), in its sole discretion, determines available REHP benefits on an ongoing basis. The Pennsylvania Employees Benefit Trust Fund (PEBTF) is a third-party administrator for the REHP under the provisions of an Administration Agreement between OA and PEBTF.

Employer costs for retiree healthcare benefits are charged as a component of payroll expenditures on a 'pay-as-you-go' basis. REHP funding is arranged between OA and the Governor's Budget Office. FY 2015 employer costs were charged at the rate of \$334/employee/bi-weekly pay period. Plan members who retired after June 30, 2005 contribute to the plan based on a percentage of their final annual gross base salary at the time of retirement. Plan member contribution rates vary based on their REHP enrollment date.

In September 2014, the Commonwealth released an Actuarial Valuation of its Post-Retirement Medical Plan with calculations made as of July 1, 2014 using census data collected as of December 2013 and health care claims costs for calendar year 2013. This valuation provided Other Postemployment Benefits (OPEB) reporting that was used for both FY 2013 and FY 2014. For FY 2014, the valuation indicated overall Annual OPEB Cost (AOC) of \$898.3 million with the System's allocated AOC of \$ 300,000. Based on the aggregate REHP qualifying contributions for FY 2014, the net OPEB liability for the System was \$539,340 for that fiscal year (as of December 31, 2014 for the System). For FY 2015, the valuation indicated overall AOC of \$1.1 billion with the System's allocated AOC of \$424,000. Based on the aggregate REHP qualifying contributions for FY 2015, the net OPEB liability for the System was \$666,722 for that fiscal year (as of December 31, 2015 for the System).

(8) RELATIONSHIPS WITH OTHER COMMONWEALTH AGENCIES

Responsibility for the organization and administration of the System is vested in the 11-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 Pennsylvania

Municipal League, 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, the active police officers, and the active firefighters. 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.

(9) 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, approval of a minimum of 75 percent of the Plan's active, vested, and retired members 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.

(10) 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. The Board also adopted a self-insurance indemnification policy in 2004. There have been no significant reductions in insurance coverage from the prior year. Settlements did not exceed insurance coverage for the past three years.

The System's implementation policy is to allow contracted external managers to decide what action to

take regarding this respective portfolio's foreign currency exposures. The System has no specific policies for interest rate risk and foreign currency risk.

(11) LITIGATION AND CONTINGENCIES

The System is subject to various threatened and pending lawsuits. These lawsuits include issues related to benefit calculations and eligibility. It is the opinion of management that the ultimate liability arising from such threatened and pending litigation will not have a material effect on the financial position of the System. The System is exposed to various other liabilities and risks related to fiduciary responsibilities of directors and officers.

(12) COMMITMENTS

The System leases office facilities under an operating lease that expires November 2016 with an option to extend for five years. Future minimum lease payments under this lease are \$112,000 per year.

Total rental expenses for the years ended December 31, 2015 and 2014 were \$104,992 and \$112,435, respectively.

(13) RISK AND UNCERTAINTIES

Investments are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investments, it is possible that changes in the values of investment securities may occur in the near term and such changes could materially affect the amounts reported in the financial statements.

(14) SUBSEQUENT EVENTS

The System has performed an evaluation of subsequent events through June 27, 2016, the date the basic financial statements were available to be issued. No material events were identified by the System.

Schedules

Required Supplementary Schedule

SCHEDULE 1

Schedule of Investment Returns
Annual money-weighted rate of return,
net of investment expense

YEAR ENDED DECEMBER 31	ANNUAL RATE
2015	-0.27%
2014	5.20%

Note: Money-weighted results for the required 10-year timeframe will be added as available.

Supplementary Schedules and Information

SCHEDULE 2 – ADMINISTRATIVE EXPENSES

Comparative Two-Year Schedule
Years Ended December 31, 2015 and 2014

	2015	2014
PERSONNEL SERVICES		
Salaries and wages	\$ 1,766,570	\$ 1,720,154
Social security contributions	121,944	128,069
Retirement contributions	34,641 ⁽¹⁾	282,345
Insurance contributions	1,219,299	647,145
Other employee benefits	6,900	6,765
Total personnel services	3,149,354	2,784,478
PROFESSIONAL SERVICES		
Actuarial	590,331	422,726
Legal	367,271	264,208
Investment consultants	187,000	175,000
IT consultants	–	144,451
Audit	162,600	108,500
Miscellaneous professional	72,797	80,837
Proxy voting services	16,100	16,100
Data processing	21,466	14,084
Total professional costs	1,417,565	1,225,906
COMMUNICATION		
Postage	53,634	61,752
Telephone	43,574	38,930
Travel and conferences	27,892	35,748
Printing	9,764	13,852
Advertising	7,620	7,380
Total communication	142,484	157,662
OTHER SERVICES AND CHARGES		
Office space rental	104,992	112,435
Contracted EDP services	72,160	51,266
Equipment leasing	29,603	18,054
Supplies	24,374	17,354
Maintenance	2,238	5,904
Dues and subscriptions	7,507	3,538
Bonding and insurance	1,744	1,293
Total other services and charges	242,618	209,844
DEPRECIATION	31,378	33,572
Total administrative expenses	\$ 4,983,399	\$ 4,411,462

⁽¹⁾ At December 31, 2014, PMRS reported \$453,473 of deferred outflows of resources. Of the \$453,473 of deferred outflows of resources, PMRS recorded \$343,460 of contributions subsequent to the measurement date which will be recognized as a reduction of the net pension liability in the year ended December 31, 2016.

SCHEDULE 3 – INVESTMENT EXPENSES

Comparative Two-Year Schedule
Years Ended December 31, 2015 and 2014

	2015	2014
Investment management fees	\$ 9,012,672	\$ 7,789,141
Custodial fees	89,858	74,073
Total investment expenses	\$ 9,102,530	\$ 7,863,214

SCHEDULE 4 – PAYMENT TO CONSULTANTS

Comparative Two-Year Schedule
Years Ended December 31, 2015 and 2014

FIRM NAME	NATURE OF SERVICE	2015	2014
Cheiron	Actuary	\$ 590,331	\$ 422,726
CliftonLarsonAllen, LLP	Auditor	162,600	108,500
Dahab Associates, Inc.	Investment consultant	187,000	175,000
Akanksha	IT consultants	-	127,150
ISS	Proxy voting services	16,100	16,100
Total		\$ 956,031	\$ 849,476



Investments

Basis of Presentation

The data presented in the Investment Section by the System's independent investment consultant has been prepared by using a time-weighted rate of return methodology based upon market values. The Investment Section includes only those investments under management of advisors which are under contract with the System. These investments are valued in a manner consistent with information present in the Financial Section with the exception of the recognition of unallocated cash and pending sales and purchases. The difference noted above represents the difference between the investment balance of \$1,997,182,858 presented in the Financial Section and the balance of \$1,996,572,502 reported in this section.

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.

Returns for actively-managed funds presented throughout the Investment Section are gross of external manager fees; returns for passively managed funds are net of external manager fees. Overdraft charges, debit interest, registration expenses, and stamp duties and taxes spent on foreign securities are deducted and are not included in the calculation of returns.

INVESTMENT RETURN

As of December 31, 2015 the Pennsylvania Municipal Retirement Board's investment portfolio was valued at \$1,996,572,502 which was a decrease of \$51,391,527 from the December 2014 ending valuation of \$2,047,964,029. During the calendar year of 2015, the System recorded aggregate net withdrawals of \$53,382,645 and a net investment return of \$1,991,118.

For the period between December 31, 2010 and December 31, 2015, the System recorded net withdrawals of \$138,137,412 and a net investment return of \$597,144,163. During that period the System has increased from \$1,537,565,751 to \$1,996,572,502. If the fund had earned an annualized compound rate of 5.5% during that period, it would have been worth \$1,851,465,553 or \$145,106,949 less than the actual value for the year.

Investment Guidelines

INTRODUCTION

The following represents highlights from the Board's investment guidelines adopted on May 15, 2014. 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 daily management of the System's assets.

BACKGROUND

The System is currently experiencing a slight negative cash flow and does expect this trend to gradually increase in the future. The System currently meets routine benefit payments from incoming revenue as opposed to any depletion of invested assets.

The Board adopted two changes to the Investment Guidelines on May 15, 2014. The Board adopted its

allocation goals established on May 16, 2013 and changed the benchmark for equity managers of portfolios assigned to invest in non-domestic firms in developed markets from S&P BMI World Ex-U.S. Equity to MSCI ACWI Ex-USA Index.

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. On May 16, 2013, the Board established its allocation goals as follows:

Domestic equities (large capitalized firms)	25 percent
Domestic equities (small capitalized firms)	15 percent
International equities (developed markets)	15 percent
International equities (emerging markets)	10 percent
Fixed income	15 percent
Real estate	12.5 percent
Timberland	7.5 percent

OBJECTIVE

The Board's investment objective is to benefit PMRS 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 managers' performance measures rely on other characteristics that 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 manager in a cash or cash equivalent position must invest in vehicles authorized by the System. The manager must utilize the System's depository relationship with the State Treasurer who, as custodian of the Fund, will invest all cash on a daily basis in a short-term fund. No management fee will be paid by the System for any portion of a manager's average assets in excess of 5 percent remaining in cash equivalents at Treasury after the end of any 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 manager other than a U.S. Government bond is to account for more than 5 percent of the fair value of an investment manager's bond portfolio. The System shall not hold as assets more than 10 percent of any one bond issue nor more than 5 percent of the bonds of any one issuing agent. Corporate bonds of any given industry are not to account for more than 25 percent 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 issuance, and underlying value. No single equity holding may account for more than 7.5 percent of the fair value of the System's equity portfolio. Generally, no single sector should account for more than 20 percent of the value of an individual manager's portfolio. No more than 1 percent of the capitalization of any company is to be held by the System. The cumulative holdings of a manager for all of that manager's clients shall account for no more than 5 percent of the outstanding voting common stock of a corporation.

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 manager'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 future 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 the State Treasurer as the custodian and the Bank of New York Mellon as the sub-custodian.

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

The investment managers may enter into agreements with certain brokerage houses 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 generated by companies domiciled in the U.S. 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. Proxy solicitations by non-U.S. domiciled companies are handled by the investment manager that holds the security of that company in their portfolio.

COMMUNICATIONS

The Board expects an open and constant line of communication between the System's staff and investment managers. Reports required of investment managers 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. Active equity managers are required to report on a quarterly basis the average commission price per share traded during the quarter. In addition to the written reports, the investment managers are obligated to make periodic personal appearances before the Board as specifically spelled out in the investment manager's contract.

Investment managers' fees are paid in hard dollars. The cost for each investment manager is based on the fair value of the firm's quarterly average balance in the System's portfolio.

MONITORING

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

Report on Investment Activity

RELATIVE PERFORMANCE

Total Fund

The time-weighted rate of return for the System's investments during the year ended December 31, 2015 was 0.1 percent, ranking in the 43rd percentile of the Investment Metrics (IM) Public Fund universe. This performance level was 0.2 percent below the shadow index return of 0.3 percent. The five-year return for December 2010 through December 2015 was 7.1 percent on an annualized basis and ranked in the 45th percentile. For comparison the shadow index return was 7.1 percent.

Large Cap Equities

Over the trailing 12 months, the large cap equity portfolio returned 1.8 percent, which was 0.4 percent more than the comparative benchmark S&P 500 Index's 1.4 percent performance and ranked in the 41st percentile. For the last five years, this component returned 13.3 percent per annum and ranked in the 31st percentile. The S&P 500 returned an annualized 12.6 percent during the same time frame.

Small Cap Equities

This component returned -5.2 percent, which was

0.8 percent less than the comparative benchmark Russell 2000 Index's -4.4 percent performance, ranking in the 75th percentile for the trailing 12 months. For the five-year period, this component returned 9.7 percent annualized and ranked in the 67th percentile. For comparison, the Russell 2000 returned an annualized 9.2 percent over the same period.

Developed International Equities

This segment's return was 0.3 percent over the trailing year, which was 0.7 percent more than the comparative benchmark MSCI EAFE Index's -0.4 percent return, ranking in the 45th percentile. For the five-year period, this component returned 4.5 percent on an annualized basis and ranked in the 50th percentile. For comparison, the MSCI EAFE Index returned an annualized 4.0 percent during the same time frame.

Emerging Markets Equities

Over the trailing year, the emerging markets equity portfolio returned -15.1 percent, 0.5 percent below the comparative benchmark MSCI Emerging Markets Index's -14.6 percent return, ranking in the 70th percentile. For the last five-year period, this component returned -5.0 percent on an annualized basis

and ranked in the 84th percentile. For comparison, the MSCI Emerging Markets Index returned an annualized -4.5 percent during the same time period.

Fixed Income

Over the trailing year, this component returned 0.6 percent; that return was equal to the comparative benchmark Barclays Aggregate Index's 0.6 percent return, ranking in the 70th percentile. For the five-year period, this component returned 3.3 percent annualized and ranked in the 87th percentile. For comparison, the Barclays Aggregate Index also returned an annualized 3.3 percent over the same period.

Real Estate

Over the trailing 12-month period, this segment returned 11.2 percent, which was 2.1 percent below the comparative benchmark NCREIF Property Index's 13.3 percent performance. For the cumulative five-year period, this component returned 10.1 percent per annum, while the NCREIF Property Index returned an annualized 12.2 percent over the same time frame.

The table on page 40 compares rates of return for

the System's total investment portfolio with standard indexes for the last year, three years, five years and 10 years.

Asset Allocation

The following table shows the allocation of assets as of December 31, 2015.

* Numbers may not add due to rounding.

