# FIRE & POLICE

## EMPLOYEES' RETIREMENT SYSTEM City of Baltimore, Maryland

Join Bi

## **Comprehensive Annual Financial Report**

A Component Unit of the City of Baltimore, Maryland *Year Ended June 30, 2015* 

### **BALTIMORE POLICE DEPARTMENT**

The Baltimore Police Department is the 8th largest municipal police force in the United States, staffed by nearly 4,000 civilian and sworn personnel. The Baltimore Police Department's jurisdiction covers Maryland's largest city, with a population of 641,000.

The preservation of the peace, protection of property and the arrest of offenders has been the goal of Baltimore residents since August 8, 1729, when the legislature created Baltimore Towne. The first attempt to organize a force to guard Baltimore occurred in 1784. Constables were appointed and given police powers to keep the peace.

On March 16, 1853 the state legislature passed a bill, "to provide for the better security for the citizens and property in the City of Baltimore." This statute provided that police officers should be armed and that a badge and commission be furnished each member.

The police department began a modernization program which continues today. In 1885, a call box system was established to provide a means of communications between officers on the street and "the station house." The first patrol wagon went into service on October 25, 1885. A harbor patrol was established in 1885, the traffic division in 1908, and the police academy was established in 1913.

The first radio communications system between patrol vehicles and a central dispatcher went into service on March 4, 1933. The accident investigation unit was established on February 21, 1938, the laboratory division went into operation in June, 1950, and the central records division was created on August 7, 1951.

Other innovations included the inception of the marine unit in 1860 and the mounted patrol unit in 1888. Since then, the deployment of the K-9 unit on March 1, 1956, the merger of the park police with the regular force on January 1, 1961, and the formation of the aviation unit in 1970 have greatly expanded the services of the police department. More recently the Cyber and Electronic Crimes Unit was created as criminals today are more high tech using cell phones, computers, and the internet to commit crimes.

Today Baltimore is divided into nine police districts, which are each headed by a local police station. The police department's jurisdiction encompasses an area of 86.0 square miles: 78.3 square miles of land and 7.7 square miles on waterways. The present headquarters building of the Baltimore Police Department was opened in 1972.

All photographs courtesy of Gino Inocentes, Baltimore Police Department Public Affairs Section, VIDEOUNIT with the exception of the Motorcycle photograph on the Financial Section which is courtesy of Dale Wood.

# FIRE & POLICE

## EMPLOYEES' RETIREMENT SYSTEM *City of Baltimore, Maryland*

Prepared by: N. Anthony Calhoun, Executive Director David A. Randall, Deputy Executive Director Howard I. Mossovitz, Accounting Manager

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## **Comprehensive Annual Financial Report**

A Component Unit of the City of Baltimore, Maryland *Year Ended June 30, 2015* 

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## INTRODUCTORY SECTION





**Government Finance Officers Association** 

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Fire and Police Employees' Retirement System, City of Baltimore

Maryland

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2014

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**Executive Director/CEO** 

### CITY OF BALTIMORE

STEPHANIE RAWLINGS-BLAKE, Mayor



#### FIRE AND POLICE EMPLOYEES' RETIREMENT SYSTEM

N. ANTHONY CALHOUN, Executive Director 7 E. Redwood Street 18th Floor Baltimore, Maryland 21202

November 17, 2015

The Honorable Members of the Board of Trustees Fire and Police Employees' Retirement System Baltimore, Maryland

The Fire and Police Employees' Retirement System of the City of Baltimore (F&P, Plan, System) has just completed fifty-three years of service to the uniformed officers of the Baltimore City Fire and Police Departments. On behalf of the dedicated staff that serves the System's membership, I am pleased to submit the Comprehensive Annual Financial Report of the F&P for the fiscal year ended June 30, 2015. The System's administration is responsible for both the accuracy of the data and the completeness of the presentation, including all disclosures. To the best of my knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the F&P. The F&P is a component unit of the City of Baltimore.

Established July 1, 1962, by City ordinance, the F&P is a defined benefit plan that covers all uniformed officers of the Baltimore City Fire and Police Departments. The Plan also covers certain Maryland Aviation Administration firefighter/paramedics. These State of Maryland employees were grandfathered into F&P plan coverage by State law.

All System-related administrative and benefit provisions are established by City ordinance, as contained in Article 22 of the Baltimore City Code, and may be amended only by the Mayor and City Council. The F&P provides normal service retirement benefits for members who attain the required age and/or service requirements, and now due to plan amendments passed in June 2010, early service retirement benefits. Coverage for line-of-duty disability benefits is immediate upon entry into the System. Disability benefits for non-duty-related injury or illness are provided after the attainment of five years of membership. Line-of-duty death benefits are provided upon membership for any member whose death results from an injury occurring in the actual performance of duty. After one year of System service, members are also covered for non-duty-related death benefits. Members who do not reach normal or early service retirement benefit eligibility remain vested only in their accumulated member contributions and interest credits which are payable to the member upon termination from employment. A Deferred Retirement Option Plan (DROP) is available to members who entered the F&P prior to July 1, 2003, and who attained twenty or more years of service as of December 31, 2009. Members who do not meet the eligibility requirements for DROP may become eligible to participate in DROP 2 that commenced January 1, 2010. More information concerning the benefit provisions, DROP, and DROP 2, can be found in the Summary of Plan Provisions beginning on page 82.

#### **Major Initiatives**

The plan's administration and staff successfully built upon the previous year's implementation of the new Annual Active Member's Statement process by mailing these statements in August which was a month earlier than last year.

The Board of Trustees Fire and Police Employees' Retirement System Baltimore, Maryland

Another major initiative started in 2015 was the payroll conversion. The City Council approved and the Mayor signed legislation that will allow the System to convert its current bi-weekly payroll to a monthly payroll. The plan's administration and staff have begun building the necessary platforms, notifying the membership and running parallel testing. The monthly payroll conversion will be implemented in January 2016 and we expect to save the plan \$430,000 per year.

We implemented phase 1 of a member website portal with the creation of the Active Member Retirement Benefits Estimator. The Active Member Retirement Benefits Estimator provides a simplified calculation that gives members an idea of what their retirement benefit could be should they decide to retire. The next phase of the website portal will expand on this estimator.

Following a review performed by its investment consultant Summit Strategies Group, the Board revised asset allocation to reduce exposure to fixed income investments. In addition, the Board hired eight hedge fund managers as it went from a fund to fund to direct portfolio to reduce fees in order to save the plan money.

#### **Financial Information**

This report has been prepared in accordance with the principles of governmental accounting and reporting promulgated by the Governmental Accounting Standards Board. The accrual basis of accounting is used to record assets, liabilities, revenues, and expenses. Revenues are recorded when earned, regardless of the date of collection. Expenses are recorded when liabilities are incurred, regardless of when payment is made.

Accounting principles generally accepted in the United States require that management provide a narrative introduction, an overview, and an analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The MD&A begins on page 18 immediately following the report of the independent auditor in the Financial Section of this report.

The System's administration is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the F&P are protected from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America. The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived, and that the valuation of costs and benefits requires estimates and judgments by the System's management. Sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and the fair presentation of the financial statements and supporting schedules.

#### Investments

As provided for in the plan provisions, the Board of Trustees is authorized to invest the System's assets and to take appropriate action regarding the investment, management, and custodianship of plan assets. The investment responsibilities of the Board include establishing reasonable investment objectives, developing investment policy guidelines, selecting investment managers, and evaluating performance results to assure adherence to guidelines and the achievement of objectives.

Due to the unresolved lawsuit (see "Litigation" below) filed by the fire and police unions against

#### The Board of Trustees Fire and Police Employees' Retirement System Baltimore, Maryland

the City because of changes made to the plan provisions for current members and retirees, the Board continued investment of the "managed" investment portfolio according to its general asset allocation plan and separate investment of the "dedicated variable benefit" portfolio invested in U.S. Treasury and high quality corporate fixed income securities. The "managed" portfolio returned an above median 2.3% which ranked this F&P portfolio in the 79<sup>th</sup> percentile of the BNY Mellon All Public Plans Total Fund universe at June 30, 2015. The three year, five year, and ten year performance numbers for the "managed" portfolio were 10.5% which ranked in the 59<sup>th</sup> percentile, 11.3% which ranked in the 39<sup>th</sup> percentile.

The "dedicated variable benefit" fixed income portfolios returned 3.6% for fiscal year 2015. The dedicated portfolios have a significant weight to U.S. Treasuries and high quality corporate bonds. The performance is indicative of very low interest rates. When performance of the "dedicated" portfolio is combined with the "managed" portfolio performance, the F&P total fund composite returned 2.5%. The "dedicated variable benefit" fixed income portfolios positively influenced the overall portfolio composite performance for the seven year period as the "dedicated" portfolios avoided the volatility of the equity and real estate markets. In addition, for fiscal year 2015, the "dedicated" portfolio improved the overall performance from 2.3% to 2.5%. However, the "dedicated" portfolio dragged the overall performance for the three, five, and ten year periods.

#### **Plan Funding**

In fiscal year 1996, the System's funding method was modified by legislation that established actuarial reserves in which "excess unallocated earnings" (gains and losses) were accumulated each year separate from the reserves maintained for funding purposes. The accumulated gains and losses were shared by the City and the members according to a formula in the provisions. Specific reserved investment gains could be utilized by the City to reduce or eliminate its required contributions to the F&P. Similarly, the membership could elect to utilize specific reserves to improve benefits. For the first several years, gains were accumulated and were utilized by the City to take contribution reductions and by the membership to "purchase" benefit improvements. Beginning with fiscal year 2001 and through fiscal year 2003, losses were accumulated in the separate reserves due to the extraordinary downturn in the global equity markets. At June 30, 2005, net losses of \$412.8 million were accumulated. The legislation that established the separate actuarial reserves had a June 30, 2005, sunset provision which required the Board of Trustees to apply the accumulated losses in accordance with an "appropriate asset valuation method." This caveat effectively removed the members from the sharing of the remaining losses, which then became the responsibility of the Plan and the City. With the June 30, 2006 actuarial valuation, a ten-year amortization period was employed for the release of the accumulated losses to the actuarial value of assets and was made retroactive to the June 30, 2005 valuation.

As of June 30, 2015, the date of the F&P's last actuarial valuation, the System's funded ratio was 72.8% on an actuarial value of assets basis, compared to a 74.2% actuarial value basis at June 30, 2014. As of June 30, 2015, the market funded ratio is 69.7%, compared to a 74.2% market funded ratio at June 30, 2014. As required by GASB 67, the market funding ratio is calculated using the Entry Age Normal cost method. In prior years, the Projected Unit Credit method of funding was used, however, beginning this fiscal year, the methods of funding are the Entry Age Normal cost method. The required supplementary information that follows immediately after the notes to the basic financial statements provides new information and schedules due to the GASB 67 implementation. The schedules on page 42 show the changes in net pension liability and related ratios as well as the schedule of investment return. These schedules will have two years of information as of June 30, 2015, but eventually will build up to ten years of information. Also provided is the schedule of required contributions made by the employer.

As a result of the actuarial valuation performed for the fiscal year ended June 30, 2013, a total City and State contribution due to the F&P for fiscal year 2015 was \$119.0 million.

#### Litigation

In 2010, the police and fire unions, several plan participants and beneficiaries filed suit against the City of Baltimore and the F&P Board of Trustees in the United States District Court. The suit alleged that the City impaired the contract between the members and the City with the enactment of Ordinance 10-306 in 2010 and failed to adequately fund the System. The Plaintiffs also alleged that the F&P's Board of Trustees acted improperly in the pursuit of its duties. Following a trial, the judge ruled in 2012 that the changes related to the post-retirement benefit increase provisions were unconstitutional. The parties appealed and, on August 6, 2014, the Fourth Circuit overturned the 2012 ruling, concluding that the Ordinance did not impair the federal constitutional rights of F&P members because they could have contested the Ordinance under State law. Prior to the appeal, the Plaintiffs had voluntarily dismissed the claims against the Board, without prejudice. The Fourth Circuit also remanded the case to the District Court to reconsider the "Takings Clause" issue. The District Court has invited the Plaintiffs have not filed an amended complaint which may include claims under State law; to date, the Plaintiffs have not filed an amended complaint. Barring a future court order to the contrary, F&P will continue to administer the F&P plan as amended by Ordinance 10-306. See note 11 of the Notes to Basic Financial Statements on page 39 for more information.

#### **Independent Audit**

The Baltimore City Code stipulates that the Board of Estimates shall select an independent auditor for the F&P and that the auditor shall report their findings annually to the Board of Estimates and to the Board of Trustees. The Board of Estimates elected to have CliftonLarsonAllen render an opinion on the System's financial statements. The auditor's report is contained in the Financial Section of this report.

#### **Professional Services**

The Board of Trustees appoints consultants and investment managers subject to approval by the City's policy making and approval body, the Board of Estimates. These professionals have been chosen based on their ability to provide services that are essential to the effective and efficient operation of the System. All of the professionals who provide service to the Board of Trustees are listed in the Introductory Section on page 14 and in the Investment Section on pages 62 to 65.

#### **Certificate of Achievement**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Fire and Police Employees' Retirement System, City of Baltimore, Maryland for its comprehensive annual financial report for the fiscal year ended June 30, 2014. This was the thirty-second consecutive year (fiscal years 1983-2014) that the F&P has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both accounting principles generally accepted in the United States and applicable legal requirements.

#### The Board of Trustees Fire and Police Employees' Retirement System Baltimore, Maryland

A Certificate of Achievement is valid for a period of one year only. I believe that this current report continues to meet the Certificate of Achievement Program requirements. I am submitting it to the GFOA to determine its eligibility for another certificate.

#### Acknowledgments

The preparation of this report could not be accomplished without the dedicated efforts of the System's accounting and communication support staff, investment consultant, and actuarial consultant. I would like to express my appreciation to all who assisted and contributed to its preparation.

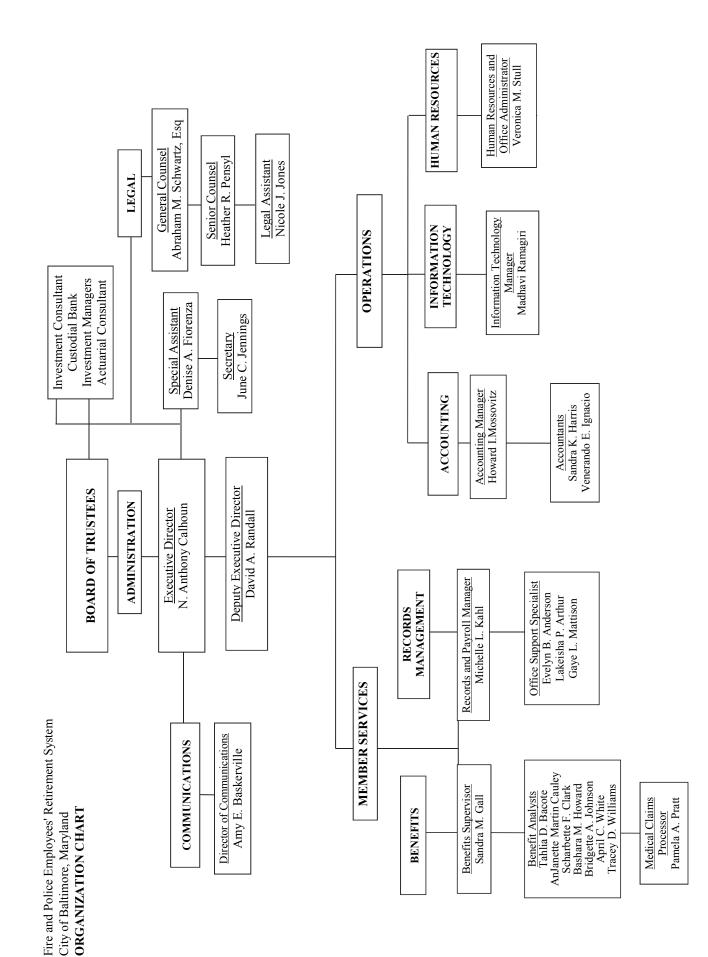
This report is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship for the assets contributed by the members and the City of Baltimore.

This report is being forwarded to the Mayor, the President of the City Council, the Comptroller, and other members of the Board of Estimates, to all members of the City Council, and to the Fire and Police Departments so that all members of the F&P will have the opportunity to review it. Hopefully, the administration of the City and the membership of the System will find this report both informative and helpful.

I would like to take this opportunity to express my gratitude to the Board of Trustees, the dedicated F&P staff, the System's consultants, investment managers and advisors, all of whom continue to work diligently to assure the successful operation of the System.

Respectfully submitted,

N. Anthony Calhoun Executive Director



#### Fire and Police Employees' Retirement System City of Baltimore, Maryland **BOARD OF TRUSTEES**

Peter E. Keith, Esquire, Chairman Partner Gallagher, Evelius & Jones, LLP Baltimore, Maryland

William R. Hudson, Vice Chairman Captain Baltimore City Fire Department

Joan M. Pratt, CPA Comptroller City of Baltimore

Henry J. Raymond Director of Finance City of Baltimore

Darryl DeSousa Deputy Commissioner Baltimore Police Department

Joe Wade Deputy Chief Baltimore City Fire Department

Frank B. Coakley Assistant Secretary, Retired MD Department of Housing & Community Development

Benjamin F. DuBose, Jr. IRS Agent, Retired U.S. Department of Treasury

Victor C. Gearhart Lieutenant Baltimore Police Department

Paul S. DeSimone Lieutenant, Retired Baltimore City Fire Department

Robert A. Haukdal Lieutenant, Retired Baltimore Police Department Appointed by the Mayor Term expires December 6, 2015 Member of the Investment Committee

Elected by the active Fire Department members Term expires June 30, 2018 Member of the Investment Committee

Ex-officio

Ex-officio Member of Investment Committee

Ex-officio Appointed by Police Commissioner Kevin Davis

Ex-officio Appointed by Fire Chief Niles Ford

Appointed by the Mayor Term expires December 6, 2015

Appointed by the Mayor Term expires December 6, 2015

Elected by the active Police Department members Term expires June 30, 2016 Member of the Investment Committee

Elected by the retired Fire Department members Term expires June 30, 2018

Elected by the retired Police Department members Term expires June 30, 2016

The Board Chairman, Vice-Chairman, and members of the Investment Committee are elected by the members of the Board of Trustees. The ex-officio members to the Board are the City Comptroller, the Director of Finance, the Police Commissioner and the Fire Chief, all of whom may appoint a Deputy to represent her or him on the Board. Trustees appointed by the Mayor serve terms concurrent with the Mayor's term. Appointed Trustees continue to serve until replaced by the Mayor, or until the expiration of two consecutive full terms. Elected active and retired member Trustees serve four-year terms. There are no term limits for Trustees elected by the active or retired members.

#### CITY OF BALTIMORE STEPHANIE RAWLINGS-BLAKE, Mayor



#### FIRE AND POLICE EMPLOYEES' RETIREMENT SYSTEM

N. ANTHONY CALHOUN, Executive Director 7 E. Redwood Street 18th Floor Baltimore, Maryland 21202

November 3, 2015

To All Members, Retirees, and Beneficiaries Fire and Police Employees' Retirement System Baltimore, Maryland

This comprehensive financial report covers the fiscal year ending June 30, 2015.

The past year has been a very challenging one for the F&P. Maintaining solid funding for local government pensions is a complicated task because of volatile financial markets, reduced government budgets, limited salary increases for active employees, reduced number of active employees contributing to retirement systems, larger numbers of retirees, and longer lifespans for retirees. For example, over the past year, the number of active F&P members decreased 1.6%, from 4,317 to 4,248, while our number of retirees remained the same. Many cities and states are grappling with chronically-underfunded pension systems and have cut pension benefits.

During the fiscal year ending June 30, 2015, the City contributed \$118.2 million to the F&P, the largest annual sum ever contributed. The annual City contribution will continue to be substantial. The City's contribution is expected to be \$120.3 million for FY 2016 and \$128.2 million for FY 2017. Our primary goal is to make our plan fully-funded, with 100% funding projected to occur in 2039, so that our Members, Retirees and Beneficiaries will continue to receive their full benefits in the years to come.

Unfortunately, the past year was a very weak one financially. Our investments earned 2.3% on a market value basis, significantly below our assumed rate of return of 7.5%. We cannot expect to have the same high investment returns, for example, that we had in FY 2014 (16.5%). Recognizing this, during the year the Board voted to decrease the investment return assumption from 7.75% to 7.5%, in response to market conditions. This will require greater City contributions going forward and help assure that our plan continues to progress to full funding. The System's funded ratio on an actuarial value of assets basis decreased from 74.2% in FY 2014 to 72.8% in FY 2015, due to weak investment performance.

Our Executive Director, Mr. N. Anthony Calhoun; our Deputy Executive Director, Mr. David A. Randall; and the F&P staff continued throughout the year to look for ways to improve service to you. Our annual statements were issued earlier this year than ever before. Members now receive a monthly instead of a bi-weekly benefit payment, due to a payroll conversion adopted this year that results in annual savings of over \$400,000 for our Members. Record-keeping and technological improvements will continue to be implemented. I encourage you to visit the website for the F&P at <u>www.bcfpers.org</u>, where you will find useful information about the F&P and your retirement, including the useful new Active Member Benefits Estimator to help you calculate your future benefits.

You may be assured that the F&P Board of Trustees and the F&P staff will continue to do our best to protect the financial sustainability of the System for all active and retired Members. On behalf of

To All Members, Retirees, and Beneficiaries Fire and Police Employees' Retirement System Baltimore, Maryland November 3, 2015 Page 2

the F&P staff and the Board of Trustees, we appreciate your dedicated service to the City and the privilege of serving you.

Sincerely,

Peter E. Keith, Esq.

Peter E. Keith, Esq. Chairman Board of Trustees

#### LEGAL COUNSEL

Law Department City of Baltimore George Nilson, Esq.

#### **GENERAL COUNSEL**

Fire and Police Employees' Retirement System City of Baltimore Abraham M. Schwartz, Esq.

#### ACTUARY

Cheiron Fiona E. Liston, F.S.A. McLean, Virginia

#### **INDEPENDENT AUDITOR**

CliftonLarsonAllen Timonium, Maryland

See pages 62 to 65 in the Investment Section for a list of investment professionals.

## FINANCIAL SECTION





CliftonLarsonAllen LLP www.CLAconnect.com

#### Independent Auditors' Report

The Honorable Joan M. Pratt, Comptroller, Other Members of the Board of Estimates of the City of Baltimore and the Board of Trustees of the Fire and Police Employees' Retirement System Baltimore, Maryland

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

We have audited the accompanying financial statements of the Fire and Police Employees' Retirement System of the City of Baltimore (the System), which comprise the statement of plan net position as of June 30, 2015, and the related statement of changes in plan net position for the year 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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2015, and the respective changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Emphasis of Matter**

The financial statements include alternative investments valued at \$685 million (28% percent of net position), and as explained in Note 2, their fair values have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or the general partners.



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#### **Other Matters**

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in net pension liability and related ratios, investment returns and employer contributions and related notes, 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 audit 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.

#### Other Information

Our audit was conducted for the purpose of forming an opinion on the System's financial statements. The schedules of administrative expenses, investment expenses and payments to consultants, 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 schedules of administrative expenses, investment expenses and payments to consultants 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 audit 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 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 schedules of administrative expenses, investment expenses and payments to consultants are fairly stated, in all material respects, in relation to the financial statements as a whole.

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

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 16, 2015 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting over financial reporting the System's internal control over financial control over financial standards in considering the System's internal control over financial reporting and compliance.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland November 16, 2015

#### Fire and Police Employees' Retirement System City of Baltimore, Maryland MANAGEMENT'S DISCUSSION AND ANALYSIS

The following overview and analysis of the financial activities of the Fire and Police Employees' Retirement System (F&P, Plan, System) is provided for the fiscal year ended June 30, 2015. Readers are encouraged to consider the information presented here in conjunction with additional information furnished in the Transmittal Letter, which begins on page 5 of this report.

