

## **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

a component unit of the City of Chicago for the years ended December 31, 2013 and 2012

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## **Comprehensive Annual** Financial Report

A Component unit of the City of Chicago for the years ended December 31, 2013 and 2012

Prepared by

Regina Tuczak Executive Director and Comptroller

Pacifico V. Panaligan Assistant Comptroller

221 North LaSalle Street Suite 1626 Chicago, IL 60601 Policemen's Annuity and Benefit Fund

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# Introductory Section



Government Finance Officers Association

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December 31, 2012

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Representing the Annuitants Kenneth A. Hauser, President

The Retirement Board of the Policemen's Annuity and Benefit Fund City of Chicago

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> > » **228**

Regina Tuczak, CPA Executive Director and Comptroller

Pacifico Panaligan Assistant Comptroller

Peter Orris, M.D. Physician

David R. Kugler Attorney for the Board

Samuel Kunz Chief Investment Officer

Address Communications to the Retirement Board

#### Retirement Board of the Policemen's Annuity and Benefit Fund of Chicago Chicago, Illinois

The Policemen's Annuity and Benefit Fund of Chicago (the Fund) hereby submits the comprehensive annual financial report (CAFR) for the years ended December 31, 2013, and 2012. The Fund accepts responsibility for the accuracy of the data and the completeness and fairness of presentation, including disclosures. To the best of our knowledge and belief, the enclosed data are accurate in all material respects and are reported in a manner designed to present fairly the financial position and results of operations of the Fund. All disclosures necessary to enable the reader to understand the Fund's financial activities have been included.

Any employee of the City of Chicago employed under the provisions of the municipal personnel ordinance as police service is covered by the Policemen's Annuity and Benefit Fund of Chicago. The Fund is governed under Illinois State Statutes (Chapter 40, Pension, Article 5, Illinois Compiled Statutes) and may be amended only by the Illinois Legislature.

The Fund was established in 1921 with the mission of providing retirement benefits to the members of the Chicago Police Department and their spouses. To properly execute this mission the Fund is administered by an eight (8) member Board of Trustees. The Board is composed of four (4) elected members, with one elected from each rank of police officer, sergeant, lieutenant and above, and a member from the retired members and their widows. The Mayor of Chicago appoints four members. The Retirement Board then elects a Board President, a Vice-President and a Recording Secretary from its own membership.

The Retirement Board is charged with many duties including: approval of all applications for benefits and annuities, investment of Fund monies in a manner prescribed by the State Statutes and Fund policy, adoption of rules and regulations for the proper conduct of the affairs of the Fund, engaging a certified independent public accountant to conduct an annual audit on the financial results each year and engaging an actuary to perform an annual actuarial valuation of the Fund. Annually, the Fund files financial statements and an actuarial valuation with the State of Illinois Department of Insurance and the City of Chicago, along with other governmental entities as requested. A summary of plan provisions overseen by the Retirement Board, as prescribed in the state statutes, are presented as part of this CAFR.

#### This report presents the financial activities of the Fund and is composed of five (5) sections:

- 1. The introductory section contains the table of contents, this transmittal letter, a listing of the Retirement Board members and office staff members, a listing of professional consultants, a listing of investment managers, and the Fund's organizational chart.
- 2. The financial section contains the report of the independent auditors, management discussion and analysis, the financial statements and accompanying notes, required supplementary information and supporting schedules of the Fund;
- 3. The investment section reports on activity, policy, results, allocation, commissions paid to managers and brokers and includes an investment summary;
- 4. The actuarial section contains the report of the Fund's actuary with supporting actuarial assumptions, schedules and tables;
- 5. The statistical section provides membership data for both active members and annuitants of the Fund.

#### **Financial Information**

Management of the Fund is responsible for establishing and maintaining an internal control structure designed to maintain reasonable assurance regarding the safekeeping of the Fund's assets from loss, theft or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements that conform to generally accepted accounting principles. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management. Consideration of the internal controls over financial reporting is included in the auditor's review. The Fund does engage an independent certified public accountant to audit the Fund's financial statements, and the auditor's unqualified audit opinion on the financial statements as of and for the years ended December 31, 2013 and 2012, is included in the financial section.

Users of this report are strongly encouraged to review the **Management's Discussion and Analysis** portion of the financial section in order to obtain a more complete understanding of the Fund's financial condition and activity.

#### **Investment Performance and Policy**

The Fund relies heavily upon the performance of its assets to fund benefits (augmented by both employer and employee contributions). The Fund's net asset position increased by only \$51.8 million from December 31, 2012 to December 31, 2013, despite extremely strong returns of +14.51% (net) for the year, which highlights the acuteness of the effects of underfunding on the Fund's operations. The returns reflect strong performance across almost all asset classes. Equity in general and U.S. Equity in particular exhibited exceptional returns. Private Capital and Alternative Investments also showed robust increases in values. In 2013, the number of professional investment management firms investing on behalf of the Fund remained stable. These firms make investment decisions under the Prudent Person Rule authorized by State statutes and the Investment consultant and Chief Investment Officer to monitor investment performance, aid in the selection of investment management firms, and assist in the development of its Investment Policy.

#### **Economic Condition and Outlook**

The 2008 collapse in market prices has significantly impacted the value of the Fund's net assets, which were \$4.3 billion as of year-end 2007. Because of its significant underfunding, and despite posting extremely strong returns since the end of 2008 (+13.98% net, annualized), the Fund's assets have not fully recovered. While the Board of Trustees and the Fund's investment consultant feel that the Fund's structure is sufficiently diversified to sustain conventional market conditions, continued economic instability and volatility in the capital markets could impact its performance to an extent beyond what can be reasonably anticipated by most scenarios.

Generally, investment decisions and strategies attempt to balance optimal performance and risk management, given the Fund's ongoing liquidity needs and constraints. That said, a sustained economic recovery and substantial growth in asset prices remain critical factors in the Fund's ability to meet its future obligations. On the other hand, it is expected that a significant correction in the capital markets would negatively impact the Fund's assets in a very meaningful way.

#### **Funding Status**

The actuarial value of assets at year-end 2013, using the GASB 25 and 43 methods, was \$3.054 billion with a corresponding actuarial liability of \$10.311 billion. The GASB 25 actuarial liability increased approximately \$90 million, up from \$10.221 billion in 2012. Fund assets currently fund 29.6% of this liability, decreasing from a funded ratio of 30.8% in 2012. The normal cost and the interest on the actuarial liability continue to cause the decline in the funded ratio, despite actuarial gains from investment returns and some provisional changes.

Other factors contributing to the decline in the funded ratio include continued benefit payments in excess of contributions and increasing applications for benefits without a corresponding significant increase in active membership.

While the employer contribution requirement (tax multiplier) since 1982 has remained constant at 2.00 times the employee contributions received two years prior, legislation was signed into law which will require actuarially-determined employer contributions. This new legislation, which will be effective with the City of Chicago tax levy beginning in 2015, will mandate that the Fund be 90% funded by 2040. The funding ratio will consider the fair value of the Fund's assets and application of certain required actuarial assumptions and methodologies. This new legislation, which was enacted in the 2011 legislative session, is a significant development that will greatly contribute to improving the funded status of the Fund. The Fund's actuaries have prepared their calculation on the projected funding request beginning with the 2015 tax levy, and such request will soon be submitted to the City of Chicago.

#### **The Budget Process**

The Fund's budget is prepared through a process that originated in 1975. The current fiscal planning and budgeting process normally begins in the third quarter and ends in December with the approval by the Board of Trustees.

Administrative expenses represent only 0.6% and 0.7% of the total deductions from plan assets in both 2013 and 2012, respectively. Any increases in administrative expenses are carefully reviewed by the Board of Trustees, both during the annual budget process, and at each monthly Board of Trustee meeting. At each monthly meeting, cumulative administrative expenses are compared to budget allocations. Anticipated expenditures are detailed to the Board of Trustees monthly and approved at each meeting.

#### **Major Initiatives**

The Fund continues to strive for customer service excellence by improving the operational efficiencies and service delivery to the membership. The Fund, with the assistance of an external computer software developer, implemented a new pension administration system which became fully operational in 2009. The Fund continues to add enhancements to the system, including an online estimate program for retirement benefits for members, incorporation of the Fund's imaging records system, and electronic transmission of benefit calculation information from the pension system to the Fund's benefit payment agent. Further enhancements are scheduled for 2014, including integration of historical benefit payment information onto the pension administration system.

The Fund also continues to develop and enhance its website, located at www.chipabf.org. The website includes the online estimate program for active members, electronic copies of the Fund's newsletter, information on scheduled meetings of the Board of Trustees, and other important updates.

#### **Professional Services**

The Fund's actuarial valuation, along with other actuarial services, are provided by Gabriel, Roeder, Smith & Company. The annual audit of the financial statements is performed by Mitchell & Titus LLP, Certified Public Accountants. The Fund's investment consultant is NEPC, LLC. A complete listing of all investment managers is detailed in the CAFR's introductory section.

#### Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Fund for its comprehensive annual financial report for the fiscal year ended December 31, 2012. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. The report must satisfy both generally accepted accounting principles and applicable legal requirements.

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

#### **Acknowledgments**

On behalf of the Board of Trustees, I wish to express appreciation to the staff and professional consultants who work so effectively to ensure the continued successful operation of the Fund. Over the past four years, the Fund has processed over 1,975 retirement applications and benefits. These are record levels of retirements for the Fund and accuracy and efficiency are of utmost importance to the staff as benefits are processed for the hardworking members of this Fund.

On July 26, 2013, the Board of Trustees appointed me the next Executive Director of the Fund, following the retirement of John J. Gallagher, Jr. on November 30, 2012. I am truly thrilled and honored to be provided such a very special opportunity. It is a privilege to serve such a dedicated, hardworking and courageous member group. The unique service that the members of this Fund provide on a daily basis are exclusive to the job of public safety officer, where continuous daily challenges await. I will work tenaciously to lead the Fund's staff to best service the pension needs of this membership.

I extend my appreciation to all Fund participants for their interest and involvement in all plan activities. We are always looking for cost effective ways to better serve the Fund's members and, as always, welcome your comments or suggestions.

Respectfully submitted,

Regina Juzak

Regina Tuczak Executive Director June 26, 2014

#### **RETIREMENT BOARD MEMBERS AND OFFICE STAFF**

#### December 31, 2013

#### **Appointed Trustees**

Juan Carlos Avila Carol L. Hamburger Stephanie D. Neely, Vice President Lois A. Scott

#### **Elected Trustees**

Kenneth A. Hauser, President Michael K. Lappe James P. Maloney, Recording Secretary and Investment Committee Chairman Brian E. Wright

#### **Office Staff Members**

Regina Tuczak, Executive Director and Comptroller Sam Kunz, Chief Investment Officer Pacifico V. Panaligan, Assistant Comptroller

#### Support Staff

Robert Crawford Anthony Kiefer Kris Matalik Richard Mulhbacher Alma Rivera Karina Fruin Carol Lopez Anne McGowan Maggie O'Grady Erwin Santos Kay Hylton Anthony Madonia Dorothy Miller Ed Rausch

### **PROFESSIONAL CONSULTANTS**

#### LEGALADVISOR

David R. Kugler, Esquire

#### MEDICAL ADVISOR Peter Orris, M.D.

Peter Orris, M.D.

#### INVESTMENT CONSULTANTS NEPC, LLC

#### **CONSULTING ACTUARY**

Gabriel, Roeder, Smith & Company

#### AUDITOR

Mitchell & Titus L.L.P.

#### MASTER CUSTODIAN

The Northern Trust Company

#### **COMMERCIAL BANK**

Chase

#### **INVESTMENT MANAGERS**

**ABR** Chesapeake **Adams Street Partners Aetos Capital LLC AG Realty Apollo Real Estate Advisors** Acadian Asset Management, LLC **Artisan Partners CBRE Clarion Securities Capital Guardian Trust Co.** The Carlyle Group **Dearborn Partners Denali** Advisors **DRA Advisors LLC** Earnest Partners, LLC **European Investors Inc. Fisher Investments Global Infrastructure Partners** Grantham, Mayo, Van Otterloo & Co., LLC **Great Lakes Advisors** HarbourVest Partners, LLC **Holland Capital Management Invesco Capital Management** JP Morgan Asset Management **K2** Advisors LM Capital Group Lone Star Funds **Blackrock Asset Management McKinley Capital Management Mesa West Capital Mesirow Financial** Montag & Caldwell **Morgan Stanley Real Estate** Muller & Monroe Newport Capital Partners, LLC Northern Trust Global Investments **Oaktree Capital Management Quadrant Real Estate Advisors RCP** Advisors **SEI PIMCO Shamrock-Hostmark** Taplin, Canida & Habacht **UBS Global Asset Management** Lazard Asset Management, LLC Wellington Management Company Wells Capital Management William Blair & Company

#### **ORGANIZATION CHART**

RETIREMENT BOARD OF TRUSTEES Kenneth A. Hauser, President Stephanie D. Neely, Vice-President James P. Maloney, Recording Secretary and Investment Committee Chairman Juan Carlos Avila, Trustee Carol L. Hamburger, Trustee Michael K. Lappe, Trustee Lois A. Scott, Trustee Brian E. Wright, Trustee						
		↑ ↑				
<b>EXECUTIVE DIRECTO</b> Regina Tuczak	R	CHIEF INVES Samuel Kunz,	STMENT OFFICER			
PROFESSIONAL C Legal Advisor Medical Advisor Investment Consulta Consulting Actuary Auditor Master Custodian Investment Manager	nts	↑ COMPTROLLER Regina Tuczak, CPA ASSISTANT COMPTROLLER Pacifico V. Panaligan, CPA				
BENEFIT CALCULATIONS Anthony Keifer	BENEFIT CLAIMS Kay Hylton	<b>BENEFIT</b> <b>COUNSELING</b> Maggie O'Grady	<ul> <li>↑</li> <li>↑</li> <li>↑</li> <li>↑</li> <li>BENEFIT</li> <li>DISBURSEMENTS</li> <li>Kris Matalik</li> </ul>			

Information regarding investment professionals that provide services to The Policemen's Annuity and Benefit Fund of Chicago can be found in the Other Supplementary Information to the Financial Statements (see Schedule of Investment Fees on page 68) and the Investment Section (pages 70 to 88)



# Financial Section



Mitchell & Titus, LLP 333 West Wacker Drive Chicago, IL 60606 Tel: +1 312 332 4964 Fax: +1 312 332 0181 mitchelltitus.com

#### **REPORT OF INDEPENDENT AUDITORS**

Board of Trustees Policemen's Annuity and Benefit Fund of Chicago

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

We have audited the accompanying financial statements of Policemen's Annuity and Benefit Fund of Chicago (the Fund), a component unit of the City of Chicago, as of and for the years ended December 31, 2013 and 2012, and the related notes to the financial statements, which collectively comprise the Fund's 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 conformity with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

#### Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

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#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Fund as of December 31, 2013 and 2012, and the changes in its financial position for the years then ended in conformity with U.S. generally accepted accounting principles.

#### **Other Matters**

#### **Required supplementary information**

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

#### Supplementary information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Fund's basic financial statements. The supplementary schedules of administrative expenses, consulting costs, and investment fees are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States. In our opinion, the supplementary schedules of administrative expenses, consulting costs, and investment fees are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The supplementary information included in the introductory section, the investment section, the actuarial section, and the statistical section as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Mitchell : Titus, LLP

June 25, 2014

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The Management's Discussion and Analysis section of this report is intended to serve as an introduction to the financial statements of the Policemen's Annuity and Benefit Fund of Chicago (the Fund) and to supplement the information contained therein.

#### **Overview of Financial Statements and Accompanying Information**

The basic financial statements are prepared in accordance with generally accepted accounting principles as established by the Governmental Accounting Standards Board (GASB) and are described below:

- The Statements of Fiduciary Net Position report the Fund's assets, liabilities, and the resultant net position where assets minus liabilities equal net position held in trust for pension benefits at the end of the year.
- The Statements of Changes in Fiduciary Net Position show the sources and uses of funds during the calendar year, where additions minus deductions equal the net increase or decrease in net position held in trust for pension benefits for the year.
- The Notes to the Financial Statements are an integral part of the financial statements and include important information and schedules to provide a more comprehensive understanding of the data provided in the financial statements. Information contained in the note disclosures includes the Fund's accounting policies, descriptions of pension and health benefits and related liabilities, detail of investments and related risks, fund reserves, and various other relevant topics.
- **Required Supplementary Information** presents detailed required historical information and is presented after the Notes to the Financial Statements. This supplementary information includes data on funding progress and employer contributions, along with other information useful in evaluating the financial condition of the Fund.

#### **Financial Highlights**

- The fiduciary net position of the Fund increased by \$51.8 million, or 1.6%, to \$3,265.2 million at December 31, 2013. At December 31, 2012, the fiduciary net position of the Fund increased by \$38 million, or 1.2%, to \$3,213.4 million from the December 31, 2011 balance of \$3,175.5 million.
- Fund investment income earned, net of investment-related expenses was approximately \$414.4 million during 2013, compared with a gain of approximately \$352.0 million during 2012. The returns reflect strong performance across all asset classes. Equities in general and U.S. Equity in particular exhibited exceptional returns. Private Capital and Alternative Investments also showed robust increases in values. On a relative basis, Infrastructure and non-U.S. Equities significantly outperformed their respective benchmarks, while Private Equity and Real Estate lagged their respective indices. From an allocation perspective, it is worth noting that in late 2013, 9% of the total allocation was reallocated from non-U.S. Large Cap to non-U.S. Small Cap and Emerging Market Equity in order to diversity this part of the allocation.