ASSET ALLOCATION

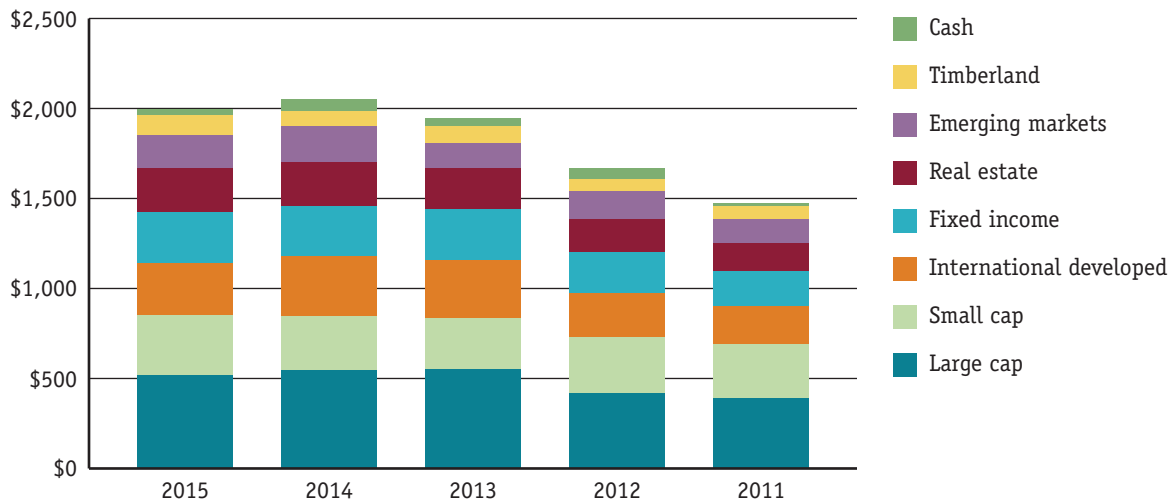
(as of December 31, 2015)

TYPE	PERCENT	AMOUNT
Large cap equities	26.1	\$ 520,582,661
Small cap equities	14.8	296,458,850
International developed markets	14.1	280,938,692
International emerging markets	8.8	174,723,714
Total equities	63.8	\$ 1,272,703,917
Fixed income	16.5	330,326,796
Real estate	18.0	359,232,883
Cash and equivalents ⁽¹⁾	1.7	34,308,906
Total portfolio	100.0	\$ 1,996,572,502

The following graph shows the System's five-year trend of investments at fair value.

PORTFOLIO DISTRIBUTION — FIVE-YEAR TREND

(Fair Value – Amounts in Millions)



⁽¹⁾ Cash and equivalents include funds held by the Pennsylvania Treasury Department.

Portfolio Rates of Return⁽¹⁾

(Last 10 Years as of December 31, 2015)

The following table compares rates of return for the System's total investment portfolio with standard indexes for the last one, three, five and 10 years.

The calculations of yields were prepared using a time weighted rate of return based on the market rate. The System's returns have been competitive with other professionally-managed funds.

PERFORMANCE SUMMARY

	1 YEAR (PERCENT)	3 YEAR (PERCENT)	5 YEAR (PERCENT)	10 YEAR (PERCENT)
Total Portfolio	0.1	8.1	7.1	5.7
Public Fund Rank ⁽²⁾	(43)	(35)	(45)	(56)
Shadow Index ⁽³⁾	0.3	8.0	7.1	5.9
Large Cap Equity	1.8	15.9	13.3	7.4
Large Cap Rank ⁽⁴⁾	(41)	(36)	(31)	(64)
S&P 500	1.4	15.1	12.6	7.3
Small Cap Equities	-5.2	12.3	9.7	6.7
Small Cap Rank ⁽⁴⁾	(75)	(62)	(67)	(81)
Russell 2000	-4.4	11.7	9.2	6.8
International Equity	0.3	6.1	4.5	4.5
International Equity Rank ⁽⁵⁾	(45)	(43)	(50)	(57)
MSCI EAFE	-0.4	5.5	4.0	3.5
Emerging Markets Equity	-15.1	-7.2	-5.0	-
Emerging Markets Rank ⁽⁶⁾	(70)	(82)	(84)	-
MSCI Emerging Markets	-14.6	-6.4	-4.5	3.9
Real Estate	11.2	11.0	10.1	5.6
NCREIF	13.3	12.0	12.2	7.8
Fixed Income	0.6	1.5	3.3	4.5
Core Fixed Income Rank ⁽⁷⁾	(70)	(78)	(87)	(84)
Barclays Aggregate	0.6	1.4	3.3	4.5

Report prepared by DAHAB ASSOCIATES, INC.

⁽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. Rates of return are gross of fees.

⁽²⁾ Ranked against balanced funds.

⁽³⁾ The shadow index is a customized index created by the System's investment consultant. It is constructed at the asset class level with corresponding benchmark allocations matching the portfolio.

⁽⁴⁾ Ranked against equity oriented funds.

⁽⁵⁾ Ranked against international developed markets oriented funds.

⁽⁶⁾ Ranked against international emerging markets oriented funds. PMRS entered emerging markets equities in late 2008.

⁽⁷⁾ Ranked against fixed income oriented funds.

Asset Allocation

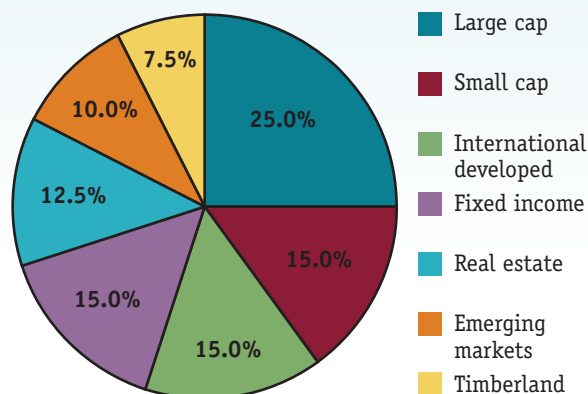
On May 16, 2013, the Board established its allocation goals as follows:

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Domestic Equities (small capitalized firms)	15 percent
International Equities (developed markets)	15 percent
International Equities (emerging markets)	10 percent
Fixed income	15 percent
Real estate	12.5 percent
Timberland	7.5 percent

The System's asset allocation as of December 31, 2015, was \$817.1 million committed to domestic equities (\$520.6 large cap and \$296.5 small cap), \$455.6 million to international equities (\$280.9 international developed and \$174.7 emerging markets), \$330.3 million to bonds, \$359.2 million to real estate (includes timberland \$111.1), and \$34.3 million to cash equivalents. The percentage distribution is illustrated below.

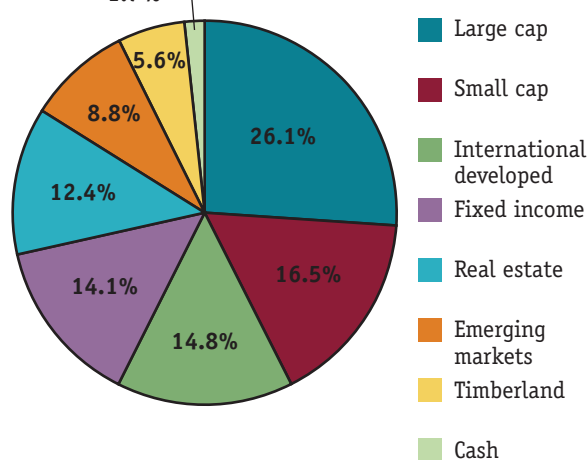
ASSET ALLOCATION TARGETS

December 31, 2015



ACTUAL ASSET ALLOCATION

December 31, 2015



SUMMARY OF INVESTMENT EXPENSES

December 31, 2015

SECTOR	TARGET ALLOCATION	TARGET DOLLAR	CURRENT ALLOCATION	CURRENT DOLLAR ALLOCATION	VARIANCE/DOLLAR	VARIANCE/PERCENT
Large cap	25	\$ 499,143,126	26.1	\$ 520,582,661	\$ 21,439,535	1.07
Small cap	15	299,485,875	14.8	296,458,850	(3,027,025)	-0.15
International developed	15	299,485,875	14.1	280,938,692	(18,547,183)	-0.93
Emerging markets	10	199,657,250	8.8	174,723,714	(24,933,536)	-1.25
Fixed income	15	299,485,875	16.5	330,326,796	30,840,921	1.54
Real estate	12.5	249,571,563	12.4	248,171,383	(1,400,180)	-0.07
Timber	7.5	149,742,938	5.6	111,061,500	(38,681,438)	-1.94
Cash	0.0	-	1.7	34,308,906	34,308,906	1.72
TOTAL	100	\$ 1,996,572,502	100	\$ 1,996,572,502		

Investment Summary

SUMMARY OF INVESTMENT EXPENSES

Comparative Two-Year Schedule
Years ended December 31, 2015 and 2014

FIRM NAME	2015	2014
Large Cap Domestic Managers		
Polen Capital Management	\$ 769,266	\$ 676,568
LSV Asset management	587,637	569,416
DePrince, Race & Zollo	383,925	461,839
Federated Investors ⁽¹⁾	364,781	-
	2,105,609	1,707,823
Small Cap Domestic Managers		
Brandywine Global Investment	722,351	740,456
BMO Global Asset Management	634,761	569,573
Emerald Advisers	472,433	405,995
	1,829,545	1,716,024
Passive Manager		
State Street Global Advisors	343,901	374,275
	343,901	374,275
International Managers		
HGK Asset Management	621,742	642,914
Johnston Asset Management	510,761	503,521
Jarislowsky, Fraser Limited ⁽²⁾	328,610	100,960
WHV Investment Management ⁽³⁾	-	150,301
	1,461,113	1,397,696
Real Estate Managers		
TIAA-CREF Global Real Estate	1,494,400	1,145,397
Forest Investment Associates	1,003,959	755,774
Prudential Real Estate Investors	774,145	692,152
	3,272,504	2,593,323
Total Investment Management Fees	\$ 9,012,672	\$ 7,789,141
Custodial Fees – BNY Mellon	89,858	74,073
Total Investment Expenses	\$ 9,102,530	\$ 7,863,214

⁽¹⁾ Investment manager hired 2nd quarter in 2015.

⁽²⁾ Investment manager hired 3rd quarter in 2014.

⁽³⁾ Investment manager terminated in 2014.

TEN LARGEST COMMON STOCK HOLDINGS

As of December 31, 2015 (Fair Value)

STOCK	SHARES	FAIR VALUE	% OF PORTFOLIO
Visa Inc.	178,472	\$ 13,840,504	0.69
Starbucks Corp.	205,302	12,324,279	0.62
Nike, Inc.	197,180	12,323,750	0.62
Alphabet Inc., Class C	14,830	11,254,190	0.56
Oracle Corp.	267,752	9,780,981	0.49
Priceline Group Inc.	7,591	9,678,145	0.48
TJX COS Inc.	135,328	9,596,108	0.48
Alphabet Inc., Class A	11,975	9,316,670	0.47
Abbott Laboratories	203,800	9,152,658	0.46
Regeneron Pharmaceuticals Inc.	16,403	8,904,697	0.45

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

PORTFOLIO SUMMARY

As of December 31, 2015

TYPE OF INVESTMENT	COST VALUE	FAIR VALUE	% OF TOTAL FAIR VALUE
Corporate and government bonds			
U.S. Government bonds	\$ 192,248,317	\$ 226,339,921	11
Corporate bonds	88,324,241	103,986,876	5
Total	280,572,558	330,326,797	16
Common stock			
Domestic	717,579,218	816,383,502	41
International	413,804,360	455,212,477	23
Total	1,131,383,578	1,271,595,979	64
Other investments			
Real estate	298,059,159	357,870,568	18
Cash equivalents	37,389,514	37,389,514	2
Total	335,448,673	395,260,082	20
Grand total	\$ 1,747,404,809	\$ 1,997,182,858	100

PORTFOLIO QUALITY

Two-Year Comparative Analysis
As of December 31, 2015 and 2014

BOND RATING	FAIR VALUE	% OF TOTAL FAIR VALUE	% OF TOTAL CARRYING VALUE
December 31, 2015			
AAA	\$ 226,339,921	69	69
AA	103,986,876	31	31
Total bonds	\$ 330,326,797	100	100
December 31, 2014			
AAA	\$ 206,849,517	69	69
AA	94,724,352	31	31
Total bonds	\$ 301,573,869	100	100