#### **Financial Summary**

- The net position restricted for pension benefits decreased by \$26.0 million during the fiscal year from \$2,492.5 million at June 30, 2014, to \$2,466.5 million at June 30, 2015. The decrease was mainly due to the fiscal year 2015 relative underperformance across the entire portfolio.
- Additions to Net Position (Revenues) for the year were \$203.3 million, a decrease of \$253.3 million from the prior year revenues of \$456.6 million. The decrease in revenues was caused by lower investment earnings that were uniformly down across all asset classes, except for the alternative investment classes, for fiscal year 2015.
- Deductions from Net Position (Expenses) were \$229.2 million in the current year, an increase of \$3.9 million from the prior year expenses of \$225.3 million. The increase in expenses was driven by post-retirement benefit increases, effective January 2015, by increased retirement allowance payments, and by increased administrative expenses.
- The "managed" investment portfolio total rate of return of 2.3% (which excludes performance of the dedicated variable benefit assets) for the one year period ended June 30, 2015, was at the System's total fund policy index of 2.3% and was below the median public fund performance of 3.5%.
- The "managed" portfolio performance for the three year period ended June 30, 2015, was 10.5% which was slightly above the System's total fund policy index of 10.2% and was slightly below the median public plan performance of 10.9%.
- The System's real estate portfolio composite performance was a strong return of 17.0% for fiscal year 2015. The real estate composite outperformed the NCREIF Property Index and provided top quartile relative performance.
- The energy master limited partnership (MLP) portfolio composite lagged due to the oil market downturn by providing a return of negative 10.9% for fiscal year 2015. The energy MLP composite outperformed the S&P MLP Index by 5.6%.
- The U.S. equity composite provided a 7.2% rate of return which ranked slightly above the median 7.0% rate of return for the BNY Mellon All Master Trust – U.S. Equity Segment universe.
- The international equity composite provided a negative 2.2% rate of return which outperformed the MSCI All Country World Ex-U.S. Index by 3.1%.
- The System's "managed" fixed income composite portfolio earned negative 2.6% and performed below the 1.6% median portfolio performance of the BNY Mellon All Master Trust U.S. Fixed Income Segment universe.
- The System's private equity fund-of-funds portfolio composite and the hedge fund-of-funds portfolio composite provided returns of 12.4% and 6.0%, respectively, for fiscal year 2015.
- The assets dedicated to the "variable benefit" post-retirement benefit increases remained segregated from the "managed" portfolio and were separately invested in "dedicated" fixed income portfolios which returned 3.7% for fiscal year 2015.
- Including the separately invested dedicated "variable benefit" fixed income portfolio performance of 3.7% with the composite "managed" investment portfolio total rate of return of 2.3% provided a total fund composite rate of return of 2.5% for the fiscal year ended June 30, 2015. The combined performance placed the F&P in the 75<sup>th</sup> percentile of the BNY Mellon Public Fund Total Fund universe.

#### Fire and Police Employees' Retirement System City of Baltimore, Maryland MANAGEMENT'S DISCUSSION AND ANALYSIS

- Employer contributions made to the F&P were \$119.0 million in fiscal year 2015, up from the employer contribution made in fiscal year 2014.
- Member contributions to the F&P increased by \$2.1 million in fiscal year 2015 due to an increase in member's covered payroll.
- The F&P's funding objective is to meet benefit obligations through investment income, employer contributions, and member contributions. The earnings assumption rate for FY 2015 was 7.5%.
- As of June 30, 2015, the date of the F&P's last actuarial valuation, the System's funded ratio is 72.8% on an actuarial value of assets basis, compared to 74.2% at June 30, 2014. The System's Plan Fiduciary Net Position as a percentage of the Total Pension Liability at June 30, 2015 is 69.7% compared to 74.2% at June 30, 2014. Both ratios are calculated using the Entry Age Normal cost method.
- Capital assets are recorded at cost, net of depreciation, and include leasehold improvements, computer equipment, and office furniture.

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

The following discussion and analysis are intended to serve as an introduction to the F&P financial statements and the Financial Section of this report. The statements and the notes are in conformity with accounting principles generally accepted in the United States. These principles require certain financial statement presentations and disclosures including the use of the accrual basis of accounting to record assets and liabilities, and revenues and expenses.

The **Statement of Plan Net Position** provides a snapshot of the financial position of the F&P at June 30, 2015, the end of the plan's financial year. It indicates the total assets, current liabilities, and the net assets available for future payment of retirement benefits and operating expenditures at June 30, 2015. The assets comprise cash and cash equivalents, which are fixed income instruments with a maturity date of three months or less; receivables, which are primarily from investment activity; investments at fair value; securities lending collateral; and capital assets, which includes leasehold improvements, computer equipment, and office furniture. Securities traded on national or international exchanges are valued at the last reported sale price at current exchange rates. Purchases and sales of investments are recorded on a trade date basis. The current liabilities comprise of payables for securities lending collateral, certain investment activity, retirement benefits, lump sums payable to members, and administrative expenses.

The **Statement of Changes in Plan Net Position** summarizes the F&P financial activities that occurred during the plan's fiscal year from July 1, 2014, through June 30, 2015. Employer contributions are recognized when a formal commitment has been made by the employer to provide the contributions. Member contributions are recognized in the period in which the contributions are due. The net appreciation (depreciation) in fair value of investments consists of the realized gains or losses and the unrealized increase or decrease in fair value of investments during the year. Realized gains and losses on sales of investments are computed based on the difference between the sales price and the original cost of the investment sold. Realized gains and losses on investments that had been held in more than one fiscal year and sold in the current fiscal year were included as a change in the fair value of investments reported in the prior year(s) and the current year. Unrealized increase or decrease is computed based on changes in the fair value of investments between years. Security transactions are accounted for on a trade date basis. Interest income is recognized when earned and dividend income is recorded on the ex-dividend date. Retirement benefits and refunds are recognized when due and payable in accordance with the terms of the plan provisions.

The **Notes to Basic Financial Statements** provide additional information that is essential to a full understanding of the data provided in 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** that follows immediately after the notes to the basic financial statements provides information and schedules required by GASB 67. The schedules on page 42 show the changes in net pension liability and related ratios as well as the schedule of investment return. Also provided is the schedule of required contributions made by the employer. See the Required Supplementary Information beginning on page 41 of this report.

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

#### **Financial Analysis**

The examination of plan net position over time may serve as a useful indicator of the financial position of the F&P. At June 30, 2015, net position, as displayed below, exceeded current liabilities by \$2.5 billion, a decrease of \$26.0 million over the prior year. Prior to the passage of Ordinance 10-306 of June 2010, it was mandated that the total assets of two reserves, the Paid-Up Benefit Reserve and the Contingency Reserve, were to be segregated and separately invested from the general plan assets. As required, the assets of these two reserves were dedicated to the payment of certain post-retirement benefit increases. With the passage of Ordinance 10-306, the assets of the two aforementioned reserves are to be included in the general asset pool as there is no longer a requirement to maintain those reserves and invest those assets separately. However, the Board of Trustees approved maintaining the separate investment and management of those assets until resolution of the lawsuit brought by the member unions against the City and the Board of Trustees. The net position of the separately invested dedicated reserves totaled \$472.4 million at June 30, 2015. The remaining net position of \$1,994.1 million at June 30, 2015, is available to meet the ongoing regular benefit obligations to the F&P participants and beneficiaries. As of June 30, 2015, total assets decreased by 1.8% from the prior year mainly due to a decrease in investments at fair value. Total current liabilities were lower at June 30, 2015, from the prior fiscal year, mainly due to a decrease in securities lending collateral payable and investments purchased liabilities.

				Percentage
	2015	2014	Increase	Change
Current assets	\$ 88,643,162	\$ 68,364,825	\$ 20,278,337	29.7%
Capital assets	936,114	1,047,592	(111,478)	(10.6)
Investments at fair value	2,474,851,888	2,542,820,400	(67,968,512)	(2.7)
Total Assets	2,564,431,164	2,612,232,817	(47,801,653)	(1.8)
Current liabilities	97,854,462	119,688,418	(21,833,956)	(18.2)
Total Liabilities	97,854,462	119,688,418	(21,833,956)	(18.2)
Net Position	<u>\$ 2,466,576,702</u>	<u>\$ 2,492,544,399</u>	<u>\$ (25,967,697)</u>	(1.0)%

#### Plan Net Position For the Fiscal Years ended June 30, 2015 and 2014

#### Fire and Police Employees' Retirement System City of Baltimore, Maryland MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **Investment Assets**

The F&P's total investment portfolio is comprised of two distinct portfolios, the "managed" asset portfolio which is diversified across the Board's general asset allocation and the "dedicated" portfolio which is invested to cover the liabilities of the "variable benefit" post-retirement benefit increase provisions. The "managed" asset portfolio is invested in domestic and foreign fixed income, domestic and international equities, real estate limited partnerships, hedge fund-of-funds, private equity fund-of-funds, energy master limited partnerships, and a risk parity fund. All assets are managed by external investment management firms selected by the Board of Trustees and approved by the City's policy making body, the Board of Estimates. BNY Mellon Asset Servicing, the F&P's custodian bank, holds in custody all marketable securities except securities held in commingled management accounts, hedge fund-of-funds, private equity fund-of-funds, and the assets held by the real estate portfolios. The System participates in a securities lending program that is managed by BNY Mellon Asset Servicing. The Board of Trustees retains the services of the Summit Strategies Group, an investment consulting services firm that provides investment allocation advice, manager selection, manager and portfolio performance calculations and peer comparisons, performance analytics, asset-liability studies, and other related services. As the result of an asset-liability study concluded in fiscal year 2011, the Board expanded its investment opportunity set to include target allocations for risk parity, emerging market debt, and private energy/natural resource investments. With the assistance of the Summit Strategies Group, the Board filled its risk parity and emerging market debt allocation targets, as well as hedge fund-of-fund and private equity fund-of-fund targets, and restructured the core fixed income portfolio and the large cap growth equity portfolio.

The dedicated "variable benefits" portfolios totaled \$472.5 million as of June 30, 2015, were separately invested from the Board's asset allocation targets and are managed in fixed income portfolios dedicated to immunize certain post-retirement increase liabilities. The Board's policy was to invest the dedicated assets in fixed income securities that are managed to match the payout streams of the "variable benefit" post-retirement increases. These benefit increases were not guaranteed by the City and the Board chose to immunize those benefit payments with fixed income securities to assure their continuation. Since the "dedicated" portfolio was managed to immunize the benefit liabilities and was not managed to the Board's general asset allocation, the fiscal year 2015 rate of return of 3.7% for the "variable benefit" assets is not included in the rates of return disclosed elsewhere in this report. However, the "dedicated" assets are included and reported in the System's financial statements along with the "managed" assets.

All investments are stated at fair value and include the recognition of unrealized gains and losses in the current period. The rate of return on total "managed" assets for the year ended June 30, 2015, was 2.3%. The median public plan performance was 3.5%. The "managed" portfolio annualized rates of return for the last three-year, five-year, and ten-year periods ended June 30, 2015, were 10.5%, 11.3%, and 6.7%, respectively.

The Board has diversified the "managed" assets across multiple classes and strategies as it seeks to maximize investment opportunities and return at an acceptable level of investment risk. However, as evidenced by the variation in rates of return from year to year, the Board's investment allocation plan is not immune to market volatility. The F&P's long-term actuarial investment return assumption was 7.5% for fiscal year 2015, as the result of an actuarial experience study concluded subsequent to year end, and as recommended and adopted by the Mayor and City Council.

Beginning on page 49 of this report, the Investment Section gives detailed information on the F&P investment policies. See page 58 for the comparison of the "managed" asset allocation targets established by the Board of Trustees to the actual asset allocation at June 30, 2015.

#### Liabilities

Reported on the Statement of Plan Net Position, the current liabilities are payables incurred mainly from investment portfolio transaction activity. Liabilities at June 30, 2015, were \$97.9 million, \$21.8 million less than the \$119.7 million in liabilities at June 30, 2014. While payables for the settlement of investment purchases decreased \$1.5 million to \$7.0 million, and forward foreign contracts payable decreased \$3.5 million to \$2.8 million at June 30, 2015, the securities lending collateral payable also decreased by \$20.7 million from \$93.2 million at June 30, 2014, to \$72.5 million at June 30, 2015, and served as a reason for the overall decrease in current liabilities at June 30, 2015.

	2015	2014	(Decrease)
Additions			
Net investment income	\$ 53,442,809	\$ 313,953,904	\$ (260,511,095)
Employer contributions	119,020,291	113,843,250	5,177,041
Member contributions	30,341,796	28,265,556	2,076,240
Net securities lending income	459,490	495,366	(35,876)
Total Additions	203,264,386	456,558,076	(253,293,690)
Deductions			
Retirement allowances	210,318,274	205,591,968	4,726,306
Lump sum DROP payments	11,477,573	12,373,388	(895,815)
Administrative expenses	4,297,773	3,907,539	390,234
Refunds of member contributions	2,796,110	3,129,650	(333,540)
Death benefits	342,353	344,230	(1,877)
Total Deductions	229,232,083	225,346,775	3,885,308
Net Increase (Decrease)	<u>\$ (25,967,697)</u>	<u>\$ 231,211,301</u>	<u>\$ (257,178,998)</u>

#### Changes in Plan Net Position For the Fiscal Years Ended June 30, 2015 and 2014

Increase

#### **Investment Income**

The F&P's total "managed" composite portfolio achieved a 2.3% rate of return which ranked the F&P "managed" asset performance in the 79<sup>th</sup> percentile when compared to other public pension plans in the BNY Mellon Public Fund–Total Fund universe. Weak performance across the entire portfolio was major contributors to the overall declining rate of return.

The System's U.S. equity composite returned 7.2% for fiscal year 2015, which ranked the domestic equity composite in the  $47^{\text{th}}$  percentile of the BNY Mellon All Master Trust – U.S. Equity Segment universe. The domestic equity composite underperformed its Russell 3000 comparative index by 14 basis points.

The international equity composite posted a negative 2.2% rate of return which ranked in the 44<sup>th</sup> percentile of the BNY Mellon All Master Trust – International Equity Segment universe. The international equity composite outperformed its MSCI All Country World Ex-U.S. comparative index by 310 basis points.

The "managed" fixed income composite earned negative 2.6% for the fiscal year which ranked in the 99<sup>th</sup> percentile of the BNY Mellon All Master Trust – U.S. Fixed Income Segment universe. The fixed income portfolio underperformed its Barclays Capital Aggregate index benchmark of 1.6% by 420 basis points.

The real estate composite portfolio continued to earn good rates of return with performance of a strong 17.0% for the fiscal year. The real estate portfolio continued its recovery from the 2008-2009 liquidity crisis, as it outperformed the comparative NCREIF Property Index, which returned 13.0% this fiscal year, by 400 basis points.

#### Fire and Police Employees' Retirement System City of Baltimore, Maryland MANAGEMENT'S DISCUSSION AND ANALYSIS

The System's alternative asset portfolios, hedge fund-of-funds, and private equity fund-of-funds, had positive performance. The hedge fund-of-funds composite earned 6.0%, and performed 200 basis points above its comparative HFRI Fund-of-Funds Composite Index that provided a 4.0% for the fiscal year ended June 30, 2015. The hedge fund-of-funds composite portfolio is expected to provide investment returns which, over a market cycle, generally are greater than bonds and less than stocks, but with less volatility than that of stocks and more like that of fixed income investments.

The System invests in various private equity fund-of-funds. The private equity composite achieved a 12.5% return for the fiscal year and outperformed the S&P 500 Index performance of 7.4% for the same time period. The private equity portfolio funds are diversified by strategy and vintage year; and many of underlying investments are still very young in their investment lifecycle. The goal of the private equity portfolio is to outperform the S&P 500 index over a market cycle. The private equity composite is reviewed over rolling three and five year periods and the composite performance have slightly underperformed the index over the last five year period.

For the year ended June 30, 2015, the MLPs composite was a drag on performance with a negative 11.0% rate of return, but exceeded the S&P MLP Index by 5.6%. The MLPs are expected to have low correlation to other asset classes which makes them a good diversifier for overall portfolio performance. Over time, the Board expects the MLPs to continue to outperform the domestic equity composite with lower risk.

Risk parity managers invest in a diversified portfolio with more exposure in bonds, commodities, credit, and less in stocks. The asset allocation is driven by forecasting risk and not forecasting return. The risk parity portfolio is expected to outperform a portfolio composition of 60% S&P 500 Index/ 40% Barclays Aggregate Index. For the year ended June 30, 2015, the risk parity portfolio returned negative 4.3%, and underperformed the comparative index by 10%.

The "dedicated" fixed income "variable benefit" portfolios, which the Board agreed to continue to separately invest from the general plan assets while the unions' lawsuit against the City and the Board remains unresolved, were invested in U.S. Treasury securities and high grade corporate bonds. The "dedicated" portfolio composite returned 3.7% for the year. While the "dedicated" composite portfolio is not benchmarked to any specific index, it underperformed the Barclays Capital U.S. Long Government/Credit index, which returned 1.7%. The cash flow of the dedicated portfolios is matched to the benefit payment streams of the post-retirement "variable benefit" increases.

The investment income is reduced by investment expenses which include the fees paid to firms hired by the Board to manage the System's assets, the Board's investment consulting firm, and the System's custodian bank which tracks the investment activity of the F&P's investment managers, values the System's assets, and provides accounting reports to System staff and the Board's investment consultant. Investment expenses decreased from \$8.1 million in fiscal year 2014 to \$7.3 million in fiscal year 2015.

#### **Member and Employer Contributions**

Member contributions were made at 10.0% of regular compensation during fiscal year 2015. Member contributions increased by \$2.1 million during the current fiscal year, due to the increase in the regular salaries of the active members. Overtime pay is not subject to the mandatory member contribution rate and it is not included in the member's average final compensation calculation. The number of active members decreased slightly from 4,317 at June 30, 2014, to 4,248 at June 30, 2015. Should the active member population remain stable, member contributions are expected to continue to increase, in conjunction with increased salaries.

Employer contributions requirements are determined by the results of an actuarial valuation process which is performed following the end of each fiscal year. The valuation results determine the contribution requirements due on July 1 two fiscal years hence. The employer contribution is comprised of the contribution made by the City of Baltimore and the contribution made by the State of Maryland for a small fixed number of State employees whose F&P coverage is mandated by State law. The contribution required from the City of Baltimore for fiscal year 2015 was \$118.2 million.

The City's employer contribution requirement will increase to \$120.3 million for fiscal year 2016 and to \$128.8 million for fiscal year 2017, the later mainly due to the increase in the unfunded actuarial liability.

#### Fire and Police Employees' Retirement System City of Baltimore, Maryland MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **Retirement Benefits and Administrative Expenses**

The F&P was created to provide lifetime service retirement and permanent disability retirement benefits for eligible members and survivor benefits and death benefits to eligible beneficiaries. The cost of such programs includes recurring retirement benefit payments, post-retirement benefit increases, lump-sum payments to Deferred Retirement Option Plan (DROP and DROP 2) participants, lump sum death benefits, refunds of accumulated member contributions and interest to non-retirement eligible members who leave F&P covered employment, and the costs of administering the System.

The primary expense during fiscal year 2015 was for the payment of continuing retirement benefits totaling \$210.3 million, an increase of \$4.7 million over the \$205.6 million in retirement allowances paid in fiscal year 2014. The increase in retirement allowances was mainly due to higher benefit levels paid to newly retired members, post-retirement increases, and minimum benefit amounts paid to certain beneficiaries.

Lump sum DROP and DROP 2 distributions decreased \$0.9 million from \$12.4 million in fiscal year 2014 to \$11.5 million in fiscal year 2015 due to a slight decrease in the number of DROP and DROP 2 participant service retirements. The number of DROP participants continues to decrease as the eligibility for DROP was frozen in 2009. DROP 2 became effective January 1, 2010; the number of DROP 2 participants continues to increase.

Administrative expenses are comprised primarily of personnel costs and other professional services costs including information technology consultants. Administrative expenses increased by \$390,234 from fiscal year 2014 to fiscal year 2015. The increase in administrative expenses was mainly due to increased technology cost created by our new document imaging system. The cost of processing the retirement payroll has significantly increased as well. Leasehold improvements and office furniture are depreciated on a straight-line basis over 15 years. Computer equipment is depreciated on a straight-line basis over a five year useful life.

#### Litigation

In 2010, the fire and police unions filed suit against the City of Baltimore and the F&P Board of Trustees in the United States District Court. The suit alleged that the City impaired the contract between the members and the City with the enactment of Ordinance 10-306 in 2010 and failed to adequately fund the System. The Plaintiffs also alleged that the F&P's Board of Trustees acted improperly in the pursuit of its duties. Following a trial, the judge ruled in 2012 that the changes related to the post-retirement benefit increase provisions were unconstitutional. On August 6, 2014, the Fourth Circuit overturned the 2012 ruling, concluding that the Ordinance did not impair the federal constitutional rights of F&P members because they could have contested the Ordinance under State law. The Fourth Circuit also remanded the case to the District Court to reconsider the federal "Takings Clause" issue. Barring a future court order to the contrary, F&P will continue to administer the F&P plan as amended by Ordinance 10-306. See Note 11 to financial statements on page 39 for more information.

#### **Requests for Information**

This report is designed to provide a general overview of the F&P's financial activity. Questions concerning information provided in this report or requests for additional financial information should be addressed to:

N. Anthony Calhoun Executive Director Fire and Police Employees' Retirement System 7 East Redwood Street, 19<sup>th</sup> Floor Baltimore, Maryland 21202 Fire and Police Employees' Retirement System City of Baltimore, Maryland **STATEMENT OF PLAN NET POSITION** June 30, 2015

Assets Cash and Cash Equivalents		\$	66,326,443
Receivables			
Accrued income	\$ 13,065,535		
Investments sold	6,496,790		
Forward foreign contracts	2,753,163		
Receivable - members	1,231		
Total Receivables			22,316,719
Investments, at fair value			
Stocks	930,020,502		
Bonds	787,092,854		
Real estate funds	214,812,389		
Hedge funds	207,333,843		
Private equity funds	164,495,449		
Risk parity fund	98,568,257		
Total Investments		2	,402,323,294
Capital Assets, net of depreciation			
Leasehold improvements	460,880		
Computer equipment	337,897		
Office furniture	137,337		
Total Capital Assets, net of depreciation			936,114
Securities Lending Collateral			72,528,594
Total Assets		_2	2,564,431,164
Liabilities			
Securities lending collateral	72,528,594		
Investments purchased	7,029,387		
Retirement allowances payable	6,968,834		
Lump sums payable to members	4,844,264		
Forward foreign contracts	2,775,805		
Securites lending loss payable	1,568,940		
Investment management fees payable	1,550,057		
Administrative expenses payable	541,148		
Other accounts payable	47,433		
Total Liabilities			97,854,462
Net Position Restricted for Pension Benefits		\$2	,466,576,702

The notes to the basic financial statements are an integral part of this statement.

Fire and Police Employees' Retirement System City of Baltimore, Maryland **STATEMENT OF CHANGES IN PLAN NET POSITION** For the Year Ended June 30, 2015

Investment Income(33,723,438)Net depreciation in fair value of investments(33,723,438)Hedge funds income42,081,769Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income	9,362,087 3,442,809
Plan members30,341,796Total Contributions\$ 14Investment Income\$ 14Net depreciation in fair value of investments(33,723,438)Hedge funds income42,081,769Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses	
Total Contributions\$ 14Investment Income(33,723,438)Net depreciation in fair value of investments(33,723,438)Hedge funds income42,081,769Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Deductions210,318,274	
Investment Income(33,723,438)Hedge funds income42,081,769Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Total Additions20	
Net depreciation in fair value of investments(33,723,438)Hedge funds income42,081,769Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Total Additions20	3 442 809
Hedge funds income42,081,769Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Total Additions20Deductions210,318,274	3 442 809
Interest and dividends37,416,494Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Total Additions20	3 442 809
Real estate income10,834,115Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Total Additions20Deductions210,318,274	3 442 809
Private equity income8,576,189Risk parity loss(4,421,860)Less: Investment expenses(7,320,460)Net Investment Income5Securities lending income612,618Less: Securities lending expenses(153,128)Net Securities lending income20Total Additions20Deductions210,318,274	3 442 809
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Securities lending income       612,618         Less: Securities lending expenses       (153,128)         Net Securities lending income	3 442 809
Less: Securities lending expenses       (153,128)         Net Securities lending income	5,112,007
Less: Securities lending expenses       (153,128)         Net Securities lending income	
Total Additions 20 Deductions Retirement allowances 210,318,274	
Deductions Retirement allowances 210,318,274	459,490
Retirement allowances 210,318,274	3,264,386
Lump sum DROP payments 11,477,573	
Administrative expenses 4,297,773	
Refunds of member contributions 2,796,110	
Death benefits 342,353	
Total Deductions 22	9,232,083
Net Increase in Net Plan Net Position (2	5,967,697)
Net Position Restricted for Pension Benefits         June 30, 2014	2,544,399
June 30, 2015	

The notes to the basic financial statements are an integral part of this statement.

#### 1. Plan Description:

The Fire and Police Employees' Retirement System of the City of Baltimore (F&P, Plan, System) is the administrator of a single employer defined benefit local government retirement plan. Established July 1, 1962, the Plan covers all uniformed personnel of the Baltimore City Fire and Police Departments. In addition, the Plan includes four active fire officers who are employees of the State of Maryland; this contingent emanated from when the City of Baltimore owned the Baltimore/Washington International Thurgood Marshall Airport. Based on criteria established by the Governmental Accounting Standards Board, the F&P is a component unit of the City of Baltimore and is included in the City's financial report as a public employees' retirement system (PERS).

At June 30, 2015, the F&P membership consisted of:

Retirees and beneficiaries currently	
receiving benefits	6,268
Active plan members	4,248
Total	<u>10,516</u>

The F&P provides normal service retirement benefits, as well as, death and disability benefits in accordance with Article 22 of the Baltimore City Code, which may be amended only by the Mayor and City Council. Certain provisions were amended by Ordinance 11-444, as noted in the Summary of Plan Provisions beginning on page 82. Membership in the System is mandatory upon employment. The System does not have a vested benefit plan; however, members have vested rights to their contributions and interest.

Post-retirement benefit increases are provided to retirees and beneficiaries based on age, type of retirement and having received benefits for two or more years as of each June 30 eligibility determination date.