#### **Financial Highlights** (continued)

- The Fund received contributions of \$93.3 million from members and \$188.9 million from the City of Chicago in 2013, compared to contributions of \$95.9 million from members and \$207.2 million from the City of Chicago in 2012. The number of active members increased by 1.1% from 2012 to 2013. Despite the increase in active members, contributions from members actually declined by 2.6%. This decline is due to a change in the mix of active members; with 573 members having less than one year of service at December 31, 2013, and 406 members retiring in 2013. This change in service of active members has resulted in a reduction of the average salary and thus a decline in member contributions. Employer contributions are mandated by a statutorily set multiplier of 2.0 times member contributions collected two years prior. In August of 2010, a retroactive wage increase was provided to active members which resulted in \$12.3 million of additional member contributions in 2010. Consequently, employer contributions in 2012 reflected the multiplier impact of the retroactive wages paid to members in 2010. In 2011, member contributions were \$10.1 million less than the prior year as no retroactive wages were applicable, which resulted in the reduction in employer contributions from 2012 to 2013.
- Benefit payments, excluding death benefits, increased by approximately \$31.0 million in 2013, from \$601.2 million in 2012 to \$632.2 million in 2013. The number of retirees and beneficiaries increased in 2013 by 193 members, or 1.5%, thus contributing to the increase. Since January 1, 2011, the Fund has experienced approximately 1,450 retirements of active members, which has resulted in significant increases in benefits in 2011, 2012 and 2013. In 2013, over 400 active members retired, resulting in an increase in annuities of over \$2.0 million per month or over \$24.6 million per year. Also contributing to the increase is the annual cost of living adjustments provided to retirees born prior to January 1, 1955. Death benefits and refunds of employee deductions decreased from 2012 to 2013 by approximately \$3.0 million, from \$12.7 million to \$9.7 million, respectively. The decrease is primarily due to a reduction in resign refunds from terminated members and a smaller number of retiring officers with a single, unmarried status at retirement, thus receiving a refund of spousal contributions.
- Administrative expenses decreased in 2013 by approximately \$0.5 million. The decrease is primarily due to a reduction in legal fees, due to near resolution on one outstanding legal investment matter. Additionally, Fund management has worked vigorously to maintain and control administrative expenses, including a reduction of \$0.13 million in salaries and related benefits in 2013.
- The funding objective of the Fund is to meet its long-term defined pension benefit obligations. The funding ratio of the Fund on a fair value basis experienced a increase, from 31.4% at December 31, 2012 to 32.4 % at December 31, 2013. The increase reflects actuarial gains relating to investment return, salary changes and a change in the healthcare provisions of the health insurance supplement plan. Additionally, the increase reflects a change in the cost method used to develop the actuarial liability for purposes of determining the employer's contribution.

#### Financial Highlights (continued)

- Under GASB Nos. 25 and 43, the Fund uses a five-year actuarial smoothing method in valuing its assets to determine its funded status and the contributions required to fund the plan going forward. This actuarial valuation method reduces the effect of short-term market volatility and provides a more stable trend valuation for the Fund's long-term planning needs. The actuarial value of assets at December 31, 2013, reflects that assets were marked to the market value of assets at January 1, 2012, and all related investment gains and losses through January 1, 2012, were recognized. This methodology change was necessary due to the upcoming statutory contribution provisions of Public Act 96-1495. The funding ratio of the Fund using an actuarial value of assets experienced a decrease, from 30.8% at December 31, 2012 to 29.6% at December 31, 2013.
- In compliance with GASB No. 45, the Fund recognizes a liability for other postemployment benefits (OPEB), which represents health insurance coverage for active and retired Fund employees. Expense of \$0.41 million and \$0.49 million was recognized in 2013 and 2012, respectively, resulting in a total accrued liability of \$1.78 million and \$1.48 million as of December 31, 2013, and 2012, respectively.

#### **Fiduciary Net Position**

A summary of fiduciary net position is presented below:

As of D	ece	mber 31.	20	13, 2012,	and	d 2011			
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- ) - )				2013–20 Chan	
		2013		2012		2011		\$	%
Receivables	\$	201.6	\$	221.1	\$	196.7	\$	(19.5)	(8.8)%
Brokers-unsettled trades		146.6		159.4		194.0		(12.8)	(8.0)
Investments, at fair value		3,097.3		3,066.8		3,094.8		30.5	1.0
Invested securities lending									
collateral		271.9		255.4		312.1		16.5	6.5
Total assets		3,717.4		3,702.8		3,797.6		14.6	0.4
Brokers-unsettled trades		173.2		227.7		304.4		(54.5)	(23.9)
Securities lending payable		271.9		255.4		312.1		16.5	6.5
OPEB obligation		1.8		1.5		1.2		0.3	20.0
Refunds and accounts payable		5.3		4.7		4.4		0.6	12.8
Total liabilities		452.2		489.4		622.1		(37.1)	(7.6)
Net position	<u>\$</u>	3,265.2	\$	3,213.4	\$	3,175.5	<u>\$</u>	51.8	<u>1.6</u> %

#### Fiduciary Net Position (In millions) As of December 31, 2013, 2012, and 2011

#### Plan Net Position (continued)

The increase in fiduciary net position of \$51.8 million in 2013 was driven primarily by investment earnings, which were significantly offset by immediate benefit funding needs. The assets available for investment earned 14.51% in 2013, compared to an investment gain of 12.39% in 2012. Improvements in economic activity across the board in general, and specifically in the U.S. job market lifted Equity valuations, which in turn boosted the overall portfolio during the measurement period.

#### **Changes in Fiduciary Net Position**

The following table reflects a comparative summary of various changes in fiduciary net position:

Years En	ded I	Decembe	r 31	, 2013, 2	012	and 2011			
								2013–20 Chan	
		2013		2012		2011		\$	%
ADDITIONS									
Member contributions	\$	93.3	\$	95.9	\$	98.2	\$	(2.6)	(2.7)%
Employer contributions		188.9		207.2		183.5		(18.3)	(8.8)
Net investment gains									
and investment income		414.4		352.0		32.5		62.4	17.7
Securities lending income		0.9		1.2		1.2		(0.3)	(25.0)
Miscellaneous income		0.5		0.4		0.1		0.1	25.0
Total additions		698.0		656.7		315.5		41.3	6.3
DEDUCTIONS									
Annuity, disability, and death									
benefits		633.8		602.8		568.0		31.0	5.1
Refunds of contributions		8.1		11.2		7.3		(3.1)	(27.7)
OPEB expense		0.4		0.5		0.5		(0.1)	(20.0)
Administrative expenses		3.9		4.4		3.9		(0.5)	(11.4)
Total deductions		646.2		618.8		579.7		27.3	4.4
Net increase/(decrease)	\$	51.8	<u>\$</u>	37.8	<u>\$</u>	(264.2)	<u>\$</u>	14.0	<u>37.0</u> %

#### Changes in Fiduciary Net Position (In millions) Years Ended December 31, 2013, 2012 and 2011

The Fund experienced a net increase in fiduciary net position in 2013. The increase reflects strong investment returns of 14.5%, which were offset significantly by increasing benefit payments. The Fund continues to liquidate assets as contributions from members and the employer are approximately \$359.7 million less than benefits to members. This liquidation of assets is consistent with 2012 activity, in which contributions from members and the employer were approximately \$310.9 million less than benefits to members. The Fund continues to experience retirement levels in 2013, 2012 and 2011 significantly above levels in prior years. The increased retirement levels are partially attributed to some early retirement health care benefits offered to members by the City of Chicago. Retirements of over 1,450 active members occurred during the three years of 2013, 2012 and 2011.

#### **Investment Activities**

The strategic allocation was unchanged in 2013. Long-term targets include: 21% for U.S. Equity, 20% for non-U.S. Equity, 22% for Fixed Income and Cash, 19% for Tactical and Alpha Strategies, 4% for Real Assets, 7% for Private Equity, 5% for Real Estate, and 2% for Infrastructure.

The Fund continues to prudently implement the revised strategic allocation approved by the Board of Trustees in late 2010. U.S. Equity and Fixed Income exposures were reduced through the year because of immediate benefit funding requirements. Most of the changes in the overall allocation resulted from a restructuring of the Equity portfolio, which was rebalanced to include non-US small Cap and Emerging Market Equity. Specifically, three managers were terminated and three managers were hired to improve the portfolio's overall diversification.

#### Investment Returns Years Ended December 31, 2013, 2012 and 2011

	<u>2013</u>	<u>2012</u>	<u>2011</u>
Total fund (%)	14.51%	12.39%	0.78%
Equities	25.75	17.66	(4.68)
Fixed income	(1.19)	6.72	7.88
Alternatives	8.47	12.05	(2.91)
Private capital	13.04	8.01	12.78
Cash and cash equivalents	0.11	0.14	0.13

Private capital consists of investments in private equity, real estate and infrastructure. Alternative investments consist of fund of hedge fund investments and global tactical allocations.

#### **Plan Membership**

The following table reflects the Plan membership as of December 31, 2013, 2012 and 2011.

#### Plan Membership As of December 31, 2013, 2012 and 2011

				2013-2	012
	2013	2012	2011	Change	0⁄0
Retirees and beneficiaries					
receiving benefits	13,159	12,966	12,663	193	1.5%
Active employees	12,161	12,026	12,236	135	1.1
Terminated (inactive members) employees entitled to benefits					
or refunds of contributions	654	664	624	(10)	(1.5)
Total	25,974	25,656	25,523	318	<u>    1.2</u> %

#### **Funding Status**

The actuarial value of assets, using the GASB Nos. 25 and 43 methods, for the December 31, 2013 valuation was \$3,054 million and the actuarial liability was \$10,311 million. The actuarial liability increased by approximately \$90 million in 2013, from \$10,221 million in 2012 to \$10,311 million in 2013. The assets currently fund 29.6 % of this liability, a decrease from the 30.8% funded ratio in 2012. The significant excess of benefit payments over contributions on an annual basis continues to speed the decline in the funded ratio.

On December 30, 2010, Governor Pat Quinn signed into law, SB 3538, as part of Public Act 096-1495. This legislation included provisions, which significantly change the method by which contributions to the Fund by the Employer, the City of Chicago, are determined, as well as the level of benefits afforded police officers hired by the City of Chicago after January 1, 2011.

Before Public Act 096-1495, the City of Chicago met its statutory obligation for funding through a tax multiplier calculation that was based upon active member contributions. Public Act 096-1495 changes the City of Chicago funding obligation, effective with tax levy year 2015, such that each year annually actuarially determined employer contributions will be calculated and required. Such actuarially determined contributions will be established that produce a projected funding goal of 90% by the end of 2040, based upon the projected actuarial value of Fund assets and liabilities and application of certain required actuarial methodologies. The Public Act also provides an enhancement mechanism such that failure by the City of Chicago to remit the required contributions can result in withholding of certain grants owed by the State of Illinois Comptroller to the City of Chicago, and direct deposit of such monies to the Fund.

The calculation of the statutory contributions mandated by PA 096-1495 required that the actuarial cost method of the actuarial liability be changed from entry age normal to projected unit credit. This change is reflected in the statutory funding calculations of 2013 and all market value funding calculations. For GASB purposes, the actuarial cost method continues to be entry age normal, which satisfies the requirements of GASB No. 25 for plan year ended December 31, 2013, and GASB No. 67 for plan year ending December 31, 2014.

Based upon the statutory provisions of PA 096-1495 and related calculations provided by the Fund's actuarial consultant, contributions from the City of Chicago are expected to significantly increase from \$188,431,000 in 2014 to \$592,863,000 in 2015. This is a significant funding contribution and a change from prior years. In 2013 and 2012, the annual required contribution for the pension and health insurance benefits, as computed under GASB Nos. 25 and 43, was not reached, despite the City of Chicago meeting its fiduciary obligation to funding through a 2.0 times multiplier of active member contributions.

As previously noted, the statutory provisions of PA 096-1495 also required that assets be marked to market at March 30, 2011. The actuarial value of assets at December 31, 2013, reflects that assets were marked to the market value of assets at January 1, 2012, and all related investment gains and losses through January 1, 2012, were recognized. For purposes of the actuarial asset valuation, resetting the actuarial value of assets to the market value of assets at January 1, 2012, instead of March 30, 2011, does not impact the statutory contribution requirement for 2015.

#### **Contact Information**

This financial report is designed to provide the employer, plan participants, and others with a general overview of the Fund's finances and to show accountability for the monies received. Questions concerning any data provided in this report can be submitted to:

Ms. Regina M. Tuczak Executive Director Policemen's Annuity and Benefit Fund of Chicago 221 N. LaSalle Suite 1626 Chicago, IL 60601

#### POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

#### (A Component Unit of the City of Chicago)

Statements of Fiduciary Net Position

As of December 31, 2013 and 2012

	2(	)13	2012		
ASSETS					
Cash	\$	250	\$	250	
Receivables					
Employer tax levies, net of allowance for					
loss of \$19,677,411 in 2013 and					
\$18,678,661 in 2012	190	,071,158	20	09,436,721	
Member contributions	4	,513,521		4,519,144	
Interest and dividends	7	,027,508		7,137,650	
Accounts receivable—due from brokers	146	,643,193	1;	59,429,849	
	348	,255,380	38	80,523,364	
Investments, at fair value					
U.S. common stock and other equity	489	,961,707	50	64,104,261	
Collective investment funds, stock	430	,949,971	3	15,897,623	
Collective investment funds, international equities	29	,596,278		32,031,415	
Collective investment funds, fixed income	284	,158,454	30	08,491,943	
International equity	655	,118,654	60	57,303,919	
Bonds and notes	580	,084,746	59	98,489,579	
Short-term instruments	187	,366,569	(	93,899,392	
Infrastructure	35	,538,660	-	39,609,925	
Forward contracts and swaps	3	,845,772	2	14,645,959	
Hedge fund-of-funds	95	,941,758	8	35,754,714	
Real estate	119	,140,822	12	25,923,043	
Venture capital and private equity		,569,567	1	90,685,937	
	3,097	,272,958	3,00	66,837,710	
Invested securities lending cash collateral	271	,856,279	2	55,434,143	
Total assets	3,717	,384,867	3,70	02,795,467	
LIABILITIES					
Refunds and accounts payable	5	,312,489		4,734,680	
Trade accounts payable—due to brokers	173	,235,185	22	27,710,970	
Securities lending cash collateral	271	,856,279	25	55,434,143	
OPEB obligation	1	,780,360		1,482,440	
Total liabilities	452	,184,313	48	89,362,233	
Net position held in trust for pension benefits	\$ 3,265	,200,554	\$ 3,2	13,433,234	

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

#### POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

#### (A Component Unit of the City of Chicago)

#### Statements of Changes in Fiduciary Net Position

For the Years Ended December 31, 2013 with and 2012

	2013	2012
ADDITIONS		
Contributions		
Employer	\$ 188,889,240	\$ 207,228,022
Plan member salary deductions	93,328,944	95,892,052
Total contributions	282,218,184	303,120,074
Investment income		
Net appreciation in fair value of investments	364,545,293	300,497,700
Interest	20,352,113	22,830,852
Dividends	32,815,167	32,217,299
Real estate income	5,327,641	5,690,917
	423,040,214	361,236,768
Investment activity expenses		
Investment management fees	(7,989,489)	(8,448,610)
Custodial fees	(190,592)	(190,575)
Investment consulting fees	(493,265)	(596,499)
Total investment activity expenses	(8,673,346)	(9,235,684)
Net income from investing activities	414,366,868	352,001,084
From securities lending activities		
Securities lending income	936,295	989,371
Borrower rebates	221,980	479,540
Bank fees	(231,531)	(293,649)
Net income from securities lending activities	926,744	1,175,262
Total net investment income	415,293,612	353,176,346
Miscellaneous income	479,328	423,216
Total additions	697,991,124	656,719,636
DEDUCTIONS		
Pension and disability benefits	632,204,674	601,213,032
Death benefits	1,634,600	1,543,000
Refunds of employee deductions	8,087,018	11,150,565
	641,926,292	613,906,597
Administrative expenses	3,891,329	4,396,638
OPEB expense	406,183	491,848
Total deductions	646,223,804	618,795,083
Net increase	51,767,320	37,924,553
Net position held in trust for pension benefits		
Beginning of year	3,213,433,234	3,175,508,681
End of year	\$ 3,265,200,554	\$ 3,213,433,234

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

#### NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### **Reporting Entity**

Accounting principles generally accepted in the United States, as established by the Governmental Accounting Standards Board (GASB), define a financial reporting entity as consisting of the primary government and its component units, for which the primary government is financially accountable. Financial accountability includes appointing a voting majority of a component unit's governing board, the ability of the primary government to impose its will on the component unit, or a potential for the component unit to provide specific financial benefits to or impose specific financial burdens on the primary government. A primary government may also be financially accountable for its component units.