SUMMARY OF COMMISSIONS PAID TO BROKERS

Year Ended December 31, 2015

BROKER NAME	COMMISSIONS PAID	BROKER NAME	COMMISSIONS PAID
Albert Fried & Company LLC, New York	\$ 210	Exane Inc., Jersey City	\$ 4
Ancora Securities Inc., Jersey City	4,805	Exane, Paris	546
Avondale Partners LLC, Nashville	2,216	Fidentis Equities SvSa., Madrid	4,230
Baird, Robert W. & Co. Inc., Milwaukee	2,634	First Analysis Secs. Corp., Chicago	65
Banque Paribas, Frankfurt	70	Fox River Execution Tech., LLC, Jersey City	767
Banque Paribas, Paris	574	Friedman Billing and Ramsey	141
Barclays Capital Inc./LE, New Jersey	359	Goldman Sachs & Co., NY	7,971
Barclays Capital LE, Jersey City	7,455	Goldman Sachs Execution & Clearing, NY	935
Batucha Securities & Inv LTD, Tel-Aviv	833	Goldman Sachs Intl., London	15,570
BB&T Securities, LLC, Richmond	2,700	Gordon Haskett Cap. Corp., NJ	1,963
Bernstein, Sanford C. & Co., New York	3,619	Greentree Brokerage Services, Jersey City	7,618
Bloomberg Tradebook LLC, New York	44,882	Guggenheim Capital Mkt. LLC, Jersey City	248
BMO Capital Markets Corp, New York	192	Guggenheim Liquidity Svcs., New York	201
BNP Paribas Prime Brokerage, Inc., New York	371	ICBC Fincl. Svcs., New York	654
BNP Paribas SEC Svcs., London	605	Instinet Corp., New York	654
BNP Paribas SEC Svcs., Zurich	226	Instinet Corp., NY	4,405
BNY Convergenx Execution Sol, New York	14,983	Instinet Europe Limited, London	29,378
BNY Convergenx, New York	24,793	Instinet Pacific LTD, Hong Kong	5,108
BTIG LLC, San Francisco	260	Investment Technology Group LTD, Dublin	1,242
Buckingham Research Grp. Inc., Brooklyn	1,575	Investment Technology Group, New York	15,690
Caceis Bank Deutschland, Germany	646	ISI Group Inc., NY	5,263
Canaccord Genuity Inc., New York	7,860	IXIS Securities, Paris	573
Canadian Imperial BK Commerce, London	406	J.P. Morgan Secs. LTD, London	2,099
Cantor Fitzgerald & Co. Inc., New York	12,895	J.P. Morgan Securities Inc., Brooklyn	23,337
Cap Instl Svcs. Inc.-Equities, Dallas	55,450	J.P. Morgan Clearing Corp., New York	3,410
Capital One Southcoast Inc., New Orleans	6,187	Janney Montgomery Scott, Philadelphia	5,612
Citigroup Gbl. Mkts. Inc., New York	5,090	Jefferies & Co. Inc., New York	16,141
Citigroup Gbl. Mkts./Salomon, New York	1,520	JMP Securities, San Francisco	735
Citigroup Global Markets Ltd., London	1,841	JMP Securities Inc., New York	1
CJS Securities Inc., Jersey City	30	Jonestrading Instl. Svcs. LLC, Westlake	8,397
CJS Securities Inc., New York	12	J.P. Morgan Chase Bank NA (GST), London	355
Clearview Trading Advisors, Jersey City	1,580	J.P. Morgan Secs Asia Pacific, Hong Kong	2,073
Compass Point Research & Tr., Jersey City	848	Keefe Bruyette and Woods, Jersey City	12,144
Cornerstown Macro LLC, New York	4,674	Kepler Equities, Paris	178
Cowen and Company LLC, New York	3,688	Keybank Capital Markets Inc., Jersey City	16,526
Craig Hallum, Minneapolis	5,941	Keybank Capital Markets Inc., New York	243
Credit Lyonnais Secs., Singapore	7,150	King (CL) & Associates, Albany	1,883
Credit Research & Trading LLC, Jersey	3,527	Knight Clearing Services LLC, Jersey City	439
Credit Suisse, New York	62,945	Knight Direct LLC, Jersey City	69
Daiwa Sec. SMBC Europe LTD, London	8,183	Knight Equity Markets L.P., Jersey City	2,613
Daiwa Secs. (HK) LTD, Hong Kong	958	Leerink Swann & Co., Jersey City	4,301
Daiwa Secs. Amer Inc, New York	724	Liberum Capital Limited, London	2,962
Davidson & Co. Inc., New York	1,525	Liquidnet Inc., Brooklyn	22,243
Deutsche Bk. Intl. Eq., London	2,212	Liquidnet Inc., New York	20,245
Deutsche Bk. Secs. Inc., NY	12,069	Longbow Securities LLC, Jersey City	708
Dougherty & Company LLC, Minneapolis	734	Loop Capital Markets, Jersey City	2,835
Dougherty Company, Brooklyn	5,839	Macquarie Bank LTD, Hong Kong	371
Drexel Hamilton LLC, Jersey City	1,370	Merrill Lynch Gilts LTD, London	631

BROKER NAME	COMMISSIONS PAID
Merrill Lynch Intl. London Equities	\$ 12,343
Merrill Lynch Pierce Fenner Smith Inc., NY	11,149
Merrill Lynch Professional Clrg., Purchas	9,601
Mizuho Securities USA Inc., Greenwich	1,235
MKM Partner LLC, Greenwich	536
Morgan Stanley & Co. Inc., NY	52,323
National Finl Svcs. Corp., New York	405
Needham & Co., New York	6,270
Needham and Company LLC, Jersey City	917
Northland Secs Inc., Jersey City	1,858
Oneil William & Co. Inc./BCC, Los Angeles	5,357
Oppenheimer & Co. Inc., New York	3,515
Pacific Crest Securities, Portland	1,687
Pareto Fonds As., Oslo	679
Pershing LLC, Jersey City	1,533
Pershing Securities LTD, London	426
Piper Jaffray & Co., Minneapolis	10,746
Raymond James & Assoc Inc., St. Petersburg	12,905
RBC Capital Markets LLC, New York	14,306
Redburn Partners LLP, London	3,805
Rosenblatt Securities LLC, Jersey City	888
Royal Bank of Canada Europe LTD, London	566
Sandler O'Neill & Partners, New York	3,555
Sanford C. Bernstein & Co. Inc., London	41,170
SG Americas Securities LLC, New York	640
SG SEC (London) LTD, London	223
Sidoti & Co. LLC, New York	11,280

BROKER NAME	COMMISSIONS PAID
State Street Brokerage Svcs., Boston	\$ 8,234
State Street Global Markets LLC, Boston	778
Stephens Inc., Little Rock	1,858
Sterne Agee & Leach Inc.	1,231
Stifel Nicolaus	16,439
Stifel Nicolaus and Co., St. Louis	4,924
Strategas Securities LLC, New York	241
Sturdivant and Co. Inc., Mount Laurel	5,089
Suntrust Capital Markets Inc., Atlanta	5,418
Telsey Advisory Group LLC, Dallas	4,305
Thompson Davis & Co., Jersey City	143
Topeka Capital Markets Inc., New York	436
UBS Equities, London	1,447
UBS Securities LLC, Stamford	9,126
UBS Warburg Asia LTD, Hong Kong	620
UBS Warburg, London	13,529
Vandham Securities Corp., New York	149
Wall Street Access, Jersey City	1,897
Wedbush Morgan Secs. Inc., Los Angeles	2,564
Weeden & Co., New York	6,342
Wells Fargo Securities LLC, Charlotte	712
Wiley Bros-Aintree Capital, Jersey City	224
William Blair & Co., Chicago	3,717
Wood Gundy Inc.-NSCC, Boston	105
Wunderlich Securities Inc., Memphis	6,250
Total Brokerage Commissions Paid	\$ 851,829



Actuarial

Actuary's Certification Letter



Classic Values, Innovative Advice

Via Electronic Mail

June 13, 2016

Pennsylvania Municipal Retirement Board of the
Pennsylvania Municipal Retirement System
c/o Stephen W. Vaughn, Secretary
P.O. Box 1165
Harrisburg, PA 17108-1165

Dear Board Members:

At your request, we have conducted the Annual Actuarial Valuation of the Pennsylvania Municipal Retirement System (the System) as of January 1, 2015. The results of the valuation are contained in our report. The funded ratio of the System as of January 1, 2015 was 100.7% funded on an actuarial asset value basis and 99.2% funded on a market value basis.

This report is for the use of the Pennsylvania Municipal Retirement Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users. This report contains analyses which combine asset and liability performance and projections.

The System is defined as an agent multiple employer Plan under Governmental Accounting Standards Board Statement No. 67. Assets and liabilities are separately accounted for and reported to the Public Employee Retirement Commission of the Commonwealth of Pennsylvania. This report reflects aggregate valuation results for the System and provides statistics on employer contribution levels for the defined benefit portion of the municipal plans participating in the system as of the valuation date; the methods and assumptions were updated January 1, 2013.

Our report contains required disclosures for the entire System and a description of the funding methods and assumptions as required by State law and covered under Act 205 which also falls within the methods as defined as acceptable under the Governmental Accounting Standards Board Statement No. 67, which replaced GASB No. 25. Additional details required under the new Governmental Accounting Standards Board Statement No. 67 have also been provided to the System.

In preparing our report, we relied on information (some oral and some written) supplied by the System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice

#23. The report provides comments on the sources and reliability of both the data and the actuarial assumptions on which our findings are based. Those comments are the basis for our certification. Future valuation reports may differ significantly from the current valuation report presented due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

The assumptions used in preparing the individual municipal valuation have been determined and adjusted based on actuarial experience analysis and presented to the Board for consideration and adoption. The actuarial methods were adopted effective January 1, 1985 unless otherwise indicated. The funding method applied provides for an annual normal cost as a level percent of pay and amortization of unfunded and/or surplus over a fixed period in accordance with provisions of Act 205. The complete actuarial valuation report as of January 1, 2015 is included as an attachment to this letter.

The figures and data disclosed in the following schedules for the Financial and Actuarial sections were provided by Cheiron for 2010-2015.

1. Solvency Test which shows the portion of the Actuarial Liability covered by Assets
2. Funded Status of Actuarial Liabilities
3. Required Supplemental Information
4. Schedule of Retirees and Beneficiaries
5. Schedule of Total Membership
6. Schedule of Total Membership Funded Status of Actuarial Liabilities
7. Schedule of Active Member Valuation Data
8. Actuarial Methods and Significant Assumptions

In addition, while Cheiron did not explicitly provide the Schedule of Required Employer Contributions provided in the CAFR, it is our understanding that this schedule was determined based upon information Cheiron provides in the annual valuation reports. This includes the Normal Cost percentage for each plan and the employers' anticipated payroll for each participating plan. It may also include the amortization payment calculated by the actuary or the over-funding credit required under Pennsylvania State Law, Act 205 of 1984. The composite figure is assembled by the agency's staff and has not been reviewed by Cheiron.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Should you have any questions, please do not hesitate to contact us.

Sincerely,
Cheiron



Kenneth A. Kent, FSA, FCA
Principal Consulting Actuary



Karen Zangara, FSA
Principal Consulting Actuary



Anthony Bucci, EA, MAAA
Associate Actuary

SOLVENCY TEST

Aggregate Accrued Liabilities for

VALUATION DATE JANUARY 1,	ACTIVE MEMBER CONTRIBUTIONS (1) ⁽¹⁾	RETIREES & BENEFICIARIES (2)	ACTIVE MEMBER EMPLOYER FINANCED CONTRIBUTIONS (3)	ACTUARIAL VALUE OF REPORTED ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY REPORTED ASSETS		
					(1)	(2)	(3)
2015	\$ 427,736,008	\$ 938,380,470	\$ 701,148,372	\$ 2,081,439,591	100%	100%	102%
2014	416,472,872	881,502,593	707,246,642	1,972,273,674	100%	100%	95%
2013	418,163,830	812,688,102	672,720,129	1,886,703,664	100%	100%	97%
2012	407,199,633	639,260,852	680,756,784	1,792,809,433	100%	100%	110%
2011	395,048,320	655,645,661	623,210,164	1,713,751,974	100%	100%	106%
2010	348,126,106	589,362,501	622,868,929	1,620,150,779	100%	100%	110%

⁽¹⁾ This includes the sum of the active member employee contribution balances, the member separate annuity account balances, the municipal for member separate annuity account balances, and the excess interest allocations.

FUNDED STATUS OF ACTUARIAL LIABILITIES

VALUATION DATE JANUARY 1,	ACTUARIAL VALUE OF ASSETS (A) ⁽¹⁾	ACTUARIAL LIABILITY (AL) ENTRY AGE (B)	UNFUNDED AL (SURPLUS) (B-A)	FUNDED RATIO (A/B)
2015	\$ 2,081,439,591	\$ 2,067,264,850	(\$ 14,174,741)	100.7%
2014	1,972,273,674	2,005,222,107	32,948,433	98.4%
2013	1,886,703,664	1,903,572,061	16,868,397	99.1%
2012	1,792,809,433	1,727,217,269	(65,592,164)	103.8%
2011	1,713,751,974	1,673,904,145	(39,847,829)	102.4%
2010	1,620,150,779	1,560,357,536	(59,793,243)	103.8%

⁽¹⁾ The Actuarial Value Assets (AVA) were determined based upon the methodology outlined in PMRS Policy Statement. The 1/1/2015 AVA was based upon the reserves published by PMRS in the 2014 CAFR.

The actuarial assumptions as of January 1, 2015, are shown in the assumptions and methods section. The above information was derived from the following membership data and number of pension plans, as provided by the System, regarding:

VALUATION OF DEFINED BENEFIT LIABILITIES			
VALUATION DATE	COMPLETE VALUATION	ROLL FORWARD	CASH BALANCE PLANS
January 1, 2015	717	4	286
January 1, 2014	4	712	268
January 1, 2013	710	4	251
January 1, 2012	4	705	240
January 1, 2011	702	5	229
January 1, 2010	5	691	202
January 1, 2009	691	5	203
January 1, 2008	4	688	183

Note to Supplementary Information

The information presented in the 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, 2015
Actuarial cost method	Entry age normal
Amortization method	Level dollar for Plan Bases and an average for Aggregate Gain/Loss, 10% of surplus is credited against aggregate cost where applicable, based on an open amortization period.
Actuarial assumptions:	
Investment rate of return (*)	5.5%
Projected salary increases (*)	3.0% - 8.3%
(*) Includes inflation at	3.0%
Cost-of-living adjustments	ad hoc

The actuarial assumptions used have been reviewed by the actuary and adopted by the System's Board based on the review of the System's experience study completed in 2010.

The rate of employer contributions to the System is composed of the normal cost, amortization of the unfunded actuarial liability and an allowance for administrative expenses. The normal cost is a level percent of payroll cost which, along with member contributions, will pay for projected benefits at retirement for the average plan participant. The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial liability. The allowance for administrative expenses is based upon the System's actual administrative expenses.

SCHEDULE OF RETIREES AND BENEFICIARIES

Added to and Removed from Rolls in Last Six Years

VALUATION DATE JANUARY 1,	ADDED TO ROLL	AVERAGE ANNUAL ANNUITIES ADDED ⁽¹⁾	DELETED FROM ROLL	AVERAGE ANNUAL ANNUITIES REMOVED ⁽¹⁾	NUMBER ON ROLL	ANNUAL ANNUITIES	PERCENTAGE INCREASE IN ANNUITIES	AVERAGE ANNUAL ANNUITIES	PERCENTAGE INCREASE IN AVERAGE ANNUAL ANNUITIES
2015	392	\$ 17,908	227	\$ 10,494	5,108	\$ 75,936,364	6.6	\$ 14,866	3.1
2014	431	20,472	168	16,043	4,943	71,257,797	9.5	14,416	3.7
2013	391	16,440	105	8,288	4,680	65,046,544	9.5	13,899	2.8
2012	438	16,404	228	14,252	4,394	59,411,245	7.5	13,521	2.4
2011	396	18,624	121	8,981	4,184	55,257,189	13.0	13,207	5.6
2010	296	16,030	137	9,458	3,909	48,897,954	7.7	12,509	3.3

SCHEDULE OF TOTAL MEMBERSHIP

Six-Year Trend

VALUATION DATE JANUARY 1,	ACTIVE MEMBERS DEFINED BENEFIT PLANS	ACTIVE MEMBERS CASH BALANCE PLANS	RETIREES	BENEFICIARIES	DEFERRED PENSIONS	INACTIVE MEMBERS ⁽¹⁾	TOTAL
2015	7,580	1,214	4,566	542	1,027	8	14,937
2014	7,676	1,185	4,423	520	1,044	14	14,862
2013	7,599	1,131	4,160	520	1,098	51	14,559
2012	7,836	1,158	3,899	495	952	21	14,361
2011	8,091	1,119	3,707	477	945	42	14,381
2010	8,357	994	3,449	460	834	23	14,117

⁽¹⁾ Inactive members represent inactive non-vested participants with employee contribution account balances.