#### 2. Summary of Significant Accounting Policies:

#### Basis of Presentation:

The accounting and financial reporting policies of the F&P included in this report conform to accounting principles generally accepted in the United States and reporting standards as promulgated by the Governmental Accounting Standards Board, which designates accounting principles and financial reporting standards applicable to PERS. This report includes solely the accounts of the F&P, a component unit of the City of Baltimore.

There are no component units of the F&P based on the nature of operational or financial relationships.

#### Basis of Accounting:

These financial statements have been prepared on the accrual basis of accounting, whereby revenues are recorded when they are earned, expenses are recorded when liabilities are incurred, and investment purchases and sales are recorded as of their trade date. Member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

#### 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 the Board to make estimates and assumptions that affect the reported amounts of assets, liabilities, additions and deductions to net position held in trust for pension benefits and disclosure of contingent assets and liabilities at the date of the financial statements and during the reporting period. Actual results could differ from those estimates.

#### Method Used to Value Investments:

Investments are reported at fair value. Securities traded on national or international exchanges are valued at the last reported sales price at the current exchange rates. The real estate holdings are based on the most recent appraisal (either internal to the manager or third party) as then presently available. For alternative investments, which include private equity, hedge and risk parity funds where no readily ascertainable market value exists, management, in consultation with the general partner and investment advisors, has determined the fair values for the individual investments based upon the partnership's most recent available financial information. Foreign exchange contracts are marked-to-market daily based on published market prices and quotations from national securities exchanges or securities pricing services. The changes in market value are recognized as part of net appreciation/depreciation in the fair value of investments. Initial margin requirements for such financial instruments are provided by investment securities pledged as collateral or by cash.

Investment income consists of realized and unrealized appreciation (depreciation) in the fair value of investments, and interest and dividend income earned, less investment expenses. Interest income is recorded on the accrual basis and dividends are recorded on the ex-dividend date. Securities and securities transactions are reflected in the financial statements on a trade-date basis.

#### 3. Contributions and Reserves:

F&P members were required to contribute 10.0% of their regular compensation through payroll deduction for fiscal year 2014. The employer contributions are determined through an actuarial valuation. According to the plan provisions, contribution requirements of the plan members and the City are established and may be amended by the Mayor and City Council. The valuation method is stipulated in the plan provisions. An expense load of 1.5% of covered payroll is included in the annual employer contribution requirement to cover administrative plan costs.

The plan provisions, Article 22 of the Baltimore City Code, established the following reserves:

Annuity Savings Reserve - Accumulated in this reserve are members' contributions inclusive of interest credits, less amounts distributed upon termination of employment or death, or transferred to another reserve for retirement.

Annuity Reserve - Upon retirement, the accumulated contributions of members are transferred to this reserve. From this reserve, the members' accumulated contributions are paid as a life annuity.

Pension Accumulation Reserve - Employer contributions are credited and accumulated with earnings in this reserve. DROP benefits and certain death benefits are paid from here. In addition, when a member retires, an amount equal to the member's pension reserve is transferred from this reserve to the Pension Reserve.

Pension Reserve - From this reserve is paid the pension portion of the retirement allowance. The pension represents benefits for life derived from employer contributions and investment income.

The paid up benefit reserve and the contingency reserve were eliminated by Ordinance 10-306. The assets and the liabilities from these reserves are reflected as transferred to the pension reserve.

At June 30, 2015, the balances in the legally required reserves are as follows:

Reserves	Balance
Annuity savings reserve	\$ 300,379,071
Annuity reserve	347,959,760
Pension accumulation reserve	(205,376,005)
Pension reserve	2,023,613,876
Total Reserves	\$ 2,466,576,702

#### 4. Securities Lending:

The Board of Trustees (the Board) entered into a Securities Lending Authorization Agreement with the System's custodian bank, BNY Mellon Asset Servicing. All individual securities which are readily marketable and which are not restricted due to an outstanding short option are eligible for loan at the discretion of the custodian bank. The investment manager may loan securities held in custody of commingled accounts if authorized in the manager's contract with the F&P.

Collateral received in exchange for securities loaned is collected in an escrow account for the F&P's benefit for the duration of the loan. At no time will the System lose custody of the loaned securities. Collateral in exchange for the principal loaned may be in the form of cash, or securities issued or guaranteed by the U.S. government, its agencies or instrumentalities. Irrevocable Letters of Credit from banks approved by the custodian may not be used as collateral. The minimum levels of collateral will be set at 102% of the market value of domestic securities loaned, including all accrued income, and 105% of the market value of international securities loaned, including all accrued income. If the market value of the collateral amounts will be marked to market daily. The F&P does not have the right to sell or pledge securities received as collateral without borrower default.

At June 30, 2015, the F&P had no credit risk exposure to borrowers because the amounts the F&P owed borrowers exceeded the amounts the borrowers owed the F&P. The market value of securities on loan at June 30, 2015, was \$127,060,300 and the market value of the collateral received for those securities on loan was \$130,673,045. The terms of the Securities Lending Authorization Agreement require that the custodian indemnify the F&P against: (1) the failure to demand adequate and appropriate collateral from a borrower; (2) the failure to comply with the investment guidelines in connection with the investment and reinvestment of cash collateral; (3) the failure to obtain and perfect a security interest or rights equivalent thereto in and to the collateral; and (4) the failure to make a reasoned determination of the creditworthiness of any borrower.

Substantially all securities loans can be terminated on demand either by the custodian or by the borrower, although generally the average term of these loans is one week. Cash collateral is invested in the custodian's short-term investment account, specific to the F&P. The short-term investment account guidelines specify that a minimum of 20.0% of the invested cash collateral is to be available each business day and the dollar weighted average maturity of holdings should not exceed 90 days.

The custodian's lending program does not operate the collateral investments as a "matched program" where the length of the loaned assets would be specifically matched to the length of the portfolio investments. Because the System's active investments are currently engaged in the overnight investment fund, all assets in the portfolio mature within a 24 hour period.

As a participant in the custodian's short-term investment pool, the F&P suffered a principal loss of \$2.3 million in fiscal year 2009. The collateral pool had an interest in Sigma Finance Corporation. The security defaulted and was downgraded and

transferred to a liquidating fund at a \$1.00 value per unit. Although recovery of the defaulted security is being sought through the bankruptcy court, BNY Mellon expects the loss of \$2.3 million to materialize. F&P recognized the loss in fiscal year 2009. BNY Mellon advised that the System has an obligation to reimburse the collateral short term investment fund for the loss. To date, the F&P has not reimbursed the custodian. The liability for the loss is presently recorded at \$1.6 million.

The following represents the balances relating to the securities lending transactions as of June 30, 2015:

Types of Securities On Loan	Market Value of Securites On Loan	Market Value of Collateral Received	Type of Collateral
U.S. treasury notes and bonds	\$ 44,743,933	\$ 45,806,208	Cash
U.S. Government agency bonds	22,829,416	23,488,985	Securities
Domestic equities	16,933,931	17,420,718	Securities
Domestic equities	16,864,924	17,340,071	Cash
U.S. treasury notes and bonds	10,068,146	10,394,362	Securities
International equities	5,903,876	6,198,115	Cash
Corporate Bonds	5,214,722	5,403,265	Securities
Corporate Bonds	3,110,096	3,184,200	Cash
International equities	1,391,256	1,437,121	Securities
Total Securities on Loan	\$ 127,060,300	\$130,673,045	

#### 5. Cash and Investments:

The System's cash deposits are entirely covered by federal depository insurance at all times. The System classifies cash on deposit in the custodian institution, BNY Mellon, as well as the cash management pool held by BNY Mellon as cash and cash equivalents. The System also classifies certain short-term highly liquid securities as cash equivalents if the date of maturity is three months or less from the date of acquisition.

The Board of Trustees of the F&P is authorized by the Baltimore City Code to make investments in accordance with the guidelines and limitations set forth in the Code. The Board accomplishes the daily management of the System's investments through an external investment consultant who acts as a fiduciary for the System and through external investment managers. The Board invests the assets of the F&P using the "prudent person standard" which allows the Board to consider the probable safety of investments, avoid speculative investments, and invest as people of prudence, discretion, and intelligence would in a similar situation. The Board has adopted an investment policy and guidelines to formally document its investment objectives and responsibilities.

The F&P invested assets at June 30, 2015 are presented below:

Investment Type		<u>Fair Value</u>
Debt Securities:	<b>^</b>	
Corporate bonds	\$	436,393,489
U.S. treasury notes and bonds		165,683,761
U.S. Government agency bonds		103,198,708
Emerging markets debt fund		73,116,108
Barclay aggregate index fund		8,700,788
Total debt securities	_	787,092,854
Other:		
		206 771 084
Domestic equities		396,771,984
International equities		376,779,594
Real estate funds		214,812,389
Hedge funds		207,333,843
Private equity funds		164,495,449
Energy master limited partnerships		156,468,924
Risk parity fund		98,568,257
Total other		1,615,230,440
Total investments	\$	2,402,323,294

#### Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a plan's investment in a single issuer. As of June 30, 2015, the F&P has no single issuer that exceeds 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded.

#### Foreign Currency Risk Exposure

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. It is the Board's policy that external managers demonstrate sensitivity to foreign currency risk. The foreign currency exposure of the System may be hedged back to the U.S. dollar using forward foreign exchange contracts. From 0% to 100% of the foreign currency exposure of a portfolio may be hedged. Cross-hedging to currency other than the U.S. dollar may reach 25% of the total portfolio. Currency speculation is not permitted.

The F&P exposure to foreign currency risk is presented on the following table:

Euro Currency Unit	\$ 75,619,696
British Pound Sterling	52,466,579
Japanese Yen	47,642,972
Swiss Franc	28,143,574
Hong Kong Dollar	18,819,571
South Korean Won	10,822,406
Canadian Dollar	9,604,835
South African Comm Rand	2,394,422
Danish Krone	2,028,335
Swedish Krona	1,967,059
Australian Dollar	1,845,127
New Taiwan Dollar	1,831,562
Brazil Real	673,319
Singapore Dollar	503,997
UAE Dirham	341,923
Mexican Peso	326,096
Thailand Baht	232,358
Indonesian Rupiah	158,909
Norwegian Krone	134,656
Total Foreign Currency	\$ 255,557,396
U.S. Dollars (held in International Equity)	\$ 129,262,094

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment. F&P uses the Option Adjusted Duration as a measure of interest rate sensitivity for bonds. Duration is a measure of the approximate sensitivity of a bond's value to interest rate changes. The Board's fixed income interest rate policy states that the effective duration of a portfolio may not exceed 120% of the effective duration of the underlying Barclay Capital Aggregate benchmark.

Asset Type	Option Adjusted Duration	Fair Value
	(in years)	
Corporate bonds	5.60	\$436,393,489
U.S. treasury notes and bonds	11.93	165,683,761
U.S. Government agency bonds	5.08	103,198,708
Emerging markets debt fund	5.22	73,116,108
Barclay aggregate index	5.64	8,700,788
Total debt securities		\$787,092,854

#### Credit Risk by Quality

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Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. The Board has not adopted a formal policy to limit credit risk. The F&P's rated debt investments as of June 30, 2015, were rated by Standard & Poor, and for securities with no S&P rating, the Moody Quality ratings were used.

Asset Type	Quality Ratings	Fair Value
Corporate bonds	AAA	\$ 35,125,582
-	AA	59,080,042
	А	151,612,730
	BBB	116,226,394
	BB	28,954,631
	В	25,111,326
	CCC	6,876,627
	С	22,713
	D	176,216
	Not Rated	13,207,228
Total corporate bonds		436,393,489
U.S. treasury notes and bonds	AA	165,683,761
U.S. Government agency bonds	AA	103,198,708
Emerging markets debt fund	BBB	73,116,108
Barclay aggregate index	AA	8,700,788
Total debt securities		\$787,092,854

#### Investment Policy

The System's investment policy is to preserve the capital value of the System adjusted for inflation; to ensure adequate liquidity to meet benefit liabilities as they fall due; to meet the actuarial interest rate assumptions over the longer term while maintaining appropriate risk levels; and to exceed the investment return by the astute management of System assets. The System's investment policy is designed to provide broad diversification among asset classes in order to maximize returns at a prudent level of risk. In addition, asset allocation ranges, target allocations and a process of periodic rebalancing are used to maintain compliance with policy. The long-term expected rate of return was determined using a building-block method in which bestestimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The following is the Board's adopted target asset allocation and the best estimates of arithmetic real rates of return by asset class.

Asset Class	Allocatio n Target	Long-Term Expected Real Rate of Return
US Equity	19.5%	5.8%
International Equity	19.5%	7.8%
Private Equity	5.0%	10.0%
Fixed Income	19.0%	3.3%
Real Estate	10.0%	8.0%
Hedge Funds	10.0%	4.8%
Energy MLP	7.0%	7.3%
Private Energy	5.0%	10.0%
Risk Parity	5.0%	7.3%
Total Portfolio	100.0%	

#### Rate of return

For the year ended June 30, 2015, the annual money-weighted rate of return of the Plan, calculated as the internal rate of return on investments, net of investment expenses, was 2.0%. The money-weighted rate of return expresses the Plan's investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

#### 6. Deferred Retirement Option Program (DROP):

The System has two DROP programs, DROP and DROP 2. DROP became effective July 1, 1996 and DROP 2 became effective January 1, 2010. The DROP balance as of June 30, 2015, is \$75,592,056. The DROP 2 balance as of June 30, 2015, is \$45,347,543.

#### <u>DROP</u>

Members with more than 20 years of service on or before December 31, 2009 can elect to participate in DROP at any time. A member's DROP participation period can be for one, two or three years. During that time the member will accrue no

additional service. A member who continues employment at the end of his/her DROP participation period shall begin to earn additional service credit.

If a member retires during his/her DROP participation period or immediately at the end of this period, he/she shall be entitled to a Basic DROP Retirement Benefit. This shall equal:

1) The retirement benefit that would have been paid had the member retired at the time he/she began his/her DROP participation, plus

2) A lump sum equal to the member's DROP account. This equals the accumulation of the annuity payments the member would have received had he/she retired at the time his/her DROP participation began receiving benefits, plus the member contributions paid during his/her DROP participation period, plus interest at 8.25%.

If a member retires later than the end of the three-year DROP period but less than 18 months after the conclusion of his/her DROP participation period, he/she is entitled to an Intermediate DROP Retirement Benefit. This shall equal:

1) The retirement benefit that would have been paid had the member retired at the time he/she began his/her DROP participation, plus

2) Benefit accrual of 2% plus an extra 1.5% per year (not to exceed 18 months) for service after the DROP participation period.

3) A lump sum equal to the DROP account. No additions (other than interest) are added after the conclusion of the DROP participation period.

If a member retires more than 18 months after the conclusion of his/her DROP participation period, he/she is entitled to a Full DROP Retirement Benefit. This shall equal:

1) The retirement benefit based on current average final compensation and all service excluding service while a participant is in DROP.

2) Benefit accrual includes an extra 1.5% per year (not to exceed four years) for service after the DROP participation period.

3) A lump sum equal to the DROP account. No additions (other than interest) are added after the conclusion of the DROP participation period.

# DROP 2

Members with more than 20 years of service on or after January 1, 2010, but not before December 31, 2009, can elect to participate in DROP 2. Effective July 1, 2010, the 20-year requirement was moved to 25 years for non-grandfathered members. A member's DROP 2 participation period can be for one, two or three years. The participant must remain in DROP 2 for at least one year. Those participants who retire prior to the end of the first year are not entitled to receive any amounts accumulated in the DROP 2 account. No additional service is accrued during DROP 2 participation. A member who continues employment at the end of the DROP 2 participation period shall begin to earn additional service credit.

If a member retires during the DROP 2 participation period or immediately at the end of this period, the member is entitled to an Early DROP 2 Retirement Benefit. This is equal to:

1) The retirement benefit that would have been paid had the member retired at the time he/she began his/her DROP 2 participation, plus

2) A lump sum equal to the member's DROP 2 account. This equals the accumulation of the annuity payments the member would have received had he/she retired at the time his/her DROP 2 participation began plus the member contributions paid during his/her DROP 2 participation period, plus interest at 5.5% for grandfathered participants and 3.0% for non-grandfathered participants.

If a member retires later than the end of the three-year DROP 2 period but less than 3.5 years for police employees or five years for fire employees after the conclusion of his/her DROP 2 participation period, he/she is entitled to a Mid DROP 2 Retirement Benefit. This is equal to:

1) The retirement benefit that would have been paid had the member retired at the time he/she began his/her DROP 2 participation, plus

2) Benefit accrual of 2% for service after the DROP 2 participation period began.

3) An additional benefit accrual of 1.5% per year (not to exceed four years) for service after the DROP 2 participation period for fire employees only. Police employees do not receive an additional benefit accrual.

4) A lump sum equal to the DROP 2 account. No additions (other than interest) are added after the conclusion of the DROP 2 participation period.

If a member retires more than 3.5 years for police employees or five years for fire employees after the conclusion of his/her DROP 2 participation period, he/she is entitled to a Complete DROP 2 Retirement Benefit. This shall equal:

1) The retirement benefit based on current average final compensation and all service excluding service while a participant is in DROP 2.

2) Benefit accrual includes an extra 1.5% per year (no to exceed four years) for service after the DROP 2 participation period for fire employees only. Police employees do not receive an additional benefit accrual.

3) A lump sum equal to the DROP 2 account. No additions (other than interest) are added after the conclusion of the DROP 2 participation period.

# 7. Capital Assets:

Capital Assets consisting of furniture and equipment, computer equipment and leasehold improvements are recorded at cost. Depreciation on computer equipment is calculated on a straight-line basis over a five year useful life; depreciation on leasehold improvements and office furniture is calculated on a straight-line basis over fifteen years, the life of the building lease. Accumulated depreciation for computer equipment is \$1,009,569; for office furniture is \$259,276; for leasehold improvements is \$893,234.

June 2014 Balance	Additions	<u>Depreciation</u>	June 2015 Balance
\$ 332,660	\$ 145,617	\$140,380	\$ 337,897
163,777		26,440	137,337
551,155		90,275	460,880
\$ 1,047,592	\$ 145,617	\$257,095	\$ 936,114
	\$ 332,660 163,777 551,155	\$ 332,660 \$ 145,617 163,777 551,155	\$ 332,660       \$ 145,617       \$140,380         163,777       26,440         551,155       90,275

# 8. Net Pension Liability:

The following schedules show the Net Pension Liability as of June 30, 2015, and the sensitivity of the NPL to the discount rate. The discount rate used to measure the total pension liability was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that member and employer contributions will be made at rates equal to those based on the June 30, 2015, Actuarial Valuation Report. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service cost of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, F&P's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members as of July 1, 2015. Therefore, the long-term expected rate of return on F&P investments was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2015.

#### **Net Pension Liability**

Total Pension Liability	\$ 3,536,781,722
Plan Fiduciary Net Position	 2,466,576,702
Net Pension Liability	\$ 1,070,205,020

Plan Fiduciary Net Position as aPercentage of the Total Pension Liability69.7%

# Sensitivity of Net Pension Liability to Changes in Discount Rate

Total Pension Liability	1% Decrease 6.50% \$ 3,941,652,422	Discount Rate 7.50% \$ 3,536,781,722	1% Increase 8.50% \$ 3.199,542,675
Plan Fiduciary Net Position Net Pension Liability	<u>2,466,576,702</u> <u>1,475,075,720</u>	\$ 3,356,761,722 2,466,576,702 \$ 1,070,205,020	<u>2,466,576,702</u> <u>732,965,973</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	62.6%	69.7%	77.1%

Valuation Date 6/30/2015

The total pension liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Cost Method	Entry Age Normal
Discount rate	7.50%
Price inflation	3.00%
Salary increases	3.00% plus merit component based on employee classification and years of service
Mortality	Actives, Retirees, Beneficiaries: 114% and 130% of the RP-2014 Blue Collar Mortality Table
	for males and females respectively projected using the RPEC_2014 model, with an ultimate rate
	of 0.85% for ages 20-95, an ultimate rate of 0.00% for ages 95-120, convergence to the ultimate
	rate in year 2017, and using the committee selected weighting assumption.
	Disable Members: RP-2014 Disabled Retiree Mortality blended 50%/50% with the healthy
	annuitant's table projected using the healthy annuitant's RPEC_2014 model.

The last experience study covered the period July 1, 2012 through June 30, 2015. An actuarial experience study is generally conducted every five years, however, the F&P conducts an experience study every three years.

# 9. Derivatives:

Derivatives are generally defined as an investment contract or security with a value that depends on, or is derived from, the value of an underlying asset, reference rate or financial index. The F&P has classified the following hedging instruments as derivatives:

# **Forward Currency Contracts**

Certain F&P investment managers enter into forward currency contracts to manage exposure to fluctuations in foreign currency exchange rates on portfolio holdings. Those managers also enter into forward exchange contracts to settle future obligations. A forward exchange contract is a commitment to purchase (payable) or sell (receivable) a foreign currency at a future date at a negotiated forward rate. Risk associated with such contracts includes movement in the value of a foreign currency relative to the U.S. dollar. Unrealized gain or loss on forward currency contracts is the difference between the contract and the closing market value of such contract and is included in the statement of changes in plan net position as net appreciation/depreciation in fair value of investments. The table below summarizes the market value of foreign currency contracts as of June 30, 2015.

<u>Currency</u>	Со	ward Foreign ntracts Cost Receivable	ward Foreign ntracts Cost Payable	Con	ward Foreign tracts Market e Receivable	Ma	ward Foreign Contracts arket Value Payable
Australian Dollar	\$	32,031	\$ 32,031	\$	32,124	\$	32,031
British Pound Sterling		1,315,454	1,315,454		1,315,454		1,339,819
British Pound Sterling		97,628	97,628		97,551		97,628
Canadian Dollar		62,951	62,951		62,475		62,951
Euro Currency Unit		339,084	339,084		339,084		338,778
Euro Currency Unit		308,623	308,623		307,732		308,623
Hong Kong Dollar		249,908	249,908		249,908		249,893
Japanese Yen		236,574	236,574		239,813		236,574
Swiss Franc		109,508	 109,508		109,022		109,508
Totals	\$	2,751,761	\$ 2,751,761	\$	2,753,163	\$	2,775,805

#### 10. Commitments:

The F&P has at June 30, 2015, committed to fund certain alternative investment partnerships in the amount of \$415,000,000. Funding of \$310,353,177 has been provided leaving an unfunded commitment of \$104,646,823.

# 11. Litigation:

The City enacted changes to the plan, through Ordinance 10-306, effective June 30, 2010: 1) replacing the "variable benefit" increases based on investment performance with tiered post-retirement COLAs based on the attained age of the retiree or beneficiary, 2) increasing the months used for the average final compensation calculation, 3) lengthening the eligibility requirements for normal service retirement and DROP 2 participation, and 4) increasing member contribution rates. In 2010, the fire and police unions and several plan participants and beneficiaries filed suit in U.S. District Court as a result of these changes to the plan, claiming that the City wrongfully impaired the pension contract with the plan membership and violated the "Takings Clause" of the U.S. Constitution when it enacted the changes. On September 20, 2012, after holding a three-phase trial, the court ultimately decided that: 1) the City impaired its contract with plan members by its replacement of the variable benefit with a tiered post-retirement COLA, 2) the impairment was substantial, and 3) although it was reasonable and necessary for the City to eliminate the "variable benefit" in order to sustain the plan, the tiered, post-retirement fixed COLAs granting older retirees higher COLAs than younger retirees rendered the change unconstitutional under the federal constitution.

In their lawsuit, the plaintiffs also sued the F&P Board of Trustees, claiming that the F&P Board did not properly exercise its fiduciary duties. Included in this claim were allegations that the F&P Board acted improperly by: 1) ignoring actuary's recommendation to lower the interest rate on retiree assets, 2) miscalculating variable increases for 2005, 2006, and 2007 fiscal years, 3) concealing F&P funding status from members, and 4) improperly amortizing losses attributable to BIF and ERF. Ultimately, the court found that these claims were a matter for state court review and dismissed the claims against the F&P Board without prejudice, allowing the plaintiffs to sue the F&P Board in state court if they so desire.

In a November 30, 2012 memorandum, the U.S. District Court judge found that the changes to the plan enacted in 2010, which are not related to the "variable benefit," are severable --- and therefore valid and enforceable --- from the changes related to the "variable benefit" provisions, which are invalid and not enforceable. The enforceable changes include: the changes made to the average final compensation calculation, the eligibility requirements for normal service retirement, DROP 2 participation, and increases to member contribution rates. The court also decided that the federal "Takings Clause" claim was moot.

The City and the unions both appealed the decision. On December 28, 2012, the judge issued an order staying the effects of his ruling pending appeals to the Fourth Circuit Court of Appeals. On August 6, 2014, the Fourth Circuit overturned the 2012 ruling that the provision in Ordinance 10-306 that replaced the F&P's variable benefit retiree increase with a tiered COLA was unconstitutional under the federal constitution. The appeals court concluded that the provision in the Ordinance did not impair the federal constitutional rights of F&P members because they could have contested the Ordinance under State law. The Fourth Circuit also remanded the case to the District Court to reconsider the "Takings Clause" issue. The District Court has invited the Plaintiffs to file an amended complaint which may include claims under State law; the Plaintiffs have voluntarily dismissed their claims against the Board, without prejudice. To date, the Plaintiffs have not as yet filed an amended complaint. Barring a future court order to the contrary, F&P will continue to administer the F&P plan as amended by Ordinance 10-306.