Based on the above criteria, the Policemen's Annuity and Benefit Fund of Chicago (the Fund, or PABF) is considered to be a component unit of the City of Chicago (the City). The Fund is part of the City's financial reporting entity and is included in the City's fiduciary statement of net assets as pension trust funds.

#### Basis of Accounting

The Fund's financial statements are prepared on the accrual basis of accounting. Employee and employer contributions are recognized as additions in the period in which employee services are performed. Benefits and refunds are recognized as deductions when payable. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made.

#### Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

#### Investments

The Fund is authorized to invest in bonds, notes, and other direct obligations of the U.S. Government and U.S. Government agencies; corporate bonds, debentures, and notes; certain notes secured by mortgages, including pass-through securities; common and preferred stocks; certain pooled funds; limited partnerships; real estate; derivatives; currencies and other types of investment vehicles as set forth in the Illinois Compiled Statutes.

#### **NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES** (continued)

#### Method Used to Value Investments

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Fixed-income securities are valued principally using quoted market prices provided by independent pricing services. For collective investments, net asset value is determined and certified by the investment managers as of the reporting date. Real estate investments are valued at estimated fair value as determined by the general partner, based upon appraisals provided by the investment manager. Hedge fund, venture capital, private equity, infrastructure, and certain opportunistic investments are reported at estimated fair value as determined by the general partner of the investment vehicle.

#### Furniture and Office Equipment

Furniture and office equipment are not capitalized as they are immaterial and are charged to expenses in the year of purchase.

#### Administrative Expenses

Administrative expenses are recorded as incurred and are budgeted and approved by the Fund's Board of Trustees. Administrative expenses are funded by employer contributions.

#### Income Taxes

Income earned by the Fund is not subject to Federal income tax.

#### Securities Lending Transactions

Cash received as collateral on securities lending transactions and investments made with that cash are reported as assets in the statements of fiduciary net position at fair value. Securities received as collateral are reported as assets only if the Fund is able to pledge or sell them without a borrower default. Liabilities resulting from these transactions are reported in the statements of fiduciary net position.

#### **NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES** (continued)

#### Recent Accounting Pronouncements

The following standards were adopted by the Fund during 2013 and 2012 and their adoption did not have any material impact on the financial statements:

GASB's codification standard on *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows or Resources, and Net Position* was effective for the Fund beginning with its year ending December 31, 2012. The objective of this Statement is to improve financial reporting by standardizing the presentation of deferred outflows of resources and deferred inflows of resources and their effect on the net position. It alleviates uncertainty about reporting those financial statement elements by providing guidance where none previously existed.

GASB's codification standard on *Items Previously Reported as Assets and Liabilities* was effective for the Fund beginning with its year ending December 31, 2013. The objective of this Statement is to establish accounting and financial reporting standards that reclassify, as deferred outflows of resources or deferred inflows of resources, certain items that were previously reported as assets and liabilities and recognizes, as outflows of resources or inflows of resources, certain items that were previously reported as assets and liabilities.

GASB's codification standard on *Technical Corrections*—2014—an amendment of GASB Statements No. 10 and No. 62 was effective for the Fund beginning with its year ending December 31, 2013. The objective of this Statement is to improve accounting and financial reporting for a governmental financial reporting entity by resolving conflicting guidance in previously issued standards.

Other accounting standards that the Fund is currently reviewing for applicability and potential impact on the financial statements include:

GASB's codification standard on *Financial Reporting for Pension Plans* establishes improved reporting by state and local governmental pension plans through enhanced note disclosures and schedules of required supplementary information. The provisions of the new standard will be effective for the Fund beginning with its year ending December 31, 2014.

#### **NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES** (continued)

#### Recent Accounting Pronouncements (continued)

GASB's codification standard on *Accounting and Financial Reporting for Pensions* establishes new financial reporting requirements for most governments that provide their employees with pension benefits through these types of plans. The new standard will be effective for the Fund beginning with its year ending December 31, 2015. The new standard replaces the previous standards relating to governments that provide pensions through pension plans administered as trusts or similar arrangements that meet certain criteria. The new standard requires governments providing defined benefit pensions to recognize their long-term obligation for pension benefits as a liability for the first time, and to more comprehensively and comparably measure the annual costs of pension benefits. The standard also enhances accountability and transparency through revised and new note disclosures and required supplementary information.

#### NOTE 2 PENSION PLAN

#### Plan Description and Contribution Information

Policemen's Annuity and Benefit Fund of Chicago is the administrator of a defined benefit, single-employer pension plan with a defined contribution minimum for the purpose of providing benefits to the police officers of the City of Chicago and their widows and children. Any City employee employed under the provisions of the municipal personnel ordinance as police service is covered by the Fund. The defined benefits, as well as the employer and employee contribution levels, are mandated in Illinois Compiled Statutes (40 ILCS Act 5, Article 5) and may be amended only by the Illinois State Legislature. The Fund is governed by an eight-member Board of Trustees (four appointed by the City, three elected by the policemen, and one elected by the annuitants) whose duties are to administer the Fund under the Illinois Pension Code.

#### Plan Description and Contribution Information (continued)

The City of Chicago payrolls for employees covered by the Fund for the years ended December 31, 2013 and 2012 were \$1,015,426,128 and \$1,015,170,686, respectively. At December 31, 2013 and 2012, the Fund membership consisted of the following:

	2013	2012
Active employees	12,161	12,026
Retirees and beneficiaries currently		
receiving benefits	13,159	12,966
Terminated employees entitled to		
benefits or a refund of contributions,		
but not yet receiving them	654	664
	25 974	25 656
	23,774	<u></u>

The Fund provides retirement benefits as well as death and disability benefits. Employees age 50 or older with at least 10 years of service are entitled to receive a money purchase annuity and partial City contributions if less than 20 years of service have been completed. Effective 2003, the mandatory retirement age for a participant is 63. Employees age 50 or older with at least 20 years of service are entitled to receive a minimum formula annuity of 2.5% per year for the first 20 years of service, plus 2.5% per year for each following year or fraction thereof times the final average salary (highest average annual salary for any four consecutive years within the last 10 years of service immediately preceding the date of retirement). The annuity shall not exceed 75% of the highest average annual salary.

The monthly annuity increases by 3% of the original annuity at the first of the month following the later of the attainment of age 55 or the first anniversary of retirement, and by 3% on each January 1 thereafter, if the recipient was born before January 1, 1955.

If the recipient was born after January 1, 1955, the monthly annuity increases by 1.5% of the original annuity at the first of the month following the later of the attainment of age 60 or the first anniversary of retirement, and 1.5% on each January 1 thereafter, but will not exceed a total of 30%.

#### Plan Description and Contribution Information (continued)

Members first hired after January 1, 2011 are subject to different provisions within their defined benefit pension plan. The new provisions include a minimum retirement age of 55, a final average salary calculation based upon 96 consecutive months within the last 120 months of employment, an annual salary cap for purposes of calculating a pension benefit, and cost-of-living increases for a pension benefit that include considerations related to the consumer price index for urban consumers.

Covered employees are required to contribute 9.0% of their salary to the Fund. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest. The City is required by state statutes to contribute the remaining amounts necessary to finance the requirements of the Fund. It is required to levy a tax at a rate not more than an amount equal to the total amount of contributions by the employees to the Fund made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 2.00 annually.

The total annual actuarial required contribution to the Fund (financed by the employees and the City) is equal to the normal cost plus interest only on the unfunded actuarial accrued liabilities determined using the entry age normal method. This actuarial cost method amortizes the costs of the participants' benefits over the entire career of each member as a level of percentage of compensation. The employer contribution required for interest only on the unfunded actuarial accrued liabilities results in a decreasing annual employer cost expressed as a percentage of payroll as future payrolls increase. Since the tax levy is expressed as a multiple of the total salary deductions made two years prior, the City is effectively contributing a level annual percentage of payrolls.

The financing by which the City will fund members' pension benefits will significantly change, effective with the City of Chicago tax levy beginning in 2015. New legislation changes that funding obligation such that annually actuarially determined employer contributions will be calculated and required. Such actuarially determined contributions will be established with a funding goal of 90% by the end of 2040, based upon the actuarial value of Fund assets and application of certain required actuarial assumptions and methodologies.

#### Plan Description and Contribution Information (continued)

The actuarial calculation utilized and reported to the City of Chicago for its tax levy beginning in 2015 requires that assets are marked-to-market at March 30, 2011, and the actuarial value of assets be based upon a five-year smoothing of investment gains and losses incurred in fiscal years ending after March 30, 2011. The actuarial value of assets at December 31, 2013, reflects that assets were marked to the market value of assets at January 1, 2012, and all related investment gains and losses through January 1, 2012, were recognized. Investment gains and losses for the years ended December 31, 2012, and 2013, are recognized at a rate of 20 percent per year over a five-year period. For purposes of the actuarial asset valuation, resetting the actuarial value of assets to the market value of assets at January 1, 2012, instead of March 30, 2011, does not impact the statutory contribution requirement for 2015.

#### Funded Status and Funding Progress

The funded status of the Fund as of December 31, 2013 and 2012, the most recent actuarial valuation dates, is as follows:

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ([b-a]/c)
12/31/13	\$ 3,053,881,777	\$ 10,282,338,599	\$ 7,228,456,822	29.70%	\$ 1,015,426,128	711.86%
12/31/12	3,148,929,770	10,051,827,391	6,902,897,621	31.33	1,015,170,686	679.97

The schedule of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, present multiyear trend information regarding the actuarial values of Fund assets and the ratio to the AAL for benefits.

Funded Status and Funding Progress (continued)

Additional information as of the latest actuarial valuation follows:

Valuation date Actuarial cost method Amortization method Remaining amortization period Asset valuation method	December 31, 2013 and 2012 Entry age normal Level percent open 30 years open 5-year smoothed market
Actuarial assumptions Investment rate of return	7.75%
Projected salary increases	4.0% per year, plus additional percentage related to service
Cost of living allowance	For members hired before January 1, 2011: 3.0% (1.50% for retirees born after January 1, 1955) For members hired on or after January 1, 2011: 1/2 CPI, maximum 3.0%; assumed rate of 1.5%
General inflation rate	3.0%

#### NOTE 3 HEALTH INSURANCE SUPPLEMENT

#### Plan Description and Contribution Information

The City offers group health benefits to annuitants and their eligible dependents through the City's health care plans.

Premiums are established by the City, with the City paying 50% of the claims or premiums, whichever are applicable, and the remaining amount to be paid by all annuitants participating in the City's health care plans. Currently, the Fund pays the City on behalf of each of the annuitants who chooses to participate in any of the City's health care plans, up to a maximum of \$95 per month from July 1, 2009 through December 31, 2016, for each annuitant who is not qualified to receive Medicare benefits; and up to a maximum of \$65 per month from July 1, 2009 through December 31, 2016, for each annuitant who is qualified to receive Medicare benefits. These subsidy rates expire on December 31, 2016.

#### **NOTE 3 HEALTH INSURANCE SUPPLEMENT** (continued)

#### Plan Description and Contribution Information (continued)

The disclosures herein assume that for valuation purposes the health insurance supplement in effect at December 31, 2012 and 2013, will end on December 31, 2016.

The supplemental payments by the Fund are included in employer contributions on the statements of changes in fiduciary net position. The supplemental health care benefits are not dependent upon inflation, as the benefits paid are a fixed dollar amount.

The health insurance supplement is financed with current contributions on a payas-you-go basis. There is no separate healthcare account or assets to pay the health insurance supplement.

At December 31, 2013 and 2012, the number of annuitants or surviving spouses who had subsidized health insurance totaled 10,809, and 10,738, respectively. Of the 2,350 and 2,228 remaining annuitants or surviving spouses, at December 31, 2013 and 2012, respectively, substantially all were eligible for subsidized health insurance, subject to their election of such benefits at a future date, and successful completion of the City's enrollment procedures, which includes certificate of insurability or an annual exam. Additionally, of the 654 and 664 terminated employees entitled to benefits or a refund, at December 31, 2013 and 2012, respectively, approximately 89 and 203 of the terminated employees were eligible for subsidized health insurance, subject to their election of such benefits at a future date and successful completion of the City's enrollment procedures. The annual required contribution represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years. The estimated City contribution represents the expected benefit payments for the health insurance supplement. In 2013 and 2012, the Fund received contributions of \$9,847,310, and \$9,765,686, respectively, from the City, and remitted contributions of insurance premiums to the City of \$9,847,310, and \$9,765,686, respectively. Contributions to the health insurance supplement are equal to insurance premium payments to the City. There were no net assets to report for the health insurance supplement at December 31, 2013 or 2012.

#### **NOTE 3 HEALTH INSURANCE SUPPLEMENT** (continued)

#### Funded Status and Funding Progress

The funded status of the Fund's health care plans as offered by the City as of December 31, 2013 and 2012, which are the most recent actuarial valuation dates, is as follows:

Actuarial Valuation Date	 Actuarial Value of Assets (a)	Actuarial Accrued ability (AAL) Entry Age (b)	 Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ([b-a]/c)_
12/31/13 12/31/12	\$ -	\$ 28,375,681 168,811,118	\$ 28,375,681 168,811,118	0.00% 0.00	\$ 1,015,426,128 1,015,170,686	2.79% 16.63

The schedule of funding progress, presented as Required Supplementary Information (RSI) following the notes to the financial statements, present multiyear trend information regarding the actuarial values of Fund assets and the ratios to the AALs for benefits.

Additional information as of the latest actuarial valuation follows:

Valuation dates Actuarial cost method	December 31, 2013 and 2012 Entry age normal
Amortization method	Level percent open
Remaining amortization period	30 years - December 31, 2012 3 years closed - December 31, 2013
Asset valuation method	No assets (pay-as-you-go)
Actuarial assumptions	
OPEB investment rate of return	4.5%
Projected salary increases	4.0% per year, plus additional percentage related to service
Healthcare cost trend rate	0.0% (fixed dollar subsidy)
General inflation rate	3.0%

#### NOTE 4 CASH AND INVESTMENT RISK

#### Cash

The bank balance and carrying amount of the Fund's deposits at December 31, 2013 were \$552,755 and (\$205,473), respectively; and \$1,028,256 and (\$751,337) at December 31, 2012, respectively. These balances excluded \$250 of petty cash. The bank balance at December 31, 2013 and 2012 is on deposit with the City Treasurer and is insured or collateralized by securities held by the City Treasurer in the Fund's name.

#### Investment Policy

The Fund's overall investment policy is based on the following principles established by the Trustees:

- Maintain a long-term investment horizon for the Fund
- Diversify investments across several asset classes

The Board has indicated interest in developing a risk policy statement in parallel to the Fund's investment policy. The policy would highlight those risks managed at the Fund level and those managed by external managers. The risk policy would also state the types of risks that are monitored and how they are measured. Until such policy is developed by PABF staff and adopted by the Board, there is no formal policy relating to specific investment-related risk.

In order to minimize the impact of large losses and reduce annual variability of returns, the Fund's assets are allocated across several different asset classes and diversified broadly within each asset class.

#### Investment Summary

The following table presents a summary of the Fund's investments by type at December 31, 2013 and 2012.

	 2013	 2012
U.S. Government and agency fixed		
income	\$ 262,696,101	\$ 280,359,077
U.S. corporate fixed income	317,388,645	318,130,502
U.S. common collective fixed income funds	154,432,010	179,601,366
Global common collective fixed income funds	129,726,444	128,890,577
Global common collective equity funds	198,103,231	176,026,045
U.S. equities	489,961,707	564,104,261
U.S. common collective stock funds	232,846,740	139,871,578
International equity common collective fund	29,596,278	32,031,415
Foreign equities	655,118,654	667,303,919
Pooled short-term investment funds	160,600,280	58,023,962
Infrastructure	35,538,660	39,609,925
Real estate	119,140,822	125,923,043
Venture capital	185,569,567	190,685,937
Forward contracts and swaps	3,845,772	44,645,959
Hedge fund-of-funds	95,941,758	85,754,714
Cash and cash equivalents	 26,766,289	 35,875,430
Total investments at fair value	\$ 3,097,272,958	\$ 3,066,837,710

#### Investment Summary

There are no individual investments held by the Fund that represent 5% or more of net position held in trust for pension benefits, except for the Fund's investment in the MFO GMO Global Asset Allocation Fund, which amounted to \$198,103,231 and \$176,026,045 at December 31, 2013 and 2012, respectively, and the NTGI Collective Russell 1000 Index Fund which amounted to \$232,846,740 at December 31, 2013.

The Fund's investments were managed by approximately 47 external investment managers during 2013 and 2012, with additional services provided by an external investment consultant. The Fund does not employ any internal investment managers, therefore its investments are not managed internally. The Fund does not have a formal policy regarding the credit risk of its external managers or investment consultant.

#### Investment Risks

The Fund's investments are subject to certain types of risks, including interest rate risk, credit risk, custodial credit risk, foreign currency risk, and others risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term and such changes could materially affect the amounts reported in the statements of fiduciary net position.