**SCHEDULE OF TOTAL MEMBERSHIP
FUNDED STATUS OF ACTUARIAL LIABILITIES**

Schedule of Total Membership Over Last Six Years

	AS OF JANUARY 1 ⁽¹⁾					
	2015	2014	2013	2012	2011	2010
a. Retirees currently receiving benefits	4,566	4,423	4,160	3,899	3,707	3,449
b. Beneficiaries currently receiving benefits	542	520	520	495	477	460
c. Terminated vested employees entitled to future benefits from defined benefit plans	779	753	800	723	711	647
d. Terminated non-vested employees entitled to contribution refunds from defined benefit plans	8	14	51	21	42	23
e. Active employees in defined benefit plans	7,580	7,676	7,599	7,836	8,091	8,357
i. Aggregate salary ⁽²⁾	\$384,270,155	\$389,410,214	\$376,296,674	\$366,882,467	\$383,802,844	\$377,960,930
ii. Vested ⁽³⁾	4,726	4,881	4,885	4,964	4,992	5,025
iii. Non-vested	2,854	2,795	2,715	2,872	3,099	3,333
f. Participants in cash balance-only plans	1,462	1,476	1,429	1,387	1,353	1,181
i. Aggregate salary ⁽²⁾	\$47,537,851	\$45,193,710	\$44,490,671	\$41,143,383	\$41,683,065	\$35,104,086
ii. Active	1,214	1,185	1,131	1,158	1,119	994
iii. Inactive	248	291	298	229	234	187

⁽¹⁾ Includes defined benefit non-county plans, defined benefit county plans, and cash balance plans.

⁽²⁾ Actual salary for preceding valuation date.

⁽³⁾ Count of vested participants estimated based on service as of the valuation date.

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Last Six 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 (DECREASE) IN PAYROLL	AVERAGE ANNUAL SALARY	PERCENTAGE INCREASE (DECREASE) IN AVERAGE ANNUAL SALARY
2015	7,580	(1.3)	721	0.7	\$ 384,270,155	(1.3)	\$ 50,695	(0.1)
2014	7,676	1.0	716	0.3	389,410,214	3.5	50,731	2.5
2013	7,599	(3.0)	714	0.7	376,296,674	2.6	49,519	5.8
2012	7,836	(3.2)	709	0.3	366,882,467	(4.4)	46,820	(1.3)
2011	8,091	(3.2)	707	1.4	383,802,844	1.5	47,436	4.9
2010	8,357	(0.6)	697	0.1	377,960,930	1.5	45,227	2.2

CASH BALANCE 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 (DECREASE) IN PAYROLL	AVERAGE ANNUAL SALARY	PERCENTAGE INCREASE (DECREASE) IN AVERAGE ANNUAL SALARY
2015	1,214	2.4	286	6.7	\$ 47,537,851	5.2	\$ 39,158	2.7
2014	1,185	4.8	268	6.8	45,193,710	1.6	38,138	(3.1)
2013	1,131	(2.3)	251	4.6	44,490,671	8.1	39,337	10.7
2012	1,158	3.5	240	4.8	41,143,383	(1.3)	35,530	(4.6)
2011	1,119	12.6	229	13.4	41,683,065	18.7	37,250	5.5
2010	994	1.6	203	(.5)	35,104,086	6.9	35,316	5.3

Actuarial Assumptions and Methods

The current PMRS actuarial assumptions used in this valuation are as follows.

A. Healthy Life Mortality Rates:

Sample rates are shown below:

(a) Killed in service mortality rates:

AGE	HEALTHY LIFE MORTALITY RATES			
	ACTIVES (MALES RP2000+1) FEMALES RP2000+5)		RETIREES (RP2000 SEX DISTINCT)	
	MALE	FEMALE	MALE	FEMALE
50	0.20%	0.11%	0.21%	0.17%
55	0.32	0.17	0.36	0.27
60	0.59	0.27	0.67	0.51
65	1.13	0.51	1.27	0.97
70	1.98	0.97	2.22	1.67
75	3.39	1.67	3.78	2.81
80	5.79	2.81	6.43	4.59
85	9.98	4.59	11.08	7.74

- (i) 15 percent of mortality is assumed to be service-related for municipal plans, and
- (ii) 50 percent of mortality is assumed to be service-related for uniform plans.

B. Disabled Life Mortality Rates:

Mortality under RP-2000 mortality table for a life 10 years older.

C. Termination Rates Before Retirement:

TERMINATION RATES BEFORE RETIREMENT

YEARS OF SERVICE	CURRENT VALUATION RATE ⁽¹⁾			
	NUMBER OF ACTIVE MEMBERS IN PLAN			
	UNIFORMED		MUNICIPAL	
	<25	>25	<25	>25
LESS THAN 1	14%	13%	20%	20%
1 BUT LESS THAN 2	14	10	20	20
2 BUT LESS THAN 3	12	7	12	15
3 BUT LESS THAN 4	10	7	10	12
4 BUT LESS THAN 5	6	6	8	7
5 BUT LESS THAN 6	4	5	6	7
6 BUT LESS THAN 7	3	4	4	6
7 BUT LESS THAN 8	2	3	3	5
8 BUT LESS THAN 9	2	3	3	5
9 BUT LESS THAN 10	1	3	2.5	5
10 OR MORE	1	3	2.5	3

D. Disability Incidence Rates:

Municipal—40 percent of 1964 OASDI (Social Security) Experience for Males (sample rates below)

Uniformed plans—60 percent of 1964 OASDI (Social Security) Experience for Males (sample rates below)

MUNICIPAL RATES

AGE	CURRENT VALUATION RATE (%)
25	0.034
35	0.059
45	0.144
55	0.404
65	0.928

UNIFORMED RATES

AGE	CURRENT VALUATION RATE (%)
25	0.051
35	0.088
45	0.216
55	0.605
65	1.393

Type of disability:

- (i) 15 percent of disablements are assumed to be service-related for municipal plans
- (ii) 50 percent of disablements are assumed to be service related for uniform plans.

E. Workers Compensation:

Service-related disability benefits payable from municipal plans are offset by 25 percent of final average salary.

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

⁽²⁾ Add 2 percent for each of the first three years of service.

⁽³⁾ Rates indicated are adjusted by adding 5 percent (and 10 percent for ages 60–62 under current rate assumptions) for the year in which the member is first eligible for normal retirement.

F. Salary Scale:

Three-year select rates include 3.0 percent inflation and age-related scale for merit/seniority based on sample rates as shown at right plus 2 percent during the select period only then reverting to inflation and merit/seniority thereafter. Final actual salary plans assume an additional 6 percent at retirement.

SAMPLE SALARY RATES

AGE	TOTAL RATE (%) ⁽²⁾ (INCLUDING INFLATION)
25	8.3
30	6.4
35	5.6
40	5.0
45	4.2
50	4.1
55	3.9
60	3.7
65	3.0

G. Retirement Age:

The age at which unreduced benefits are available. No early retirement is assumed. Specific assumptions regarding retirement age are:

a) Municipal Members:

Members are assumed to retire over a range of ages as shown to the right.

b) Uniformed Members:

Retirement rates are reflected in the chart to the right.

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

NON-UNIFORM PLAN RETIREMENT ASSUMPTIONS

AGE	CURRENT RATE OF NORMAL RETIREMENT
under 46	5
46–54	15
55–59	10
60–61	10
62	30
63–64	20
65	35
66–74	15
75	100

RETIREMENT RATES FOR UNIFORMED MEMBERS

AGE	RATES ⁽³⁾
<49	0%
50	20
51	10
52	10
53	10
54	10
55	20
56	25
57	25
58	30
59	30
60	40
61	50
62	50
63	60
64	70
65	80
66+	100

H. Marital Status and Spouse's Age:

85 percent of members will be married at time of retirement and females are three years younger than their spouses.

I. Social Security Projections⁽¹⁾:

a) The Social Security Taxable Wage Base will increase by 3.5 percent compounded annually;

b) The Consumer Price Index will increase by 3.0 percent compounded annually;

- c) The Average Total Wages of All Workers will increase by 3.5 percent compounded annually.

J. Post-Retirement Cost of Living Increases⁽¹⁾:

3.0 percent per year, subject to plan limitations.

K. Investment Return Assumption:

5.5 percent compounded annually, net of investment expenses.

L. Administrative Expenses:

The expense assumption is based upon the expected expenses for the current year. The non-investment related expenses of the System, net the \$20 per participant annual assessment, is \$4,102,422 for 2015.

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:

Sum of all audited reserve accounts as of the valuation date, including Member, Municipal, Retired, Disability, and DROP 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 percent of fair market value.

Each year, municipalities receive an excess interest allocation derived as a portion of new surplus created during the prior year based on the current financial standing of the System. “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 is used to allocate the new surplus. Generally, depending on the relative size of surplus to fair market value, between 10 percent and 90 percent of the new surplus will become excess interest.

Based on the unique legislative structure of PMRS, because assets are set equal to reserves under the System, they do not necessarily relate directly or indirectly with the current market value of assets as required under Actuarial Standard of Practice Statement No. 44 which states under section 3.3:

“... the actuary should select an asset valuation method that is designed to produce actuarial values of assets that bear a reasonable relationship to the corresponding market values. The qualities of such an asset valuation method include the following:

- a. The asset valuation method is likely to produce actuarial values of assets that are sometimes greater than and sometimes less than the corresponding market values.
- b. The asset valuation method is likely to produce actuarial values of assets that, in the actuary’s professional judgment, satisfy both of the following:
 1. *The asset values fall within a reasonable range around the corresponding market values. For example, there might be a corridor centered at market value outside of which the actuarial value of assets may not fall, in order to assure that the difference from market value is not greater than the actuary deems reasonable.*
 2. *Any differences between the actuarial value of assets and the market value are recognized within a reasonable period of time. For example, the actuary might use a method where the actuarial value of assets converges toward market value at a pace that the actuary deems reasonable, if the investment return assumption is realized in future periods.*

In lieu of satisfying both (1) and (2) above, an asset valuation method could satisfy section 3.3(b) if, in the actuary’s professional judgment, the asset valuation method either (i) produces values within a sufficiently narrow range around market value or (ii) recognizes differences from market value in a sufficiently short period.”

On this basis, the administrative rules adopted by the PMRS Board, which are not subject to comply with Actuarial Standards of Practice (ASOP), when defining the Actuarial Value of Assets, does not necessarily meet the requirement of ASOP 44 Selection and Use of Asset Valuation Methods for Pension Valuations.

The Actuarial Value of Assets provided within this CAFR follow the Pennsylvania Municipal Retirement System Law and the PMRS Policy Statement.

ACTUARIAL COST METHOD

Entry Age Normal Actuarial Cost Method.

The Entry Age Normal Actuarial Cost Method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. Entry age is defined as attained age less credited service. The normal cost is based on taking the value, as of entry age into the plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of each member's expected future salary producing a normal cost rate as a percent of salary. The normal cost rate is multiplied by current salary to determine each member's normal cost. If a plan provides for a Separate Member Annuity through required member contributions, this contribution rate is then added to the total normal cost rate to determine the final total normal cost rate. Within the MMO calculation, the normal cost is reduced by the member contribution to produce the employer normal cost to be paid.

The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.

Actuarial gains (or losses), including the effect of contributions greater or lesser than the previously determined actuarial level, are reflected by decreases (or increases) in the unfunded actuarial liability. Under Act 205 of 1984, and updates by Act 44, the unfunded actuarial liability is amortized as a level dollar amount over the lesser of:

- a) i. 30 years, with respect to the initial liability as of 1/1/85 (or first valuation);
- ii. 20 years, with respect to actuarial gains and losses;
- iii. 15 years, with respect to changes due to actuarial assumptions;

- iv. 10 years, with respect to changes due to plan provisions;
 - v. 1 year, with respect to changes in benefits for currently retired members,
 - vi. 20 years, with respect to state mandated benefit changes; or
- b) the average assumed working lifetime of active employees as of the date the liability was established ⁽¹⁾.

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

- 1) Retired and disabled members are paid monthly benefits from the System's Retired 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 with the System. (However, this procedure does not apply to the legislated ad-hoc adjustments effective January 1, 1989.)
- 2) A disabled member's pension is met in part 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 the 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.

CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS

There were no changes in the actuarial assumptions from last year to this year.



Statistical

Part I • Financial

Introduction

The objectives of the statistical section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information to understand and assess the System's overall financial condition. In support of these objectives, the System has implemented GASB Statement No. 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements relative to the supplementary information provided in this section.

The schedules beginning on page 59 compare the revenues versus expenses of the System and include total investments of the System for the past 10 years. The schedules also show operating information. The operating information is intended to provide contextual information about the System's operations to assist in assessing the System's economic condition. These schedules provide detailed information about the trends of key sources of additions and deductions to the System's assets, which assist in providing a context framing how the System's financial position has changed over time.

The schedules beginning on page 63 provide information relative to membership. The schedules and graphs reflect changes in active and retired members of the System. The information is intended to provide contextual information about the System's membership and framework for the ratio of funding versus obligations. The schedules beginning on page 65 provide information relative to pension payments and pensions awarded. The information is intended to provide contextual information about payment trends of the System.

All non-accounting data is derived from the System's internal sources.