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# REQUIRED SUPPLEMENTARY INFORMATION AND SUPPORTING SCHEDULES



# Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS SCHEDULE OF INVESTMENT RETURNS

For the Year Ended June 30

Schedule of Changes in Net Pension Liability and Rela	ted Ratios	
	2015	2014
Total Pension Liability:		
Interest (includes interest on service cost)	\$ 257,871,163	\$ 250,480,374
Service cost	66,665,615	66,034,831
Changes of assumptions	35,744,707	
Differences between expected and actual experience	28,263,161	1,405,813
Benefit payments, including refunds of member contributions	(224,934,312)	(221,439,237)
Net change in total pension liability	163,610,334	96,481,781
Total pension liability - beginning	3,373,171,388	3,276,689,607
Total pension liability - ending	\$ 3,536,781,722	\$ 3,373,171,388
Plan fiduciary net position		
Net investment income	\$ 53,902,299	\$ 314,449,271
Contributions - employer	119,020,291	113,843,250
Contributions - members	30,341,796	28,265,556
Benefit payments, including refunds of member contributions	(224,934,310)	(221,439,237)
Administrative expense	(4,297,773)	(3,907,539)
Net change in total pension liability	(25,967,697)	231,211,301
ret enange in total pension nability	(23,507,057)	201,211,001
Plan fiduciary net position - beginning	2,492,544,399	2,261,333,098
Plan fiduciary net position - ending	\$ 2,466,576,702	\$ 2,492,544,399
Net pension liability - ending	\$ 1,070,205,020	\$ 880,626,989
Plan fiduciary net position as a percentage		
of the total pension liability	69.74%	73.89%
Covered employee payroll	\$ 322,667,150	\$ 292,739,239
Net pension liability as a percentage		
of covered employee payroll	331.67%	300.82%
Schedule of Investment Returns		
	2015	2014
Annual money-weighted rate of return,		
net of investment expense	2.00%	13.60%

These schedules are presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Fire and Police Employees' Retirement System will present information for those years for which information is available.

Fire and Police Employees' Retirement System City of Baltimore, Maryland Required Supplementary Information SCHEDULE OF EMPLOYER CONTRIBUTIONS

Contribution Rate of Covered Employee Payroll	19.98%	23.63	26.95	24.70	34.02	39.01	37.77	38.84	38.89	36.89
Covered Employee Payroll	\$248,558,248	254,489,308	269,690,209	281,423,808	276,576,626	275,647,861	284,601,473	277,524,356	292,738,969	322,667,150
Total Contributions Made	\$49,661,627	60,128,727	72,687,585	69,513,236	94,097,743	107,539,873	107,488,403	107,778,859	113,843,250	119,020,291
Total Contributions Required	\$49,661,627	54,623,507	66,955,744	69,513,236	82,697,743	90,641,037	99,686,139	102,078,859	113,843,250	119,020,291
Additional City <u>Contributions</u>		\$ 5,505,220	5,731,841		11,400,000	16,898,836	7,802,264	5,700,000		
Contributions Required From <u>State of Maryland</u>	\$413,311	530,750	532,536	585,048	818,687	841,660	790,190	786,970	839,306	829,985
City Contribution Per Actuarial Valuation	\$49,248,316	54,092,757	66,423,208	68,928,188	81,879,056	89,799,377	98,895,949	101,291,889	113,003,944	118,190,306
Fiscal Year Ended June 30	2006	2007	2008	2009	2010	2011	2012	2013	2014 (1)	2015 (1)

Notes:

(1) For fiscal years 2014 and 2015, covered payroll includes all payroll elements (i.e. overtime, etc.) whether or not such items are included in pay for plan benefit purposes.

See notes to required supplementary information.

# Fire and Police Employees' Retirement System City of Baltimore, Maryland NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

- 1. Preceding the preparation of the June 30, 2005 Actuarial Valuation Report, the System's actuary performed an Actuarial Experience Study for the three year period ended June 30, 2005. As a result of the Experience Study, the Board of Trustees adopted changes in actuarial assumptions which included increases to the salary scale for most ages, reductions to pre-retirement and post-retirement mortality rates, increases to withdraw rates for members under age 50, decreases to withdraw rates for members over age 50, reductions to non-line-of-duty disability rates for members age 40 and above, increases to line-of-duty disability rates for ages 44 and below, an increase to the DROP participation rate, and changes to both DROP and non-DROP retirement rates. These assumption changes, which were incorporated into the June 30, 2005 actuarial valuation, increased the actuarial accrued liability \$39.5 million. The Board approved utilization of \$34.3 million of excess investment earnings to reduce the increase in the unfunded accrued liability.
- 2. A plan provision that required that excess earnings be credited and deficit earnings be charged to certain actuarial reserves expired on June 30, 2005. The purpose of the reserves, established June 30, 1996, was to segregate excess positive earnings that could then be utilized by the City to reduce its required employer contributions to the plan and by the plan membership to "purchase" benefit improvements. The reserves were initially utilized for those two purposes. Subsequently, however, because of the downturn in the global equity markets in fiscal years 2001 through 2003, the reserves have instead accumulated net deficit earnings of \$412.8 million as of June 30, 2005. The plan provision requires that the Board of Trustees apply the deficit in the reserves in accordance with an appropriate asset valuation method. The City Administration requested that a 10-year amortization of the accumulated net deficit be utilized. It is expected that the City's employer contributions to the plan will substantially increase in future years due to this deficiency.
- Ordinance 10-306, signed by the Mayor on June 22, 2010, provided amendments and clarifications to the plan that 3. affect current and future members and retirees. The Ordinance, which was clarified by Ordinance 10-357 and signed by the Mayor on August 10, 2010: (1) modified the plan's variable post-retirement increase benefit provisions by changing to a guaranteed, fixed increase: 1% for eligible retirees and beneficiaries aged 55 to 64 who have been receiving periodic benefit payments for 2 or more years as of June 30, 2011, beginning in January 2012; and 2% for eligible retirees and beneficiaries aged 65 and older and for 100% line-of-duty disability retirees and their beneficiaries who have been receiving periodic benefit payments for 2 or more years as of June 30, 2010, beginning in January 2011; and no increases for retirees less than 55 years of age; (2) changed the age and service requirements for a normal service retirement benefit for all non-grandfathered members (members who, as of June 30, 2010, did not meet the eligibility requirements for a service retirement benefit or had fewer than 15 years of service) to the earlier of 25 years of service or age 55, with at least 15 years of service as an F&P member; (3) established a new early service retirement benefit for non-grandfathered members by allowing members who are not eligible for the new normal service retirement to retire at or after their former retirement eligibility date and receive a reduced early retirement benefit; (4) changed the definition of "average final compensation" for nongrandfathered members to mean a member's salary over 36 consecutive months during which pay was highest; (5) increased DROP 2 eligibility to 25 years of service as a contributing F&P member for non-grandfathered members with less than 15 years of service as of June 30, 2010; (6) increased the percentage of compensation contributable by all members to 7% effective July 1, 2010; 8% effective July 1, 2011; 9% effective July 1, 2012; and 10% effective July 1, 2013; (7) reduced interest paid by the plan on withdrawal of accumulated contributions and lumpsum death benefits from 5.5% to 3.0% for all members; (8) reduced interest paid by the plan on DROP 2 accounts from 5.5% to 3.0% for members with less than 15 years of service; (9) established a new minimum annual benefit of \$16,000 payable to spousal beneficiaries of sworn members who, before August 1, 1996, retired or died in service with 20 or more years of service; (10) allowed pre-employment military service to be used to satisfy eligibility for a normal service, DROP, or DROP 2 retirement for all members; (11) lowered the plan's long-term investment earnings assumption from 8.25% to 8.0%; and (12) expanded the plan's Board of Trustees to add the City's Director of Finance and a third Mayoral appointee and established new professional qualifications for the Mayoral appointees.

# Fire and Police Employees' Retirement System City of Baltimore, Maryland NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

Due to the aforementioned plan changes, the June 30, 2009 actuarial valuation report was revised. The actuarial accrued liability was reduced by \$88.8 million and the fiscal year 2011 employer contribution due July 1, 2010 was reduced from \$101.8 million to \$90.6 million.

- 4. The June 30, 2010, unfunded actuarial liability increased \$134.1 million from a revised \$374.9 million at June 30, 2009, due to the above noted changes in plan provisions, to \$509.0 million mainly due to the recognition of prior year investment losses.
- 5. Ordinance 11-444, signed by the Mayor on May 19, 2011, established a new minimum annual benefit of \$16,000 payable to spousal beneficiaries of sworn members who, before August 1, 1996, retired on account of a Line-of-Duty Disability with less than 20 years of service. The unfunded actuarial liability increased \$49.6 million to \$558.6 million at June 30, 2011; the increase included \$5.6 million due to the minimum benefit improvement which commenced in January 2012.
- 6. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, 2015. The following actuarial methods and assumptions were used to determine contribution rates reported in the schedule:

Valuation date Timing	6/30/2013 Actuarially determined contribution rates are calculated based on the actuarial valuation coinciding with the beginning of the plan year.
Key methods and assumpt	ions used to determine contribution rates:
Actuarial cost method	Projected unit credit
Asset valuation method	5-year smoothed market
Amortization method	The current unfunded actuarial liability is amortized as a level dollar figure over
	20 years. This 20-year period is restarted each year.
Discount rate	7.75%
Amortization growth rate	0.00%
Price inflation	3.75%
Salary increases	3.75% plus merit component based on employee classification and years of service
Mortality	RP-2000 Combined Healthy Mortality projected to 2010 by Scale AA for healthy lives

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2015 can be found in the June 30, 2013 actuarial valuation report.

# Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF ADMINISTRATIVE EXPENSES For the Year Ended June 30, 2015

Salaries and Wages: Permanent full-time salaries	\$1,626,237	
Overtime	14,816	
Total Salaries and Wages		\$1,641,053
Other Personnel Costs:		
Medical insurance and health care	223,116	
Retirement	169,152	
Social security	116,304	
Other employee benefits	10,580	
Total Other Personnel Costs		519,152
Contractual Services:		
Technology systems support	686,192	
Retirement payroll processing	467,343	
Lease payments	270,299	
Actuarial services	121,768	
Printing	62,237	
Postage	38,081	
Financial audit fees	36,500	
Staff training	31,493	
Equipment rental	24,060	
Board meeting expense	16,973	
Legal Fees	12,385	
Trustee education	11,922	
Equipment maintenance	9,526	
Dues and publications	9,024	
Telephone systems	8,347	
Other professional services	2,961	
Total Contractual Services	2,901	1,809,111
Total Contractual Services		1,009,111
Depreciation expense		257,096
Computer equipment		37,876
Office supplies		19,250
Office furniture		14,235
Total Administrative Expenses		\$4,297,773

# Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF INVESTMENT EXPENSES SCHEDULE OF PAYMENTS TO CONSULTANTS For the Year Ended June 30, 2015

#### Schedule of Investment Expenses

Investment Expenses	Fees
Investment management fees	\$6,826,212
Investment consultant fees	327,500
Custodial fees	166,748
Securities lending fees	153,128
Total Investment Expenses	\$7,473,588

# **Schedule of Payments to Consultants**

Firm	Fees	<b>Nature of Service</b>
TeleCommunication Systems	\$214,684	Technology systems support
Magothy Technology	143,363	Technology systems support
Cheiron	121,768	Actuarial services
CliftonLarsonAllen	36,500	Financial audit
Venable, LLP	12,210	Legal fees
Total Paid to Consultants	\$528,525	

#### Notes:

 Several of the alternative investment managers provide account valuations on a net of fee basis. Manager fees are netted against investment income and because they are not separable for specific investment income, amounts are recorded and reported net of fees.

(2) A schedule of fees and commissions is also illustrated in the Investment Section on page 61.

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# INVESTMENT SECTION

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October 30, 2015

To the Board of Trustees of the Fire & Police Employees' Retirement System of the City of Baltimore

# **Introduction**

Summit Strategies Group ("Summit") prepares this report for the Fire & Police Employees' Retirement System of the City of Baltimore (the "System") based on the information supplied by the System's custodian, BNY Mellon Asset Servicing ("BNY Mellon"). BNY Mellon holds assets in safe-keeping for the System, regularly values the assets for the System, and provides Summit with beginning and ending market values, cash flows, securities transactions and positions for the System as well as each manager monthly. Third-party custodians for the pooled investment vehicles, such as mutual funds or commingled trusts, provide BNY Mellon with net asset values and the System's audited financial statements for those investments. BNY Mellon audits the information contained in its monthly accounting reports. Summit uses BNY Mellon's monthly reports to calculate performance returns for the System and the System's Board of Trustees (the "Trustees").

# **Distinction of Responsibilities**

The Trustees are responsible for the investment and administration of the System's assets. This includes establishing the strategic asset allocation that, over time, is the primary determinant of the investment return on assets. A thorough understanding of both the System's assets and liabilities is essential for determining an appropriate asset allocation. The key drivers of this analysis are the projections of the System's liabilities and the projections of expected future returns and risk for each asset class as well as correlation between asset classes. The liabilities include all key dimensions of the System's pension plan: membership, benefits, liabilities, assets, and funding requirements. In December 2010, Summit conducted and presented an asset-liability study to the System's Trustees at which time the Trustees adopted a strategic target asset allocation. Subsequent to that time, Summit has regularly reviewed the target asset allocation and expected asset class returns with the Trustees and modified the target asset mix as necessary. The following page entails the target asset allocation, as modified by the Trustees, as of fiscal year ("FY") 2015.

# **Investment Policy/Structure**

The target asset allocation adopted by the Trustees is included in the System's Statement of Investment Objectives and Policies. The System employs various investment managers to implement the asset allocation within the guidelines and limitations contained in the Statement of Investment Objectives and Policies, Asset Class Guidelines and Manager Instructions (together the "Investment Policy"). The System's assets are invested using numerous investment managers to diversify the assets among multiple asset classes and investment strategies. Each investment manager is delegated full investment discretion for its respective portfolio including the discretion to purchase, hold, and sell individual securities or other investment positions, control industry and economic sector exposure, and geographic exposure subject to Investment Policy.

The System's Investment Policy is designed to provide broad diversification among asset classes and investment strategies in order to maximize return at a prudent level of risk as determined by the Trustees, and to minimize the risk of large losses to the System. In addition, asset allocation ranges, target allocations and a process of periodic rebalancing are used to maintain compliance with the Investment Policy and to increase the likelihood that the System will achieve its long-term risk and return objectives.

The following table outlines the System's long-term target asset allocation:

Asset Class	Allocation Target
US Equity	19.5%
International Equity	19.5%
Fixed Income	19.0%
Private Equity	5.0%
Hedge Funds	10.0%
Real Estate	10.0%
Energy/Natural Resources	12.0%
Risk Parity	5.0%
Total Portfolio	100%

Within each asset class, the Trustees employ several investment managers to further diversify the investment approach and to minimize style biases. The Trustees may employ both active and passive investment strategies to obtain the desired asset allocation mix in a cost effective and efficient manner.

# **Investment Objectives**

The System's Investment Policy contains the following objectives:

- 1. To preserve the inflation-adjusted capital value of the System;
- 2. To ensure adequate liquidity is available to meet benefit liabilities as they fall due;
- 3. To meet the actuarial rate of return assumptions over time while maintaining appropriate risk level; and
- 4. To exceed the investment return objective without unduly jeopardizing objectives 1-3.

The FY 2015 investment policy return objective is based on a hypothetical portfolio that includes the following allocations: 19.5% Russell 3000 Index; 19.5% MSCI All Country World Ex-US Index; 19% Barclays US Universal Index; 10% NCREIF Property Index; 10% HFRI Fund of Funds Composite Index; 7% S&P MLP Total Return Index; 5% S&P 500 + 3%; 5% CPI + 4%; and 5% Risk Parity Index (consisting of 60% S&P 500 and 40% BC Aggregate Index). In addition, the System's investment performance is evaluated relative to the Public Plan Universe of the BNY Mellon US Trust Universe, which represents the performance of 527 public pension plans with an aggregate market value of \$1.5 trillion as of June 30, 2015. Finally, each investment manager is assessed comparative to its relevant market index and style peer universe.

# Market Overview

Major central banking policy actions continued to be a primary economic focus and theme for the fiscal year beginning July 1, 2014, and ending June 30, 2015, as economic growth prospects throughout the world continued to diverge. While U.S. growth has been relatively slow compared to historical levels, the domestic economy appears healthier than many international economies. The comparative strength of the U.S. has been reflected in the rising value of the dollar, which rose 19.7% versus a basket of foreign currencies over the 12 months ending June 30, 2015. The U.S. Federal Reserve ended its bond buying program, QE3, in the fourth quarter of 2014 and is likely to begin raising rates from near-zero levels in coming months, an action consistent with an economy that has taken steps to recover following the global financial crisis. Conversely, many central banks outside the U.S. have continued to ease monetary policy in an attempt to jumpstart lackluster growth and battle deflationary pressures.

As of December 31, 2014, the unemployment rate in the U.S. was down to 5.6%, its lowest level since June 2008, and subsequently dropped to 5.3% by fiscal year end. The strong job growth in the U.S., however, was unaccompanied by wage increases. Wages rose 1.7% in 2014 but did not outpace inflation, meaning workers did not experience an improvement in real purchasing power. Oil prices were driven down by higher than expected supply and decreasing

global demand, and the average price of a gallon of gasoline in the U.S. reached its lowest point since May 2009. The spread between 2-year and 30-year Treasuries tightened 0.55% to 2.1% during the fourth quarter of 2014 and ended the year at its lowest level since December 2008. The Barclays Aggregate Index, measuring total return of the domestic, investment grade market, returned 2.0% in the second half of 2014 as interest rates continued to move lower. GDP, unemployment, and manufacturing figures at the end of 2014 suggested that falling energy prices, low interest rates, and an improving labor market would be supportive of increased consumption and broader economic growth. By June 30, 2015 however, yield spreads widened with the 10 Year Treasury yield ending the fiscal year at 2.4%. For the fiscal year, the Barclays Aggregate Index returned only 1.9%.

Across the globe, central banks continued to be extraordinarily accommodative in the first half of 2015; however, despite this accommodation, the global economy saw a continuance of lackluster growth and inflation. The U.S. economy fared slightly better, showing modest acceleration toward the end of the first half of 2015 after a sluggish start to the year. Through the first six months of 2015, the global equity market gained 3.1%, led by international stocks as the MSCI ACWI ex-US Index was up 4.0%; in the U.S., the S&P 500 was up 1.2%. Fixed income allocations generally saw small losses over the first six months of the year, particularly those with longer durations, as yields rose across the curve. However, markets moved in mostly opposite directions in the last six months of 2014. Bringing it together for the fiscal year, the global equity market was up 0.8%, with the S&P 500 returning a positive 7.4% and the MSCI ACWI ex-US Index returning a negative 5.3%. Core U.S. bonds had a positive return for the fiscal year as the drop in interest rates in the first six months outweighed the rise over the last six months. Energy MLPs suffered throughout the fiscal year, trading lower with declining energy prices and rising interest rates, ending with a -19.8% return. This was partially offset by returns in the real estate market, with the NCREIF Property Index returning 13%.

Recent months have seen an increase in headline-making economic events, such as the debt crisis in Greece and the rapid rise and fall of China's Shanghai stock market. Broadly speaking, inflation and global growth expectations remain at very low levels while the U.S. Dollar appears poised to continue its strong run versus foreign currencies. This muted global growth, along with deleveraging pressures associated with over-indebtedness, diverging economies throughout the world, and generally high valuations across major asset classes are likely to result in increased market volatility, particularly for traditional stock and bond portfolios, compared to what has been seen in recent years.

# **Investment Performance**

For investment performance measurement purposes, the total system assets are, what has been internally called "actively managed" accounts and "other" assets. The "actively managed" portion of the System's total assets refers to the portion fully diversified according to the Investment Policy explained above. The "other" assets consist of the cash reserve, held for the payment of benefits and administrative expenses, Contingency Reserve assets, and the Variable Benefit assets held in an immunized portfolio dedicated solely to paying postretirement benefit increases. Returns for both portions are provided below but only the "actively managed" assets are given attribution in the table below. Summit calculates and reports all returns in accordance with Global Investment Performance Standards ("GIPS"). As an investment consultant, Summit is prohibited from stating that investment performance is shown "in compliance with" or "in accordance with" GIPS, as GIPS compliance is reserved solely for use by investment management firms. Summit, however, strives to uphold and maintain the guiding principles underlying GIPS standards, both ethically and in its performance calculation methodology. Accordingly, all performance returns are calculated using a time-weighted methodology known as the Modified Dietz method. This algorithm attempts to eliminate the effects of cash flows and geometrically links period returns.

The total return for the fiscal year ending June 30, 2015 on all assets was 2.5% which ranked in the 75th percentile of the Public Plan Universe of the BNY Mellon US Trust Universe. For the fiscal year, the System's rate of return for the "actively managed," diversified portfolio of assets was 2.3% and ranked in the 79th percentile of the Mellon Trust Public Fund Universe. The System's diversified portfolio performed slightly above its policy benchmark for the fiscal year. The System's Investment Policy calls for measuring performance for the diversified portfolio over rolling 3 to 5 year periods. Accordingly, this portion of the System's assets have compounded at annual rates of return of 10.5% and 11.3% for the

last 3 and 5 years, ranking in the 59th and 39th percentiles for those periods, respectively. Over the longer time period of the trailing 10 years, the System returned 6.7% and ranked in the 54th percentiles of the universe.

The actively managed assets produced a positive absolute return for the fiscal year and performed above its policy benchmark return of 2.25% for the FY 2015. Contributors and detractors for the year included:

- Strong relative performance across the entire portfolio as every asset class composite, except Fixed Income and Risk Parity, outperformed or performed in-line with its benchmark;
- Good relative performance for international equity, real estate and MLP's;
- An above target weight to private equity and a below-target weight to fixed income;
- Strong absolute performance for private equity, hedge funds and real estate investments;
- Poor relative performance of fixed income due to (international exposure) and risk parity;
- Poor absolute performance of international debt and equity, MLP's and natural resources.

The market value of all assets was \$2.48 billion on June 30, 2015. The market value of the "actively managed" assets decreased slightly from \$1.99 billion on June 30, 2014 to \$1.97 billion on June 30, 2015. The decrease in value is primarily attributable to benefit payments and expenses as investment returns remained positive over the last twelve months, as shown below:

			Fiscal Year Ra	te of Return
	Market Value	Percent		
	(\$ in millions)*	of Total*	System	Benchmark
US Equity	\$406.2	20.6%	7.2%	7.3%
International Equity	\$384.8	19.5%	-2.2%	-5.3%
Fixed Income	\$330.0	16.7%	-2.6%	1.6%
Private Equity	\$164.5	8.3%	12.5%	N/A
Hedge Funds	\$213.6	10.8%	6.0%	4.0%
Real Estate	\$214.8	10.9%	17.0%	13.0%
Energy MLPs	\$133.3	6.7%	-10.9%	-16.5%
Natural Resources	\$30.4	1.5%	-10.1%	N/A
Risk Parity	\$98.5	5.0%	-4.3%	5.3%
Total Managed Assets**	\$1,976.1*	100.0%*	2.3%	2.3%

\* Rounded

\*\* The market value of the Total Managed Assets does not include Securities Lending (\$504.66 million).

Regardless of the economic or capital market climate, it is a pleasure to serve the System, and to work with Staff and the Trustees. I look forward to our continued partnership in the continuing effort to manage risk and search for competitive investment returns in this current challenging capital market environment.

Respectfully submitted,

Daniel J. Holmes Managing Director

# Fire and Police Employees' Retirement System City of Baltimore, Maryland OUTLINE OF INVESTMENT OBJECTIVES AND POLICIES

# **Investment Objectives**

The primary investment objectives of the Board of Trustees (Board) of the Fire and Police Employees' Retirement System (F&P, System) are set forth below. It is recognized that maximizing any one objective may compromise the achievement of other objectives. For example, maximizing liquidity may reduce investment return; seeking maximum investment return may subject capital preservation to higher risk. Accordingly, the investment objectives are given in descending order of priority:

- 1. To preserve the capital value of the System assets adjusted for inflation;
- 2. To ensure adequate System liquidity to meet benefit liabilities as they fall due;
- 3. To meet the actuarial interest rate assumption; and
- 4. Without unduly jeopardizing the above objectives, to exceed the investment return objective by the astute management of funds.

# **General Investment Policy**

The Board must comply with investment restrictions imposed by the laws of the City of Baltimore and any other State or Federal laws dealing with investment of public retirement plan assets. System investment managers are expected to familiarize themselves with these laws.

Investment policy for the System relates to the portfolio of all assets that comprise the total holdings of the System. The Board recognizes that the objective of a sound and prudent policy is to produce investment results that will preserve the assets of the System, as well as to maximize earnings of the F&P consistent with its long-term needs. These long-term needs have been ascertained through various studies performed on behalf of the Board by its actuary and its investment advisor. Investment policy and the long-term average allocation of plan assets to which they refer are deemed to be consistent with the projected pattern of cash flows to the F&P and its projected benefit payments. Should the projected finances of the System change significantly, the applicable Federal or State statutes be amended, or changes in the System's asset valuation methods be adopted, these policies and average asset allocations will be reviewed and modified by the action of the Board, if appropriate.