*Interest rate risk*—Interest rate risk is the risk that the fair value of debt securities decreases due to increases in the prevailing market interest rate. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The Fund does not have a formal policy regarding interest rate risk. The Fund attempts to mitigate its exposure to fair value loss arising from increasing interest rates by diversifying its fixed income investment strategy and by allocation to several investment managers. The Fund employed six such managers in 2013 and 2012. Each investment manager is required to determine the maturities of all fixed-income securities in their portfolio. Additionally, guidelines are provided to the external investment managers, including a target duration range that is consistent with each investment manager's respective strategy.

#### Investment Risks (continued)

The following tables show the segmented time distribution of the Fund's investments into time periods of maturities based on the investments' cash flows.

At December 31, 2013, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

				Investment Maturities							
Investment Type		Fair Value		Less than 1 Year		1 to 6 Years		7 to 10 Years		More than 10 Years	
Asset-backed securities	\$	43,742,110	\$	35,339	\$	23,234,549	\$	6,232,211	\$	14,240,011	
Commercial mortgage-backed											
securities		33,078,814		-		-		337,121		32,741,693	
Corporate bonds		220,547,091		15,411,751		89,242,861		59,779,605		56,112,874	
Government agency securities		5,062,004		-		4,211,470		618,228		232,306	
Government bonds		102,513,315		-		65,153,093		14,954,644		22,405,578	
Government mortgage-backed											
securities		127,117,580		-		204,660		2,022,654		124,890,266	
Government issued commercial											
mortgage-backed securities		424,569		-		424,569		-		-	
Index-linked government funds		27,578,633		949,799		21,991,392		2,723,670		1,913,772	
Municipal principal bonds		8,423,139		-		1,036,445		467,123		6,919,571	
Non-government-backed											
collateralized mortgage obligations		11,597,491		-		566,493	_	685,180		10,345,818	
	\$	580,084,746	\$	16,396,889	\$	206,065,532	\$	87,820,436	\$	269,801,889	

#### Investment Risks (continued)

At December 31, 2012, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

			Investment	Maturities	
Investment Type	Fair Value	Less than 1 Year	1 to 6 Years	7 to 10 Years	More than 10 Years
¥					
Asset-backed securities	\$ 47,798,976	\$ 291,613	\$ 26,543,996	\$ 5,717,005	\$ 15,246,362
Commercial mortgage-backed					
securities	36,329,804	-	-	1,364,644	34,965,160
Corporate bonds	214,147,732	7,307,768	93,550,357	61,737,267	51,552,340
Government agency securities	7,062,520	-	4,012,116	2,716,877	333,527
Government bonds	124,557,627	3,498,379	72,551,751	15,908,891	32,598,607
Government mortgage-backed					
securities	133,510,864	-	345,525	1,930,326	131,235,013
Government issued commercial					
mortgage-backed securities	3,623,240	-	440,742	3,182,498	-
Guaranteed fixed income	337,433	-	337,433	-	-
Index-linked government funds	11,604,827	-	5,729,171	5,875,656	-
Municipal principal bonds	8,080,612	-	1,054,531	1,167,229	5,858,852
Non-government-backed					
collateralized mortgage obligations	11,435,944		37,026	1,696,211	9,702,707
	<u>\$ 598,489,579</u>	\$ 11,097,760	\$ 204,602,648	<u>\$ 101,296,604</u>	\$ 281,492,568

*Credit risk*: Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill its obligations. One measure of credit risk is the quality ratings issued by national ratings agencies such as Moody's Investors Services and Standard & Poor's Financial Services (S&P). The Fund does not have a formal policy in regard to aggregate credit quality of fixed income holdings. The Fund utilizes external investment management firms to invest in fixed income securities and credit quality is addressed within the guidelines of the mandate for each of the managers. If a holding falls below specific guideline requirements, the manager will either sell the security or will inform the Fund of the lower rating and why they believe that it is prudent to continue to hold the security as they believe that the security will return to minimum constraints.

The following table provides information on the credit ratings associated with the Fund's investments in debt securities. Rates were obtained from S&P:

	Fair Value			
	2013	2012		
Quality Rating				
AAA	\$ 41,006,879	\$ 44,665,030		
AA	28,200,907	33,840,143		
А	83,193,875	83,462,424		
BBB	111,297,039	96,908,753		
BB	10,744,191	12,408,998		
В	31,456	2,125,064		
Not rated	33,736,175	35,375,518		
CCC through D	9,178,123	9,344,572		
Total credit risk of U.S. corporate fixed income	317,388,645	318,130,502		
U.S. Government and agency fixed income securities	262,696,101	280,359,077		
	\$ 580,084,746	\$ 598,489,579		

*Custodial credit risk*: Custodial credit risk applies to investments, cash, and certificates of deposit. For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Fund will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. For cash and certificates of deposit, custodial credit risk is the risk that in the event of a bank failure, the Fund's deposits may not be returned. As of December 31, 2013 and 2012 cash deposits of \$956,773 and \$7,422,728, respectively, were exposed to custodial credit risk as uninsured and uncollateralized. The Fund does not have a formal policy regarding custodial credit risk.

*Foreign currency risk:* Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment.

The Fund does not have a formal investment policy governing foreign currency risk, but does manage its exposure to loss in the fair value of investments by requiring managers of foreign investments to maintain diversified portfolios. The Fund's equity and fixed-income portfolios include investments that are subject to foreign currency risk. Such investments include non-U.S. equities, government bonds, corporate bonds, and derivative instruments. Additionally, some of the Fund's investment managers at least partially hedge foreign currency exchange risk. The Fund's exposure to foreign currency risk is as follows:

	Fair Value			
	2013	2012		
Currency				
Australian Dollar	\$ 15,848,310	\$ 11,763,761		
Brazilian Real	19,899,117	7,120,637		
British Pound Sterling	89,281,171	106,139,596		
Canadian Dollar	11,775,603	24,745,718		
Chinese Yuan Renminbi	313,459	(604,634)		
Colombian Peso	1,491,743	-		
Czech Koruna	2,496,940	319		
Danish Krone	4,870,828	4,500,501		
Euro Currency Unit	112,860,881	154,870,339		
Hong Kong Dollar	67,211,924	60,149,973		
Hungarian Forint	193	189		
Indian Rupee	5,896,837	7,993,682		
Indonesian Rupiah	4,698,752	6,528,444		
Japanese Yen	81,319,319	75,714,367		
Malaysian Ringgit	2,528,327	2,469,364		
Mexican Peso	9,845,592	5,582,891		
New Israeli Shekel	2,495,275	1,202,667		
New Taiwan Dollar	9,859,013	6,684,631		
New Zealand Dollar	367,215	-		
Nigerian Naira	580,245	355,138		
Norwegian Krone	4,684,530	7,005,742		
Polish Zloty	914,677	1,623,069		
Philippine Peso	701,188	-		
Qatari Rial	1,235,292	-		
Singapore Dollar	2,674,492	8,035,118		
South African Rand	9,630,972	5,020,198		
South Korean Won	18,865,496	14,478,173		
Swedish Krona	6,228,217	10,611,473		
Swiss Franc	24,837,407	42,018,747		
Thai Baht	1,766,998	5,376,538		
Turkish Lira	6,639,716	1,397,633		
Total investments in foreign currency	\$ 521,819,729	\$ 570,784,274		

#### **Derivatives**

The Fund's investment managers may enter into derivative transactions as permitted by their guidelines. A derivative financial instrument is an investment whose payoff depends on the value of an underlying instrument such as bond or stock prices, a market index, or commodity prices. Derivative financial instruments involve, to varying degrees, credit risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to terms. Market risk is the possibility that a change in the underlying element of the derivative will cause the value of a financial instrument to decrease or become more costly to settle. Most of the derivative transactions executed by the Fund's investment managers are related to currency through foreign exchange contracts, the vast majority of which is for hedging purposes, and interest rates through interest rate futures and forward contracts, the purpose of which is mostly duration management. In addition to derivative transactions executed directly by the Fund's investment managers, the Fund also holds interests in collective funds, hedge funds, and private equity funds, which may engage in derivative transactions. The Fund does not directly purchase derivatives with borrowed funds.

*Futures contracts*: The Fund's external investment managers enter into futures contracts in the normal course of investing activities to manage market risk associated with the Fund's fixed-income investments and to achieve overall investment portfolio objectives. These contracts involve elements of market risk in excess of amounts recognized in the statements of fiduciary net position. The credit risk associated with these contracts is minimal, as they are traded on organized exchanges and settled daily.

At December 31, 2013, the Fund had interest rate futures contracts to purchase U.S. Treasury securities with notional amounts of \$37,468,080. At December 31, 2013, the Fund also had interest rate future contracts to sell U.S. Treasury securities, Japanese Government Bonds, and UK Treasury securities with notional amounts of \$8,824,675, \$6,980,177, and \$5,504,524, respectively. At December 31, 2012, the Fund had interest rate futures contracts to purchase Australian Treasury securities and U.S. Treasury securities with notional amounts of \$3,230,547 and \$22,010,552, respectively. At December 31, 2012, the Fund also had interest to sell U.S. Treasury securities and German Treasury securities with notional amounts of \$3,592,696 and \$3,045,744, respectively.

#### Derivatives (continued)

The fair value of futures contracts in the statements of fiduciary net position was zero at December 31, 2013 and 2012, as settlements are by cash daily. The Fund had net investment earnings of \$125,157 and \$751,333 on futures contracts in 2013 and 2012, respectively. These losses are accounted for as net appreciation in fair value of investments.

Interest rate and credit default swaps: The Fund's external investment managers utilize interest rate and credit default swaps in the management of the Fund's fixed-income portfolio. Swap agreements are contractual agreements between two or more parties in which each party agrees to exchange sets of cash flows based on certain agreed-upon parameters. The holder is exposed to credit risk for nonperformance and to market risk for changes in interest rates. Gains and losses on swaps are determined based on fair values and are recorded in the statements of changes in fiduciary net position. The notional value of credit default swaps was \$104,865,202 and \$64,941,778 as of December 31, 2013 and 2012, respectively. The Fund did not hold any interest rate swaps as of December 31, 2013 and 2012. The fair value of swaps outstanding at December 31, 2013 and 2012 was a net asset of \$1,983,310 and \$898,322, respectively. Investment loss from holdings and sales of interest rate and credit default swaps was \$2,331,082 and \$1,436,465 in 2013 and 2012, respectively. These earnings are included in net (depreciation) appreciation in the fair value of investments in the statements of changes in net assets.

Foreign exchange contracts: The Fund's external investment managers utilize foreign currency forward contracts, primarily for hedging purposes. Foreign currency forward contracts are contractual agreements to buy or sell a specific amount of a foreign currency at a certain date for an agreed price. As the fair value of the underlying foreign currency varies from the contractual agreed price, the Fund records an unrealized gain or loss. The holder is exposed to credit risk for nonperformance and to market risk for changes in interest rates. The Fund had pending foreign currency purchases and sales that included positions with various currencies primarily including Australian dollars, Brazilian real, British pound sterling, Canadian dollars, Chinese yuan renminbi, Danish krone, Euros, Hong Kong dollars, Indian rupee, Indonesian rupiah, Japanese yen, Malaysian ringgit, Mexican pesos, New Israeli shekel, New Taiwan dollar, Norwegian krone, Polish zloty, Singapore dollars, South African rand, South Korean won, Swedish krona, Swiss francs, Thai baht, Turkish lira and U.S. dollars at December 31, 2013 and 2012. Total pending foreign currency purchases and (sales) had notional values of \$110,623,648 and \$(110,533,355), respectively, at December 31, 2013, and \$60,132,136 and (\$60,041,639), respectively, at December 31, 2012.

#### Derivatives (continued)

Thus, the Fund had a net unrealized gain on pending foreign currency forward contracts of \$90,293 and \$90,497 at December 31, 2013 and 2012, respectively, which is reflected as the fair value of the investment on the statements of fiduciary net position. Investment income from holdings and sales of foreign currency forward contracts was \$1,525,509 and \$1,994,441 in 2013 and 2012, respectively.

*Forward interest rate contracts*: The Fund's external investment managers entered into forward contracts to purchase or sell bond securities during 2013 and 2012. Forward contracts are contracts for delayed delivery of securities in which the seller agrees to make delivery at a specified future date of a specified instrument, at a specified price or yield. The holder is exposed to credit risk for nonperformance and to market risk for changes in interest rates.

These instruments involve, to varying degrees, elements of credit risk in excess of the amount recognized in the statements of fiduciary net position. The Fund's external investment managers attempt to mitigate this credit risk through structured trading with reputable parties.

At December 31, 2013, the Fund did not hold any forward contracts. At December 31, 2012, the Fund held forward contracts to buy Swedish government bonds and US TIPS (Treasury Inflation Protected Securities) with fair values of \$36,334,577, and the Fund also held forward contracts to sell German government bonds and U.S. Treasury notes with fair values of \$43,421,600. The unrealized loss on these contracts was \$1,511,176 at December 31, 2012. Investment income (loss) from holdings and sales of interest rate forward contracts was \$1,170,592 and (\$1,442,350) in 2013 and 2012, respectively. These earnings (losses) are included in net appreciation in the fair value of investments in the statements of changes in fiduciary net position.

#### Investment Management Fees

Investment management fees from equity and fixed income managers, including most of the collective funds, are included in investment management fees on the statements of changes in fiduciary net position. Investment management fees from funds of short-term investments, infrastructure, hedge, real estate, venture capital and private equity are reflected in the net investment income from such investment products. Such investment management fees are not significant to the financial statements.

#### NOTE 5 SECURITIES LENDING PROGRAM

State statutes and Board of Trustees policies permit the Fund to lend some of its securities to broker/dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The Fund's master custodian, Northern Trust Bank, lends securities of the type on loan at year end for collateral that may include cash, U.S. government securities, and irrevocable letters of credit at 102% of the fair value of the loaned securities plus any accrued interest for U.S. securities and 105% for non-U.S. securities. The contract with the Fund's master custodian requires it to indemnify the Fund if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) due to insolvency of the borrower or if the master custodian fails to live up to its contractual responsibilities relating to the lending of those securities.

All securities loans can be terminated on demand by either the Fund or the borrower, although the average term of the loans is 128 days and 131 days, as of December 31, 2013 and 2012, respectively. Cash collateral is invested in the lending agent's Core USA Collateral Pool, which at December 31, 2013 and 2012, had a weighted-average life, as measured by interest sensitivity, of 39 days and 45 days, respectively. The relationship between the maturities of the investment pool and the Fund's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the Fund cannot determine. The Fund cannot pledge or sell collateral securities received unless the borrower defaults.

Loans outstanding as of December 31, 2013 and 2012 were as follows:

	2013	2012
Fair market value of securities loaned Fair market value of cash collateral from	\$ 266,783,040	\$ 258,285,331
borrowers Fair market value of non-cash collateral	271,856,279	255,434,143
from borrowers	1,049,482	7,679,609

As of December 31, 2013 and 2012, the Fund had limited credit risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts owed to the Fund.

#### NOTE 6 UNFUNDED INVESTMENT COMMITMENTS

The Fund had unfunded commitments of approximately \$93 million and \$103 million at December 31, 2013 and 2012, respectively, in connection with real estate, infrastructure, and private equity investments.

#### NOTE 7 POST-RETIREMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTH PLAN

#### Plan Description

The Policemen's Annuity and Benefit Fund of Chicago (PABF), as an employer, administers a single-employer defined benefit post-retirement healthcare plan (Staff Retiree Health Plan). The Staff Retiree Health Plan provides lifetime health and dental insurance for eligible retirees and their spouses through PABF's group health insurance plan, which covers both active and retired members. As of December 31, 2013, nine retirees were in the Staff Retiree Health Plan and eighteen active employees could be eligible at retirement. As of December 31, 2012, nine retirees were in the Staff Retiree Health Plan and 20 active employees could be eligible at retirement. Benefit subsidy provisions have been established by PABF's Board of Trustees. The amount of the subsidy varies according to a retiree's years of service with PABF and the coverages elected. These benefit subsidy provisions can be modified or terminated at the sole discretion of the PABF Board.

#### Funding Policy

The required contribution is based on projected pay-as-you-go financing requirements. For 2013 and 2012, PABF contributed approximately \$108,262, and \$159,011, respectively, to the Staff Retiree Health Plan for current premiums, inclusive of an implicit subsidy of \$10,276, and \$10,871, for 2013 and 2012, respectively. Members receiving benefits contributed approximately \$26,172, or 24%, of the total premiums, for 2013, and approximately \$29,000, or 18%, of the total premiums, for 2012.

#### Annual OPEB Cost and Net OPEB Obligation

PABF's annual Other Post-Employment Benefit (OPEB) expense is calculated based on the Annual Required Contribution (ARC) of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years. The amortization period is open.