NUMBER OF MEMBERS PER PLAN

(Plans with more or 100 members)

PLAN	MEMBERS	%
Allentown City	857	5.52
Adams County	785	5.06
Bethlehem City	651	4.20
Harrisburg City – Plan B	408	2.63
Jefferson County	279	1.80
Harrisburg City Fire – Plan B	209	1.35
Easton City	196	1.26
Monroeville Municipality	180	1.16
Lehigh County Authority	179	1.15
Bucks County Water & Sewer Authority	162	1.04
Tredyffrin Township	126	0.81
Upper Moreland Township	115	0.74
Hermitage City	107	0.69
Capital Region Water	105	0.68

CHANGES IN NET POSITION

Last 10 Years

YEAR	CONTRIBUTIONS	INVESTMENT INCOME (LOSS) AND MISCELLANEOUS INCOME	ANNUITY BENEFITS AND TERMINATIONS	ADMINISTRATIVE EXPENSES	CHANGE IN NET POSITION
2015	\$ 68,740,888	(\$ 4,943,521)	\$ 110,303,677	\$ 4,983,399	(\$ 51,489,709)
2014	89,762,417	100,453,558	87,436,751	4,411,462	98,367,762
2013	61,092,399	310,197,575	78,245,253	3,723,590	289,321,131
2012	59,253,955	187,755,253	71,827,710	3,424,363	171,257,135
2011	61,265,501	(29,086,613)	81,155,883	3,142,004	(52,118,999)
2010	61,930,391	180,338,425	63,383,838	3,183,253	175,701,725
2009	54,933,975	210,272,809	66,048,632	3,203,478	195,954,674
2008	49,693,605	(387,077,602)	53,771,225	2,986,656	(394,141,878)
2007	46,833,548	114,838,806	49,905,064	2,862,482	108,904,808
2006	37,749,106	161,140,029	62,491,362	2,920,868	133,476,905

REVENUES BY SOURCE

Last 10 Years

YEAR	MEMBER CONTRIBUTIONS	MUNICIPAL CONTRIBUTIONS AND TRANSFERS FROM OTHER PLAN ADMINISTRATORS ⁽¹⁾	MUNICIPAL ASSESSMENTS ⁽²⁾	INVESTMENT INCOME (LOSS) AND MISCELLANEOUS INCOME	TOTAL REVENUE, NET OF LOSSES
2015	\$ 19,605,687	\$ 48,929,087	\$ 206,114	(\$ 4,943,521)	\$ 63,797,367
2014	18,441,437	71,157,740 ⁽³⁾	163,240	100,453,558	190,215,975
2013	22,416,432	38,493,407	182,560	310,197,575	371,289,974
2012	20,981,612	37,974,023	298,320	187,755,253	247,009,208
2011	20,732,344	40,231,586	301,571	(29,086,613)	32,178,888
2010	20,684,591	40,949,360	296,440	180,338,425	242,268,816
2009	19,331,869	35,309,446	292,660	210,272,809	265,206,784
2008	17,870,426	31,532,859	290,320	(387,077,602)	(337,383,997)
2007	17,491,672	29,059,248	282,628	114,838,806	161,672,354
2006	16,316,197	21,148,089	284,820	161,140,029	198,889,135

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

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

⁽³⁾ Municipal contributions for 2014 include a one-time payment of \$27.4 million for one municipality towards its unfunded liability.

EXPENSES BY TYPE

Last 10 Years

YEAR	BENEFIT EXPENSES		ADMINISTRATIVE EXPENSES	TOTAL EXPENSES
	ANNUITY	TERMINATION		
2015	\$ 81,299,398	\$ 29,004,279	\$ 4,983,399	\$ 115,287,076
2014	78,046,330	9,390,421	4,411,462	91,848,213
2013	68,901,058	9,344,195	3,723,590	81,968,843
2012	63,390,100	8,437,610	3,424,363	75,252,073
2011	63,105,165	18,050,718	3,142,004	84,297,887
2010	54,771,528	8,612,310	3,183,373	66,567,211
2009	52,267,003	13,781,629	3,203,478	69,252,110
2008	46,173,544	7,597,681	2,986,656	56,757,881
2007	42,898,882	7,006,182	2,862,482	52,767,546
2006	44,136,795	18,354,567	2,920,868	65,412,230

SCHEDULE OF BENEFIT DEDUCTIONS FROM PLAN NET ASSETS BY TYPE

Last Nine Years⁽¹⁾

YEAR	EXPENSES BY TYPE							TOTAL ANNUITY
	NORMAL	EARLY	DISABILITY	SURVIVOR	DEATH	DROP ⁽²⁾	TRANSFER AND OTHER	
2015	\$ 64,508,631	\$ 8,698,618	\$ 1,036,807	\$ 3,900,315	\$ 2,614,938	\$ 460,751	\$ 79,338	\$ 81,299,398
2014	58,291,738	8,769,947	1,362,544	5,569,629	3,234,667	146,215	671,590	78,046,330
2013	52,063,381	8,156,170	1,722,313	5,243,882	1,637,485	68,795	9,032	68,901,058
2012	47,951,194	7,545,724	1,347,255	4,848,070	1,678,836	0	19,021	63,390,100
2011	44,166,997	6,161,604	1,257,354	4,497,860	2,241,312	0	4,780,038	63,105,165
2010	38,721,068	4,263,362	1,392,815	4,376,019	2,653,312	0	3,364,952	54,771,528
2009	36,648,826	3,780,903	2,462,766	4,284,030	3,523,786	0	1,566,692	52,267,003
2008	34,911,175	4,549,688	1,351,900	3,897,639	1,397,947	0	65,195	46,173,544
2007	31,560,200	4,397,101	1,318,921	3,975,518	1,085,900	0	561,242	42,898,882

SCHEDULE OF REFUND DEDUCTIONS FROM PLAN NET ASSETS BY TYPE

Last Nine Years⁽¹⁾

YEAR	EXPENSES BY TYPE		
	TERMINATIONS	LUMP SUM	TOTAL REFUNDS
2015	\$ 2,838,347	\$ 26,165,932	\$ 29,004,279
2014	4,788,017	4,602,404	9,390,421
2013	2,449,964	6,894,231	9,344,195
2012	3,908,772	4,528,838	8,437,610
2011	12,421,382	5,629,336	18,050,719
2010	5,657,499	2,954,811	8,612,310
2009	11,189,048	2,592,581	13,781,629
2008	6,675,755	921,926	7,597,681
2007	4,262,309	2,743,873	7,006,182

⁽¹⁾ Information prior to 2007 is not available.

⁽²⁾ First DROP participant to terminate was on January 1, 2013.

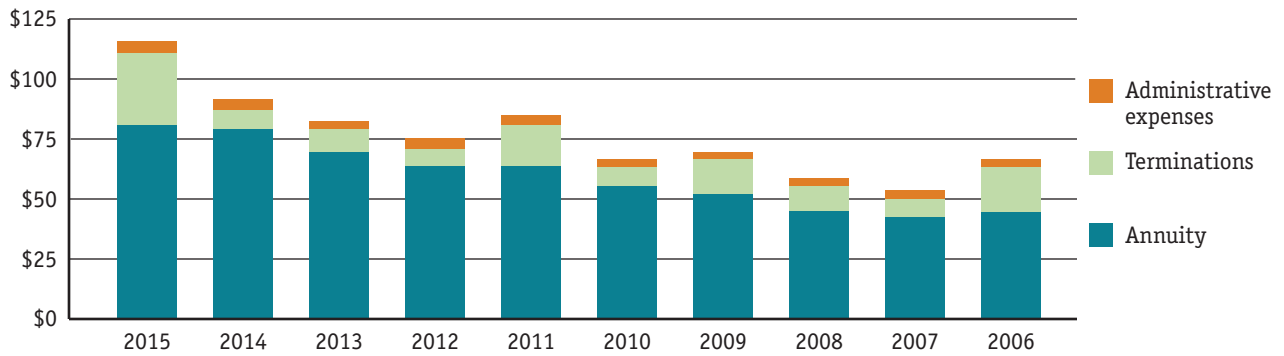
REVENUES BY SOURCE

(Amounts in Millions)



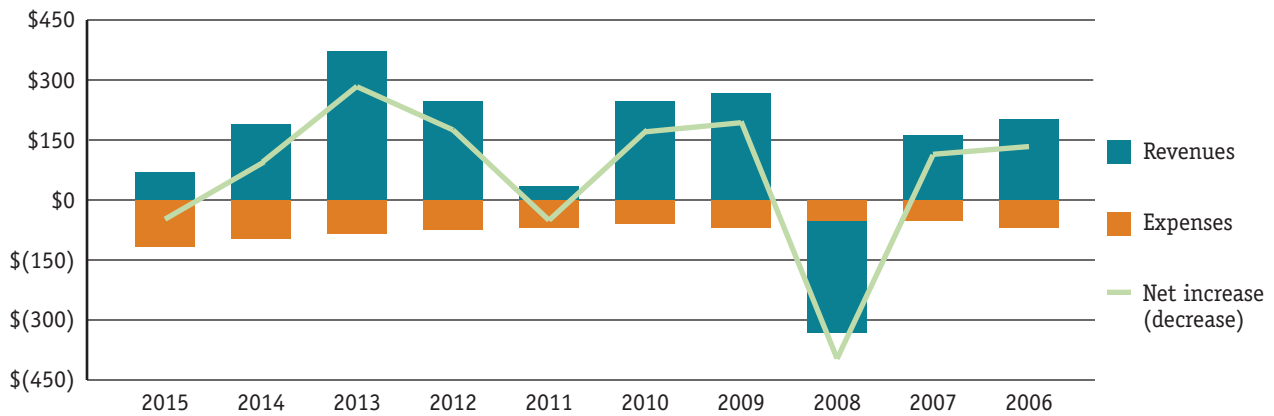
EXPENSES BY TYPE

(Amounts in Millions)



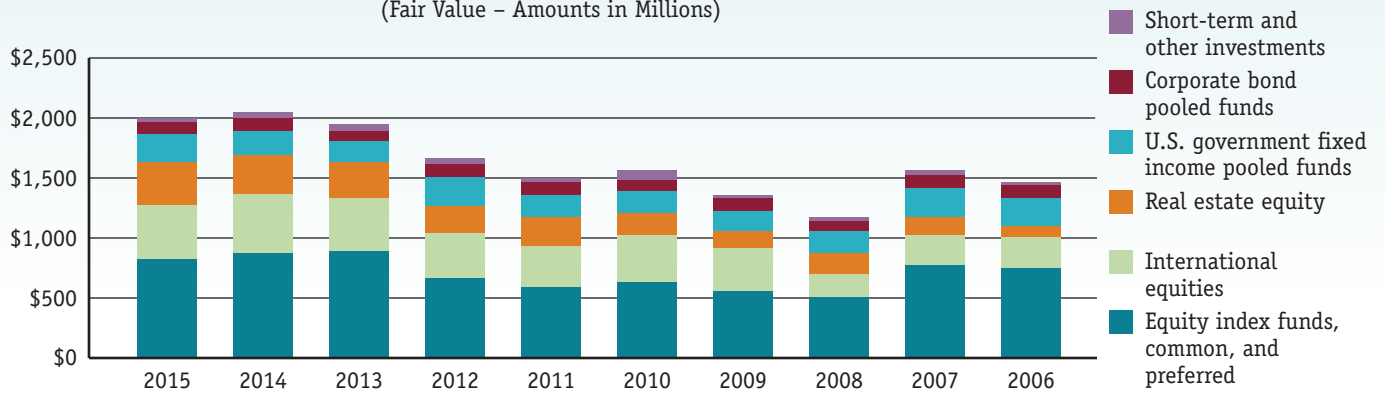
RESULTS OF OPERATIONS

(Amounts in Millions)



TOTAL INVESTMENTS

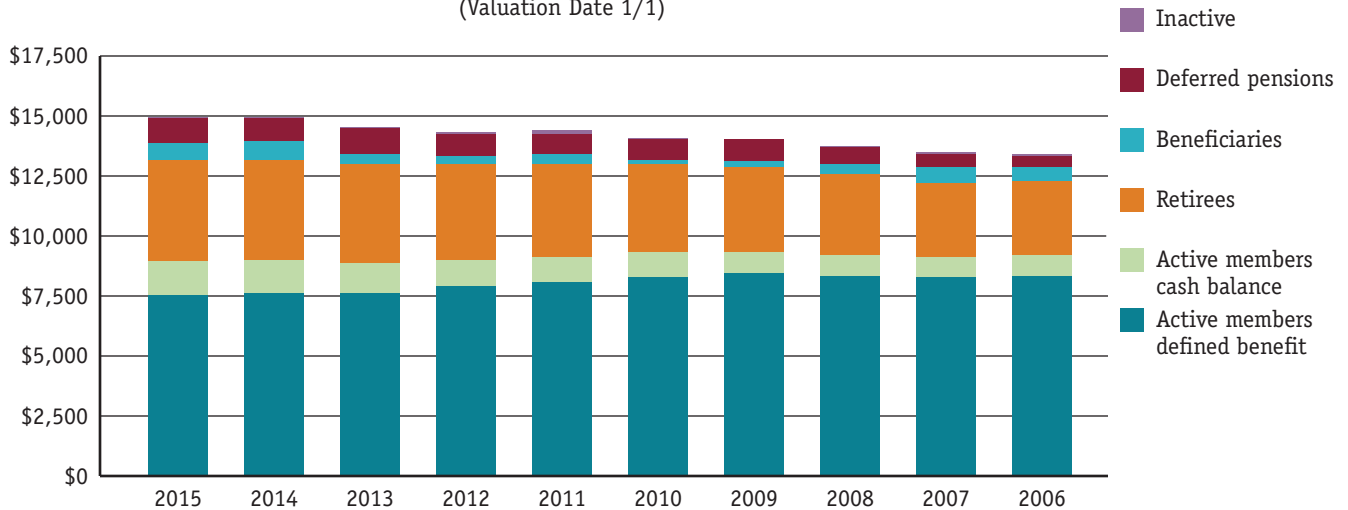
(Fair Value – Amounts in Millions)



Part II • Membership

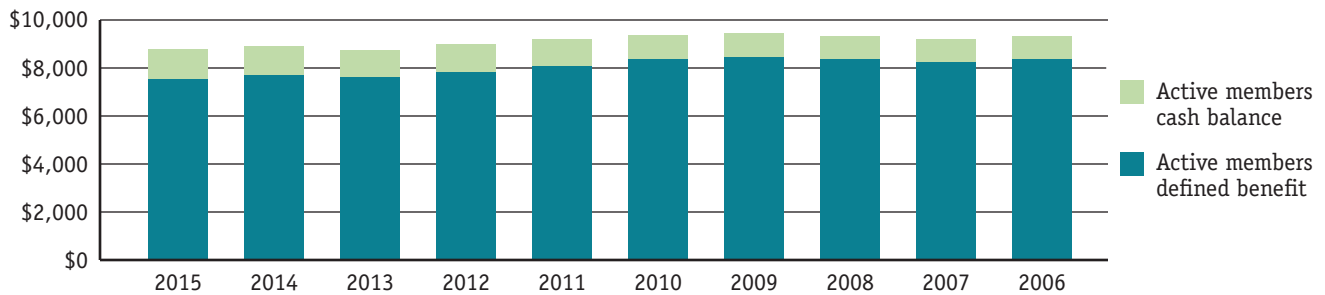
TOTAL MEMBERSHIP

(Valuation Date 1/1)