The Board recognizes that its investment portfolio must be diversified over several different asset classifications in order to reduce risk. The following asset allocation has been established as an overall objective for the total holdings of the System:

	Percentage of Total Fund at Market Value
Asset Category	Target
Domestic Equity	19.5%
International Equity	19.5%
Private Equity	5.0%
Risk Parity	5.0%
Energy MLP	7.0%
Private Energy	5.0%
Fixed Income	19.0%
Real Estate	10.0%
Hedge Funds	10.0%

Within each major asset classification, investments are further diversified. Excessive concentration in any particular security, company or industry is to be avoided. Investment guidelines have been supplied to each of the System's investment managers. Subject to these objectives and guidelines, and the System laws, the investment managers have full discretion in investment decisions. Managers are advised to notify the Board in writing if these objectives cannot be met or if the guidelines constrict performance. The investment managers are encouraged to suggest changes to the guidelines at any time.

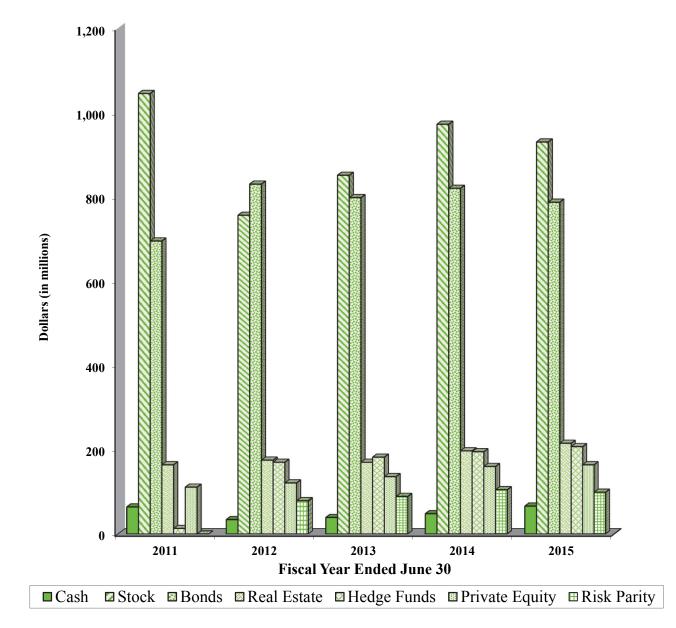
# Fire and Police Employees' Retirement System City of Baltimore, Maryland OUTLINE OF INVESTMENT OBJECTIVES AND POLICIES

# **Proxy Voting**

Pursuant to a U.S. Department of Labor directive, the Board has a long standing policy that, when solicitations of proxies with respect to securities are received by an investment manager, the decisions as to whether and how to vote such proxies are delegated to that investment manager.

The Board also recognizes, however, that the investment manager's decisions must be made in accordance with applicable legal standards and that the Board has an obligation to ensure that those standards are being observed. Therefore, the Board requests that annually (June 30) each management firm furnish the System with a written statement of their policy and practices with respect to the voting of securities held in their employee benefit plan asset portfolios, together with their written assurance that such policies and practices are being followed. These statements and assurances will be included, and will be given appropriate weight, in the Board's continuing evaluation of each manager's overall investment performance.

Fire and Police Employees' Retirement System City of Baltimore, Maryland TOTAL PORTFOLIO COMPOSITION FAIR VALUE OF INVESTMENTS



	2011		2012		2013		201	4	201	5
Cash	\$ 64	3%	\$ 34	2%	\$ 39	2%	\$ 48	2%	\$ 66	2%
Stock	1,045	50	756	35	851	38	972	38	930	38
Bonds	695	33	830	38	798	35	820	35	787	35
Real Estate	164	8	175	8	170	7	197	7	215	7
Hedge Funds	13	1	170	8	182	8	195	8	207	8
Private Equity	111	5	121	5	136	6	160	6	164	6
Risk Parity			79	4	89	4	105	4	99	4
Total	\$ 2,092	100%	\$ 2,165	100%	\$ 2,265	100%	\$ 2,497	100%	\$ 2,468	100%

	Annualized			
Total Returns	FY 2015	3 Years	5 Years	10 Years
TOTAL PORTFOLIO	2.3%	10.5%	11.3%	6.7%
Composite Benchmark	2.3	10.2	10.8	6.6
DOMESTIC EQUITIES	7.2	17.4	17.8	8.2
S&P 500 Index	7.4	17.3	17.3	7.9
Russell 1000	7.4	17.7	17.6	8.1
Russell 2000	6.5	17.8	17.1	8.4
Russell 3000	7.3	17.7	17.5	8.2
INTERNATIONAL EQUITIES	(2.2)	10.1	10.1	8.5
MSCI AC World ex USA (Net)	(5.3)	9.4	7.8	5.5
DOMESTIC FIXED INCOME	(2.6)	1.2	3.8	5.3
Barclays Capital US Government/Credit	1.7	1.6	2.8	4.0
Barclays Capital Aggregate	1.9	1.8	3.3	4.4
PRIVATE EQUITY	12.4	14.1	13.1	6.2
S&P 500 Index Plus 400 bps	7.4	17.3	17.3	7.9
HEDGE FUND	6.0	8.1	5.3	4.6
HFRI FOF Composite Index	4.0	6.3	4.1	3.2
REAL ESTATE	17.0	13.4	13.8	5.2
NCREIF Property Index	13.0	11.6	12.7	8.2
ENERGY MLP	(10.9)	18.5	N/A	N/A
S&P MLP Index	(16.5)	10.5	N/A	N/A
RISK PARITY	(4.3)	5.4	N/A	N/A
Risk Parity Index: 60% S&P 500/40% BC Agg	5.3	11.0	N/A	N/A

Notes:

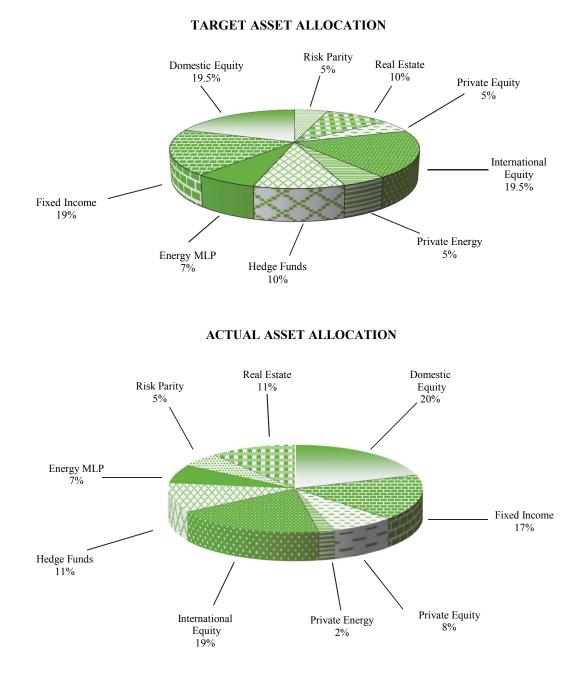
This schedule illustrates the investment results of the "managed" investment portfolio which excludes assets of the Variable Benefit Reserves and the operating cash reserve.

The total investment portfolio result which includes the performance of the fixed income Variable Benefit Reserves for the fiscal year is 2.5%. The fixed income portfolio, including the reserves, result for the fiscal year is 0.8%.

The composite returns above were calculated by the System's investment consultant, who used a time weighted rate of return based on market value.

The Composite Benchmark exhibits the overall rate of return for a sample unmanaged portfolio. At fiscal year end 2015, the Composite Benchmark is comprised of 19.5% Russell 3000 Index; 19.5% MSCI All Country World Ex-US Index; 5% S&P 500 + 3%; 5% CPI + 4%; 7% S&P MLP Total Return Index; 19% Barclays US Universal Index; 10% NCREIF Property Index; 10% HFRI Fund of Funds Composite Index; and 5% Risk Parity Index (consisting of 60% S&P 500 and 40% BC Aggregate Index).

Fire and Police Employees' Retirement System City of Baltimore, Maryland ASSET ALLOCATION - ACTIVELY MANAGED ACCOUNTS For the Period Ended June 30, 2015



Note: For asset allocation purposes, only actively managed accounts are included. Assets of the Paid Up Benefit Reserve and the Contingency Reserve are not included in this illustration. During the fiscal year 2015, the assets of these reserves were invested separately for the sole purpose of providing post retirement benefit increases. Assets in the cash reserve are also excluded from this illustration. These assets are held for the purpose of providing cash for the payment of benefits and administrative expenses.

Fire and Police Employees' Retirement System City of Baltimore, Maryland **TOP TEN DOMESTIC AND INTERNATIONAL STOCK HOLDINGS BY FAIR VALUE TOP TEN BOND HOLDINGS BY FAIR VALUE** June 30, 2015

# **Top Ten Domestic Stock Holdings**

	Shares	Stock	Market Value
1)	61,228	Apple Inc	\$7,679,521.90
2)	188,569	AT&T Inc	6,697,970.88
3)	79,021	Exxon Mobil Corp	6,574,547.20
4)	209,600	General Electric Co	5,569,072.00
5)	55,300	Johnson and Johnson	5,389,538.00
6)	158,323	Pfizer Inc	5,308,570.19
7)	43,400	Unitedhealth Group Inc	5,294,800.00
8)	76,852	Visa Inc	5,160,611.80
9)	57,689	Express Secripts Holding Co	5,130,859.66
10)	11,645	Amazon.Com Inc	5,054,978.05

# **Top Ten International Stock Holdings**

	Shares	Stock	Market Value
1)	270,500	Kddi Corp	\$6,530,110.35
2)	77,326	Akzo Nobel Nv	5,623,443.19
3)	55,469	Novartis Ag	5,469,443.42
4)	219,309	Relx Nv	5,198,633.22
5)	90,336	British American Tobacco Plc	4,851,739.24
6)	216,194	Ubs Group Ag	4,587,370.41
7)	339,977	China Mobile Ltd	4,352,466.89
8)	87,775	Total Sa	4,261,098.29
9)	43,178	Sanofi	4,245,131.77
10)	171,456	Sse Plc	4,141,806.36

# **Top Ten Bond Holdings**

	Par	Bonds	Market Value
1)	47,325,000	U S Treasury Bd Prin Strip 05/15/2030	\$31,291,763.25
2)	21,309,000	Government Tr Ctfs 10/01/2020	18,472,132.83
3)	31,240,000	U S Treasury Bd Cpn Strip 02/15/2036	16,323,837.20
4)	18,700,000	Israel St Aid 08/15/2021	16,144,271.00
5)	33,300,000	U S Treasury Bd Prin Strip 08/15/2039	15,339,312.00
6)	16,895,000	U S Treasury Bd Prin Strip 08/15/2026	12,810,971.65
7)	18,435,000	U S Treasury Bd Cpn Strip 11/15/2030	11,802,640.05
8)	10,419,000	Government Tr Ctfs 04/01/2020	9,199,872.81
9)	11,040,000	U S Treasury Bd Prin Strip 08/15/2027	8,085,916.80
10)	4,900,000	General Electric Capital Corp 08/07/2037	6,092,660.00

A complete list of portfolio holdings is available upon request.

# Fire and Police Employees' Retirement System City of Baltimore, Maryland INVESTMENT SUMMARY

June 30, 2015

	Fair Value	Percent of Total Investments
Stock:	<u></u>	<u></u>
U.S. Common Stock		
Financial	\$ 107,446,591	4.47%
Technology	55,279,019	2.30
Health care	53,100,399	2.22
Energy	43,474,343	1.82
Consumer services	34,445,674	1.43
Consumer nondurables	31,060,228	1.29
Consumer durables	30,111,284	1.25
Basic industries	17,377,771	0.72
Transportation	8,821,605	0.37
Capital goods	3,439,539	0.14
Total U.S. Common Stock	384,556,453	16.01
Other	364,330,433	10.01
International Stock	376,779,594	15.68
Large cap index fund	12,215,531	0.51
Total Other	388,995,125	16.19
Total Other	588,575,125	10.17
Total Stock	773,551,578	32.20
Bonds:		
U.S. Securities and Agencies		
Treasury notes and bonds	165,683,761	6.90
U.S. Agencies	103,198,708	4.29
Total U.S. Securities and Agencies	268,882,469	11.19
Corporate		
Financial	336,049,134	13.99
Transportation	43,297,624	1.80
Utilities	39,065,377	1.63
Industrial	17,981,354	0.75
Total Corporate	436,393,489	18.17
Emerging markets debt fund	73,116,108	3.04
Barclay Aggregate Index	8,700,788	0.36
Total Bonds	787,092,854	32.76
Other Investments:		
Real estate funds	214,812,389	8.94
Hedge funds	207,333,843	8.63
Private equity funds	164,495,449	6.85
Energy master limited partnerships	156,468,924	6.52
Risk parity fund	98,568,257	4.10
Total Other Investments	841,678,862	35.04
Total Investments	<u>\$2,402,323,294</u>	100.00%

# Fire and Police Employees' Retirement System City of Baltimore, Maryland **SUMMARY SCHEDULE OF FEES AND COMMISSIONS** For the Year Ended June 30, 2015

Assets Under Management **Investment Managers' Fees** International equity \$384,819,491 Domestic equity 570,023,177 Fixed income 802,623,271 Real estate 214,824,555 Private equity 164,495,449 Securities lending **Total Investment Managers' Fees Other Investment Service Fees:** Investment consultant fees

# Custodian bank fees Total Other Investment Service Fees

#### **Brokerage Fees**

Broker's fees on investment transactions for the year ended June 30, 2015 amounted to \$487,148. Brokerage firms receiving more than \$3,000 in fees are listed below.

Fees

\$1,833,514

2,972,400

1,176,303

362,575

481,420

153,128

\$6,979,340

\$327,500

166,748

\$494,248

	Fees		Fees
Brokerage Firms	<b>Paid</b>	Brokerage Firms	Paid
Percival Financial, LTD	\$47,474	Weeden & Co.	\$9,548
Instinet Corp	45,481	Daiwa Securities, Inc.	7,106
UBS	33,198	Stifel Nicolaus	6,332
Merrill Lynch	32,491	Rosenblatt Securities, LLC	6,004
Morgan Stanley & Co.	26,911	Macquarie Securities, Inc.	5,595
BNY Convergex	25,409	Broadcourt Capital Corp.	5,332
J P Morgan Securities, Inc.	23,785	Bernstein Sanford & Co.	4,603
Credit Suisse	23,054	Capital Institutional Services, Inc.	4,388
Barclays Capital	20,224	Merlin Securities, LLC	3,859
Citigroup Global Markets, LTD	19,780	Liquidnet, Inc.	3,518
Deutsche Bank Securities, Inc.	16,578	Raymond James & Associates, Inc.	3,254
Jefferies & Company, Inc.	14,117	Wells Fargo Securities, LLC	3,251
Goldman Sachs & Co.	12,052	RBC Capital Markets, LLC	3,124
Sanford C Bernstein & Co.	10,212	Guzman & Company	3,070

#### **Brokerage Commissions**

Because of the highly visible nature of the Fire and Police Employees' Retirement System, it is important that the investment managers have best execution as their primary objective. While the managers are permitted to direct a portion of brokerage commissions for research, it is expected that each manager will receive commission discounts which are commensurate with current discount practice. Investment managers are expected to give preference whenever possible to brokerage firms with offices located in the Baltimore Metropolitan Area. However, the managers are expected to negotiate commission rates, and local brokerage firms should be given preference only when commission rates and transaction services are competitive with those available from other firms.

Fire and Police Employees' Retirement System City of Baltimore, Maryland INVESTMENT PROFESSIONALS

#### **DOMESTIC EQUITY MANAGERS**

# Large Cap

INTECH Richard Yasenchak Palm Beach Gardens, FL

The Edgar Lomax Company Randall Eley Springfield, VA Mellon Capital Management Karen Wong San Francisco, CA

Brown Advisory Ken Stuzin Baltimore, MD

#### Small and Mid Cap

Pinnacle Associates, Ltd. Peter Marron New York, NY Rothschild Asset Management Inc Tina Jones New York, NY

Hotchkis & Wiley Capital Management Sheldon Lieberman Los Angeles, CA

# **INTERNATIONAL EQUITY MANAGERS**

William Blair & Co. Stephanie Braming Chicago, IL

Thomas White International Douglas M. Jackson Chicago, IL Causeway Capital Management, LLC Sarah Ketterer Los Angeles, CA

LMCG Investments, LLC Gordon Johnson Boston, MA

# REAL ASSETS

Harvest Fund Advisors, LLC Eric Conklin Wayne, PA Tortoise Capital Advisors, LLC Zach Hamel Leawood, KS

#### **RISK PARITY**

AQR Capital Management Tiffany Wells Greenwich, CT

# **HEDGE FUND OF FUNDS**

Union Bancaire Private Asset Management, LLC Robert Molina New York, NY

Bain Capital Jonathan Goodman Boston, MA

Cantab Capital Partners Dr. Ewan Kirk Cambridge, UK

Caspian Capital Adam S. Kohen New York, NY Farallon Capital Management Andrew Spokes San Francisco, CA

Renaissance Technologies Jennifer Milacci New York, NY

Visium Asset Management Robert Kim New York, NY

Voya Alternative Asset Management Peter Guan Atlanta, GA

Waterfall Asset Management Jack Ross New York, NY

#### FIXED INCOME MANAGERS

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

Western Asset Management Company Derek Fan Pasadena, CA

Income Research & Management (IRM) Jake Remely Boston, MA MacKay Shields Taylor Wagenseil New York, NY

Mellon Capital Management Brian Hock Pittsburgh, PA

Pugh Capital Management Mary Pugh Seattle, WA

C. S. McKee Brian Allen Pittsburgh, PA

# PRIVATE ENERGY

Aether Investment Partners David Rhoades Denver, CO Park Street Capital Sarah Dailey Boston, MA

# **REAL ESTATE MANAGERS**

Principal Global Investors John Berg De Moines, IA

LaSalle Investment Management, Inc. James Hutchinson Chicago, IL

Clarion Jeb Belford New York, NY

DLJ Real Estate Andy Rifkin New York, NY

> Equus Capital Partners Arthur Pasquarella Philadelphia, PA

# PRIVATE EQUITY

Pantheon Yokasta Segura-Baez New York, NY

BlackRock Leo Schenette Princeton, New Jersey

Capital Dynamics Cynthia Duda New York, NY

LGT Capital Partners Ryan Green New York, NY Adams Street Partners Scott C. Hazen Chicago, IL

Squadron Capital Advisors Chau Ly Central, Hong Kong

Siguler Guff Thomas McGowan New York, NY

Greenspring Global Partners Deric Emry Owings Mills, MD

Drum Capital Management, LLC Amber Tencic Stamford, CT AREA Property Partners Steven M. Wolf New York, NY

Alex Brown Realty John M. Prugh Baltimore, MD

Angelo Gordon Real Estate Adam Schwartz New York, NY

ARES Management John Ruane London, England Fire and Police Employees' Retirement System City of Baltimore, Maryland INVESTMENT PROFESSIONALS

# **GLOBAL CUSTODIAN**

BNY Mellon Asset Servicing Sarah Baulch Pittsburgh, PA

# SECURITIES LENDING

BNY Mellon Asset Servicing Mike McDermott Pittsburgh, PA

# **INVESTMENT CONSULTANT**

The Summit Strategies Group Daniel Holmes St. Louis, MO (PAGE LEFT INTENTIONALLY BLANK)

# ACTUARIAL SECTION





# Via Electronic Mail

October 29, 2015

Board of Trustees Fire and Police Employees' Retirement System of the City of Baltimore 7 East Redwood Street, 18<sup>th</sup> Floor Baltimore, Maryland 21202-3470

# **Re: 2015 CAFR**

Honorable Members of the Board of Trustees:

Cheiron has performed an actuarial valuation of the Fire and Police Employees' Retirement System (BCFPERS) as of June 30, 2015. This valuation is used to determine the City's contribution to be made in Fiscal Year 2017 for BCFPERS. The contribution actually made during Fiscal Year 2015 was developed in the 2013 actuarial valuation.

The funding method used in this annual valuation is the entry age normal funding method. Under this funding method, a normal cost rate is determined as a level percentage of pay for each active member, net of employee contributions. The normal cost rate times payroll at the valuation equals the total normal cost for each member. The employer's contribution is then increased or decreased from this normal cost amount to amortize the unfunded actuarial liability, the difference between the actuarial value of assets and the actuarial accrued liability, as a level dollar amount over a closed 25-year period that began June 30, 2014. This funding method is an actuarial change beginning with this June 30, 2015 annual valuation as the prior annual valuation utilized a closed 20-year amortization period and the projected unit credit funding method.

The actuarial value of assets for the System was set equal to the market value of assets as of June 30, 2014. Beginning with the plan year ending June 30, 2015, the actuarial value of assets is the current market value of assets, adjusted by a five-year smoothing of gains and losses on a market value basis. However, if the actuarial value of assets is less than 80% or more than 120% of the market value, an adjustment is made to the actuarial value to bring the value within this corridor.

The results presented in this Comprehensive Annual Financial Report reflect the assumptions from the June 30, 2015 actuarial valuation. Article 22 of the Baltimore City Code specifies a number of these assumptions and requires a review of all of the assumptions by the actuary at least once every three years. The most recent such review examined experience from 2011 to 2014 and resulted in assumption changes that were first reflected in the June 30, 2015 actuarial valuation.

Board of Trustees Fire and Police Employees' Retirement System October 29, 2015 Page ii

The Board adopted recommended changes, including:

- Recommended demographic assumption changes, including updates to the termination rates, retirement rates, disability rates, mortality rates, and DROP2 election
- Decrease in rate of investment return assumption from 7.75% to 7.5%,
- Decrease in inflation assumption from 3.75% to 3.00%,
- Use of the entry age normal (EAN) funding method for funding purposes, and
- Extension of the closed period amortization method from 20-year to 25-year beginning July 1, 2014.

The impact of these changes is reflected in the June 30, 2015 valuation and resulting Fiscal Year (FY) 2017 contributions. In addition, the assumptions and methods used for funding purposes meet the parameters set forth by Governmental Accounting Standards Board Statements No. 67 and 68. Note that the 7.5% rate of investment return is reflected as adopted by the Board despite Article 22 specifying a 7.75% rate.

Membership data used for the actuarial valuation are supplied by the System. An informal examination of the obvious characteristics of this data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23 was performed. Asset information is provided on an unaudited basis.

All supporting schedules in the Actuarial Section and the Schedule of Funding Progress in the Financial Section have been prepared by the System and 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 that 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.

This report was prepared solely for the Fire and Police Employees' Retirement System of the City of Baltimore for the purposes described herein, except that the System auditor may rely on this report solely for the purpose of completing an audit related to the matters herein. This valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely, Cheiron

Ehist

Fiona E. Liston, FSA, MAAA Principal Consulting Actuary

Attachments

Elizabeth Wiley, FSA, MAAA Consulting Actuary



# 1. Funding Method:

The entry age normal (EAN) funding method has been adopted with an effective date of 7/1/2015.

Liabilities and contributions shown in this report are computed using the entry age normal method of funding. Under this funding method, a normal cost rate is determined as a level percentage of pay for each active member. The normal cost rate times payroll equals the total normal cost for each member. The normal cost plus member contributions will pay for projected benefits at retirement for each active System member.

The actuarial liability is that portion of the present value of future 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 referred to as the unfunded actuarial liability (UAL).

The portion of the actuarial liability in excess of System assets, the UAL, is amortized to develop an additional cost or savings that is added to each year's employer normal cost. Under this cost method, actuarial gains and losses are directly reflected in the size of the unfunded actuarial liability. The amortization method is described as item 3 below.

# 2. Asset Valuation Method:

The actuarial value of assets is equal to the market value (Effective 7/1/2014). In future valuations, the calculation of the actuarial value of assets is calculated by the method described below.

The actuarial value has been calculated by taking the market value of assets less 80% of the investment gain (loss) during the preceding year, less 60% of the investment gain (loss) during the second preceding year, less 40% of the investment gain (loss) during the third preceding year, and less 20% of the investment gain (loss) in the fourth preceding year.

The investment gain (loss) is calculated by taking the difference between the expected value of assets based on an investment return assumption and the actual value of assets. If the actuarial value of assets is less than 80% or more than 120% of the market value, an adjustment is made to the actuarial value to bring the value within this corridor. (Effective 7/1/2015)

# 3. Amortization Method:

The current unfunded actuarial liability is amortized as a level dollar figure over a closed 25-year period beginning on July 1, 2014. (Effective 7/1/2015)

# 4. Changes Since Last Valuation:

<u>Funding Method</u> – entry age normal funding method adopted to replace the projected unit credit funding method.

Amortization Method –extended amortization period to be a 25-year closed period from July 1, 2014.

# 5. Rationale for Change in Methods:

The funding methods were chosen by the Board of Trustees, upon the recommendation of the actuaries, based on an experience study conducted on the System's experience from the 2011-2014 valuations. The results of this study were presented in September 2015 and are incorporated into this report by reference.

#### **Actuarial Assumptions**

#### 1. Rate of Investment Return:

7.50%, net of investment expenses, compounded annually.

#### 2. Rates of Salary Increase:

Salary increases are split into a static inflation assumption of 3.0% and a merit scale based on department and service, shown below.