#### NOTE 7 POST-RETIREMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTH PLAN (continued)

#### Annual OPEB Cost and Net OPEB Obligation (continued)

The following table shows the components of PABF's annual OPEB cost for 2013 and 2012, the amount actually contributed to the Staff Retiree Health Plan, and changes in PABF's net OPEB obligation to the Staff Retiree Health Plan:

		2013		2012
Annual required contribution Interest on net OPEB obligation Adjustment to annual required contribution	\$	394,221 66,710 (54,748)	\$	478,309 52,221 (38,682)
Annual OPEB expense Employer contributions made		406,183 (108,262)		491,848 (169,882)
Increase in net OPEB obligation		297,921		321,966
Net OPEB obligation at beginning of year		1,482,440		1,160,474
Net OPEB obligation at end of year	<u>\$</u>	1,780,361	<u>\$</u>	1,482,440

The annual OPEB cost, the percentage of annual OPEB cost contributed to the Staff Retiree Health Plan, and the net OPEB obligation for 2013 and 2012 is as follows:

Year <u>Ended</u>	Annual <u>OPEB Cost</u>	Percentage of Annual OPEB <u>Cost Contributed</u>	Net OPEB Obligation
12/31/2013	\$ 406,183	26.7%	\$ 1,780,361
12/31/2012	491,848	34.5	1,482,440

#### **NOTE 7 POST-RETIREMENT BENEFITS OF THE FUND—STAFF RETIREE HEALTH PLAN** (continued)

#### Funded Status and Funding Progress

The funded status of PABF's Staff Retiree Health Plan as of December 31, 2013, and 2012, is as follows:

Actuarial Valuation Date	 Actuarial Value of Assets (a)	Lia	Unfunded bility (AAL) Entry Age (b)	 Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	 Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ([b-a]/c)_
12/31/13 12/31/12	\$ -	\$	5,212,127 6,376,689	\$ 5,212,127 6,376,689	0.00% 0.00	\$ 1,276,471 1,623,675	408.3% 392.7

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the Staff Retiree Health Plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as RSI following the notes to the financial statements, present multi-year trend information on the actuarial values of assets of the Staff Retiree Health Plan and its ratio to the AAL for benefits.

#### Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members), which include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities consistent with the long-term perspective of the calculations.

For the December 31, 2013 and 2012 actuarial valuations, the entry age actuarial cost method was used. The actuarial assumptions included a 4.5% investment rate of return based on the employer's assumed return on its assets and at December 31, 2013 and 2012, an annual healthcare cost trend rate of 8.5% initially, reduced by increments of 0.5 percentage point per year to an ultimate rate of 5.0% after eight years. At December 31, 2013 and 2012, the wage inflation assumption was 3.75% and 4.5%, respectively. The unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll over a 30-year open period.

#### NOTE 8 RESERVES

The Fund maintains several reserves, as required by the Illinois Pension Code and Board policy. The following are brief descriptions of the reserves:

City Contribution Reserve

	2013	2012
Balances at December 31	<u>\$ 2,028,237,876</u>	<u>\$1,900,644,977</u>

The City Contribution Reserve is maintained for the payment of the City's portion of future retirement benefits for active and inactive participants. Interest at 3% is credited to this reserve annually. When the amount of annuity for a policeman or widow is fixed, the City Contribution Reserve is charged with the amount of the present value of retirement benefit and the Annuity Payment Reserve is credited with such amount.

The City Contribution Reserve does not equal the present value of expected retirement benefits. The reserve is maintained on a cost basis, in accordance with the Illinois Pension Code.

#### Salary Deduction Reserve

	2013	2012
Balances, at December 31	<u>\$1,353,436,830</u>	<u>\$1,304,605,726</u>

The Illinois Pension Code requires the Fund to maintain separate accounts for each policeman for the amounts of salary deductions with interest at 3% per year. When a policeman retires, the amount of his annuity is charged to the Salary Deduction Reserve and credited to the Annuity Payment Reserve. If a policeman takes a separation refund, his salary deductions are refunded to him and charged to the Salary Deduction Reserve. This reserve is fully funded.

#### **NOTE 8 RESERVES** (continued)

Annuity Payment Reserve

	2013	2012	
Balances, at December 31	<u>\$2,234,896,893</u>	<u>\$2,152,547,904</u>	

When the amount of annuity has been fixed, the present value of expected benefit is transferred from the City Contribution Reserve and the Salary Deduction Reserve to the Annuity Payment Reserve for the payment of annuity. All age and service annuities, widow's annuities, and refunds are charged to this reserve.

Annually, the actuary calculates the present value of all annuities. The Investment and Interest Reserve will transfer amounts to the Annuity Payment Reserve to ensure that the balance in the Annuity Payment Reserve equals the present value of annuities. This reserve is fully funded.

Prior Service Annuity Reserve

	2013	2012
Balances, at December 31	<u>\$(1,248,229,524</u> )	<u>\$(1,173,789,394)</u>

The Prior Service Annuity Reserve is increased by the City's contributions for policemen and widows' prior service annuities and all prior service annuities payable to policemen and widows are charged to this reserve. This reserve included an unfunded liability of \$7,026,723,767 and \$7,267,764,193 as of December 31, 2013 and 2012, respectively.

#### Gift Reserve

	2013		2012	
Balances, at December 31	<u>\$</u>	12,853,284	<u>\$</u>	13,114,372

The Gift Reserve is maintained for gifts, grants, bequests, or other amounts received by the Fund. The Board of Trustees determines the use of these funds. Interest is credited to the Gift Reserve annually.

#### **NOTE 8 RESERVES** (continued)

#### Investment and Interest Reserve

All gains and losses from investments and investment earnings are recorded in the Investment and Interest Reserve. Interest due to the City Contribution Reserve, Salary Deduction Reserve, Prior Service Annuity Reserve, Gift Reserve, and Supplementary Payment Reserve is transferred from the Investment and Interest Reserve to those reserves.

#### Ordinary Death Benefit Reserve

	2013		2012	
Balances, at December 31	<u>\$</u>	(24,754,256)	<u>\$</u>	(22,350,262)

Amounts contributed by policemen and the City for death benefits are credited to the Ordinary Death Benefit Reserve. Death benefit payments are charged to this reserve. The Ordinary Death Benefit Reserve had a deficit.

Automatic Increase Reserve

	2013	2012
Balances, at December 31	<u>\$(1,091,687,951)</u>	<u>\$ (961,787,490)</u>

The Automatic Increase Reserve is credited with amounts deducted from the salaries of policemen and matching contributions by the City for automatic increase in annuity with interest thereon. Payments of increased annuities and salary deduction refunds for increase in annuity are charged to this reserve. At December 31, 2013 and 2012, the Automatic Increase Reserve had a deficit.

# Supplementary Payment Reserve20132012Balances, at December 31\$ 447,402\$ 447

The Supplementary Payment Reserve receives amounts transferred from the Investment and Interest Reserve for supplemental increases in annuity for certain eligible retirees. This reserve is fully funded.

447,402

#### **NOTE 8 RESERVES** (continued)

The following reserves have a \$0 balance at December 31, 2013 and 2012. City contributions are allocated to these reserve accounts in amounts equal to payments made on an annual basis.

#### Child's Annuity Reserve

Amounts contributed by the City for child's annuity are credited to the Child's Annuity Reserve, and payments of child's annuity are charged to this reserve.

#### Duty Disability Reserve

The Duty Disability Reserve is increased by the City's contributions for duty disability benefits, child's disability benefits, and compensation annuities and is decreased by the payments of these benefits.

#### Ordinary Disability Reserve

Amounts contributed by the City for ordinary disability benefits are credited to the Ordinary Disability Reserve. Payments of ordinary disability benefits are charged to this reserve.

#### Hospitalization Fund Reserve

The health care premiums are paid from the tax levies and are credited to the reserve for Group Hospitalization Fund. Premium payments to the City are charged against this reserve.

#### Expense Reserve

Amounts contributed toward the cost of administration are credited to the Expense Reserve, while expenses of administration are charged to this reserve.

#### **NOTE 9 DEFERRED COMPENSATION PLAN**

The Fund offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all employees of the Fund, permits them to defer a portion of their salary until future years. Participation in the plan is optional. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. The plan is managed by a third-party administrator.

#### **NOTE 9 DEFERRED COMPENSATION PLAN** (continued)

The assets of the plan were placed in trust accounts with the plan administrator for the exclusive benefit of participants and their beneficiaries and are not considered assets of the Fund.

#### NOTE 10 LEASE AGREEMENT

The Fund leases its office facilities under a noncancellable agreement that expires June 30, 2016. There is a renewal option for a 10-year extension on the lease, however, such option has not yet been exercised. Office rental expense amounted to \$249,483 and \$244,687 for the years ended December 31, 2013 and 2012, respectively.

Future minimum rental payments under the office lease at December 31, 2013 are as follows:

Year	Ar	Amount	
2014	\$ 2	252,562	
2015	2	256,502	
2016	1	29,073	

#### NOTE 11 RISK MANAGEMENT

The Fund is exposed to various risks of loss related to tort, theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Fund carries commercial insurance to reduce its exposure to risk of loss. There is no significant change in insurance coverage from year to year. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

# **REQUIRED SUPPLEMENTARY INFORMATION**

(A Component Unit of the City of Chicago)

Required Supplementary Information

Schedule of Funding Progress—Pension

For the Years Ended December 31, 2013 and 2012

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio <u>(a/b)</u>	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ([b-a]/c)
12/31/08	\$4,093,719,894	\$8,482,574,033	\$4,388,854,139	48.26%	\$1,023,580,667	428.77%
12/31/09	3,884,978,241	8,736,101,666	4,851,123,425	44.47	1,011,205,359	479.74
12/31/10	3,718,954,539	9,210,056,428	5,491,101,889	40.38	1,048,084,301	523.92
12/31/11	3,444,690,362	9,522,395,036	6,077,704,674	36.17	1,034,403,526	587.56
12/31/12	3,148,929,770	10,051,827,391	6,902,897,621	31.33	1,015,170,686	679.97
12/31/13	3,053,881,777	10,282,338,599	7,228,456,822	29.70	1,015,426,128	711.86

# (A Component Unit of the City of Chicago) Required Supplementary Information Schedule of Employer Contributions—Pension For the Years Ended December 31, 2013 and 2012

		Contributions			
Year Ended <u>December 31,</u>	Annual Required	Actual Employee	Actual Employer	Employer Percentage <u>Contributed</u>	
2008	\$318,234,870	\$ 93,207,408	\$172,835,805	54.31%	
2009	339,488,187	95,614,390	172,043,785	50.68	
2010	363,624,570	108,402,353	174,500,507	47.99	
2011	402,751,961	98,222,258	174,034,600	43.21	
2012	431,010,173	95,892,052	197,462,336	48.08	
2013	474,177,604	93,328,944	179,041,930	37.76	

#### (A Component Unit of the City of Chicago) Notes to Required Supplementary Information—Pension For the Years Ended December 31, 2013 and 2012

# (Unaudited)

Valuation date Actuarial cost method Amortization method Remaining amortization period Actuarial value of assets	December 31, 2013 and 2012 Entry age normal Level percent open 30 years open 5-year smoothed market*
Actuarial assumptions	
Pension investment rate of return	7.75%
Projected salary increases	4.0% per year, plus additional percentage related to service
Cost of living allowance	For members hired before January 1, 2011; 3.0% (1.5% for retirees born after January 1, 1955) For members hired on or after January 1, 2011: 1/2 CPI, max 3.0%; assumed rate of
General inflation rate	1.5% 3.0%

\*The actuarial value of assets at December 31, 2013, reflects that assets were marked to the market value of assets at January 1, 2012, and all related investment gains and losses through January 1, 2012, were recognized. Investment gains and losses for the years ended December 31, 2012, and 2013, are recognized at a rate of 20 percent per year over a five-year period.

#### (A Component Unit of the City of Chicago) Required Supplementary Information Schedule of Funding Progress—Health Insurance Supplement For the Years Ended December 31, 2013 and 2012

# (Unaudited)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio <u>(a/b)</u>	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll _([b-a]/c)
12/31/08	\$ -	\$ 169,972,156	\$169,972,156	0.00%	\$1,023,580,667	16.61%
12/31/09	-	164,799,819	164,799,819	0.00	1,011,205,359	16.30
12/31/10	-	164,796,449	164,796,449	0.00	1,048,084,301	15.72
12/31/11	-	165,954,869	165,954,869	0.00	1,034,403,526	16.04
12/31/12	-	168,811,118	168,811,118	0.00	1,015,170,686	16.63
12/31/13	-	28,375,681*	28,375,681	0.00	1,015,426,128	2.79

\*Due to Public Act 98-0043 effective June 28, 2013, it is assumed for valuation purposes that the health insurance supplement in effect prior to June 30, 2013, will end on December 31, 2016, for all employee annuitants and their future surviving spouses.

#### (A Component Unit of the City of Chicago) Required Supplementary Information Schedule of Employer Contributions—Health Insurance Supplement For the Years Ended December 31, 2013 and 2012

Year		Contributions		
Ended <u>December 31,</u>	Annual Required	Actual Employee	Actual Employer	Percentage <u>Contributed</u>
2008	\$11,348,959	\$ -	\$8,850,186	77.98%
2009	11,810,766	-	9,266,431	78.46
2010	10,659,006	-	9,354,163	87.76
2011	10,538,116	-	9,591,394	91.02
2012	10,473,478	-	9,765,686	93.24
2013	10,429,882	-	9,847,310	94.41

(A Component Unit of the City of Chicago) Notes to Required Supplementary Information—Health Insurance Supplement For the Years Ended December 31, 2013 and 2012

Valuation date	December 31, 2013 and 2012
Actuarial cost method	Entry age normal
Actuarial value of assets	No assets (pay-as-you-go)
Amortization method	Level percent open-2012
	Level percent-2013
Remaining amortization period	30 years-2012;
	3 years closed-2013
Actuarial assumptions	
OPEB investment rate of return	4.5%
Projected salary increases	4.0% per year, plus
	additional percentage
	related to service
Healthcare Cost Trend Rate	0.00% (fixed dollar subsidy)

#### (A Component Unit of the City of Chicago) Required Supplementary Information Schedule of Funding Progress—Staff Retiree Health Plan For the Years ended December 31, 2013 and 2012

Actuarial Valuation Date	GASB Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio <u>(a/b)</u>	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll _([b-a]/c)
12/31/08	\$ -	\$3,239,700	\$3,239,700	0.00%	\$1,202,700	269.4%
12/31/09	-	3,474,800	3,474,800	0.00	1,256,800	276.5
12/31/10	-	5,588,688	5,588,688	0.00	1,486,848	375.9
12/31/11	-	5,971,137	5,971,137	0.00	1,553,756	384.3
12/31/12	-	6,376,689	6,376,689	0.00	1,623,675	392.7
12/31/13	-	5,212,127	5,212,127	0.00	1,276,471	408.3

#### (A Component Unit of the City of Chicago) Required Supplementary Information Schedule of Employer Contributions—Staff Retiree Health Plan For the Years Ended December 31, 2013 and 2012

Year		Contributions			
Ended <u>December 31,</u>	Annual Required	Actual <u>Employee</u>	Actual Employer	Percentage <u>Contributed</u>	
2008	\$274,600	\$ -	\$104,700	38.1%	
2009	290,600	-	121,000	41.6	
2010	434,005	-	127,630	29.4	
2011	453,535	-	133,373	29.4	
2012	478,309	-	169,882	35.5	
2013	394,221	-	108,262	27.5	

(A Component Unit of the City of Chicago) Notes to Required Supplementary Information—Staff Retiree Health Plan For the Years Ended December 31, 2013 and 2012

(Unaudited)

Valuation date Actuarial cost method Actuarial value of assets Amortization method Remaining amortization period

Actuarial assumptions OPEB investment rate of return Wage inflation

Healthcare cost trend rate

December 31, 2013 and 2012 Entry age normal No assets (pay-as-you-go) Level percent open 30 years

4.5% per year
4.5% per year-Dec. 31, 2012
3.75% per year-Dec. 31, 2013
8.5% per year, graded down to
5.0% per year, ultimate trend in
0.5% increments

SUPPLEMENTARY INFORMATION

# (A Component Unit of the City of Chicago) Schedule of Administrative Expenses For the Years Ended December 31, 2013 and 2012

	2013	2012
Administrative expenses		
Actuary services	\$ 88,922	\$ 84,961
Benefits disbursement	206,072	205,800
Equipment service and rent	167,478	188,844
External auditors	50,000	46,700
Fiduciary insurance	141,653	133,430
Legal services	461,222	753,508
Medical consultant	448,196	374,528
Miscellaneous	292,516	444,116
Occupancy and utilities	254,668	250,415
Personnel salaries and benefits	1,764,179	1,894,271
Postage	5,000	7,935
Supplies	11,423	12,130
	\$ 3,891,329	\$ 4,396,638

# (A Component Unit of the City of Chicago) Schedule of Consulting Costs For the Years Ended December 31, 2013 and 2012

	2013	2012
Payments to consultants		
External auditors	\$ 50,000	\$ 46,700
Medical consultant	448,196	374,528
Legal services	461,222	753,508
Actuary service	88,922	84,961
Investment manager fees	7,989,489	8,448,610
Master trustee fees	190,592	190,575
Consulting fees	493,265	596,499
	\$ 9,721,686	\$ 10,495,381

# (A Component Unit of the City of Chicago)

Schedule of Investment Fees

For the Years Ended December 31, 2013 and 2012

	2013	2012
Investment managers		
Acadian Asset Management	\$ 9,784	\$ -
Ariel Capital Management	15,658	320,577
Artisan Partners	695,585	578,060
Attucks Asset Management	-	8,842
Capital Guardian Trust Co.	582,191	478,327
Channing Capital	-	32,296
Chicago Equity Partners	-	109,837
Dearborn Partners LLC	215,310	208,821
Denali Advisors	180,687	126,522
European Investors	60,057	54,491
Fisher Investments	670,903	-
Great Lakes Advisors	344,311	490,392
Holland Capital Management	262,531	256,263
ING Clarion	79,966	70,342
Invesco Capital Management	375,000	379,117
JP Morgan Fleming Asset Management	557,744	830,924
Lazard Asset Management	8,257	-
LM Capital Group	94,066	92,353
McKinley Capital	405,695	385,268
Montag & Caldwell	243,409	544,540
Northern Trust Global Investments - Index Funds	72,567	45,705
Piedmont Investment Advisors	-	51,599
PRISA Prudential	-	73,192
Taplin, Canida, & Habacht	137,137	98,995
UBS Global Asset Management	855,240	1,100,114
Wellington Management	390,821	511,835
Wells Capital Management	481,898	475,510
William Blair & Co.	1,250,672	1,124,688
Total investment manager fees	7,989,489	8,448,610
Investment consultants		
Elkins McSherry Inc	20,000	20,000
NEPC LLC	473,265	465,354
The Townsend Group	-	5,109
Kolhberg & Associates	-	106,036
Total investment consultants fees	493,265	596,499
Master custodian		
The Northern Trust Company	190,592	190,575
Total investment fees	\$ 8,673,346	\$ 9,235,684



# Investment Section



#### Investments

(Compiled by NEPC, LLC, Investment Consultant to the Fund)

**Investment Authority** Since December 16, 1987, the Policemen's Annuity & Benefit Fund of Chicago has operated in accordance with Public Act 85-964, which is the Prudent-Person rule for the Police Fund's investments. The Prudent-Person rule states that fiduciaries must discharge their duties with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use under the prevailing conditions. (A fiduciary is any person who has authority or control with respect to the management or administration of plan assets.)