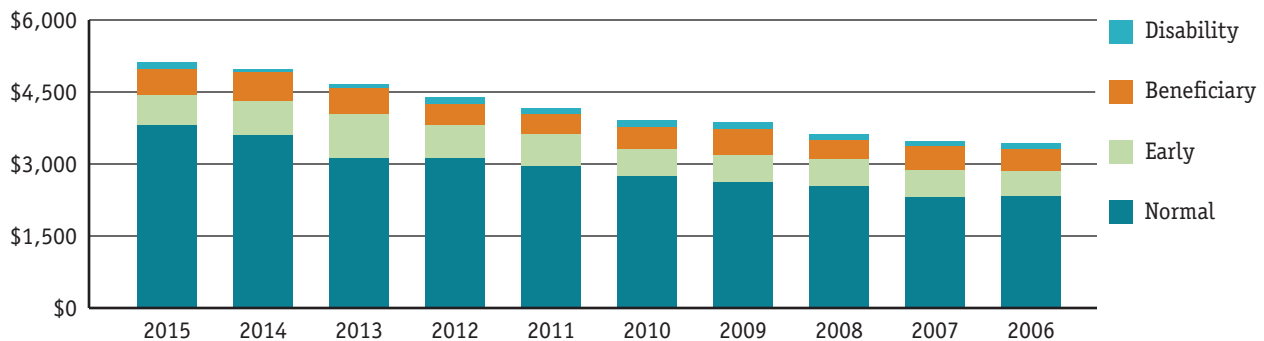
ACTIVE MEMBERS

(Valuation Date 1/1)



RETIRED MEMBERS

(Valuation Date 1/1)



DISTRIBUTION OF ACTIVE MEMBERS

Counts by Age/Service as of January 1, 2015

COUNTS BY AGE/SERVICE											
AGE	1 YEAR OR LESS	1 TO 2	2 TO 3	3 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 & UP	TOTAL
Under 20	9	0	0	0	0	0	0	0	0	0	9
20 – 24	93	52	21	12	4	0	0	0	0	0	182
25 – 29	129	91	80	88	100	2	0	0	0	0	490
30 – 34	103	83	59	89	232	75	4	0	0	0	645
35 – 39	76	48	52	75	227	222	46	1	0	0	747
40 – 44	63	54	59	94	237	233	154	71	11	0	976
45 – 49	76	78	59	99	236	275	226	143	88	3	1,283
50 – 54	78	73	52	78	256	252	218	194	180	117	1,498
55 – 59	65	67	35	89	228	267	231	184	164	236	1,566
60 – 64	30	44	20	55	133	145	138	113	118	206	1,002
65 & up	10	8	12	12	62	69	66	60	46	51	396
Total	732	598	449	691	1,715	1,540	1,083	766	607	613	8,794

DISTRIBUTION OF ACTIVE MEMBERS

Average Annual Salary by Age/Service as of January 1, 2015

COUNTS BY AGE/SERVICE											
AGE	1 YEAR OR LESS	1 TO 2	2 TO 3	3 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 & UP	TOTAL
Under 20	\$ 18,725	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,725
20 – 24	21,914	38,371	43,303	43,980	50,981	-	-	-	-	-	31,178
25 – 29	24,313	40,049	44,224	43,967	45,547	60,131	-	-	-	-	38,496
30 – 34	26,544	41,133	43,666	49,075	53,013	56,394	61,268	-	-	-	46,303
35 – 39	22,692	47,769	44,182	47,708	51,413	60,003	62,093	34,195	-	-	50,569
40 – 44	22,243	41,001	45,214	46,495	50,768	57,965	60,476	64,144	69,543	-	52,203
45 – 49	24,016	42,757	43,140	43,682	48,648	53,019	56,428	56,496	62,378	52,509	50,996
50 – 54	26,882	43,300	47,629	42,591	47,641	49,767	50,837	59,563	61,269	59,470	51,018
55 – 59	24,783	49,317	45,119	42,079	44,545	49,812	51,377	52,926	56,766	58,132	50,020
60 – 64	25,771	45,865	38,503	44,488	47,876	47,329	48,951	53,092	55,548	59,446	50,692
65 & up	29,195	31,810	32,292	44,005	39,831	41,377	41,885	43,169	53,997	57,053	\$44,279
Total	\$ 24,490	\$ 42,878	\$ 43,981	\$ 44,978	\$ 48,648	\$ 52,802	\$ 53,220	\$ 56,669	\$ 58,700	\$ 58,712	\$ 49,103

PENSIONS IN PAYMENT STATUS ON JANUARY 1, 2015

By Type and Monthly Amount

MONTHLY AMOUNT	TOTAL	TYPE OF PENSION				
		NORMAL	INVOLUNTARY EARLY	VOLUNTARY EARLY	SERVICE DISABILITY	NON-SERVICE DISABILITY
Total	5,108	4,218	267	509	34	80
Under \$100	251	216	25	8	1	1
\$100 - \$199	307	249	41	16	1	0
200 - 299	294	230	38	25	1	0
300 - 399	303	246	27	29	0	1
400 - 499	284	229	24	29	2	0
500 - 599	302	245	16	32	1	8
600 - 699	244	199	13	26	2	4
700 - 799	254	191	17	40	0	6
800 - 899	230	175	10	29	1	15
900 - 999	208	157	9	27	4	11
1,000 - 1,199	411	323	17	54	4	13
1,200 - 1,399	317	249	7	51	4	6
1,400 - 1,599	282	234	4	32	6	6
1,600 - 1,799	202	173	6	22	0	1
1,800 - 1,999	203	173	5	22	1	2
2,000 - 2,199	163	147	2	17	1	1
2,200 - 2,399	147	130	3	13	1	0
2,400 - 2,599	116	106	0	8	1	1
2,600 - 2,799	91	79	2	7	1	2
2,800 - 2,999	80	76	0	2	1	1
3,000 - 3,499	174	163	1	9	1	0
3,500 - 3,999	115	106	0	8	0	1
4,000 and over	125	122	0	3	0	0

PENSIONS AWARDED EACH OF THE LAST 10 YEARS

By Type and Amount

VALUATION DATE 1/1	TOTAL		NORMAL		VOLUNTARY EARLY		INVOLUNTARY EARLY		DISABILITY	
	COUNT	AMA ⁽¹⁾	COUNT	AMA	COUNT	AMA	COUNT	AMA	COUNT ⁽²⁾	AMA
2015	392	1,492	341	1,524	29	1,575	14	825	8(2)	1,022
2014	431	1,706	364	1,800	34	1,280	17	905	16(2)	1,319
2013	390	1,370	341	1,421	22	1,614	20	520	7(2)	709
2012	438	1,367	352	1,496	40	1,180	37	459	9(3)	888
2011	396	1,552	341	1,632	37	1,250	13	364	5(0)	1,407
2010	296	1,336	249	1,412	26	1,300	17	339	4(0)	1,067
2009	271	1,157	223	1,150	36	1,259	7	843	5(3)	1,162
2008	236	1,065	227	1,056	0	0	6	1,259	3(0)	1,350
2007	252	1,069	192	1,082	32	1,196	19	572	9(2)	1,373
2006	264	1,270	217	1,290	11	639	23	1,257	13(4)	1,493

SCHEDULE OF TOTAL MEMBERSHIP – 10-YEAR TREND

VALUATION DATE 1/1	ACTIVE MEMBERS DEFINED BENEFIT PLANS	ACTIVE MEMBERS CASH BALANCE PLANS	RETIREEES	BENEFICIARIES	DEFERRED PENSIONS ⁽³⁾	INACTIVE MEMBERS ⁽⁴⁾	TOTAL
2015	7,580	1,214	4,566	542	1,027	8	14,937
2014	7,676	1,185	4,423	520	1,044	14	14,862
2013	7,599	1,131	4,160	520	1,098	51	14,559
2012	7,836	1,158	3,899	495	952	21	14,361
2011	8,091	1,119	3,707	477	945	42	14,381
2010	8,357	994	3,449	460	834	23	14,117
2009	8,411	978	3,289	461	847	0	13,986
2008	8,383	950	3,173	425	744	7	13,682
2007	8,314	918	2,965	494	723	33	13,447
2006	8,374	896	2,941	436	675	66	13,388

⁽¹⁾ Average Monthly Amount

⁽²⁾ Number of service-related disability pensions are shown in parentheses.

⁽³⁾ Inactive participants with rights to deferred pension (vested)

⁽⁴⁾ Inactive participants with rights to return of contributions (non-vested)

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Last 10 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
2015	7,580	(1.3)	721	0.7	\$384,270,155	(1.3)	\$50,695	(0.1)
2014	7,676	1.0	716	0.3	389,410,214	3.5	50,731	2.5
2013	7,599	(3.0)	714	0.7	376,296,674	2.6	49,519	5.8
2012	7,836	(3.2)	709	0.3	366,882,467	(4.4)	46,820	1.3
2011	8,091	(3.2)	707	1.4	383,802,844	1.6	47,436	4.9
2010	8,357	(0.6)	697	0.1	377,960,930	1.5	45,227	2.2
2009	8,411	0.3	696	0.6	372,370,037	2.0	44,272	1.7
2008	8,383	0.8	692	1.3	364,865,000	1.7	43,524	0.9
2007	8,314	(0.7)	683	0.0	358,691,000	7.6	43,143	8.4
2006	8,374	0.4	683	0.9	333,300,000	4.5	39,807	4.1

CASH BALANCE 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
2015	1,214	2.4	286	6.7	\$47,537,851	5.2	\$39,158	2.8
2014	1,185	4.8	268	6.8	45,193,710	1.6	38,138	(3.1)
2013	1,131	(2.3)	251	4.6	44,490,671	8.1	39,337	10.7
2012	1,158	3.5	240	4.8	41,143,383	(1.3)	35,530	(4.6)
2011	1,119	12.6	229	13.4	41,683,065	18.8	37,250	5.5
2010	944	1.6	203	(0.5)	35,104,086	6.9	35,316	5.3
2009	978	3.0	204	11.0	32,811,919	5.5	33,550	2.5
2008	950	3.5	183	3.4	31,107,000	10.3	32,744	6.5
2007	918	2.5	177	2.9	28,213,000	1.0	30,734	(1.6)
2006	896	3.3	172	1.8	27,970,000	4.3	31,218	1.4

SCHEDULE OF AVERAGE NEW MONTHLY BENEFIT PAYMENTS FROM DEFINED BENEFIT PLANS⁽¹⁾

10 Years Ended January 1, 2015

RETIREMENT EFFECTIVE DATES	YEARS CREDITED SERVICE						
	< 5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/14 to 1/1/2015							
Average monthly benefit	\$189	\$593	\$831	\$1,304	\$1,775	\$2,236	\$3,754
Average final average salary	\$53,205	\$45,627	\$37,345	\$43,942	\$50,630	\$50,369	\$64,658
Number of retired members	16	34	34	51	36	52	54
Period 1/1/13 to 1/1/2014							
Average monthly benefit	\$172	\$438	\$786	\$1,226	\$2,042	\$2,115	\$3,318
Average final average salary	\$46,376	\$41,308	\$39,652	\$43,743	\$51,190	\$50,465	\$57,022
Number of retired members	11	35	56	41	41	43	65
Period 1/1/12 to 1/1/2013							
Average monthly benefit	\$419	\$388	\$702	\$1,196	\$1,460	\$2,093	\$3,079
Average final average salary	\$48,636	\$35,733	\$36,715	\$42,421	\$44,420	\$46,997	\$53,016
Number of retired members	13	37	61	39	44	36	76
Period 1/1/11 to 1/1/12							
Average monthly benefit	\$256	\$410	\$673	\$1,059	\$1,476	\$2,083	\$3,203
Average final average salary	\$48,402	\$36,620	\$42,759	\$40,426	\$44,336	\$49,368	\$55,249
Number of retired members	12	31	42	50	54	30	61
Period 1/1/10 to 1/1/11							
Average monthly benefit	\$244	\$544	\$813	\$1,209	\$1,588	\$2,394	\$3,336
Average final average salary	\$50,215	\$39,201	\$39,197	\$43,014	\$43,653	\$54,686	\$58,242
Number of retired members	7	31	53	44	70	40	97
Period 1/1/09 to 1/1/10							
Average monthly benefit	\$151	\$392	\$729	\$1,294	\$1,653	\$2,247	\$3,020
Average final average salary	\$30,418	\$36,819	\$36,047	\$42,001	\$47,445	\$48,018	\$53,737
Number of retired members	17	30	26	39	47	40	65
Period 1/1/08 to 1/1/09							
Average monthly benefit	\$237	\$431	\$455	\$1,004	\$1,051	\$1,999	\$2,118
Average final average salary	\$29,979	\$35,106	\$32,921	\$45,862	\$35,792	\$50,659	\$50,249
Number of retired members	17	32	42	55	25	38	58
Period 1/1/07 to 1/1/08							
Average monthly benefit	\$179	\$374	\$685	\$999	\$1,338	\$1,739	\$2,530
Average final average salary	\$34,031	\$32,597	\$35,004	\$35,358	\$35,290	\$45,102	\$51,424
Number of retired members	11	34	45	43	33	32	38
Period 1/1/06 to 1/1/07							
Average monthly benefit	\$376	\$458	\$707	\$928	\$1,331	\$1,864	\$2,443
Average final average salary	\$38,487	\$38,257	\$31,807	\$43,304	\$40,141	\$45,548	\$50,429
Number of retired members	11	27	35	45	39	36	30
Period 1/1/05 to 1/1/06							
Average monthly benefit	\$686	\$386	\$661	\$1,052	\$1,330	\$1,912	\$2,292
Average final average salary	\$38,368	\$27,580	\$33,166	\$37,380	\$37,914	\$46,427	\$45,614
Number of retired members	11	27	37	44	36	44	60