Po	lice
Service	Merit Scale
0-1	0.25%
2	1.50%
3	18.25%
4	6.25%
5	5.50%
6	1.00%
7	4.00%
8 - 14	1.00%
15	3.75%
16 - 20	1.00%
21+	0.75%

Fi	ire
Service	Merit Scale
0	0.25%
1	4.00%
2 - 3	15.00%
4	2.00%
5	3.00%
6 – 13	0.75%
14 - 15	2.50%
16 - 20	0.50%
21+	0.50%

#### 3. System Expenses:

All expenses are paid from the fund. Administrative expenses are added to the contribution in the amount of 1.5% of covered payroll (adopted 6/30/12).

#### 4. Pre-Retirement Mortality and Disability:

Age	Non-Line-of- Duty	Line-of- Duty	Non-Line Dea	e-of-Duty th <sup>2,3</sup>	Line-of-Dut	ty Death <sup>2,3</sup>
	Disability <sup>1</sup>	Disability <sup>1</sup>	Male	Female	Male	Female
20	0.0012	0.0048	0.000534	0.000206	0.000133	0.000051
25	0.0012	0.0048	0.000637	0.000219	0.000159	0.000055
30	0.0012	0.0048	0.000595	0.000277	0.000149	0.000069
35	0.0013	0.0052	0.000688	0.000364	0.000172	0.000091
40	0.0015	0.0060	0.000825	0.000503	0.000206	0.000126
45	0.0016	0.0064	0.001280	0.000835	0.000320	0.000209
50	0.0017	0.0068	0.002216	0.001401	0.000554	0.000350
55	0.0017	0.0068	0.003665	0.002127	0.000916	0.000532
60	0.0017	0.0068	0.006163	0.003103	0.001541	0.000776
64	0.0017	0.0068	0.009698	0.004308	0.002425	0.001077

<sup>1</sup> Assumes 80%/20% of total rates split between Line of Duty Disability and Non Line of Duty Disability, respectively.

<sup>2</sup> Assumes 20%/80% of total rates split between Line of Duty Death and Non Line of Duty Death, respectively.

<sup>3</sup> 114% and 130% of the RP-2014 Blue Collar Mortality Table for males and females respectively projected using the RPEC\_2014 model, with an ultimate rate of 0.85% for ages 20-95, an ultimate rate of 0.00% for ages 95-120, convergence to the ultimate rate in year 2017, and using the committee selected weighing assumption.

#### 5. Post-Retirement Mortality:

<u>Retirees and Beneficiaries</u>: 114% and 130% of the RP-2014 Blue Collar Mortality Table for males and females respectively projected using the RPEC\_2014 model, with an ultimate rate of 0.85% for ages 20-95, an ultimate rate of 0.00% for ages 95-120, convergence to the ultimate rate in year 2017, and using the committee selected weighting assumption.

<u>Disabled members</u>: RP-2014 Disabled Retiree Mortality blended 50%/50% with the healthy annuitant's table projected using the healthy annuitant's RPEC\_2014 model.

	Retirees and	Beneficiaries	Disabled Members		
Age	Male	Female	Male	Female	
55	0.006839	0.005233	0.015104	0.009856	
60	0.009640	0.007456	0.018122	0.012227	
65	0.014381	0.011343	0.023033	0.016101	
70	0.022443	0.018156	0.031395	0.023179	
75	0.035918	0.029862	0.045102	0.035454	
80	0.059119	0.049613	0.067868	0.055325	
85	0.098987	0.084514	0.106145	0.087467	
90	0.166907	0.145425	0.169956	0.139038	

#### 6. Withdrawal:

Years of Service	Withdrawal <sup>1</sup>
0	11.00%
1	9.00%
2	7.00%
3	5.00%
4	4.00%
5	3.25%
6	2.75%
7	2.35%
8	1.95%
9	1.60%
10	1.30%
11	0.85%
12	0.50%
13 – 19	0.35%
20+	0.00%

Withdrawal decrements are reduced to zero when member is eligible to retire.

#### 7. Service Retirement:

The valuation uses retirement rates that vary according to member plan (police or firefighter) and whether a member is eligible for DROP, grandfathered DROP2, or non-grandfathered DROP2.

Members with 20 or more years of service on or before December 31, 2009 are eligible for DROP.

Members who had less than 20 years of service on December 31, 2009, but had either 15 or more years of service on June 30, 2010 or were age 50 or older as of June 30, 2010, can elect to participate in grandfathered DROP2 when they have 20 or more years of service.

Members who were not age 50 or older as of June 30, 2010, and also had less than 15 years of service on June 30, 2010, can participate in non-grandfathered DROP2 when they have 25 or more years of service.

Non-grandfathered members, who are not eligible for DROP or grandfathered DROP2, can take early retirement, with a reduced benefit. Prior to reaching normal retirement eligibility, these non-grandfathered members are assumed to take early retirement according to the following table:

				Non-Gra	andfathe re	ed Early R	etire ment	Rates for	Police an	d Fire				
	Service													
Age	<10	10	11	12	13	14	15	16	17	18	19	20	21-24	25+
<45												5.00%	5.00%	
45												5.00%	5.00%	
46				Members	Not Yet	Eligible for	r Early Re	tire me nt				5.00%	5.00%	
47												5.00%	5.00%	
48												5.00%	5.00%	
49												5.00%	5.00%	
50	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	
51	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	
52	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	
53	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
54	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
55	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%							-	
56	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%								
57	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%								
58	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%								
59	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%								
60	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%			Membe	rs Eligible	e for Unre	duced Be	nefits	
61	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%								
62	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%								
63	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%								
64	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%								
65	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%								

Once members reach eligibility for normal retirement, they are expected to follow one of two paths: they either enter the DROP/DROP2 program and follow the appropriate post-DROP or post-DROP2 retirement assumptions for their group, or they never enter the DROP/DROP2 program and follow the appropriate non-DROP or non-DROP2 retirement assumptions for their group. Active members who are beyond their applicable DROP or DROP2 program eligibility as of the valuation date are assumed to have already made this decision and so are valuing only with the applicable DROP/DROP2 or non-DROP2 retirement assumptions. Those who are not yet normal retirement eligible are valued under both options and the resulting liabilities are blended according to the following probabilities table:

	Police and Fire
DROP Members	
DROP	80%
Non-DROP	20%
Grandfathered DROP2 Members	
Grandfathered DROP2	80%
Grandfathered Non-DROP2	20%
Non-Grandfathered DROP2 Members	
Non-Grandfathered DROP2	80%
Non-Grandfathered Non-DROP2	20%

#### Non-DROP/Grandfathered Non-DROP2 Retirement Probabilities

Members who do not join DROP or grandfathered DROP2 are assumed to have retirement rates that vary by service until age 50. After age 50, the rates are assumed to vary solely by age.

Ages Less Years of Service		Ages 50 and Higher			
rears of Service	Probability of Retirement	Age	Probability of Retirement		
20	40%	50	10.00%		
21+	20%	51	8.00%		
		52	8.00%		
		53	5.00%		
		54	4.00%		
		55	4.00%		
		56	4.00%		
		57	3.00%		
		58	6.00%		
		59	12.00%		
		60	18.00%		
		61	18.00%		
		62	25.00%		
		63	25.00%		
		64	35.00%		
		65	100.00%		

#### Non-Grandfathered Non-DROP2 Retirement Probabilities

Assumptions vary between the rate applicable in the first year of eligibility for unreduced retirement and those for subsequent years for those who do not join non-grandfathered DROP2.

	Police a	nd Fire
Age	First Eligible	Subsequent
Less than 65	50.0%	30.0%
65 and up	100.0%	100.0%

#### DROP and Grandfathered/Non-Grandfathered DROP2 Retirement Probabilities

	DROP and DR	OP2 Exit Rates
Years After		
Electing DROP	Police	Fire
1	12.00%	3.00%
2	12.00%	7.00%
3	15.00%	10.00%
4	16.00%	10.00%
5	17.00%	10.00%
6	20.00%	10.00%
7	23.00%	25.00%
8	25.00%	15.00%
9	10.00%	10.00%
10	13.00%	10.00%
11	16.00%	10.00%
12	19.00%	14.00%
13	20.00%	16.00%
14	20.00%	16.00%
15+	20.00%	20.00%

NOTE: In all cases once the member reaches age 65, there is 100% probability of leaving DROP to commence benefit receipt.

#### 8. Line-of-Duty Disability:

Benefit Types:	1% of line-of-duty disability retirements are assumed to receive a pension equal to 100% of compensation at the time of retirement. The rest are assumed to receive a pension equal to $66 2/3\%$ of Average Final Compensation.
Form of Payment:	All future withdrawal benefits are assumed to be paid in the form of a lump sum refund of member contributions.
	All future retirement benefits are assumed to be paid in the form of a 50% Joint and Survivor Annuity. In addition, members participating in DROP are assumed to receive their DROP account balance in the form of a lump sum upon retirement.
	Future non-line-of-duty disability retirement benefits for current active members with fewer than five years of service (i.e., eligible only for the refund of member contributions) are assumed to be paid in the form of a lump sum. All other disability retirement benefits are assumed to be paid in the form of a 50% Joint and Survivor Annuity. In addition, members participating in DROP are assumed to receive their DROP account in the form of a lump sum upon disability retirement.
	Future death benefits for current active members who have not reached service retirement eligibility are assumed to be paid in the form of a lump sum. Certain line of duty death benefits for refund of member contributions are assumed to be paid in the form of a lump sum. All other death benefits are assumed to be paid in the form of a single life annuity equal to the member's accrued benefit. Beneficiaries of members participating in DROP are assumed to additionally receive the member's DROP account in the form of a lump sum.

#### 9. Cost-of-Living Adjustment Assumption:

Assumed to follow System provisions - 0%, 1%, or 2% depending on age and type of retirement

10. Percent Married:	Males 70%, Females 70%
11. Spouse Age:	A husband is assumed to be four years older than his wife.
12. Remarriage Rates:	None

#### 13. Children:

All benefits with Joint & Survivor Forms of Payments for retirees had their survivor benefits increased by 2.0% to account for children's benefits.

#### 14. Benefit Loads:

Benefits to certain types of future beneficiaries receiving Line-of-Duty death benefits were increased by 7.0% to allow for contingent beneficiaries.

Benefits to certain types of future members receiving Line-of-Duty disability benefits were increased by 1.5% to allow for possible conversion to Line-of-Duty death benefits.

Benefits payable in the form of a Joint and Survivor 100% Pop Up or Joint and Survivor 50% Pop Up were valued, respectively, as 100% Joint and Survivor with a 2.70% load and 50% Joint and Survivor with a 1.50% load to account for the additional value of the Pop Up form of benefit in the absence of data on the amount to which the benefit would increase. (6/30/2012)

All future retirement benefits were increased by 1% to account for possible child beneficiaries. (6/30/2012)

#### **15. Funding Policy:**

The City's funding policy is to contribute the amount equal to the net normal cost, a provision for anticipated administrative expenses, plus the accrued liability contribution or less the amortization of the excess assets, as the case may be. However, the aggregate payment by the City must be sufficient, when combined with the amount in the Fund, to provide the pensions and other benefits payable out of the Fund during the then-current year.

#### 16. Changes Since Last Valuation:

Demographic assumptions (termination rates, retirement rates, disability rates, mortality rates, DROP2 election) and economic assumptions (investment return, inflation) were updated to reflect the most recent experience study.

#### 17. Rationale for Assumptions:

The actuarial assumptions were chosen by the Board of Trustees, upon the recommendation of the actuaries, based on an experience study conducted on the System's experience from the 2011-2014 valuations. The results of this study were presented in September 2015 and are incorporated into this report by reference.

# Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date June 30	Number	Annual Payroll	Annual Average Pay	% Increase In Average Pay
2006	4,627	\$248,558,248	\$53,719	2.9%
2007	4,578	254,489,308	55,590	3.5
2008	4,615	269,690,209	58,438	5.1
2009	4,690	281,423,808	60,005	2.7
2010	4,584	276,576,626	60,335	0.6
2011	4,575	275,647,861	60,251	(0.1)
2012	4,624	284,601,473	61,549	2.2
2013	4,439	277,524,356	62,520	1.6
2014	4,317	284,210,233	65,835	5.3
2015	4,248	298,354,900	70,234	6.7

ud Police Employees' Retirement Sytem of Baltimore, Maryland EDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS
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A WOM GO	Average Annual <u>Allowances</u>	\$26,457	27,379	29,038	29,420	30,301	31,121	31,732	32,488	33,137	33,945
0/ 1000000	<sup>20</sup> Increase in Annual <u>Allowances</u>	6.0%	5.5	7.0	2.1	4.4	4.2	2.6	3.6	3.0	2.4
Rolls - End of Year	Annual <u>Allowances</u>	\$151,229,284	159,563,918	170,770,734	174,430,768	182,168,840	189,838,563	194,706,019	201,620,528	207,704,903	212,765,110
Rolls	No.	5,716	5,828	5,881	5,929	6,012	6,100	6,136	6,206	6,268	6,268
Removed from Rolls	Annual <u>Allowances</u>	\$3,540,124	3,750,941	4,699,524	4,049,841	4,307,535	4,215,749	4,747,538	3,318,082	3,095,964	3,780,142
Remove	No.	171	175	211	184	197	179	198	221	196	236
Added to Rolls	Annual <u>Allowances*</u>	\$12,062,518	12,085,575	15,906,340	7,709,875	12,045,607	11,885,471	9,614,994	10,232,591	9,180,339	8,840,349
Ac	No.	309	287	264	232	280	267	234	291	258	236
	Year Ended June 30	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015

\* Includes post-retirement adjustments. The annual allowances were adjusted to incorporate the \$16,000 minimum benefit for certain beneficiaries under Ordinances 10-306 and 11-444.

oase. If the	e compared /e members. (liability 1) \$ for service e over time.			rrued vered Assets (3)	73.5%	70.8	62.0	44.9	37.1	30.2	10.0	3.0	0.0	0.0
es' service l	ent assets au red by active on deposit he liabilities will increas			Portion of Accrued Liabilities Covered by Reported Assets (2)	100%	100	100	100	100	100	100	100	97	96
r the employe	he plan's prese e already rende r contributions In addition, tl of liability 3 v			Po Lii by (1)	100%	100	100	100	100	100	100	100	100	100
which spread the cost ove test of financial soundness.	a short-term solvency test, t 3) The liabilities for servic. liabilities for active membe cept in rare circumstances). nerally, the funded portion			Valuation Assets	\$2,505,470,848	2,658,735,032	2,676,354,876	2,587,235,012	2,524,753,505	2,546,236,459	2,475,874,446	2,502,405,754	2,492,544,399	2,575,515,725
The Retirement System's funding objective is to meet long-term benefit promises through contributions which spread the cost over the employees' service base. contributions to the System are soundly executed, the System will pay all promised benefits when due - the ultimate test of financial soundness.	A short-term solvency test is one means of examining a system's progress under its funding program. In a short-term solvency test, the plan's present assets are compared with: 1) Active member contributions on deposit; 2) The liabilities for future benefits to present retired lives; and 3) The liabilities for service already rendered by active members. In a system which has been following the discipline of allocating cost on a consistent basis to valuation years, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. Generally, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is rare.	G		(3) Active Members (Employer Financed Portion)	\$771,770,463	804,200,292	837,934,859	842,153,582	809,403,584	799,746,838	792,288,436	788,974,354	810,330,710	864,170,942
meet long-term benefit prostem will pay all promised be	ining a system's progress un the liabilities for future benefi illocating cost on a consisten ves (liability 2) will be fully ves retially covered by the ren	ory of liability 3. Aggregate Accrued Liabilities For	2	(2) Retirees and Beneficiaries	\$1,731,864,189	1,875,522,941	1,933,289,565	1,971,574,127	1,977,520,610	2,057,539,881	2,134,597,319	2,208,521,089	2,266,741,330	2,372,231,709
an's funding objective is to the soundly executed, the Sys	A short-term solvency test is one means of examinin 1) Active member contributions on deposit, 2) The li stem which has been following the discipline of alloc e liabilities for future benefits to present retired lives <i>r</i> rendered by active members (liability 3) will be party 3 being fully funded is rare.	The schedule below illustrates the System's history of liability 3. Aggregate Accri		(1) Active Member Contributions	\$206,295,261	214,167,284	223,169,334	237,159,576	246,799,329	247,518,595	261,776,304	270,077,058	283,377,044	300,379,071
The Retirement Syste contributions to the System a	A short-term solvency test is with: 1) Active member contribution In a system which has been followin and the liabilities for future benefits already rendered by active members Liability 3 being fully funded is rare.	The schedule below ill		Valuation Date June 30	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015

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Fire and Police Employees' Retirement System City of Baltimore, Maryland SOLVENCY TEST

### Gains and Losses in Accrued Liabilities During Fiscal Year Resulting from Differences Between Assumed Experience and Actual Experience

<u>Type of Activity</u>	Gain or (Loss) for Fiscal Year 2014	Gain or (Loss) for Fiscal Year 2015
Age and Service Retirements If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher pays, a loss.	\$ 1,245,488	\$ (4,511,009)
<b>Disability Retirements</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3,545,830)	514,666
<b>Death-in-Service Benefits</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	649,391	(18,208)
<b>Withdrawal From Employment</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	2,409,944	3,286,281
<b>Pay Increases</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(1,153,871)	(27,680,020)
<b>Investment Income</b> If there is greater investment income than assumed, there is a gain. If less, a loss.	(121,745,786)	(31,847,940)
<b>Death After Retirement</b> If retirees live longer than assumed, there is a loss. If not as long, a gain.	2,019,016	7,755,651
<b>New Entrants</b> New entrants create a loss because they were not assumed in the previous evaluation.	(936,958)	(1,798,953)
<b>Excess Contributions</b> Gain created due to contributions that are not designated to reduce the BIF and ERF.	-	-
<b>Continuing Inactives</b> Gains and losses from continuing inactives from causes other than death.	1,033,113	(257,805)
<b>Other</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, etc.	(3,342,768)	(5,013,690)
Loss During Year From Financial Experience	\$ (123,368,261)	\$ (59,571,027)

Fire and Police Employees' Retirement System City of Baltimore, Maryland **SUMMARY OF PLAN PROVISIONS** For the Year Ended June 30, 2015

#### 1. **EFFECTIVE DATE:**

The System was established July 1, 1962, and has been amended periodically.

#### 2. ELIGIBILITY:

Any uniformed officer of the Police or Fire Departments shall become a member as a condition of employment.

#### 3. MEMBER CONTRIBUTIONS:

Prior to July 1, 2010, members contributed at the rate of 6% of regular compensation. Effective July 1, 2010, the rate increased to 7% of regular compensation; effective July 1, 2011, the rate increased to 8% of regular compensation; effective July 1, 2012, the rate is 9% of regular compensation; and, effective July 1, 2013, the rate will be 10% of regular compensation.

Contributions are treated as made by the employer and are made to the System pre-tax according to Section 414(h)(2) of the Internal Revenue Code.

Members of the Baltimore City Employees' Retirement System who transferred to this System after July 1, 1967, and did not make up the contributions which would have been made from July 1, 1962, are to have their retirement allowance reduced by the actuarial equivalent of the deficient contributions with interest.

#### 4. AVERAGE FINAL COMPENSATION:

Average Final Compensation (AFC) shall mean the average annual compensation based on eighteen consecutive months of service during which the member's compensation was highest.

Effective July 1, 2010, for members hired on or after July 1, 2010, and for members who, as of June 30, 2010, did not meet the eligibility requirements for a service retirement benefit and had fewer than 15 years of service, AFC means the average annual compensation based on 36 consecutive months of service during which the member's compensation was highest.

#### 5. MILITARY SERVICE CREDIT:

- (A) **Military Service Prior to Employment:** A maximum of three years service credit is granted provided the member has acquired:
  - (1) 10 years of service and attained the age of 50; or
  - (2) 20 years of service, regardless of age; or
  - (3) 15 years of service, regardless of age for a member removed from his/her position.

Effective July 1, 2010, eligible military service credit prior to employment also can be used to satisfy the eligibility requirements for a normal service retirement benefit, early service, DROP, or DROP 2. To qualify to receive F&P service credit, a member may not be eligible to receive retirement benefits for the military service from any other retirement system except for a Reserve Component Retirement benefit for Reserve service and National Guard members nor be eligible for a regular military pension.

(B) Military Service Within Employment: Upon retirement or death, any member who had a break in employment due to military duty, shall receive service credit for the period of absence as provided by the Uniformed Services Employment and Reemployment Rights Act, provided the member leaves his/her accumulated contributions and interest on deposit with the F&P, does not take any other employment, and returns to F&P covered employment Fire and Police Employees' Retirement System City of Baltimore, Maryland **SUMMARY OF PLAN PROVISIONS** For the Year Ended June 30, 2015

within 1 year following the military service.

#### 6. SERVICE RETIREMENT BENEFIT:

#### (A) Normal Retirement Eligibility Requirements:

- (1) Effective June 30, 2010, members who entered the System on or before June 30, 2003, and who had acquired 15 or more years of service as of June 30, 2010, or who met the following age or service requirements as of June 30, 2010, may retire based on the following eligibility requirements:
  - (a) age 50, regardless of years of service credit; or
  - (b) regardless of age, 20 years of service credit.
- (2) Effective June 30, 2010, members who entered the System on or after July 1, 2003, and who had acquired 15 or more years of service as of June 30, 2010, or who met the following age and service requirements as of June 30, 2010, may retire based on the following eligibility requirements:
  - (a) age 50, with at least 10 years of service as a contributing member of this System; or
  - (b) regardless of age, 20 years of service with at least 10 years as a contributing member of this System.
- (3) Effective July 1, 2010, members who, as of June 30, 2010, did not meet the applicable eligibility requirements in (1) or (2) above and had fewer than 15 years of service, are eligible for a normal retirement benefit upon the earlier of:
  - (a) age 55, with at least 15 years of service as a contributing member of this System; or
  - (b) regardless of age, 25 years of service with at least 15 years as a contributing member of this System.

#### (B) Normal Retirement Benefit Amount: The sum of:

- (1) an annuity of the actuarial equivalent of the member's accumulated contributions and interest; and
- (2) a pension, which together with the annuity, shall be equal to 2.5% of the member's average final compensation for each of the first 20 years of service; plus
- (3) 2.0% of the member's average final compensation for each year of service in excess of 20 years.

#### (C) Early Retirement Eligibility Requirements:

Effective July 1, 2010, members who, as of June 30, 2010, did not meet the applicable eligibility requirements (A)(1) or (2) above and had fewer than 15 years of service, are eligible for an early retirement benefit upon attaining the applicable eligibility requirements in (A)(1) or (2) above.

#### (D) Early Retirement Benefit Amount:

- (1) The amount determined under (B) above, reduced by:
- (2) The applicable percentage shown below for each month (or fraction of a month) by which the member's benefit commencement date proceeds the date the member would have first met eligibility requirements for a normal retirement benefit under (A)(3) above had the member continued in employment with the City:

- (a) 6.5/12% per month for the first 60 months or fraction of a month immediately preceding the member's normal service retirement date;
- (b) 4.5/12% per month for the next 60 months or fraction of a month;
- (c)  $\frac{1}{4}$  per month for the next 60 months or fraction of a month; and
- (d) 1/6% per month for any additional month or fraction of a month.

#### 7. NON-LINE-OF-DUTY DISABILITY RETIREMENT BENEFIT:

- (A) **Non-Line-of-Duty Disability Eligibility Requirements:** Five years of membership service and determined by a hearing examiner to be mentally or physically incapacitated for the further performance of duty and that such incapacity is likely to be permanent.
- (B) Non-Line-of-Duty Disability Benefit Amount: The sum of:
  - (1) an annuity of the actuarial equivalent of the member's accumulated contributions and interest; and
  - (2) a pension, which together with the annuity, shall be equal to 2.5% of the member's average final compensation for each year of service up to 20 years; plus
  - (3) 2.0% of the member's average final compensation for each year of service in excess of 20 years.
  - (4) the total of this benefit shall not be less than 25% of the member's average final compensation.
- (C) **Offset to Retirement Allowance:** This allowance is offset by workers' compensation, if the member entered the System after July 1, 1970.

#### 8. LINE-OF-DUTY DISABILITY RETIREMENT BENEFIT:

(A) **Line-of-Duty Disability Eligibility Requirements:** Immediate eligibility upon membership in the System and determined by a hearing examiner to be incapacitated for the further performance of duty, and the incapacity resulted from an injury occurring while in the actual performance of such duty without willful negligence on the part of the member.

Should such disability further result in extensive brain damage causing total incapacity or in the loss of or the use of both hands or both arms or both feet or both legs or both eyes or any two thereof, an additional pension will be payable.

#### (B) Line-of-Duty Disability Benefit Amount:

- (1) The sum of:
  - (a) an annuity of the actuarial equivalent of the member's accumulated contributions and interest; plus
  - (b) a pension equal to 66.667% of the member's average final compensation.
- (2) If the member's disability results in extensive brain damage causing total incapacity or in the loss of or the use of both hands or both arms or both feet or both legs or both eyes or any two thereof, an additional pension is paid so that the retirement allowance is equal to 100% of the member's current annual

compensation at the time of retirement. The member will also receive a lump-sum refund of the member's accumulated contributions and interest.