**Investment Policy** In 1983, the Trustees undertook a restructuring of the Fund's investment policy to improve the Fund's investment diversification. The revised policy allows for investment in additional asset classes (e.g., international stocks and bonds, real estate and private equity investments). As a result of the policy change, the Fund was restructured. The Trustees allocated monies among the new asset classes and added several new investment managers. The Trustees also allocated monies to passive investments (index funds), which provide a low-cost means of achieving market-like returns. The Trustees consistently review the investment policy and make changes when deemed appropriate.

**Distinction of Responsibilities** In order to clarify the roles and responsibilities of the Trustees and the various investment professionals engaged by the Trustees, the Trustees divided the responsibilities for the Fund as follows:

The Trustees assume the responsibility for establishing the investment policy that is to guide the investment of the Fund. The investment policy describes the degree of investment risk that the Trustees deem appropriate.

Investment managers are appointed to execute the policy and invest pension assets in accordance with the policy and applicable statutes, but apply their own judgments concerning relative investment values. In particular, investment managers are accorded full discretion, within policy limits, to (1) select individual investment, (2) make periodic adjustments to the proportions of equity and fixed income investments, and (3) diversify pension assets.

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**Allocation of Assets** As of December 31, 2013, the Fund's asset allocation targets were as follows:

Asset Class	Current Asset Allocation	Long-Term Target Allocation
U.S. Equity	24%	21%
Non U.S. Equity	21%	20%
Fixed Income	24%	22%
Opportunistic Strategies	14%	19%
Private Equity	8%	7%
Real Estate	4%	5%
Infrastructure	2%	2%
Real Assets	0%	4%
Cash	4%	0%
TOTAL	<u>100%</u>	<u>100%</u>

**Diversification** The Fund's assets are diversified in several ways to minimize the potential for overexposure to individual investments, and provide a broad opportunity set for the portfolio while trying to minimize risk. Since 1984, the Trustees have expanded the number of asset classes available for investment and expanded on the current manager line up. As of December 31, 2013, the Fund retained 44 investment managers for a total of 57 different fund strategies.

**Investment Objective** Given the most recent investment policy adopted by the Board of Trustees, the return of the total fund will be compared with the return of a "policy portfolio" comprising of a target policy weighted mix as follows:

- 15% Russell 1000 Index
- 6% Russell 2000 Index
- 14% MSCI EAFE Index
- 6% MSCI Emerging Markets Index
- 10% 60% MSCI World Index / 40% CITI WGBI Index
- 9% HFRI Fund of Fund Composite Index
- 2% Dow Jones UBS Commodity Index
- 2% Barclays Global Inflation Linked: U.S. TIPS Index
- 13% Barclays Aggregate Index
- 9% 1/3 each Barclays Global Aggregate Index/Merrill Lynch Global High Yield Index/JP Morgan Emerging Market Bond Index
- 9% Cambridge Private Equity 1 QTR Lagged Index
- 5% NCREIF Property Index

The investment objective is to equal or exceed the policy portfolio rate of return net of fees. The Total Fund's return will also be compared to the InvestorForce total public fund universe.

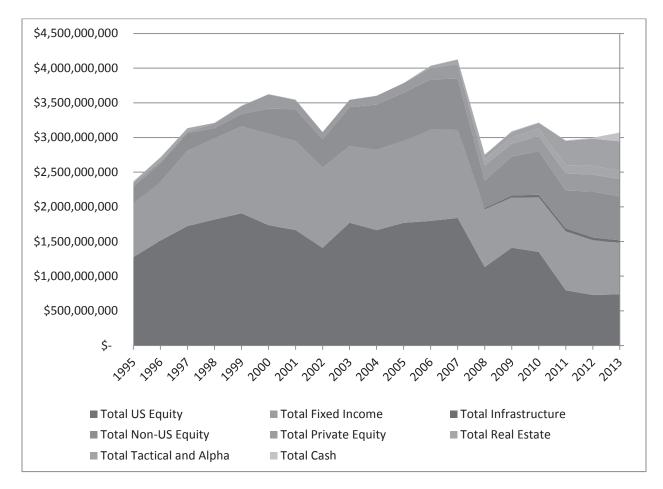
**2013 Asset Allocation** As of December 31, 2013, the Fund was overweight to U.S. Equity, Fixed Income and Non U.S. Equity. Concurrently, the Fund was underweight to Real Estate, Infrastructure, Real Assets and Opportunistic Strategies. The Fund's ending market value increased by approximately \$75.6 million during the year. The increase is a combination of investment gains of \$132.8 million, and net outflows of \$123.6 million. The Fund's asset allocation as of December 31, 2013 is shown on the following pages.



## Fair Value and Asset Allocation As of December 31, 2013 (\$ in thousands)

	U.S. Equity	Non-US Equity	Bonds	Real Estate	Private Equity	Infrastructure	Tactical	Real Assets	Cash	Total	% of Total	Policy
Denali Advisors	\$40,632	non oo Equity	201100	riour Eoraio	i mato Equity	inidotraotaro	ruotiour	10017100010	\$438	\$41,070	1.3%	r oney
Great Lakes	\$109,817								\$5,364	\$115,181	3.7%	
Fisher Investments	\$111,961								\$1,010		0.170	
Holland Capital	\$74,267								\$2,147	\$76,414	2.5%	
Montag & Caldwell	\$35,830								\$1,248	\$37,078	1.2%	
NTGI Russell	\$232,847									\$232,847	7.6%	
William Blair and Company	\$116,060								\$6,478	\$122,538	4.0%	
U.S. Equity	\$721,414	-	-		-	-	-	-	\$16,685	\$738,099	24.0%	21.0%
Artisan International		\$124,706							\$2,194	\$126,900	4.1%	
Capital Guardian Trust		\$422							\$42	\$464	0.0%	
Global Transition		\$3,724							ψ <del>1</del> 2	\$3,724	0.0%	
J.P. Morgan Asset Management		\$3,209							\$11	\$3,220	0.1%	
McKinley Capital Management		\$254							\$63	\$317	0.0%	
UBS Global Asset Management		\$60,221							\$881	\$61,102	2.0%	
William Blair		\$154,834							\$1,632	\$156,466	5.1%	
Acadian		\$95,685							\$330	\$96,015	3.1%	
Earnest Partners		\$92,818							0000	\$92,818	3.0%	
Lazard		\$92,954								\$92,954	3.0%	
Non-US Equity	-	\$628,827	-	-	-	-	-	-	\$4,823	\$633,980		20.0%
Dearborn (Baird)			\$104,653						\$2,363	\$107,016		
LM Capital	1		\$36,771						\$672	\$37,443	1.2%	
Taplin, Canida & Habacht	1		\$68,648						\$3,534	\$72,182	2.3%	
Wellington	1		\$234,981						\$11,006	\$245,987	8.0%	
Wells Capital Management			\$230,296						\$10,192	\$240,488	7.8%	
Oaktree Capital	1		\$40,300							\$40,300	1.3%	
Transition Account			\$0							\$0	0.0%	
Fixed Income	-	-	\$715,649	-	-	-	-	-	\$27,767	\$743,416	24.2%	22.0%
202.1.1.	U.S. Equity	Non-US Equity	Bonds	Real Estate	Private Equity	Infrastructure	Opportunistic	Real Assets	Cash	Total	% of Total	Policy
RCP Advisors VI					\$16,854					\$16,854	0.5%	
Adams Street Partners					\$3,052					\$3,052	0.1%	
Adams St Partners					\$6,969					\$6,969	0.2%	
Adams Street Partners					\$73,074					\$73,074	2.4%	
Chancellor					\$338					\$338	0.0%	
Harbourvest V IPO					\$64,719					\$64,719	2.1%	
HVP Partners					\$190					\$190	0.0%	
Invesco Fund IV Venture					\$6,919					\$6,919	0.2%	
Invesco Fund IV Int'l					\$4,952					\$4,952	0.2%	
Invesco Fund IV U.S.					\$18,018					\$18,018		
Mesirow Fund II					\$17,040					\$17,040	0.6%	
Mesirow Fund IV					\$15,666					\$15,666	0.5% 0.4%	
Muller & Monroe Muller & Monroe MEPEFF					\$12,610 \$9,984					\$12,610 \$9,984	0.4%	
Private Equity					\$9,984				\$0	\$9,984 \$250,385	8.2%	7.0%
Global Infrastructure Partners	-	-	-	-	\$250,385	-	-	-	<b>\$</b> 0		0.5%	7.0%
						\$16,366				\$16,366	0.5%	
The Carlyle Group						\$19,173				\$19,173	1.2%	2.0%
Infrastructure	-	-	-	- \$8,780	-	\$35,539	-	-	-	\$35,539 \$8,780	0.3%	2.0%
ABR Chesapeake III AG Core Plus Realty II				\$5,303						\$6,780 \$5,303	0.3%	
											0.2%	
Apollo Real Estate Advisors Lone Star Fund IV	1			\$7,243						\$7,243	0.2%	
Lone Star Fund IV				\$4,816 \$1,872						\$4,816 \$1,872	0.2%	
Mesa West II				\$1,872						\$1,872 \$12,819	0.1%	
Morgan Stanley MSREF	1			\$12,819						\$12,819 \$2,604	0.4%	
Newport Capital Partners				\$2,604 \$1,859						\$2,604 \$1,859	0.1%	
DRA Advisors				\$1,859 \$2,599						\$1,859 \$2,599	0.1%	
PABF-Blackrock Asia II				\$2,599 \$7,449						\$2,599 \$7,449	0.1%	
Meisrow RE Value Fund	1			\$7,449 \$9,850						\$7,449 \$9,850	0.2%	
Morgan Stanley PRIME	1			\$9,850 \$13,596						\$9,850 \$13,596	0.3%	
Quadrant R.E Advisors				\$5,989						\$5,989	0.4%	
Shamrock-Hostmark	1			\$5,989 \$0						\$5,989 \$0	0.2%	
UBS Realty Advisors	1			<sub>40</sub> \$14,181						پې \$14,181	0.0%	
CBRE Clarion	1			\$14,181					\$114	\$14,181 \$12,384	0.5%	
European Investors II				\$8,070					φ114	\$12,384	0.4%	
Real Estate		-	-	\$119,301		-		-	\$114	\$119,414	3.9%	5.0%
				÷110,001			\$47,645		<b>V</b> .14	\$47,645	1.6%	0.070
	-											
Aetos Capital	-					1	\$48,296	1	1	\$48,296	1.6%	1
Aetos Capital K2 Advisors	-											
Aetos Capital K2 Advisors GMO	\$29,967	\$49,815	\$30,356	\$0	\$0	\$0	\$19,070	\$0	\$519	\$129,726	4.2%	
Aetos Capital K2 Advisors GMO PIMCO	- \$29,967 \$2,166	\$49,815 \$38,794	\$30,356 \$121,304	\$0 \$3,151	\$0 \$0	\$0 \$0	\$26,978	\$0 \$4,135	\$519 \$1,575	\$129,726 \$198,103	6.4%	
Aetos Capital K2 Advisors GMO	1											19.0%
Aetos Capital K2 Advisors GMO PIMCO	\$2,166	\$38,794	\$121,304	\$3,151	\$0	\$0	\$26,978	\$4,135	\$1,575 <b>\$2,094</b> -	\$198,103 <b>\$423,771</b> <b>\$0</b>	6.4%	<u>19.0%</u> 4.0%
Aetos Capital K2 Advisors GMO PIMCO Tactical & Alpha	\$2,166	\$38,794	\$121,304	\$3,151	\$0	\$0	\$26,978	\$4,135	\$1,575	\$198,103 <b>\$423,771</b>	6.4% 13.8% 0.0% 4.2%	
Aetos Capital K2 Advisors GMO PIMCO Tactical & Alpha Real Assets Cash Cash Cash	\$2,166 <b>\$32,133</b> -	\$38,794 <b>\$88,609</b> -	\$121,304 <b>\$151,660</b> -	\$3,151 <b>\$3,151</b> -	\$0 -	\$0 <b>\$0</b> -	\$26,978 <b>\$141,989</b> -	\$4,135 <b>\$4,135</b> -	\$1,575 <b>\$2,094</b> - \$127,502 <b>\$127,502</b>	\$198,103 \$423,771 \$0 \$127,502 \$127,502	6.4% 13.8% 0.0% 4.2% 4.2%	4.0%
Aetos Capital K2 Advisors GMO PIMCO <b>Tactical &amp; Alpha</b> Real Assets Cash	\$2,166	\$38,794	\$121,304	\$3,151	\$0	\$0	\$26,978	\$4,135	\$1,575 <b>\$2,094</b> - \$127,502	\$198,103 <b>\$423,771</b> <b>\$0</b> \$127,502	6.4% 13.8% 0.0% 4.2%	4.0%





## **HISTORICAL ASSET ALLOCATION BY ASSET CLASS**

\*History unavailable prior to 1995



## Summary of 2013 Investment Activity

**Investment Manager Changes** Throughout 2013, four new managers were hired and four managers were terminated. Fisher Investments SMID Cap Value was hired at the start of the year. Fisher was funded following the liquidation of Ariel Capital Management, who managed assets within the same asset class. Within the non-U.S. portfolio, the core portfolios managed by Capital Guardian, McKinley Capital, and JP Morgan were terminated (after the Board voted to restructure the non-U.S. portfolio, per the recommendation of NEPC), and replaced by a non-U.S. small capitalization portfolio managed by Acadian, and emerging market portfolios managed by Earnest Partners and Lazard.

#### Market Environment

The domestic equity market emerged as the clear champion in 2013, even as investors lost money in Treasury bonds, emerging markets disappointed, and commodities declined. Equities even shrugged off the fiscal cliff, the "taper tantrum," the government shutdown, and the close-shave with the debt ceiling.

During the year, diversification was a headwind for investment portfolios, as stocks, both U.S. and Non U.S. outperformed, little else worked. For the year, The S&P 500 gained 32.4% and the Russell 2000 was up 38.8%. By contrast, emerging market equities were in negative territory returning -2.6%. Within fixed income we saw a similar swing in results, as credit and high yield outperformed government bonds, while non U.S. and emerging market debt (EMD) sovereign bonds underperformed U.S. Treasuries. To be sure, having exposure to U.S. stocks helped in 2013, while maintaining a broadly diversified portfolio proved to be a challenge.

#### **Global Equity Markets**

The U.S. stock market posted hefty gains in each month of the first quarter. Valuations rose as investors flocked to equity, snapping up attractively priced lower growth stocks while avoiding those with higher valuations. To this end, defensive sectors such as consumer staples and healthcare led the pack. The S&P 500 rose 10.6% while the Russell 2000 gained 12.4%. That said, we believe the improvements in underlying economic fundamentals are at odds with the extent of these gains in U.S. stocks.

International markets lagged behind with modest returns of 5.1% in the first quarter, according to the MSCI EAFE Index. During the quarter a strong U.S. dollar provided a headwind to international markets. The Yen and Euro fell fueled by anticipated policy changes in Japan and continued financial concerns in Europe, respectively. Similar to the U.S., defensive sectors, consumer staples and healthcare, were the strongest performers.

Starting in May, global equities trended downward, finishing the quarter with a return of -0.4%, according to the MSCI ACWI Index. International markets trailed the U.S.as the MSCI EAFE Index posted a -1.0% return. Emerging markets were driven lower by political unrest in Egypt, a credit crunch among Chinese banks and higher yields in the U.S. market.