SCHEDULE OF PARTICIPATING PLANS⁽¹⁾⁽²⁾

as of January 1, 2015

COUNTIES

Adams County
Forest County
Jefferson County
Sullivan County

CITIES

Allentown City
Bethlehem City
Clairton City
Connellsville City
Easton City
Farrell City
Greensburg City
Harrisburg City
Hermitage City
Jeannette City
Latrobe City
Lebanon City
Lower Burrell City
Nanticoke City
New Kensington City
Sharon City
Sunbury City
Uniontown City

BOROUGHES

Adamstown Borough
Apollo Borough
Ashland Borough
Atglen Borough
Atglen Borough (CB)
Avondale Borough
Avonmore Borough
Bally Borough
Bangor Borough
Bedford Borough
Bellefonte Borough
Bellefonte Borough (CB)
Bellwood Borough
Bentleyville Borough
Berlin Borough
Berlin Borough (CB)
Big Beaver Borough
Biglerville Borough
Biglerville Borough (CB)
Bloomfield Borough
Bowmanstown Borough
Brackenridge Borough

Bridgeville Borough
Bridgewater Borough
Brockway Borough
Brookville Borough
California Borough
Cambridge Springs Borough
Camp Hill Borough
Carnegie Borough
Carroll Valley Borough
Carrolltown Borough
Centerville Borough
Central City Borough
Charleroi Borough
Claysville Borough
Cleona Borough
Clymer Borough
Coaldale Borough
Cochranton Borough
Cokeburg Borough
Collegeville Borough
Collingdale Borough
Conneautville Borough
Conshohocken Borough
Conway Borough
Cressona Borough
Dalton Borough
Deemston Borough
Delmont Borough
Derry Borough
Dravosburg Borough
Dublin Borough
Duboistown Borough
Duncannon Borough
Duncansville Borough
East Berlin Borough
East Greenville Borough
East Rochester Borough
East Stroudsburg Borough
East Stroudsburg Borough (CB)
East Washington Borough
Emlenton Borough
Emporium Borough
Etna Borough
Everett Borough
Factoryville Borough
Falls Creek Borough
Ferndale Borough
Forest City Borough
Fountain Hill Borough

Franklin Borough
Franklintown Borough
Freeburg Borough
Freedom Borough
Freeland Borough
Freeport Borough
Greenville Borough
Hollidaysburg Borough
Homer City Borough
Honey Brook Borough
Hughestown Borough
Hummelstown Borough
Huntingdon Borough
Hyndman Borough
Jim Thorpe Borough
Johnsonburg Borough
Kenhorst Borough
Kennett Square Borough
Kittanning Borough
Knox Borough
Kulpmont Borough
Kutztown Borough
Lehighon Borough
Lewistown Borough
Liberty Borough
Linesville Borough
Lykens Borough
Marcus Hook Borough
Mars Borough
Martinsburg Borough
Marysville Borough
Matamoras Borough
Mayfield Borough
Mercer Borough
Meyersdale Borough
Middleburg Borough
Midway Borough
Millersburg Borough
Millerstown Borough
Minersville Borough
Monaca Borough
Monroeville Municipality
Mont Alto Borough
Montrose Borough
Moosic Borough
Moosic Borough (CB)
Morrisville Borough
Moscow Borough
Mount Gretna Borough

Mount Jewett Borough
Mount Pleasant Borough
Mount Union Borough
Mt. Gretna Borough
Nanty Glo Borough
Narberth Borough
Nesquehoning Borough
New Eagle Borough
New Florence Borough
New Stanton Borough
Newport Borough
Newtown Borough
Norristown Borough
North East Borough
North Wales Borough
Northumberland Borough
Orwigsburg Borough
Palmerton Borough
Palmyra Borough
Pen Argyl Borough
Pennsburg Borough
Perkasie Borough
Pine Grove Borough
Portage Borough
Pringle Borough
Prospect Borough
Prospect Park Borough
Richland Borough
Ridley Park Borough
Roaring Spring Borough
Rochester Borough
Rouseville Borough
Rural Valley Borough
Salisbury Borough
Sandy Lake Borough
Saxton Borough
Schuylkill Haven Borough
Selinsgrove Borough
Sellersville Borough
Seven Fields Borough
Seven Fields Borough (CB)
Shamokin Dam Borough
Sharpsburg Borough
Sharpsville Borough
Shenandoah Borough
Shippingport Borough
Slippery Rock Borough
Smithton Borough
South Waverly Borough

⁽¹⁾ County names are in parentheses.

⁽²⁾ The abbreviation CB designates a Cash Balance plan. NU denotes a Non-Uniformed plan.

Southmont Borough
Springdale Borough
Stewartstown Borough
Summit Hill Borough
Tarentum Borough
Telford Borough
Thornburg Borough
Topton Borough
Trainer Borough
Turbotville Borough
Turtle Creek Borough
Verona Borough
Versailles Borough
Waterford Borough
Waynesburg Borough
West Grove Borough
West Middlesex Borough
West Newton Borough
West Reading Borough
Wheatland Borough
White Haven Borough
Williamsburg Borough
Williamstown Borough
Wilmerding Borough
Wilson Borough
Windsor Borough
Yardley Borough
Yoe Borough
York Springs Borough
Youngwood Borough

TOWNSHIPS OF THE FIRST CLASS

Bristol Township
Caln Township
Collier Township
Crescent Township
East Deer Township
Elizabeth Township
(Allegheny County)
Harrison Township
Hopewell Township (Beaver
County)
North Huntingdon Township
North Versailles Township
Ridley Township
Rochester Township
Salisbury Township
Springdale Township
Swatara Township
Upper Moreland Township
Vanport Township
West Pottsgrove Township
Whitehall Township
Whitehall Township (CB)

Wilkins Township

TOWNSHIPS OF THE SECOND CLASS

Allegheny Township
(Westmoreland County)
Antrim Township
Athens Township
Bald Eagle Township
Beaver Township
Bedminster Township
Bell Township
Bethel Township
Birmingham Township
Black Creek Township
Blair Township
Bloomfield Township
Blooming Grove Township
Boggs Township (Centre
County)
Boggs Township (Clearfield
County)
Brecknock Township
Briar Creek Township
Brighton Township
Broad Top Township
Brokenstraw Township
Brothersvalley Township
Brown Township
Buckingham Township
Buffalo Township
Burnside Township
Burrell Township
Caernarvon Township
Cambria Township
Cambridge Township
Canal Township
Canton Township
Cass Township
Center Township (Greene
County)
Center Township (Indiana
County)
Center Township (Snyder
County)
Centre Township (Berks
County)
Centre Township (Perry
County)
Cherrytree Township
Clarion Township
Clay Township
Clearfield Township
Columbus Township
Concord Township
Conemaugh Township
Conewago Township

Cook Township
Coolspring Township
Cornplanter Township
Corydon Township
Covington Township
Cranberry Township
Cross Creek Township
Darlington Township
Delaware Township
Derry Township (Dauphin
County)
Derry Township (Dauphin
County) (CB)
Derry Township (Mifflin
County)
Derry Township
(Westmoreland County)
Dickinson Township
Dingman Township
Donegal Township (Butler
County)
Donegal Township
(Washington County)
Donegal Township
(Westmoreland County)
Dorrance Township
Douglass Township
(Montgomery County)
Drumore Township
East Allen Township
East Carroll Township
East Coventry Township
East Coventry Township (CB)
East Fallowfield Township
East Finley Township
East Hanover Township
East Huntingdon Township
East Manchester Township
East Marlborough Township
East Rockhill Township
East Rockhill Township (CB)
Eaton Township
Eldred Township (Jefferson
County)
Eldred Township (Monroe
County)
Eldred Township (Warren
County)
Elizabeth Township
(Lancaster County)
Elk Creek Township
Elk Township
Fairfield Township
Fairview Township
Falls Township
Farmington Township
Forks Township

Forward Township
Foster Township
Franklin Township (Beaver
County)
Franklin Township (Butler
County)
Franklin Township (Carbon
County)
Franklin Township (Greene
County)
Frazer Township
Freedom Township
Freehold Township
Frenchcreek Township
Girard Township
Glade Township
Greene Township
Greenfield Township (Blair
County)
Greenfield Township (Erie
County)
Greenfield Township
(Lackawanna County)
Hamilton Township
Hamiltonban Township
Hanover Township (Beaver
County)
Hanover Township (Lehigh
County)
Haycock Township
Hemlock Township
Henderson Township
Hilltown Township
Hopewell Township
(Cumberland County)
Hopewell Township
(Washington County)
Hopewell Township (York
County)
Horsham Township
Howe Township
Hunlock Township
Huntington Township
Huston Township
Jackson Township (Greene
County)
Jackson Township (Lebanon
County)
Jackson Township (Luzerne
County)
Jackson Township (Snyder
County)
Jackson Township
(Susquehanna County)
Jackson Township (Venango
County)
Jefferson Township
(Washington County)
Jenks Township

Jenner Township	Nockamixon Township	Ross Township	Washington Township (Dauphin County)
Jones Township	North Buffalo Township	Rutland Township	Washington Township (Erie County)
Keating Township	North Coventry Township	Rye Township	Washington Township (Fayette County)
Kennett Township	North Franklin Township	Scott Township	Washington Township (Greene County)
Lancaster Township (Butler County)	North Sewickley Township	Sewickley Township	Washington Township (Jefferson County)
Lancaster Township (Lancaster County)	North Strabane Township	Shade Township	Washington Township (Northampton County)
Latimore Township	North Strabane Township (CB)	Sheffield Township	Washington Township (Schuylkill County)
LeBoeuf Township	Nottingham Township	Shippensburg Township	Washington Township (Westmoreland County)
Lehman Township	Oakland Township	Shrewsbury Township	Washington Township (Wyoming County)
Liberty Township	Oil Creek Township (Venango County)	Slippery Rock Township	Waverly Township
Limestone Township (Clarion County)	Oil Creek Township (Crawford County)	Smithfield Township	Wayne Township
Limestone Township (Lycoming County)	Old Lycoming Township	Solebury Township	West Bradford Township
Limestone Township (Union County)	Oliver Township (Mifflin County)	Solebury Township (CB)	West Brunswick Township
Lincoln Township	Oliver Township (Jefferson County)	South Abington Township	West Caln Township
Liverpool Township	Orange Township	South Beaver Township	West Carroll Township
London Britain Township	Paint Township	South Bend Township	West Fallowfield Township
London Grove Township	Paradise Township	South Franklin Township	West Lampeter Township
London Grove Township (CB)	Parish Township	South Hanover Township	West Pennsboro Township
Lower Mahanoy Township	Parish Township	South Huntingdon Township	West Rockhill Township
Lower Towamensing Township	Pennsbury Township	South Manheim Township	West Salem Township
Lower Yoder Township	Perry Township	South Middleton Township	West Wheatfield Township
Loyalhanna Township	Perry Township	South Pymatuning Township	Westtown Township
Loyalhanna Township (CB)	Peters Township	South Strabane Township	Wetmore Township
Mahoning Township	Peters Township (CB)	Southampton Township	White Township
Manchester Township	Pike Township	Southwest Township	Whiteley Township
Manchester Township (CB)	Pine Creek Township	Spring Creek Township	Wiconisco Township
McKean Township	Pine Grove Township (Schuylkill County)	Springfield Township	Williams Township
Mead Township	Pine Grove Township (Warren County)	Stonycreek Township	Wilmington Township
Middle Smithfield Township	Pittsfield Township	Sugar Grove Township	Windsor Township
Middlesex Township	Pleasant Township	Sullivan Township	Woodward Township
Milford Township (Bucks County)	Plumcreek Township	Summit Township	Wright Township
Milford Township (Pike County)	Plumstead Township	Tinicum Township	Wrightstown Township
Millcreek Township	Plymouth Township	Towamensing Township	Zerbe Township
Monongahela Township	Pocopson Township	Tredyffrin Township	
Monroe Township (Snyder County)	Point Township	Tunkhannock Township	
Monroe Township (Wyoming County)	Portage Township	Union Township (Berks County)	
Moore Township	Porter Township	Union Township (Lebanon County)	
Morris Township (Greene County)	Preston Township	Union Township (Snyder County)	
Morris Township (Tioga County)	Price Township	Union Township (Washington County)	
Morris Township (Washington County)	Providence Township	Unity Township	
Mount Joy Township	Pulaski Township	Upper Burrell Township	
Mount Pleasant Township	Pymatuning Township	Upper Nazareth Township	
Muncy Creek Township	Raccoon Township	Valley Township	
New Garden Township	Rice Township	Wallace Township	
New Sewickley Township	Richhill Township	Warrington Township	
	Richland Township (Bucks County)	Warsaw Township	
	Richland Township (Bucks County CB)	Warwick Township	
	Richland Township (Venango County)	Washington Township (Berks County)	
	Ridgway Township	Washington Township (Cambria County)	
	Rome Township		
	Rose Township		

POLICE

Apollo Borough Police
 Ashley Borough Police
 Bally Borough Police
 Barrett Township Police
 Bedminster Township Police
 Bellwood Borough Police
 Bentleyville Borough Police
 Bentleyville Borough Police (CB)
 Big Beaver Borough Police
 Biglerville Borough Police
 Birmingham Township Police
 Blair Township Police