(C) **Offset to Retirement Allowance:** This allowance is offset by workers' compensation, if the member entered the System after July 1, 1970.

#### 9. TERMINATION OF EMPLOYMENT:

- (A) **Eligibility Requirements:** If removed from a position without fault upon acquiring 15 years of service, the member is eligible for an immediate benefit; otherwise a refund of accumulated contributions and interest if not eligible for any other benefits.
- (B) Benefit Amount: The sum of:
  - (1) an annuity of the actuarial equivalent of the member's accumulated contributions and interest; plus
  - (2) a pension, which together with the annuity, shall be equal to 2.5% of the member's average final compensation for each of the first 20 years of service; plus
  - (3) 2.0% of the member's average final compensation for each year of service in excess of 20 years.

#### 10. MAXIMUM ALLOWANCE AND OPTIONAL METHODS OF RECEIVING BENEFIT PAYMENTS:

(A)	Maximum Allowance:	Upon retiree's death, 50% of the retiree's maximum allowance is paid to the spouse provided they had been married for at least one year prior to retirement or five years beginning before or after retirement. A spouse remains eligible for the maximum benefit unless she or he remarries or until death. If there is no eligible spouse, the allowance will be paid to any minor and unmarried children until the last child marries, dies, or attains age 18 or age 22 if a full-time student. All other options will result in a lesser amount paid.
(B)	Reserve Guarantee Option:	Upon retiree's death, a cash refund to retiree's designated beneficiary based on present value of allowance at retirement less payments made.
(C)	100% Joint and Survivor Option:	Upon retiree's death, 100% of retiree's allowance to continue to designated beneficiary until death.
(D)	50% Joint and Survivor Option:	Upon retiree's death, 50% of retiree's allowance to continue to designated beneficiary until death.
(E)	100% Pop-up Joint and Survivor Option:	Upon retiree's death, 100% of retiree's allowance to continue to designated beneficiary until death. If the beneficiary predeceases member, the member's benefit "pops-up" to the maximum allowance.
(F)	50% Pop-up Joint and Survivor Option:	Upon retiree's death, 50% of retiree's allowance to continue to designated beneficiary until death. If the beneficiary predeceases member, the member's benefit "pops-up" to the maximum allowance.

#### (G) Specific Benefit Option:

Upon retiree's death and subject to the approval of the Board of Trustees, the member's designated beneficiary will receive:

- (1) a specific lump sum amount; or
- (2) a specific periodic allowance.

These options are available for service, termination, non-line-of-duty disability, and line-of-duty disability retirement. The option and/or beneficiary may be changed within thirty days after retirement.

#### 11. NON-LINE-OF-DUTY DEATH BENEFIT:

(A) **Non-Line-of-Duty Death Benefit Eligibility Requirements:** Member who dies while actively employed but whose death does not qualify as a line-of-duty death.

#### (B) Non-Line-of-Duty Death Benefit Amount:

- (1) Lump-sum benefit: The member's accumulated contributions and interest and if the member has one or more years of service, 50% of the greater of the member's current annual compensation or average final compensation shall be payable to the member's designated beneficiary or as specified by the plan provisions.
- (2) 25% plus benefit: In lieu of (1) above, if the member had at least two years of continuous service, an annual sum equal to 25% of the member's current annual compensation, plus 1.5% of the member's current annual compensation for each year of service in excess of two years. This benefit is not to exceed 50% of the member's current annual compensation. This benefit shall be payable to:
  - (a) the member's spouse until the spouse remarries or dies; or
  - (b) the member's minor and unmarried children equally until the last child marries, dies, or attains age 18 or age 22 if a full-time student.
- (3) 100% survivorship benefit: If the member was eligible for a service retirement and the member's designated beneficiary is his/her spouse to whom she/he was married for at least one year prior to the date of death, or surviving parent, such beneficiary may elect to receive in lieu of (1) and (2) above, an allowance equal to the amount that would have been paid under the 100% Joint and Survivor Option.
- (C) **Offset to Retirement Allowance:** This allowance is offset by workers' compensation, if the member entered the System after July 1, 1970.

#### 12. LINE-OF-DUTY DEATH BENEFIT:

#### (A) Line-of-Duty Death Benefit Eligibility Requirements:

- (1) Immediate eligibility upon membership in the System and determined by a hearing examiner that the member's death arose out of and in the course of the actual performance of duty, without willful negligence on the part of the member; or
- (2) A member had been granted a line-of-duty disability and dies within five years as a result of the last injury that resulted in a line-of-duty disability retirement.

- (B) Line-of-Duty Death Benefit Amount: This benefit will consist of:
  - (1) A refund of the member's accumulated contributions and interest to the member's designated beneficiary or as specified by the plan provisions, and
  - (2) A pension of 100% of member's current annual compensation to be paid to:
    - (a) the member's surviving spouse to continue for life; or
    - (b) if no surviving spouse or the spouse dies, then equally to the member's minor and unmarried children equally until the last child marries, dies, or attains age 18 or age 22 if a full-time student; or
    - (c) if no surviving spouse or eligible minor child or children, then to the member's surviving dependent parents to continue for life.
- (C) **Offset to Retirement Allowance:** This allowance is offset by workers' compensation, if the member entered the System after July 1, 1970.

#### 13. DEFERRED RETIREMENT OPTION PLAN (DROP):

The Deferred Retirement Option Plan became effective July 1, 1996.

- (A) Eligibility: a member who did not meet the following eligibility requirements as of December 31, 2009, is not eligible for DROP participation and is not entitled to DROP benefits effective January 1, 2010. Such member may be eligible for participation in the Deferred Retirement Option Plan 2 (DROP 2) that became effective January 1, 2010.
  - (1) For members who entered the System on or before June 30, 2003, a member must acquire 20 or more years of service, regardless of age on or before December 31, 2009. Eligible military service credit prior to employment also can be used to satisfy the eligibility requirements.
  - (2) For members who entered the System on or after July 1, 2003, a member must acquire 20 or more years of service with at least 10 years of service as a contributing member of this System, regardless of age, on or before December 31, 2009. Eligible military service credit prior to employment also can be used to satisfy the eligibility requirements.
  - (3) An application must be filed not less than 30 days nor more than 90 days prior to the date the DROP participation will begin.
  - (4) A member who terminates employment immediately becomes ineligible to participate or to continue to participate in the DROP.

#### (B) **Term of DROP:**

The maximum period of time that a member can participate in the DROP is a single term of three consecutive years beginning on the member's DROP start date.

#### (C) No Service Credit While in DROP:

A DROP participant remains a member of the F&P but is not credited with F&P service.

Except for Intermediate DROP Retirement Benefits, compensation during the member's DROP participation period

shall be disregarded in calculating the member's AFC.

#### (D) **Discontinuation of DROP Participation:**

- (1) If a member terminates service anytime during or at the end of the three year DROP period, participation in the DROP ends automatically.
- (2) A member may elect to end participation in the DROP on either the first or second anniversary of the DROP participation start date. The election must be made by filing an application with the System not less than 30 days nor more than 90 days prior to the first or second anniversary of the member's DROP start date.
- (3) A member who continues employment after terminating participation in the DROP shall resume earning service credit in the F&P.
- (4) Once a member terminates participation in the DROP, the member cannot again participate in the DROP at a later date.
- (5) If a member retires at the end of the DROP participation period, begins receiving DROP retirement benefits, and is then reemployed in a position covered by the F&P or any Baltimore City sponsored retirement system, all DROP retirement benefit payments will be suspended until the member's later retirement.
- (E) **DROP Account:** The member's DROP account shall consist of:
  - (1) For each full year of a member's DROP participation, an amount equal to the maximum annual service retirement allowance the member would have received had the member retired from service and began receiving the maximum retirement allowance;
  - (2) For each partial year of a member's DROP participation, an amount equal to a member's pro-rated maximum annual service retirement allowance;
  - (3) A separate sub-account consisting of the member's regular mandatory contributions made during the member's DROP participation period; and
  - (4) Interest compounded annually at 8.25% until the member terminates from service.

#### (F) **DROP Retirement Benefit:**

(1) BASIC DROP:

A member who terminates service during or at the conclusion of the DROP participation period will receive:

- (a) the service retirement benefit the member would have received if the member had retired on the date the DROP participation began; and
- (b) the balance in the member's DROP account.
- (2) INTERMEDIATE DROP:

A member who continues working following the conclusion of the DROP participation period and terminates service within 18 months following the DROP participation period will receive:

(a) all benefits under the Basic DROP Benefit; plus

- (b) 2.0% of the member's AFC, calculated as of the member's date of termination from employment covered by this System, for each year of service credit, prorated for partial years, earned by employment following the DROP participation period (taking into account the member's annual compensation while in DROP), not to exceed 18 months; plus
- (c) a recovery rate of 1.5% of the member's AFC, calculated as of the member's date of termination from employment covered by this System, for each year of service credit, prorated for partial years, earned by employment following the DROP participation period (taking into account the member's annual compensation while in DROP), not to exceed 18 months, but limited to a "recovery" of 2.0% if the member discontinued participation in DROP after 1 year or limited to a "recovery" of less than 2.25% if the member discontinued participation in DROP after 2 years; plus
- (d) 2.0% of the member's AFC, calculated as of the member's termination date from employment covered by this System, for each year of service not already included in the calculation of the member's retirement benefit under (a) and (b).
- (3) FULL DROP:

A member who continues working following the conclusion of the DROP participation period and terminates service 18 or more months following the DROP participation period will receive:

- (a) an annuity of the actuarial equivalent of the member's accumulated contributions and interest; plus
- (b) a pension, which together with the annuity, shall be equal to 2.5% of the member's AFC, calculated as of the member's date of termination from employment covered by this System for each of the first 20 years of service; plus
- (c) 2.0% of the member's AFC, calculated as of the member's date of termination from employment covered by this system for each year of service in excess of 20 years; plus
- (d) a recovery rate of 1.5% of the member's AFC, calculated as of the member's date of termination from employment covered by this System, for each year of service credit, prorated for partial years, earned by employment following the DROP participation period, not to exceed 4 years, but limited to a "recovery" of 2.0% if the member discontinued participation in DROP at 1 year or limited to a "recovery" of 4.0% if the member discontinued participation in DROP at 2 years; plus
- (e) the balance in the member's DROP account.

#### (G) Non-Line-of-Duty Disability:

- (1) any member who retires on account of a non-line-of-duty disability during or at the end of the DROP participation period will receive the Basic DROP Retirement Benefit.
- (2) any member who retires on account of a non-line-of-duty disability within 18 months following the DROP participation period will receive the Intermediate DROP Retirement Benefit.
- (3) any member who retires on account of a non-line-of-duty disability 18 or more months following the DROP participation period will receive the Full DROP Retirement Benefit.

#### (H) Line-of-Duty Disability:

Any member who retires on account of a line-of-duty disability during or following the DROP participation period

will receive the line-of-duty disability retirement benefit consisting of: an annuity of the member's accumulated contributions and interest, plus 66.667% of current AFC. This benefit will be paid instead of any DROP retirement benefits and the member will not receive the balance in the DROP account.

#### (I) Non-Line-of-Duty Death:

Due to the non-line-of-duty death of a member who dies during or following the DROP participation period, the beneficiary will receive the non-line-of-duty death benefit according to the DROP provisions. The member's DROP account is payable according to the form of the non-line-of-duty death benefit as follows:

- (1) Lump-sum benefit: The beneficiary of a deceased DROP participant will receive the balance of the deceased member's DROP account in a lump sum payment.
- (2) 25% plus benefit: The beneficiary can elect to receive the balance of the deceased member's DROP account in a lump sum payment or in periodic payments.
- (3) 100% survivorship benefit: The beneficiary can elect to receive the balance of the deceased member's DROP account in a lump sum payment or in periodic payments.

#### (J) Line-of-Duty Death:

The line-of-duty death benefit payable due to the death of a member who dies during or following the DROP participation period will equal either of the following as elected by the member's beneficiary:

- (1) the non-line-of-duty death benefit including DROP benefits as described above; or
- (2) the line-of-duty death benefit payable as though the member had never participated in the DROP.

#### (K) Benefits for Reemployed DROP Participants:

- (1) if a member receiving DROP retirement benefits is reemployed in a position covered by the F&P, the member's DROP retirement benefits shall be suspended. When the member later retires again on a service or non-line-of-duty disability retirement, the member will resume receiving the DROP benefits which had been suspended at the time of reemployment, plus, the member will receive 2.0% (prorated for partial years) of the member's current AFC for each year of service credit earned during the reemployment period.
- (2) if a member receiving DROP retirement benefits is reemployed in a position covered by the F&P, and then dies during the reemployment period, beneficiary eligibility for either non-line-of-duty death benefits or line-of-duty death benefits will be determined according to the DROP provisions.
- (3) if a member receiving DROP retirement benefits is reemployed in a position covered by another Baltimore City sponsored retirement system, the member's DROP retirement benefits shall be suspended. When the member later retires again, the member will resume receiving the DROP retirement benefits which had been suspended at the time of reemployment,

#### (L) **DROP Post-Retirement Benefit Increases:**

- (1) A member who retires during or at the end of the DROP participation period will have that DROP participation period credited toward the eligibility requirement for post-retirement benefit increases.
- (2) A member who continues working following the DROP participation period will not have that DROP

participation period credited toward the eligibility requirement for post-retirement benefit increases.

(3) Post-retirement benefit increases for former DROP participants are applied prospectively.

#### (M) Form of Payment of Benefits from DROP Account:

A member (or a beneficiary after the death of the member in service) can choose to receive the total balance of the DROP account as:

- (1) One lump sum which can be:
  - (a) rolled over to an IRA or similar account; or
  - (b) taken in pocket; or
- (2) Periodic payments in the same form as the retirement benefit.

#### 14. DEFERRED RETIREMENT OPTION PLAN 2 (DROP 2):

DROP 2 became effective January 1, 2010. A member who is a DROP participant or who is entitled to DROP benefits is not entitled to DROP 2 participation or DROP 2 benefits. DROP 2 provisions differ for fire department and police department personnel.

#### (A) **Eligibility:**

- (1) For members who entered the System on or before June 30, 2003, a member must acquire 20 or more years of service regardless of age.
- (2) For members who entered the System on or after July 1, 2003, and on or before December 31, 2009, a member must acquire 20 or more years of service with at least 10 years of service as a contributing member of this System, regardless of age.
- (3) For members who entered the System on or after January 1, 2010, a member must acquire 20 or more consecutive years of service credit through City employment and as a contributing member of the System, regardless of age.
- (4) Effective July 1, 2010, members who had 15 or more years of service as of June 30, 2010, must acquire 20 or more years of service, and members who had less than 15 years of service as of June 30, 2010, must acquire 25 or more years of service as a contributing member of this System.
- (5) For members who entered the System on or after July 1, 2010, a member must acquire 25 or more years of service credit as a contributing member of the System, regardless of age.
- (6) An application must be filed not less than 30 days nor more than 90 days prior to the date the DROP 2 participation will begin.
- (7) A member who terminates employment immediately becomes ineligible to participate or to continue to participate in the DROP 2.

#### (B) Term of DROP 2:

The maximum period of time that a member can participate in the DROP 2 is a single term of three consecutive

years beginning on the member's DROP 2 start date.

A member must remain in DROP 2 for a minimum of 1 year to be eligible for DROP 2 benefits.

#### (C) No Service Credit While in DROP 2:

A DROP 2 participant remains a member of the F&P but is not credited with F&P service.

Except for Mid DROP 2 retirement benefits, compensation during the member's DROP 2 participation period shall be disregarded in calculating the member's AFC.

#### (D) **Discontinuation of DROP 2 Participation:**

- (1) If a member terminates service anytime during or at the end of the three year DROP 2 period, participation in the DROP 2 ends automatically.
- (2) A member may elect to end participation in the DROP 2 on either the first or second anniversary of the DROP 2 participation start date. The election must be made by filing an application with the System not less than 30 days nor more than 90 days prior to the first or second anniversary of the member's DROP 2 start date.
- (3) A member who continues employment after terminating participation in the DROP 2 shall resume earning service credit in the F&P.
- (4) Once a member terminates participation in the DROP 2, the member cannot again participate in the DROP 2 at a later date.
- (5) If a member retires at the end of the DROP 2 participation period, begins receiving DROP 2 retirement benefits, and is then reemployed in a position covered by the F&P or any Baltimore City sponsored retirement system, all DROP 2 retirement benefit payments will be suspended until the member's later retirement.
- (E) **DROP 2 Account:** The member's DROP 2 account shall consist of:
  - (1) For each full year of a member's DROP 2 participation, an amount equal to the maximum annual service retirement allowance the member would have received had the member retired from service and began receiving the maximum retirement allowance;
  - (2) For each month of a member's DROP 2 participation, an amount equal to one-twelfth of a member's maximum annual service retirement allowance;
  - (3) For each day not included in (1) or (2), an amount equal to 1/365 of the member's maximum annual service retirement allowance;
  - (4) Documentation requirements must be met prior to the member's DROP 2 start date for inclusion of preemployment military service credit in the DROP 2 benefit calculation.
  - (5) A separate sub-account consisting of the member's regular mandatory contributions made during the member's DROP 2 participation period; and
  - (6) Interest compounded annually at 5.50% until the member terminates from service. Effective July 1, 2010, for members who had fewer than 15 years of service as of June 30, 2010, interest is compounded annually at 3.0%

until the member terminates from service.

#### (F) DROP 2 Retirement Benefit - FIRE DEPARTMENT MEMBERS:

(1) EARLY DROP 2:

A member must complete a minimum of 1 year of DROP 2 participation to be eligible for Early DROP 2 benefits. A member who terminates service during year 2 or year 3 or at the conclusion of the DROP 2 participation period will receive:

- (a) the following percentages of the member's AFC calculated as of the day before the member's DROP 2 start date:
  - (i) 2.5% for each of the first 20 years of service, plus
  - (ii) 2.0% for each full year of service in excess of 20 years, prorated for partial years, prior to the member's DROP 2 start date; no service credit is earned during the member's DROP 2 participation period; plus
- (b) the balance in the member's DROP 2 account.
- $(2) \qquad \text{MID DROP 2:}$

A member who continues working, resumes earning service credit for employment covered by this System following the conclusion of the member's DROP 2 participation period, and terminates service anytime within 5 years following the member's DROP 2 participation period will receive:

- (a) the following percentages of the member's AFC calculated as of the day before the member's DROP 2 start date:
  - (i) 2.5% for each of the first 20 years of service, plus
  - (ii) 2.0% for each full year of service in excess of 20 years, prorated for partial years, prior to the member's DROP 2 start date, plus
  - (iii) 2.0% for each full year of service, prorated for partial years, purchased during or following the member's DROP 2 participation period, if any; no service credit is earned during the member's DROP 2 participation period; plus
- (b) the following percentages of the member's AFC calculated as of the member's termination date from employment covered by this System:
  - (i) 2.0% for each full year of service, prorated for partial years, for up to 5 years of employment as a contributing member of this System following the member's DROP 2 participation period; no service credit is earned during the member's DROP 2 participation period, plus
  - (ii) A recovery rate of 1.5% for each of the first four years of employment covered by this System immediately following the member's DROP 2 participation period, subject to the following limitations:
    - 1. if the member discontinued DROP 2 participation at 1 year, the recovery rate is limited to 2.0%.
    - 2. if the member discontinued DROP 2 participation at 2 years, the recovery rate is limited to 4.0%.

plus,

- (c) the balance in the member's DROP 2 account.
- (3) COMPLETE DROP 2:

A member who continues working, resumes earning service credit for employment covered by this System following the conclusion of the member's DROP 2 participation period, and terminates service 5 or more years following the DROP 2 participation period will receive:

- (a) the following percentages of the member's AFC calculated as of the member's termination date from employment covered by this System:
  - (i) 2.5% for each of the first 20 years of service, plus
  - (ii) 2.0% for each full year of service, prorated for partial years, for service in excess of 20 years, excluding employment covered by this System during the member's DROP 2 participation period, plus
  - (iii) A recovery rate of 1.5% for each of the first four years of employment covered by this System immediately following the member's DROP 2 participation period, subject to the following limitations:
    - 1. if the member discontinued DROP 2 participation at 1 year, the recovery rate is limited to 2.0%.
    - 2. if the member discontinued DROP 2 participation at 2 years, the recovery rate is limited to 4.0%.

plus,

(b) the balance in the member's DROP 2 account.

#### (G) **DROP 2 Retirement Benefit – POLICE DEPARTMENT MEMBERS:**

(1) EARLY DROP 2:

A member must complete a minimum of 1 year of DROP 2 participation to be eligible for Early DROP 2 benefits. A member who terminates service during year 2 or year 3 or at the conclusion of the DROP 2 participation period will receive:

- (a) the following percentages of the member's AFC as of the day before the member's DROP 2 start date:
  - (i) 2.5% for each of the first 20 years of service, plus
  - (ii) 2.0% for each full year of service in excess of 20 years, prorated for partial years, prior to the member's DROP 2 start date; no service credit is earned during the member's DROP 2 participation period; plus
- (b) the balance in the member's DROP 2 account.
- (2) MID DROP 2:

A member who continues working, resumes earning service credit for employment covered by this System following the conclusion of the member's DROP 2 participation period, and terminates service anytime within 3½ years following the DROP 2 participation period will receive:

- (a) the following percentages of the member's AFC as of the day before the member's DROP 2 start date:
  - (i) 2.5% for each of the first 20 years of service, plus
  - (ii) 2.0% for each full year of service in excess of 20 years, prorated for partial years, prior to the member's DROP 2 start date, plus
  - (iii) 2.0% for each full year of service, prorated for partial years, purchased during or following the member's DROP 2 participation period, if any; no service credit is earned during the member's DROP 2 participation period; plus
- (b) the following percentage of the member's AFC calculated as of the member's termination date from employment covered by this System:

2.0% for each full year of service, prorated for partial years, for up to  $3\frac{1}{2}$  years of employment as a contributing member of this System following the member's DROP 2 participation period; no service credit is earned during the member's DROP 2 participation period; and

- (c) the balance in the member's DROP 2 account.
- (3) COMPLETE DROP 2:

A member who continues working, resumes earning service credit for employment covered by this System following the conclusion of the member's DROP 2 participation period, and terminates service 3<sup>1</sup>/<sub>2</sub> or more years following the DROP 2 participation period will receive:

- (a) the following percentages of the member's AFC calculated as of the member's termination date from employment covered by this System:
  - (i) 2.5% for each of the first 20 years of service, plus
  - (ii) 2.0% for each full year of service, prorated for partial years, for service in excess of 20 years excluding employment covered by this System during the member's DROP 2 participation period; plus
- (b) the balance in the member's DROP 2 account.

#### (H) Non-Line-of-Duty Disability:

- (1) the member must complete a minimum of 1 year of the DROP 2 participation period to be eligible for any DROP 2 benefits.
- (2) any member who retires prior to the first anniversary of the member's DROP 2 start date is not entitled to any benefits under DROP 2. The benefit will be calculated as though the member had never participated in DROP 2.
- (3) any member who retires on account of a non-line-of-duty disability during or at the end of the DROP 2 participation period will receive the Early DROP 2 retirement benefit.
- (4) any Fire department member who retires within 5 years following the end of the DROP 2 participation period or any Police department member who retires within 3<sup>1</sup>/<sub>2</sub> years following the end of the DROP 2 participation period on account of a non-line-of-duty disability will receive the Mid DROP 2 Retirement Benefit.

(5) any Fire department member who retires with 5 or more years following the end of the DROP 2 participation period or any Police department member who retires with 3<sup>1</sup>/<sub>2</sub> or more years following the end of the DROP 2 participation period on account of a non-line-of-duty disability will receive the Complete DROP 2 Retirement Benefit.

#### (I) Line-of-Duty Disability:

Any member who retires on account of a line-of-duty disability during or following the DROP 2 participation period will receive the line-of-duty disability retirement benefit consisting of: an annuity of the member's accumulated contributions and interest, plus 66.667% of current AFC. This benefit will be paid instead of any DROP 2 retirement benefits and the member will not receive the balance in the DROP 2 account.

#### (J) Non-Line-of-Duty Death:

Due to the non-line-of-duty death of a member who dies after completing a minimum of one year of DROP 2 participation or following the DROP 2 participation period, the beneficiary will receive the non-line-of-duty death benefit according to the DROP 2 provisions. The member's DROP 2 account is payable according to the form of the non-line-of-duty death benefit as follows:

- (1) Lump-sum benefit: The beneficiary of a deceased DROP 2 participant will receive the balance of the deceased member's DROP 2 account in a lump sum payment.
- (2) 25% plus benefit: The beneficiary can elect to receive the balance of the deceased member's DROP 2 account in a lump sum or in periodic payments.
- (3) 100% survivorship benefit: The beneficiary can elect to receive the balance of the deceased member's DROP 2 account in a lump sum payment or in periodic payments.

If the member dies within the first year of the DROP 2 participation period, the benefit will be calculated as though the member had never participated in DROP 2.

#### (K) Line-of-Duty Death:

The line-of-duty death benefit payable due to the death of a member who dies after completing a minimum of one year of DROP 2 participation or following the DROP 2 participation period will equal either of the following as elected by the member's beneficiary:

- (1) the non-line-of-duty death benefit including DROP 2 benefits as described above; or
- (2) the line-of-duty death benefit payable as though the member had never participated in the DROP 2.