In the U.S., equities proved to be more resilient, finishing the quarter with positive results. Performance was boosted by robust returns from stocks in the financial and consumer sectors amidst strong economic sentiment, healthy corporate earnings and continued strengthening in the housing market. Small cap stocks modestly outperformed large cap stocks with the Russell 2000 Index returning 3.1% for the quarter and the Standard & Poor's 500 Index advancing 2.9%.



U.S. stocks continued their march upward in the third quarter where the S&P 500 Index gained 5.2%, shrugging off uncertainty around the continuity of the Federal Reserve's accommodative monetary policy. The economy also expanded modestly during this time. Housing remained strong as unemployment inched lower and consumers regain confidence. Stock market gains were tempered at the end of the quarter as investors fretted over the political gridlock and a potential debt default by the U.S.. Small-cap shares continued to lead in the third quarter and year to date, with the Russell 2000 Index returning 10.2% for the three months ended Sep. 30.

The quarter also was positive for international and emerging markets. Returns were boosted on the back of improving economic data in Europe, especially in some of the more troubled regions such as Greece, Italy and Spain. Japanese stocks gained but still lagged broader developed markets as its Prime Minister's political party failed to garner a majority in elections. Signs of stabilizing growth in China pushed up emerging markets, which returned around 5.9% in the third quarter. An increase in risk-taking within these regions sparked a sharp rally in the more cyclical sectors, such as energy and materials; defensive sectors lagged, with, for instance, consumer staples losing 0.1%. Global Fixed

U.S. equities had a strong fourth quarter, capping off a successful year for investors. A brighter economic outlook and continued Fed stimulus drove returns higher through the year. Sectors that were tied to the improving economy, such as consumer discretionary, healthcare, industrials, and financials, outperformed; defensive, yield oriented sectors like telecommunications and utilities, lagged. Small capitalization stocks outperformed large capitalization stocks in 2013, with the Russell 2000 Index returning 38.8% compared to the S&P 500 Index's gain of 32.4%. In terms of style, growth bested value in both large and small stocks for the year, with the lead being most pronounced down the capitalization spectrum.

Macro policy and politics affected global markets during the last quarter. Fears of the U.S. hitting its debt ceiling and slowing growth in emerging markets initially pushed non-U.S. stocks lower. Markets subsequently turned positive when Janet Yellen emerged as the favored candidate to serve as the chairperson of the Fed. A solid showing in December rounded off a strong year for global equities, which gained 22.8%, according to the MSCI World Index. During the fourth quarter, European stocks returned 7.9%, outperforming the UK and Japan. Emerging markets' equities trailed, posting gains of 1.9% during the quarter, however, still finished off the year in negative territory.

Equity Index Returns as of 12/31/2013								
Global Equity	Quarter	1 Year	3 Yrs	5 Yrs				
MSCI World	7.6%	24.1%	9.9%	16.1%				
US Equity	Quarter	1 Year	3 Yrs	5 Yrs				
S&P 500	10.5%	32.4%	16.2%	17.9%				
Dow Jones Industrial Average	9.6%	26.5%	14.4%	17.8%				
NASDAQ Composite	10.7%	38.3%	19.1%	33.0%				
Russell 1000 Growth	10.4%	33.5%	16.5%	20.4%				
Russell 1000 Value	10.0%	32.5%	16.1%	16.7%				
Russell 2000	8.7%	38.8%	15.7%	20.1%				
Russell 2000 Growth	8.2%	43.3%	16.8%	22.6%				
Russell 2000 Value	9.3%	34.5%	14.5%	17.6%				
International Equity	Quarter	1 Year	3 Yrs	5 Yrs				
MSCI EAFE	5.7%	22.8%	8.2%	12.4%				
MSCI Emerging Markets	1.8%	-2.6%	-2.1%	14.8%				
MSCI Europe	7.9%	25.2%	10.9%	17.4%				
MSCIUK	7.4%	20.7%	11.8%	22.2%				
MSCI Japan	2.3%	27.2%	6.0%	8.9%				
MSCI Far East	2.3%	23.3%	5.8%	10.8%				

#### **Global Fixed Income Markets**

Investors' quest for yield again drove performance for fixed income in the first quarter. Depressed yields in investment grade bonds pushed investors into riskier segments of the market. Government stimuli withstood the selling pressures at the short-end of the curve and kept rates suppressed, but a steepening of the curve left long-dated government issues at a loss. The yield on the 10-year Treasury stood at 1.87% in March, compared to 1.78% in December, and 1.65% in September 2012. As a result of the yield increase, the Barclays Aggregate index returned -0.1%, its first quarterly loss since 2006. The Barclays high yield index returned 2.9% with low quality issues outperforming higher quality paper.

Nearly all global fixed income sectors posted negative returns in the second quarter of 2013. The sharp sell-off, triggered by indications that the Fed could taper its quantitative easing as early as September, was quick and painful with most of it occurring over a six-week period beginning at the end of May. The search for yield morphed into a quest for liquidity as longer-duration corporates and emerging markets debt dropped dramatically. Interestingly, within the credit sectors, lower-quality securities fared better than higher quality issues because the latter were deemed more interest rate sensitive and, thus, more prone to a correction in response to rising Treasury rates.

Fixed income markets were beset by volatility in the third quarter as bonds continued to price in the Fed eventually tapering its monetary stimulus. This caused yields in long term Treasuries and high-quality bonds to spike, with the 10-year Treasury yield closing near 2.6% in mid-September. An unexpected announcement by the Fed to leave the bond-purchase program unaltered ratcheted up investors' risk appetite. U.S. Treasury obligations, the assets most sensitive to Fed policy, sold off as yields reached 2.98% in September from 2.52% in June, subsequently ending the quarter at 2.64%. Longer-dated Treasuries fared the worst amid inflationary expectations fueled by continued monetary stimulus and signs of a slowly improving domestic economy. In response, U.S.TIPS returned 0.9% in the quarter and the breakeven rate, that is, the spread between nominal and real yields that serves as a proxy for market expectations for inflation, widened 10 basis points to 2.3%. The Barclays Aggregate Index, which tracks

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the U.S. investment-grade fixed income market, lost 0.6% in the quarter, bringing year to date losses to - 1.9%.

Fed policy and improvements in the domestic economy drove fixed income performance in the fourth quarter and 2013. Bond markets rallied across the board for six-to-eight weeks after Fed Chairman Bernanke announced an unabated continuation of quantitative easing in September. Starting in November, as published data indicated moderate progress in the economy, investors began piling into credit sectors and equities in an effort to seek protection from rising interest rates. The reality of rising rates materialized in mid-December when the Fed announced a \$10 billion reduction in asset purchases. As a result, the most duration-sensitive sectors of the bond market, that is, Treasuries and mortgage backed securities, sold off.

The yield on the U.S. Treasury 10-year note closed above 3% in December, a first since July 2011. Over the fourth quarter, the 10-year yield increased 40 basis points to 3.04%. The U.S. investment grade fixed income market stood nearly flat in the quarter returning -0.1%, according to the Barclays Aggregate Index; losses in Treasuries and agency MBS detracted from the benchmark's returns. For the year, the Barclays Aggregate lost 2.0%, only its third negative annual return since inception. Credit markets withstood another barrage of rising Treasury yields to post positive returns across the duration curve. The U.S. Credit Index gained 0.9% and the Long Duration Index returned 1.5% in the fourth quarter.

Fixed Income Index Returns as of 12/31/2013								
Global Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs				
Citi WGBI	-1.1%	-4.0%	1.2%	2.3%				
JPM EMBI Plus	0.6%	-8.3%	6.1%	13.3%				
Domestic Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs				
BC Aggregate Bond	-0.1%	-2.0%	3.3%	4.4%				
BC US Agg. Treasury	-0.8%	-2.7%	3.0%	2.2%				
BC US Credit	0.9%	-2.0%	5.4%	9.2%				
BC Mortgage Backed	-0.4%	-1.4%	2.5%	4.0%				
BC Interm. Gov't/Credit	0.0%	-0.9%	2.9%	4.0%				
BC 1-10 Yr TIPS	-1.3%	-5.6%	2.6%	5.0%				
BC High Yield	3.6%	7.4%	9.3%	18.9%				
S&P LSTA Lev. Loan	1.7%	5.3%	5.7%	19.1%				
3 Month T-Bills	0.0%	O.1%	O.1%	0.2%				
10-Year Bond Yields	Dec-13	Sep-13	Dec-12	Dec-11				
US	3.0%	2.6%	1.8%	1.9%				
Germany	1.9%	1.8%	1.3%	1.8%				
UK	3.0%	2.7%	1.8%	2.0%				
Japan	0.7%	0.7%	0.8%	1.0%				

Source: Bloomberg

**Total Fund Performance (gross of fees)** For 2013, on a gross of fee basis, the Total Fund returned 14.8% which outperformed the policy index return of 13.2%. This ranked the Fund in the 57<sup>th</sup> percentile (1% being the highest, 100% being the lowest) of the IF Public DB Universe. The median (50%) return of the IF Public Fund for this time period was 15.5%. Over the trailing three year period, the Fund's



9.4% return outperformed the policy index return of 8.5%. This ranked the Fund in the 54<sup>th</sup> percentile of the IF Public DB Universe. The median (50%) return of the IF Public Fund for this time period was 9.5%. Over the trailing five years, the Fund's 12.5% return outperformed the policy index return of 10.9% and ranked the Fund in the 46<sup>th</sup> percentile. The median (50%) return of the IF Public Fund for this time period was 12.2%.

**Asset Class Performance (gross of fees)** The Fund's U.S. equity portfolio returned 34.6%, which outperformed the Russell 3000 Index return of 33.6%. The non-U.S. equity portfolio returned 18.0% outpacing the MSCI ACWI Ex U.S. return of 15.3%. The combined equity portfolio, including domestic and non-U.S., returned 26.3%, outperforming the MSCI ACWI Index return of 22.8%. Within the fixed income portfolio, the composite's return of -1.0% outperformed the Barclays Capital Aggregate Index return of -2.0%. The total real estate portfolio returned 7.4%% for the year, underperforming the NCREIF Property Index return of 11%. The private equity portfolio, which is valued on a lagged basis, returned 15.6% for the year, underperforming the Thomson One All Private Equity Index return of 16.9%. The infrastructure portfolio returned 19% for the year, outperforming the NCREIF Property Index return of 11%. The global asset allocation portfolio returned 7.5%, trailing the 11.4% return of a blended 60% MSCI ACWI/40% Citi WGBI index.

**Longer Term Performance** On the following pages, a detailed analysis of the Fund's net of fee performance has been provided both on a trailing and calendar year basis.



## ANNUAL INVESTMENT RETURNS<sup>1</sup> Calculations are prepared utilizing a time weighted rate of return

ANNUAL INVESTMENT RETURNS - DECEMEBER 31, 2013

									Cumulativ ualized Re	
	2007	2008	2009	2010	2011	2012	2013	3 Years	5 Years	10 Years
TOTAL FUND										
Police Fund	9%	-28%	22%	13%	1%	12%	15%	9%	12%	6%
Policy Portfolio	11%	-21%	17%	13%	0%	13%	13%	9%	11%	8%
IF Public DB Universe Median	9%	-26%	20%	13%	1%	12%	16%	10%	12%	7%
Inflation	4%	0%	3%	1%	3%	1%	2%			
U.S EQUITY										
Police Fund	8%	-38%	33%	17%	0%	15%	34%	16%	19%	8%
Russell 3000 Index	5%	-37%	28%	17%	1%	16%	34%	16%	19%	8%
eVestment US Equity Universe Median	5%	-38%	29%	20%	0%	0%	36%	16%	20%	10%
NON-U.S EQUITY										
Police Fund	16%	-46%	40%	12%	-14%	21%	18%	7%	14%	7%
Performance Benchmark	17%	-46%	41%	11%	-14%	17%	15%	5%	13%	8%
eVestment Non US Equity Universe Median	14%	-44%	37%	11%	-12%	20%	25%	10%	15%	8%
FIXED INCOME										
Police Fund	5%	-4%	12%	8%	8%	7%	-1%	4%	7%	5%
Barclays Capital Aggregate Bond Index	7%	5%	6%	7%	8%	4%	-2%	3%	4%	5%
eVestment Bond Universe Median	7%	0%	12%	9%	7%	6%	0%	4%	6%	5%
REAL ESTATE										
Police Fund <sup>2</sup>	-6%	-11%	-9%	7%	6%	10%	7%	8%	4%	8%
NCREIF Net Property Index	16%	-7%	-17%	13%	14%	11%	8%	11%	5%	8%
INFRASTRUCTURE										
Police Fund		-15%	-6%	15%	9%	-3%	19%	8%	6%	
NCREIF Net Property Index	16%	-7%	-17%	13%	14%	11%	8%	11%	5%	8%
PRIVATE EQUITY										
Police Fund	21%	-7%	-21%	13%	17%	17%	15%	14%	6%	7%
Thomson One All Private Equity Lag	37%	2%	-26%	16%	12%	14%	11%	13%	4%	13%
HEDGE FUND										
Police Fund			11%	5%	-3%	8%	12%	6%	7%	
HFRI Fund of Funds Composite Index	10%	-21%	12%	6%	-6%	5%	9%	3%	5%	3%
GLOBAL ASSET ALLOCATION										
Police Fund						13%	8%			
60% MSCI ACWI (Net)/40% CITI WGBI	12%	-24%	21%	10%	-2%	10%	11%	7%	10%	6%
Asset Allocation										
US Stocks	45%	41%	41%	42%	27%	24%	24%			
Non US Stocks	18%	15%	18%	20%	19%	22%	21%			
Private Equity	5%	8%	6%	7%	8%	8%	8%			
Fixed Income	31%	30%	28%	23%	29%	26%	24%			
Infrastructure		<1%	1%	1%	2%	2%	1%			
Opportunistic		3%	3%	4%	12%	13%	14%			
Real Estate	2%	3%	3%	3%	4%	4%	4%			

<sup>1</sup>All Chicagp PABF performance presented net of fees. IF and eVestment universe returns are presented gross of fees

<sup>2</sup> Real Estate results are shown beginning in 2007, when the Fund's new real estate program was initiated



#### 18.0 15.5 16.0 14.5 14.0 13.2 12.2 12.2 12.0 10.9 9.5 10.0 9.1 8.5 7.5 8.0 6.8 6.4 6.0 4.0 2.0 0.0 2013 3 YEARS 5 YEARS **10 YEARS** Police Fund Policy Portfolio IF Public DB Universe Median

ANNUAL AND CUMULATIVE RETURNS (net of fees) As of December 31, 2013



## **Real Estate Investments**

(Compiled by NEPC, LLC, Investment Consultant to the Fund)

### 2013 U.S. Real Estate Market Review

In 2013, non-major markets in the U.S. experienced greater asset value appreciation than major markets, however values remained low relative to pre-recession peaks. Pricing for non-major markets was approximately 20% below peak values, compared to 28% at the end of 2012 (and compared to major markets, which were 3% below peak values). In the core market, average income yields were decreasing but remained strong relative to traditional fixed income yields and property fundamentals continued to improve. Occupancy levels and rent growth rates generally increased across property types while new construction starts remained low. Apartments remained the exception, as occupancies stabilized at approximately 95% and new construction returned to the market (though new completion rates were still below historical averages). A major concern for U.S. core real estate is whether net income growth will offset potentially higher capitalization rates triggered by the market's expectation for higher future interest rates. NEPC is neutral on core real estate going forward but believes that select non-core opportunities remain in the U.S. for skilled firms with a proven ability to identify undervalued assets, buy right, and create value.

In Europe, the economic recovery was more muted and European banks remained highly levered compared to U.S. banks. Unemployment continued to increase and GDP growth remained negative across the Eurozone, however select individual economies performed better. Similar to the U.S., corequality assets in gateway cities recovered quickly compared to distressed properties and secondary markets. Specifically, cities like London and Paris experienced significant cap rate compression over the past several years. NEPC believes that undervalued non-core properties and continued capital structure distress in Europe creates an appealing opportunity.

#### **Chicago PABF Real Estate Portfolio Summary**

As of year-end 2013, PABF's real estate portfolio had a total reported value of \$123.5 million (~4.0% of total plan assets). In addition, PABF had unfunded commitments to real estate of \$23.7 million, bringing the total plan real estate exposure to \$147.1 million (or 4.8% of total plan assets). PABF's target allocation to real estate is 5.0% of total plan assets. The real estate portfolio was split 27% in core, 33% in value-add, 23% in opportunistic, and 17% in REIT/REOC investments. The total real estate portfolio observed an internal rate of return of 10.6% during 2013.



#### Core Real Estate

U.S. core commercial real estate continued to experience strong post-recession performance in 2013. The NCREIF Property Index ("NPI") had a total gross return of 11.0% in 2013. The NCREIF Fund Index Open-End Diversified Core ("ODCE") had a total net return of 12.9% in 2013.<sup>1</sup> Capital continued to flow into core real estate in 2013 (a trend that has continued since 2010) with open-end core funds reporting large entrance queues. The table that follows shows the performance of PABF's core funds for 2013 relative to the NPI and ODCE. It should be noted that the UBS Trumbull Property Fund is a low-leverage fund that will lag more highly-levered funds in improving markets.