Brecknock Township Police
 Briar Creek Township Police
 Bridgewater Borough Police
 Buckingham Township Police
 California Borough Police
 Cambria Township Police
 Cambridge Springs Borough Police
 Camp Hill Borough Police
 Carroll Township Police
 Carroll Valley Borough Police
 Carrolltown Borough Police
 Central City Borough Police
 Centre Township Police (Berks County)
 Clairton Police
 Clymer Borough Police
 Cochranon Borough Police
 Colebrookdale Township Police
 Conneaut Lake Regional Police
 Covington Township Police
 Crescent Township Police
 Danville Borough Police
 Darlington Township Police
 Decatur Township Police
 Delmont Borough Police
 Donegal Township Police (Washington County)
 Douglass Township Police (Berks County)
 Douglass Township Police (Montgomery County)
 Dublin Borough Police
 Duboistown Borough Police
 Dunbar Borough Police
 Duncannon Borough Police
 Duncansville Borough Police
 East Bangor Borough Police
 East Berlin Borough Police
 East Coventry Township Police
 East Deer Township Police
 East Fallowfield Township Police
 East Franklin Township Police
 East Marlborough Township Police
 East Pennsboro Twp Police
 East Washington Borough Police
 Elizabeth Township Police (Allegheny County)
 Emlenton Borough Police
 Emporium Borough Police
 Everett Borough Police
 Factoryville Borough Police
 Fairview Township Police
 Falls Creek Borough Police
 Farrell City Police
 Forest City Borough Police
 Forward Township Police
 Franklin Borough Police
 Franklin Township Police (Beaver County)
 Frazer Township Police
 Freedom Township Police
 Freeland Borough Police
 Gilpin Township Police
 Greenfield Township Police
 Greenville Borough Police
 Hamiltonban Township Police
 Harveys Lake Borough Police
 Heidelberg Township Police
 Hellam Township Police
 Hemlock Township Police
 Hilltown Township Police
 Honey Brook Borough Police
 Hummelstown Borough Police
 Hyndman Borough Police
 Independence Township Police
 Jackson Township Police (Luzerne County)
 Johnsonburg Borough Police
 Kennett Township Police
 Knox Borough Police
 Lancaster Township Police (Butler County)
 Larksville Borough Police
 Lewistown Borough Police
 Liberty Borough Police
 Linesville Borough Police
 Locust Township Police
 Lower Windsor Township Police
 Lower Yoder Township Police
 Lykens Borough Police
 Mahoning Township Police (Lawrence County)
 Mahoning Township Police (Montour County)
 Manor Borough Police
 Mars Borough Police
 Martinsburg Borough Police
 Marysville Borough Police
 Maxatawny Township Police
 Mayfield Borough Police
 Mead Township Police
 Mercer Borough Police
 Middleburg Borough Police
 Middlesex Township Police
 Millcreek Township Police
 Millersburg Borough Police
 Millville Borough Police
 Montour Township Police
 Moore Township Police
 Moosic Borough Police
 Morrisville Borough Police
 Moscow Borough Police
 Mount Jewett Borough Police
 Mount Pleasant Borough Police
 Mount Pleasant Township Police (Washington County)
 Mount Union Borough Police
 New Castle Township Police
 New Garden Township Police
 New Wilmington Borough Police
 Newport Borough Police
 Newtown Borough Police
 Nockamixon Township Police
 North Coventry Township Police
 North Hopewell Township Police
 North Huntingdon Township Police
 North Middleton Township Police
 North Sewickley Township Police
 Northeastern Regional Police Department
 Northumberland Borough Police
 Old Lycoming Township Police
 Orangeville Area Police Board
 Orwigsburg Borough Police
 Palmyra Borough Police
 Paxtang Borough Police
 Penbrook Borough Police
 Pennridge Regional Police Dept.
 Perkasie Borough Police
 Pine Grove Borough Police
 Point Township Police
 Polk Borough Police
 Pulaski Township Police
 Pymatuning Township Police
 Quarryville Borough Police
 Red Lion Police
 Redstone Township Police
 Richland Borough Police
 Richland Township Police
 Roaring Brook Township Police
 Roaring Spring Borough Police
 Rochester Township Police
 Rye Township Police
 Sandy Lake Borough Police
 Saxton Borough Police
 Schwenksville Borough Police
 Scott Township Police
 Scottdale Borough Police
 Selinsgrove Borough Police
 Shade Township Police
 Shamokin Dam Borough Police
 Sheffield Township Police
 Shippingport Borough Police
 Shiremanstown Borough Police
 Sinking Spring Borough Police
 South Beaver Township Police
 South Centre Township Police
 South Pymatuning Township Police
 South Waverly Borough Police
 South Williamsport Borough Police
 Southern Police Commission
 Southern Regional Police Commission
 Springdale Township Police
 Summit Hill Borough Police
 Telford Borough Police
 Tinicum Township Police
 Tulpehocken Township Police
 Tunkhannock Township Police
 Upper Burrell Township Police
 Upper Macungie Township Police
 Vanport Township Police
 Versailles Borough Police
 Washington Township Police (Fayette County)
 Waverly Township Police
 West Caln Township Police
 West Fallowfield Township Police
 West Grove Borough Police
 West Lampeter Township Police
 West Middlesex Borough Police
 West Newton Borough Police
 West Pikeland Township Police
 West Pottsgrove Township Police
 West Sadsbury Township Police
 West Vincent Township Police
 Westfield Borough Police
 Wheatland Borough Police

White Haven Borough Police
Wiconisco Township Police
Williamstown Borough Police
Windsor Borough Police
Windsor Township Police
Wrightstown Township Police
Yardley Borough Police
Youngwood Borough Police

FIREFIGHTERS

Clairton City Firefighters
Farrell City Firefighters
Greenville Borough
Firefighters
Harrisburg City Firefighters
Larksville Borough
Firefighters
Manchester Township
Firefighters
Manchester Township (CB)
Firefighters
South Strabane Township
Firefighters
Upper Moreland Township
Firefighters
Wilson Borough Firefighters

AUTHORITIES AND OTHER UNITS

Allegheny Valley Joint Sewer
Authority
Ambridge Borough Municipal
Authority
Armstrong Conservation
District
Avonmore Borough Municipal
Authority
B.A.R.T.A.
Bangor Borough Authority
Bath Borough Authority
Bedford Borough Water
Authority
Bedford Township Municipal
Authority
Belle Vernon Municipal
Authority
Berks-Lehigh Regional Police
NU
Bethlehem Authority
Bethlehem City
Redevelopment Authority
Bethlehem Parking Authority
Blair Township Water and
Sewer Authority
Bloomfield Township Sewer
Authority
Bradford City Water Authority
Bradford Regional Airport
Authority

Brighton Township Municipal
Authority
Brighton Township Sewer
Authority
Brockway Area Sewage
Authority
Brockway Borough Municipal
Authority
Brodhead Creek Regional
Authority
Brookville Municipal
Authority
Bucks County Redevelopment
Authority
Bucks County Water & Sewer
Authority
Burrell Township Sewage
Authority
Butler Area Public Library
Cambria County Conservation
& Recreation Authority
Cambria Township Sewer
Authority
Cambria Township Water
Authority
Capital Region Water
Carbon County Conservation
District
Carmichaels-Cumberland
Joint Sewer
Carroll Township Authority
Catawissa Borough Municipal
Water Authority
Centerville Borough Sanitary
Authority
Central Carbon Municipal
Authority
Central Indiana County Joint
Sanitary Authority
Centre County Library &
Historical Museum
Clarion County Housing
Authority
Clarion County Housing
Authority (CB)
Coaldale-Lansford-Summit
Hill Sewer Authority
Columbia County
Conservation District
Connellsville Municipal
Authority
Connellsville Redevelopment
Authority
Conshohocken Borough
Authority
Coolspring-Jackson-Lake
Latonka Joint Authority
Coplay-Whitehall Sewer
Authority
Cressona Borough Authority

Creswell Heights Joint
Authority
Cumberland-Franklin Joint
Municipal Authority
Curwensville Municipal
Authority
Delaware Valley Municipal
Management Association
Delaware Valley Municipal
Management Association (CB)
Derry Township Municipal
Authority
Derry Township Sanitary
Sewer Authority
DuBois City Redevelopment
Authority
DuFAST Authority
East Berlin Area Joint
Authority
East Norriton-Plymouth-
Whitpain Joint Sewer
Authority
Eastern Snyder County
Regional Authority
Economy Borough Municipal
Authority
Elizabeth Borough Municipal
Authority
Elizabeth Township Sanitary
Authority
Elizabethville Area Authority
Emlenton Area Municipal
Authority
Erie County Housing
Authority
Everett Area Municipal
Authority
Fairfield Municipal Authority
Fawn Township Sewage
Authority
Fawn-Frazer Joint Water
Authority
Fayette County Conservation
District
Forward Township Municipal
Authority
Frackville Area Municipal
Authority
Franklin City Housing
Authority
Franklin Township Municipal
Sanitary Authority
Franklin Township Sewer
Authority
Frazer Transportation
Authority
Fredericksburg Sewer & Water
Authority
Freeland Borough Municipal
Authority
Glendale Valley Municipal
Authority

Greater Lebanon Refuse
Authority
Greenville Municipal
Authority
Guilford Township Authority
Guilford Water Authority
Harrison Township Water
Authority
Hawley Area Authority
Hazleton Transit Authority
Hellertown Borough
Authority
Hilltown Township Water &
Sewer Authority
Horsham Township Sewer
Authority
Hughesville-Wolf Township
Joint Municipal Authority
Hyndman Borough Municipal
Authority
Indiana County Conservation
District
Indiana County Solid Waste
Authority
Jackson Township Water
Authority
Jeannette Municipal
Authority
Jefferson Conservation
District
Jenner Area Joint Sewer
Authority
Johnsonburg Municipal
Authority
Juniata County Conservation
District
Kiskiminetas Township
Municipal Authority
Kittanning Suburban Joint
Water Authority
Kulpmont-Marion Heights
JMA
Lancaster City Parking
Authority
Lansford-Coaldale Joint Water
Authority
Lebanon City Authority
Lebanon City Authority (CB)
Lebanon Community Library
Leetsdale Borough Municipal
Authority
Lehigh County Authority
Lehighon Water Authority
Linesville Pine Joint
Municipal Authority
London Grove Township
Municipal Authority
Lower Bucks County Joint
Municipal Authority

Lower Bucks County Joint Municipal Authority Supervisors
 Lower Indiana County Municipal Authority
 Lower Mahanoy Township Municipal Authority
 Lower Providence Township Sewer Authority
 Luzerne Conservation District
 Lycoming Sanitary Committee
 Mahanoy Township Authority
 Mahoning Township Authority
 Maidencreek Township Authority
 Manheim Borough Authority
 Manor Township Joint Municipal Authority
 Mary Meuser Memorial Library
 McKean County Solid Waste Authority
 Mercer County Regional Planning Commission
 Mid Mon Valley Water Authority
 Middlesex Township Municipal Authority
 Middletown Township Sewer Authority
 Mifflin County Regional Police NU
 Mifflintown Municipal Authority
 Milford Water Authority
 Millcreek-Richland Joint Authority
 Millersburg Area Authority
 Mon Valley Sewage Authority
 Monroe County Control Center
 Monroe County Redevelopment Authority
 Montgomery County Sewer Authority
 Montour County Conservation District
 Montrose Municipal Authority
 Moon Township Municipal Authority
 Mount Joy Township Authority
 Mount Pleasant Township Municipal Authority
 Mount Pocono Municipal Authority
 Mt. Jewett Borough Authority
 Mt. Lebanon Parking Authority
 Municipal Authority of the Borough of Matamoras
 Municipal Authority of the Borough of Morrisville
 Municipal Authority of the Borough of Portage Water Department
 Myerstown Community Library Association
 Myerstown Water Authority
 Nanty Glo Sanitary Sewer Authority
 Nanty Glo Water Authority
 Nesquehoning Borough Authority
 New Kensington Municipal Sanitary Authority
 New Kensington Redevelopment Authority
 Newport Borough Water Authority
 Norristown Municipal Waste Authority
 North & South Shenango Joint Municipal Authority
 North Coventry Municipal Authority
 North Huntingdon Township Municipal Authority
 North Middleton Authority
 North Strabane Township Municipal Authority
 Northampton Borough Municipal Authority
 Northampton Borough Municipal Authority (CB)
 Northeastern Regional Police (NU)
 Northern Lancaster County Authority
 Northern York County Regional Police (NU)
 Northwest Regional Lancaster County Police (NU)
 Oil City Housing Authority
 PA League of Cities & Municipalities
 Parks Township Municipal Authority
 Penn Township Sewage Authority
 Pennridge Regional Police (NU)
 Pennridge Waste Treatment Authority
 Perkasio Regional Authority
 Peters Creek Sanitary Authority
 Peters Township Municipal Authority
 Pleasant Hills Authority
 Portage Area Sewer Authority
 Possum Valley Municipal Authority
 Redevelopment Authority in the City of Corry
 Reynoldsville Water Authority
 Riverview Sanitary Authority
 Robesonia-Wernersville Municipal Authority
 Robinson Township Municipal Authority
 Rochester Area Joint Sewer Authority
 Rostraver Township Sewer Authority
 Saxton Borough Municipal Authority
 Seward/St. Clair Township Sanitary Authority
 Shade-Central City Joint Authority
 Shamokin City Redevelopment Authority
 Shannock Valley General Services Authority
 Sharon Sanitary Authority
 Sheffield Township Municipal Authority
 Slippery Rock Municipal Authority
 Smithton Borough Municipal Authority
 Snake Spring Township Authority
 Snyder County Housing Authority
 Somerset Conservation District
 South Fayette Township Municipal Authority
 South Middleton Township Municipal Authority
 Southern Police Commission NU
 Southwest Regional Dispatch Center
 Southwestern PA Water Authority
 Southwestern Regional Police NU
 St. Marys Area Water Authority
 Sunbury Municipal Authority
 Susquehanna Township Authority
 Swatara Township Authority
 Tower City Borough Authority
 Township of Falls Authority
 Tri-County COG IBC
 Tri-County Joint Municipal Authority
 Twin Boroughs Sanitary Authority
 Upper Allegheny Joint Sanitary Authority
 Upper Montgomery Joint Authority
 Upper Southampton Municipal Authority
 Vanport Township Municipal Authority
 Vernon Township Sanitary Authority
 Vernon Township Water Authority
 Warren County Housing Authority
 Warren County Solid Waste Authority
 Warwick Township Municipal Authority
 Washington Area COG
 Washington Township Municipal Authority (Berks County)
 Washington Township Municipal Authority (Fayette County)
 Waterford Borough Municipal Authority
 Wayne County Redevelopment Authority
 Wayne Library Authority
 Wernersville Municipal Authority
 West Carroll Township Water & Sewer Authority
 Western Butler County Authority
 Western Clinton County Municipal Authority
 Western Westmoreland Municipal Authority
 Westmoreland-Fayette Municipal San Authority
 White Run Regional Municipal Authority
 Whitehall Township Authority
 Williamstown Borough Authority
 Womelsdorf-Robeson Joint Authority
 York County Planning Commission



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Fax: 717-783-8363
Website: www.pmr.state.pa.us
Email: ra-staff@pa.gov