If the member dies within the first year of the DROP 2 participation period, the benefit will be calculated as though the member had never participated in DROP 2.

#### (L) Benefits for Reemployed DROP 2 Participants:

(1) if a member receiving DROP 2 retirement benefits is reemployed in a position covered by the F&P, the member's DROP 2 retirement benefits shall be suspended. When the member later retires again on a service or non-line-of-duty disability retirement, the member will resume receiving the DROP 2 benefits which had been suspended at the time of reemployment, plus, the member will receive 2.0% (prorated for partial years) of the member's current AFC for each year of service credit earned during the reemployment period.

- (2) if a member receiving DROP 2 retirement benefits is reemployed in a position covered by the F&P, and then dies during the reemployment period, beneficiary eligibility for either non-line-of-duty death benefits or line-of-duty death benefits will be determined according to the DROP 2 provisions.
- (3) if a member receiving DROP 2 retirement benefits is reemployed in a position covered by another Baltimore City sponsored retirement system, the member's DROP 2 retirement benefits shall be suspended. When the member later retires again, the member will resume receiving the DROP 2 retirement benefits which had been suspended at the time of reemployment,

#### (M) **Pre-employment Military Service Credit for DROP 2 Participants:**

A member may receive up to 3 years of membership service credit for military service prior to employment with the City of Baltimore if the requirements are met according to the plan provisions. Credit for pre-employment military service may be used in the calculation of the member's maximum service retirement benefit credited to the member's DROP 2 account.

The member must apply and provide the F&P proper and complete documentation of pre-employment military service prior to the member's DROP 2 participation start date in order for the pre-employment military service to be used in the calculation of the members DROP 2 benefit credited to the DROP 2 account.

If the member fails to properly apply and provide the F&P with complete documentation of pre-employment military service prior to the member's DROP 2 participation start date, the pre-employment military service credit will not be included in the calculation of the member's maximum service retirement benefit that is credited to the member's DROP 2 account.

#### (N) Form of Payment of Benefits from DROP 2 Account:

A member (or an eligible beneficiary after the death of the member in service) can choose to receive the total balance of the DROP 2 account as:

- (1) One lump sum which can be:
  - (a) rolled over to an IRA or similar account; or
  - (b) taken in pocket; or
- (2) Periodic payments in the same form as the retirement benefit.

#### 15. **POST-RETIREMENT BENEFIT INCREASES:**

Effective June 30, 2010, post-retirement benefit increases are fixed rather than based on investment performance. Retirees and beneficiaries who have been receiving periodic benefit payments for two or more years as of the June 30 determination date may be eligible for such an increase. An exception exists for DROP participants who retire during or at the end of their DROP participation period. Basic DROP retirees will have their DROP participation period credited toward the eligibility requirements for post-retirement benefit increases. The increase is payable commencing in the January following the June 30 determination date.

The amount and eligibility of the post-retirement benefit increase is as follows:

(1) Eligible retirees (or their beneficiaries) who have not attained age 55 as of the June 30 determination date will not receive an increase payable the following January.

- (2) Eligible retirees (or their beneficiaries) who have attained age 55 but have not attained age 65 and have been retired for two or more years as of the June 30 determination date will receive a 1.0% increase payable the following January. This increase was first payable in January 2012.
- (3) Eligible retirees (or their beneficiaries) who have attained age 65 and have been retired for two or more years as of June 30 determination date will receive a 2.0% increase payable the following January. This increase was first payable in January 2011.
- (4) Eligible retirees (or their beneficiaries) who are receiving a 100% line-of-duty disability regardless of age and have been retired for two or more years as of the June 30 determination date will receive a 2.0% increase payable the following January. This increase was first payable in January 2011.

#### 16. MINIMUM BENEFIT FOR CERTAIN SPOUSAL BENEFICIARIES

Effective July 1, 2010, a minimum annual benefit of \$16,000 is provided to the spousal beneficiary of a sworn member who, before August 1, 1996, retired or died in service with 20 or more years of service.

Effective January 1, 2012, a minimum annual benefit of \$16,000 is provided to the spousal beneficiary of a sworn member who, prior to August 1, 1996, retired on account of line-of-duty disability with less than 20 years of service.

# STATISTICAL SECTION

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#### Fire and Police Employees' Retirement System City of Baltimore, Maryland STATISTICAL SECTION NARRATIVE

The Statistical Section of this Comprehensive Annual Financial Report presents information to add historical perspective, context, and detail to the financial statements, notes to financial statements, and required supplementary information presented in the preceding sections. To provide historical perspective and a sense of trends, most exhibits in this Section are presented in multiple-year formats. The information is categorized into two topical groups: Financial Trends and Demographic and Economic Information.

#### Financial Trends

These schedules contain trend information to help the reader understand how the F&P's financial performance has changed over time.

Statement of Changes in Plan Net Position - Fiscal Years 2006 - 2015 Revenues by Source - Fiscal Years 2006 - 2015 Expenses by Type - Fiscal Years 2006 - 2015 Benefit Expenses by Type - Fiscal Years 2006 - 2015 Average Monthly Service Retirement Benefit Payments - Fiscal Years 2006 - 2015

#### Demographic and Economic Information

These schedules offer demographic indicators to help the reader understand trends in F&P membership.

Active Members by Years of Service - Fiscal Years 2006 – 2015 Active Members and Active DROP / DROP 2 Members by Years of Service and Department Active DROP / DROP 2 Members by Fiscal Year of DROP / DROP 2 Entry and Department – Fiscal Years 1997 – 2015 Retirees and Beneficiaries by Attained Age and Type of Retirement DROP / DROP 2 Retirees and DROP / DROP 2 Beneficiaries by Attained Age and Type of Retirement

	2006	2007	2008	2009	<u>2010</u>
Additions					
Net investment income	\$178,616,240	\$ 347,068,360	\$ (97,529,998)	\$ (357,730,702)	\$ 252,146,101
Employer contributions	49,661,627	60,128,727	72,687,585	69,513,236	94,097,743
Member contributions	15,157,898	15,438,649	16,547,425	17,661,252	17,254,515
Net securities lending income	561,649	756,603	2,049,347	1,801,369	500,376
Total Additions	243,997,414	423,392,339	(6,245,641)	(268, 754, 845)	363,998,735
Deductions					
Retirement allowances	147,353,252	155,639,508	166,119,977	173,547,075	176,660,415
Lump sum DROP payments	14,025,599	12,950,280	14,118,642	10,379,493	18,078,701
Administrative expenses	2,552,458	2,818,795	3,264,028	3,334,851	3,311,686
Refunds of member contributions	1,708,619	2,007,222	1,627,871	1,114,334	1,372,214
Death benefits	520,214	721,942	63,151	251,544	154,775
Total Deductions	166,160,142	174,137,747	185,193,669	188,627,297	199,577,791
Net Increase (Decrease)	\$ 77,837,272	\$ 249,254,592	\$(191,439,310)	\$(457,382,142)	\$ 164,420,944

Fire and Police Employees' Retirement System City of Baltimore, Maryland CHANGES IN PLAN NET POSITION

	2011	2012	2013	2014	2015
Additions					
Net investment income	\$ 366,713,890	\$ 80,339,513	\$ 200,073,582	\$ 313,953,904	\$ 53,442,809
Employer contributions	107,539,873	107,488,403	107,778,859	113,843,250	119,020,291
Member contributions	19,586,155	22,866,939	25,381,635	28,265,556	30,341,796
Net securities lending income	452,113	594,933	463,706	495,366	459,490
Total Additions	494,292,031	211,289,788	333,697,782	456,558,076	203,264,386
Deductions					
Retirement allowances	186,002,569	193,082,852	198,640,360	205,591,968	210,318,274
Lump sum DROP payments	17,039,089	10,816,700	13,625,797	12,373,388	11,477,573
Administrative expenses	4,241,753	3,672,958	3,568,855	3,907,539	4,297,773
Refunds of member contributions	1,490,557	1,309,010	2,393,838	3,129,650	2,796,110
Death benefits	254,630	385,167	163,838	344,230	342,353
Total Deductions	209,028,598	209,266,687	218,392,688	225,346,775	229,232,083
Net Increase (Decrease)	\$ 285,263,433	\$ 2,023,101	\$ 115,305,094	\$ 231,211,301	\$ (25,967,697)

Fire and Police Employees' Retirement System City of Baltimore, Maryland CHANGES IN PLAN NET POSITION (Concluded)

#### Fire and Police Employees' Retirement System City of Baltimore, Maryland **REVENUES BY SOURCE**

	Net	Employer C	Contributions		
Fiscal Year	Investment Income	Amount	% of Covered Payroll	Member Contributions	Total
2006	\$ 179,177,889	\$49,661,627	20.0%	\$15,157,898	\$ 243,997,414
2007	347,824,963	60,128,727	23.6	15,438,649	423,392,339
2008	(95,480,651)	72,687,585	27.0	16,547,425	(6,245,641)
2009	(355,929,333)	69,513,236	24.7	17,661,252	(268,754,845)
2010	252,646,477	94,097,743	34.0	17,254,515	363,998,735
2011	367,166,003	107,539,873	39.0	19,586,155	494,292,031
2012	80,934,446	107,488,403	37.8	22,866,939	211,289,788
2013	200,537,288	107,778,859	38.8	25,381,635	333,697,782
2014	314,449,270	113,843,250	38.9 (1)	28,265,556	456,558,076
2015	53,902,299	119,020,291	36.9 (1)	30,341,796	203,264,386

#### Notes:

(1) For fiscal years 2014 and 2015, covered payroll includes all payroll elements (i.e. overtime, etc.) whether or not such items are included in pay for plan benefit purposes.

(2) Employer contributions were made in accordance with actuarially determined contribution requirements.

# Fire and Police Employees' Retirement System City of Baltimore, Maryland **EXPENSES BY TYPE**

Fiscal Year	Retirement Benefits	DROP Payments	Refunds	Administrative Expenses	Total
2006	\$147,873,466	\$14,025,599	\$1,708,619	\$ 2,552,458	\$ 166,160,142
2007	156,361,450	12,950,280	2,007,222	2,818,795	174,137,747
2008	166,183,128	14,118,642	1,627,871	3,264,028	185,193,669
2009	173,798,619	10,379,493	1,114,334	3,334,851	188,627,297
2010	176,815,190	18,078,701	1,372,214	3,311,686	199,577,791
2011	186,257,199	17,039,089	1,490,557	4,241,753	209,028,598
2012	193,468,019	10,816,700	1,309,010	3,672,958	209,266,687
2013	198,804,198	13,625,797	2,393,838	3,568,855	218,392,688
2014	205,936,198	12,373,388	3,129,650	3,907,539	225,346,775
2015	210,660,627	11,477,573	2,796,110	4,297,773	229,232,083

Fire and Police Employees' Retirement System City of Baltimore, Maryland BENEFIT EXPENSES BY TYPE

						Д	Disability Benefits	S	
Year	Age and Service Benefits	vice Benefits		Death Benefits		Retirees	.ees		
Ending	Retirees	Beneficiaries	Duty	Non-Duty	Lump Sum	Duty	Non-Duty	Beneficiaries	Total
2006	\$118,470,165	\$8,380,341	\$2,564,442	\$2,853,866	\$258,136	\$19,654,354	\$5,107,533	\$4,610,228	\$161,899,065
2007	123,111,432	9,121,591	2,736,442	3,026,112	335,991	20,835,183	5,367,831	4,777,148	169,311,730
2008	131,942,122	10,116,092	2,914,432	3,142,188	63,151	21,797,015	5,331,204	4,995,566	180,301,770
2009	133,001,464	10,862,644	3,608,486	3,242,417	251,544	22,751,656	5,481,123	4,978,778	184,178,112
2010	143,638,241	11,219,469	3,066,579	3,215,249	154,775	23,209,880	5,262,840	5,126,858	194,893,891
2011	148,265,914	13,292,721	3,063,434	3,311,818	254,630	23,759,543	5,291,033	6,057,195	203,296,288
2012	147,421,816	13,916,530	3,010,331	3,269,163	385,167	24,626,399	5,192,927	6,462,386	204,284,719
2013	154,203,276	14,539,747	2,972,662	3,238,196	163,838	25,229,266	5,136,984	6,946,026	212,429,995
2014	158,233,244	15,372,751	2,908,705	3,229,061	344,230	25,992,206	5,061,399	7,167,990	218,309,586
2015	160,757,738	16,006,666	2,870,887	3,289,067	342,353	26,604,387	5,025,575	7,241,527	222,138,200

Retirement Effective Dates From July 1, 2005 to June 30, 2015	<u>&lt;15</u>	Y <sub>6</sub>	Years of Credited Service <u>21-25</u>	e <u>26-30</u>	31+
Period 7/1/05 to 6/30/06 Average Monthly Benefit		2,383	2,971	3,566	4,347
Average-Average Final Compensation		57,370	60,675	60,001	63,996
Number of Active Retirees		27	61	27	26
Period 7/1/06 to 6/30/07	000 1	007 C		000 c	4 610
Average Infoluity Denetit Average-Average Final Compensation	49 821	2,400 59 550	0,1/0 64 443	5,036 65,036	4,010 66 721
Number of Active Retirees	1	27	69	23	21
Period 7/1/07 to 6/30/08	027 1	103 0		007 7	CL0
Average Monuny Denem Average-Average Final Compensation	1,0 <i>39</i> 54,859	2,221	68.204	4,492 72,422	4,0/2 69.542
Number of Active Retirees	5	35	60	22	13
Period 7/1/08 to 6/30/09 Aversoe Monthly Renefit	1 575	2997	987 c	7634	5 366
Average-Average Final Compensation	58,129	<i>2</i> ,000 65,460	68,713	77,044	71,285
Number of Active Retirees	1	27	50	20	21
Period 7/1/09 to 6/30/10					
Average Monthly Benefit	1,536 67 507	2,628 62 700	3,530 71 251	4,400 70.818	5,857 01 212
Average-Average That Compensation Number of Active Retirees	5 5	32	56	,0,010 31	210,100

Fire and Police Employees' Retirement System City of Baltimore, Maryland AVERAGE MONTHLY SERVICE RETIREMENT BENEFIT PAYMENTS

	31+	5,909 82,155 23	5,188 75,409 14	5,222 69,186 16	5,275 76,000 10	6,411 83,835 16	5,300 73,838 186
	<u>26-30</u>	4,378 71,592 27	4,395 72,633 24	4,762 76,472 36	4,496 74,239 23	5,031 78,631 17	4,386 71,675 250
Years of Credited Service	<u>21-25</u>	3,452 72,061 62	3,495 71,762 34	3,532 71,254 76	3,724 74,337 60	3,604 76,053 60	3,424 69,758 588
	<u>16-20</u>	2,658 65,078 37	3,025 69,173 37	2,919 65,559 46	3,086 71,445 49	3,282 73,791 43	2,813 65,953 360
	<15	1,770 68,688 1	2,940 61,719 11	3,011 58,539 19	2,905 59,037 21	3,380 63,848 12	2,829 60,218 73
		Period 7/1/10 to 6/30/11 Average Monthly Benefit Average-Average Final Compensation Number of Active Retirees	Period 7/1/11 to 6/30/12 Average Monthly Benefit Average-Average Final Compensation Number of Active Retirees	Period 7/1/12 to 6/30/13 Average Monthly Benefit Average-Average Final Compensation Number of Active Retirees	Period 7/1/13 to 6/30/14 Average Monthly Benefit Average-Average Final Compensation Number of Active Retirees	Period 7/1/14 to 6/30/15 Average Monthly Benefit Average-Average Final Compensation Number of Active Retirees	Period 7/1/05 to 6/30/15 Average Monthly Benefit Average-Average Final Compensation Number of Active Retirees

Fire and Police Employees' Retirement System City of Baltimore, Maryland AVERAGE MONTHLY SERVICE RETIREMENT BENEFIT PAYMENTS (Concluded)

Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF ACTIVE MEMBERS BY YEARS OF SERVICE

2015	801	883	739	651	633	334	207	4,248	13.62	40.24
2014	787	934	765	686	668	275	202	4,317	13.42	39.94
2013	824	799	791	763	575	294	195	4,439	13.09	39.72
2012	987	982	770	853	504	313	215	4,624	12.73	39.23
2011	1,047	873	770	890	536	251	208	4,575	12.64	39.14
2010	1,079	873	726	872	572	264	198	4,584	12.71	39.21
2009	1,142	006	759	904	513	291	181	4,690	12.45	38.99
2008	1,088	946	814	757	515	329	166	4,615	12.34	38.91
2007	1,017	949	902	661	514	348	187	4,578	12.52	38.73
2006	1,019	931	948	717	473	345	194	4,627	12.46	38.66
Years of Credited Service	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total Members	Average Service Credit	Average Age

For the Year Ended June 30, 2015	Schedule of C	Schedule of Current Active Members Bv Years of Service and Department	sv Years of Service an	d Department	
Years of Credited <u>Service</u>	Police Department	Fire Department	School School Crossing <u>Guards</u>	Airport Employees	Total
	557 559 430 474 129 104	244 324 309 177 173 202 101	_	- σ	801 883 739 651 633 334 207
Total Members	2,713	1,530	-	4	4,248
Years of Credited <u>Service</u>	Schedule of Curre Police <u>Department</u>	Schedule of Current Active DROP Members By Years of Service and DepartmentSchoolPoliceFireCrossingAirportDepartmentDepartmentGuardsEmployees	rs By Years of Service School Crossing <u>Guards</u>	e and Department Airport Employees	Total
20-24 25-29 30+ Total DDOD Mambars	1 82 102	121 101		ω – – <i>z</i>	1 206 205
Years of Credited Service	Schedule of Currer Police Department	Total     Total       Schedule of Current Active DROP 2 Members By Years of Service and Department       School       Police     Fire       Crossing     Airport       Department     Department       Department     Guards	ers By Years of Servic School Crossing <u>Guards</u>	ce and Department Airport Employees	Total
20-24 25-29 30+ Total DDOD 2 Mombars	274 40 1	106 79			380 119 1
Total DROP 2 Members	315	185			500

Total	27 4 30 30 31 1 1 1 1 1 1 26 30 30 30 30 30 30 30 30 30 30 30 30 30	412	Total	33 110 50 142 52 500
Airport <u>Employees</u>	7	4	Airport Employees	
School Crossing <u>Guards</u>	_	-	School Crossing <u>Guards</u>	
Fire <u>Department</u>	12 55 13 15 14 16 15 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	222	Fire <u>Department</u>	19 80 12 23 43 8 8 185
Police <u>Department</u>	$\begin{array}{c} 15\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\1\\$	185	Police <u>Department</u>	14 30 38 99 44 315
Year of DROP Entry	7/1/96 - 6/30/97 7/1/96 - 6/30/98 7/1/99 - 6/30/00 7/1/00 - 6/30/01 7/1/01 - 6/30/02 7/1/02 - 6/30/04 7/1/02 - 6/30/06 7/1/05 - 6/30/06 7/1/06 - 6/30/06 7/1/08 - 6/30/06 7/1/10 - 6/30/11 7/1/10 - 6/30/12 7/1/11 - 6/30/12 7/1/11 - 6/30/13 7/1/11 - 6/30/13 7/1/11 - 6/30/13 7/1/11 - 6/30/13	Total DROP Members	Year of DROP 2 Entry	7/1/09 - 6/30/10 7/1/10 - 6/30/11 7/1/11 - 6/30/12 7/1/13 - 6/30/14 7/1/14 - 6/30/15 Total DROP 2 Members

## Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF RETIREES BY ATTAINED AGE AND TYPE OF RETIREMENT

For the Year Ended June 30, 2015

				TYPE OF RE	TIREMENT*		
Age	Number of Recipients	0	1	2	3	4	9
0-24							
25-29	2					2	
30-34	25				3	22	
35-39	48				7	41	
40-44	176	69			20	87	
45-49	350	220	1	4	25	99	1
50-54	483	341		6	28	107	1
55-59	583	502	1	1	20	59	
60-64	700	628		1	21	50	
65-69	856	766		1	19	70	
70-74	576	478			30	68	
75-79	427	357			28	41	1
80-84	315	238			27	49	1
85 and up	234	172			27	35	
Totals	4,775	3,771	2	13	255	730	4
Average Annual Benefit	\$38,475	\$40,330	\$25,706	\$31,379	\$19,313	\$35,628	\$61,242

<u>\*Type of Retirement</u> 0 - Normal retirement for age and service

- 1 Early Retirement
- 2 Discontinued service
- 3 Non-line-of-duty disability

4 - Line-of-duty disability

9 - Line-of-duty disability, 100% of compensation

City of Baltimore, Maryland SCHEDULE OF BENEFICIARIES BY ATTAINED AGE AND TYPE OF RETIREMENT Fire and Police Employees' Retirement System For the Year Ended June 30, 2015

	6											1					-	.12,457	
	×	þ	4			2	c.	3	5	3	5	6	8	7	4	6	62	\$45,411 \$	
	Ľ		4	1	1	1	С	ŝ	4	ŝ	Э	10	10	ŝ	4	2	52	\$17,151	
<b>IREMENT</b> *	y						1	1	4	9	12	13	9	14	11	12	80	\$28,614	
<b>TYPE OF RETIREMENT*</b>	ν	F	ŝ		2			2	8	11	15	15	27	50	55	71	259	\$17,380	
	"	0	2					4	4	2	6	14	23	26	46	38	168	\$14,373	
	¢	1										1					-	\$12,457	
	0		ю			2	9	17	49	65	84	109	129	118	117	171	870	\$18,485	
	Number of Recipients	entraidiaast	16	1	ŝ	5	13	30	74	90	128	171	203	219	237	303	1,493	\$19,454	It
	Аде	750	0-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	62-69	70-74	75-79	80-84	85 and up	Totals	Average Annual Benefit	*Type of Retirement

0 - Normal retirement for age and service

2 - Discontinued service3 - Non-line-of-duty disability

4 - Line-of-duty disability
6 - Non-line-of-duty death, member eligible for service retirement at death
7 - Non-line-of-duty death with 25% of compensation

8 - Line-of-duty death9 - Line-of-duty disability, 100% of compensation

# Fire and Police Employees' Retirement System City of Baltimore, Maryland SCHEDULE OF DROP RETIREES BY ATTAINED AGE AND TYPE OF RETIREMENT SCHEDULE OF DROP BENEFICIARIES BY ATTAINED AGE AND TYPE OF RETIREMENT For the Year Ended June 30, 2015

#### Schedule of DROP Retirees by Attained Age and Type of Retirement

		TYPE OF	RETIREMENT*
Age	Number of Recipients	0	4
40-44	84	84	
45-49	252	241	11
50-54	428	419	9
55-59	492	480	12
60-64	482	476	6
65-69	222	219	3
70-74	81	81	
75+	19	19	
Totals	2,060	2,019	41
Average Annual			
Benefit	\$45,340	\$45,350	\$44,825

#### Schedule of DROP Beneficiaries by Attained Age and Type of Retirement

				TYPE OF R	ETIREMENT*		
Age	Number of Recipients	0	3	4	6	7	8
< 24	1					1	
40-44	3	3					
45-49	7	6			1		
50-54	43	39	1		3		
55-59	50	46			3		1
60-64	55	44	1		8		2
65-69	47	38			6	1	2
70+	58	56			2		
Totals	264	232	2		23	2	5
Average Annual Benefit	\$20,944	\$18,184	\$22,107		\$36,427	\$29,993	\$73,717

#### \*Type of Retirement

0 - Normal retirement for age and service

3 - Non-line-of-duty disability

4 - Line-of-duty disability: Member not eligible for DROP benefits

6 - Non-line-of-duty death, member eligible for service retirement at death

7 - Non-line-of-duty death with 25% of compensation

8 - Line-of-duty death: Beneficiary not eligible for DROP benefits

# Fire and Police Employees' Retirement System City of Baltimore, Maryland

# SCHEDULE OF DROP 2 RETIREES / BENEFICIARIES BY ATTAINED AGE AND TYPE OF RETIREMENT

For the Year Ended June 30, 2015

#### Schedule of DROP 2 Retirees by Attained Age and Type of Retirement

		TYPE OF	RETIREMENT	`*
Age	Number of Recipients	0	3	4
35-39				
40-44	17	17		
45-49	34	31	1	2
50-54	29	28		1
55-59	8	8		
60-64	8	8		
65-69	1	1		
70-74				
Totals	97	93	1	3
Average Annual Benefit	\$36,296	\$35,893	\$30,386	\$50,753

#### Schedule of DROP 2 Beneficiaries by Attained Age and Type of Retirement

		TYPE OF	RETIREMENT*
Age	Number of Recipients	0	7
35-39	1	1	
40-44			
45-49	5	4	1
50-54	2	2	
55-59	1	1	
60-64			
65-69			
70-74			
Totals	9	8	1
Average Annual Benefit	\$16,592	\$13,262	\$32,269

\*Type of Retirement

0 - Normal retirement for age and service

3 - Non-line-of-duty disability

4 - Line-of-duty disability

7 - Non-line-of-duty death with 25% of compensation





SERVING BALTIMORE CITY'S PUBLIC SAFETY OFFICERS



# FIRE & POLICE EMPLOYEES' RETIREMENT SYSTEM City of Baltimore, Maryland

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