Investment Fund	Vintage Year	Commit- ment	Fund 2013 Return	NPI Gross 2013 Return	ODCE Net 2013 Return
Prime Property Fund	2006	\$13.5	16.2%	11.0%	12.9%
Quadrant Fund	2006	\$13.4	(1.2%)	11.0%	12.9%
UBS Trumbull Property Fund	2006	\$14.3	8.5%	11.0%	12.9%

Note: commitment in millions.

#### Value-Add Real Estate

The table below shows the performance of PABF's value-add real estate funds for 2013 and since inception relative to the applicable vintage year index benchmark. The AG Core Plus Realty Fund II and the two debt funds (DMR Mortgage Opportunity Fund and Mesa West Real Estate Income Fund II) are included with the value-add investments for lack of an applicable benchmark.

_Investment Fund	Vintage Year	Commit- ment	Fund 2013 Return	Fund Return Since Inception	Benchmark Vintage Year Return Since Inception
AG Core Plus Realty Fund II	2006	\$15.0	9.0%	7.5%	(7.6%)
ABR Chesapeake Fund III	2006	\$10.0	6.5%	2.9%	(7.6%)
DRA G&I Fund VI LLC	2007	\$5.0	15.2%	7.0%	2.4%
Mesa West R.E. Inc. Fund II	2008	\$20.0	15.4%	23.7%	8.4%
DMR Mortgage Opportunity	2009	\$10.0	NA	53.7%	12.4%
Mesirow Financial RE Value	2012	\$10.0	12.3%	9.3%	10.0%

Note: Commitment in millions. For benchmarking purposes, we compared Fund performance to the Burgiss PrivateIQ Value-Add Real Estate Fund universe (as of December 31, 2013).

<sup>&</sup>lt;sup>1</sup> The NPI consists of property-level returns of core assets and does not include the effects of leverage, while the ODCE represents actual fund-level returns and does reflect the use of leverage.



#### **Opportunistic Real Estate**

The table that follows shows the performance of PABF's opportunistic real estate funds for 2013 and since inception relative to the applicable vintage year index benchmark.

Investment Fund	Vintage Year	Commit- ment	Fund 2013 Return	Fund Return Since Inception	Benchmark Vintage Year Return Since Inception
DV Urban Realty Partners I	2006	\$15.0	8.0%	(35.3%)	(4.0%)
Apollo Europe R.E. Fund III	2007	\$10.0	24.0%	2.7%	(0.4%)
MGP Asia Fund III	2007	\$10.0	13.2%	5.1%	(0.4%)
Morgan Stanley R.E. VI	2007	\$11.0	8.9%	(22.8%)	(0.4%)
Shamrock Hotel Fund	2007	\$5.0	327.1%	(55.4%)	(0.4%)
Lone Star Fund VI (U.S.)	2008	\$10.0	8.4%	14.0%	2.7%
Lone Star R.E. Fund (U.S.)	2008	\$5.0	6.0%	5.5%	2.7%

Note: Commitment in millions. For benchmarking purposes, we compared Fund performance to the Burgiss PrivateIQ Opportunistic Real Estate Fund universe (as of December 31, 2013).

#### **Real Estate Securities**

In 2013, the real estate securities markets had mixed performance, with the FTSE NAREIT Equity REIT Index ("FNERTR") posting a 2.9% return for the year. The index had negative returns in each of the last three quarters of the year, after six straight quarters of positive returns. This brings the average quarterly return of the index since the recession back in line with pre-recession levels. Publicly-traded real estate companies in the U.S. raised over \$80 billion in 2013, surpassing the amount raised in 2012. The table below shows the performance of PABF's real estate securities fund performance for 2013 compared to the FTSE NAREIT Equity REIT Total Return Index.

	Vintage		Fund 2013	FNERTR 2013
Investment Fund	Year	Commit-ment	Return	Return
EII World Fund	2008	\$10.0	2.8%	2.9%
ING Clarion Global RE Securities	2008	\$20.0	4.8%	2.9%

Note: Commitment in millions. FNERTR is the FTSE NAREIT Equity REIT Total Return Index.

NOTE: NEPC provides Chicago Police with quarterly economic and investment market updates and performance reviews, investment manager monitoring and selection advice, and related investment services for traditional and non-traditional asset classes. Investment performance analysis and comparisons produced by NEPC have been calculated using standard performance evaluation methodologies and are consistent with industry standards. Performance results are calculated using a time-weighted return methodology. The Board's goal of achieving market rates of returns, while mitigating unwarranted risk, is measured against appropriate benchmarks and comparative universes on a quarterly basis. Performance is measured on a most recent quarter, year-to-date, and accumulated trailing annual periods, as well as three and five year periods (full market cycle). Risk-adjusted performance on an absolute basis and a comparative basis is also measured. This review process allows the Board to evaluate and determine whether established goals and objective are being achieved. Data on traditional assets held by the Fund is provided by the Fund's custodian to NEPC. Data on alternative investments held by the Fund is provided by the investment manager to NEPC.

# Largest Stock Holdings as of December 31, 2013

	Shares	Stocks	Fair Value
1	6,314,049	HARBOURVEST GLOBAL	\$ 64,719,002
2	7,325	SAMSUNG ELECTRIC	9,522,812
3	52,520	BAYER AG NPV	7,378,115
4	40,522	ADR BAIDU INC SPONSORED ADR	7,208,053
5	68,100	EXXON MOBILE CORP COM	6,891,720
6	23,442	ROCHE HOLDINGS AG GENUSSCHEINE NPV	6,568,557
7	54,900	AMERIPRISE FINL INC COM	6,316,245
8	166,767	ADR ICICI BK LTD	6,198,729
9	1,231,662	AIA GROUP LTD NPV	6,179,159
10	66,550	HONEYWELL INTL INC COM STK	6,080,674

# Largest Bond Holdings as of December 31, 2013

	Par	Bonds	Fair Value
1	16,100,000	UNITED STATES TREAS NTS INFLATION INDEXED .125 4-15-2018	\$ 16,591,684
2	12,000,000	UNITED STATES TREAS .25% DUE 10-31-2015	11,983,128
3	9,392,000	UNITED STATES TREAS NTS DTD 11-30-2013 .25 DUE 11-30-2015 REG	9,373,291
4	8,750,000	UTD UNITED STATES 1.25% DUE 4-30-2019	8,477,245
5	7,738,000	UNITED STATES TREAS NTS 1.25 DUE 11-30-2018	7,572,360
6	6,500,000	GNMA II JUMBOS 4 30 YEARS SETTLES JAN	6,758,226
7	5,794,000	UNITED STATES TEAS NTS .625% DUE 12-15-2016	5,770,465
8	3,875,000	UNITED STATES TREAS BDS DTD 11/16/1998 5.25% DUE 11/15/2028	4,665,136
9	3,880,000	UNITED STATES TREAS NTS DTD 00289 3.125% DUE 4-30-2017	4,153,722
10	4,000,000	UNITED STATES TREAS NTS DTD 10-15-2013 .625% DUE 10-15-2016	3,992,500

A complete list of portfolio holdings is available upon request.

Manager	Total Number of Trades	Total Number of Shares	Total Commissions
Ariel Capital Management	2,504	15,771,742	\$ 96,962
Artisan Partners	2,145	7,297,492	113,655
Capital Guardian Trust Co.	1,469	17,613,501	112,955
Denali Advisor	306	1,370,324	24,059
Fisher Investments	93	958,122	13,201
Great Lakes Advisors	30	202,602	7,477
Habourvest Global	4	450,100	12,000
Holland Capital Management	121	508,564	14,150
ING Clarion	1,142	1,271,252	11,520
JP Morgan Global Asset Managemen	it 240	14,171,396	82,014
Lazard Asset Management	6	204,209	1,947
McKinley Capital Management	593	30,971,270	194,473
Montag & Caldwell	223	621,192	17,577
Transition Account	1,444	112,375,809	296,981
UBS Global Asset Management	361	9,563,335	114,623
Vanguard	2	451,150	6,767
William Blair & Company	3,936	21,118,953	310,836
	14,565	234,921,013	\$ 1,431,197

# **Commissions Paid by Investment Managers in 2013**

Broker	Total Number of Shares	Total Commissions
Barclays Capital	2,495,112	\$ 26,559
BNP, Paribas	896,236	8,033
Cabrera Capital Markets	2,901,818	36,499
Cheevers & Co.	419,174	14,540
CIMB Securities	3,407,042	10,365
Citigroup Global Markets	5,883,099	54,154
CLSA Securities	5,367,218	19,880
Companhia Brasileira De Liquidacao	3,355,785	27,141
Credit Agricole Securities	566,056	8,531
Credit Suisse	16,180,192	80,815
Daiwa Capital Markets	704,408	7,899
Deutsche Bank	3,329,526	28,577
Goldman Sachs & Co	8,071,902	66,007
G-Trade Services Ltd	4,636,079	78,710
HSBC	883,659	10,850
Instinet	1,519,358	28,402
Investment Technology Group	915,448	12,027
JP Morgan Securities	6,575,049	56,495
Jefferies & Co.	528,189	9,261
Liquidnet Inc	1,645,307	12,242
Loop Capital Markets	481,215	14,677
Macquarie Securities	7,241,102	28,120
Merrill Lynch	7,127,385	89,496
Morgan Stanley	10,290,635	56,030
Pershing LLC	2,342,242	22,991
Renaissance Broker Ltd	1,990,845	7,651

## **Commissions Paid to Brokers in 2013**

Broker	Total Number of Shares	Total Commissions
State Street Global Advisors	118,998,601	357,260
UBS	5,712,194	47,892
Williams Capital Group LP	251,950	7,448
Brokers with less than \$7,000 in commissions	10,204,185	202,645
Totals	234,921,013	\$ 1,431,197

# Commissions Paid to Brokers in 2013 (Con'd)

# Investment Summary as of 12/31/13

<u>Investment Type</u>	<u>Fair Value</u>	Percent of Total <u>Fair Value</u>
Fixed Income		
<b>Government Bonds</b>	\$ 262,696,101	8.5%
<b>Corporate Bonds</b>	317,388,645	<u>10.2%</u>
Total Bonds	580,084,746	18.7%
Fixed Income Funds	284,158,454	9.2%
<b>Total Fixed Income</b>	864,243,200	27.9%
Equities		
U.S. Equities	489,961,707	15.8%
International Equities	655,118,654	21.1%
Stock Index Funds	460,546,249	<u>14.9%</u>
<b>Total Equities:</b>	1,605,626,610	51.8%
Other Investments		
Hedge Fund-of-Funds	95,941,758	3.1%
Infrastructure	35,538,660	1.2%
Real Estate	119,140,822	3.8%
Swaps	3,845,772	0.1%
Venture Capital	<u>185,569,567</u>	<u>6.0%</u>
<b>Total Other:</b>	440,036,579	14.2%
Short-term funds and Cash:	187,366,569	6.1%
Total Assets at Fair Value:	\$ 3,097,272,958	100.0%



# Actuarial Section



Gabriel Roeder Smith & Company Consultants & Actuaries 20 North Clark Street Suite 2400 Chicago, IL 60602-5111 312.456.9800 phone 312.456.9801 fax www.gabrielroeder.com

May 23, 2014

Board of Trustees Policemen's Annuity and Benefit Fund City of Chicago 221 North LaSalle Street, Suite 1626 Chicago, IL 60601-1404

## Subject: Actuarial Valuation Report for the Year Ending December 31, 2013

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Policemen's Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2013. This valuation has been performed to measure the funded status of the Fund and to determine the contribution levels for 2014. In addition, it includes disclosure information required under GASB Statement No. 25, Statement No. 27, Statement No. 43, and Statement No. 45 for the fiscal year ending December 31, 2013. The assumptions and methods used were recommended by the actuary and approved by the Board and meet the parameters set for the disclosure presented in the financial section by GASB Statement No. 25 and GASB Statement No. 43. These actuarial valuations of the Fund are performed annually.

We have prepared the supporting schedules for the actuarial section of the comprehensive annual financial report, including:

- Summary of Actuarial Valuation Methods and Assumptions
- Schedule of Active Member Data
- Retirements and Beneficiaries Added to and Removed from Rolls
- Prioritized Solvency (Termination) Test
- Development of Annual Required Contributions under GASB Statements No. 27 and No. 45
- Development of Actuarial Gains and Losses
- Summary of Basic Actuarial Values

We have also provided the following schedules in the financial section of the report.

- Schedule of Funding Progress
- Development of Statutory Contributions Requirements
- Notes to Required Supplementary Information

Policemen's Annuity and Benefit Fund of Chicago Page 2

This valuation is based upon:

**Data relative to the members of the Fund** – Data for active members and persons receiving benefits from the Fund was provided by the Fund's staff. We have tested this data for reasonableness.

Asset Values – Actuarial value of assets are used to develop actuarial results for the determination of statutory contribution requirements as well as for financial reporting under GASB Statement No. 25 and Statement No. 27. In each future fiscal year, gains and losses will be phased in over a five year period.

Actuarial Method – The actuarial method utilized by the Fund is the Projected Unit Credit cost method. The objective of this method is to uniformly amortize the costs of Fund benefits over the entire career of each member. Any Unfunded Actuarial Accrued Liability (UAAL) under this method is separately financed. All actuarial gains and losses under this method are reflected in the UAAL. The actuarial method utilized for all GASB reporting purposes remains Entry-Age Normal.

Actuarial Assumptions – All actuarial assumptions remain unchanged from the prior valuation. The assumptions used are set forth in Appendix 4: Actuarial Methods and Assumptions of the Valuation Report.

**Plan Provisions** – The actuarial valuation is based on plan provisions in effect as of December 31, 2013.

Public Act 96-1495, effective as of January 1, 2011, requires that the City finance plan benefits on an actuarial basis commencing with tax levy year 2015. The funding policy requires that future employer contributions, employee contributions and other fund income is sufficient to produce 90 percent funding by fiscal year end 2040. The projections are based on an open group, level percent of pay financing, and the Projected Unit Credit cost method. This valuation report contains the projected funding requirements under the Public Act 96-1495 and the applicable contributions for tax levy year 2015.

The valuation results set forth in this report are based on the data and actuarial techniques described above, and upon the provision of the Fund as of the valuation date. Based on these items, we certify these results to be true and correct.

Respectfully yours,

Ulex Rivera

Alex Rivera, F.S.A., E.A., M.A.A.A. Senior Consultant

Larrey wien

Lance Weiss, E.A., F.C.A, M.A.A.A Senior Consultant

Gabriel Roeder Smith & Company

## I. ACTUARIAL COST METHOD

An Actuarial Cost Method is a set of techniques used by the actuary to develop contribution levels under a retirement plan. The Actuarial Cost Method used in this valuation for statutory funding and State reporting purposes is the Projected Unit Credit cost method. The Actuarial Cost Method used for GASB accounting purposes is the Entry-Age Normal cost method.

Under the Projected Unit Credit cost method, the projected pension at retirement age is first calculated and the value thereof at the individual member's current or attained age is determined. The normal cost for the member for the current year is equal to the value so determined divided by the member's projected service at retirement. The normal cost for the plan for the year is the sum of the individual normal costs.

The actuarial liability at any point in time is the value of the projected pensions at that time less the value of future normal costs.

Under the Entry-Age Normal Actuarial Cost Method, each participant's benefits are assumed to be funded by annual installments, equal to a level percentage of compensation, payable from date of participation to assumed retirement. The total "Normal Cost" is the sum of the current year's annual installments determined for all active participants. The "Actuarial Accrued Liability" is the excess of the value of projected benefits for all participants (both active and retired) over the discounted value of Normal Costs determined for future years of service.

To the extent that current assets and future Normal Costs do not support participants' expected future benefits, an Unfunded Actuarial Accrued Liability ("UAAL") develops. The UAAL is generally amortized over a fixed period of time (e.g. 30 years) from the date incurred. At a minimum, interest on UAAL should be funded. The total contribution developed under this method is the sum of the Normal Cost and the payment toward the UAAL. The Minimum Actuarially Determined Contribution contains only an interest payment on the UAAL.

## II. CURRENT ACTUARIAL ASSUMPTIONS

The current actuarial assumptions were adopted and became effective December 31, 2009, and were based on an experience study for the period January 1, 2003, to December 31, 2008. The investment return assumption was changed effective for the December 31, 2012 actuarial valuation.

### A. Demographic Assumptions

Mortality:	1994 Group Annuity Mortality Table. The mortality table used is a static table and provides an estimated margin of 25 percent, based on the postretirement experience from 2003 through 2008, for future mortality improvement.
Disabled Mortality:	1994 Group Annuity Mortality Table set forward six years.

	<b>ATTAINED AGE</b>	RATE
	22	.0003
	27	.0006
	32	.0012
	37	.0015
	42	.0020
	47	.0045
	52	.0050
	57 62	.0060 .0060
	The distribution of disability types is ass	
	Duty Disability	45%
	Occupational Disease Disability	15%
	Ordinary Disability	40%
Rate of Retirement:	Rates at which members are assumed to the Fund. The rates assumed are as follow	
	For members hired before January 1,	2011 <sup>.</sup>

ATTAINED AGE	RATE <sup>1</sup>
49	.00
50	.08
51	.08
52	.08
53	.08
54	.15
55	.15
56	.15
57	.15
58	.15
59	.15
60	.25
61	.30
62	.35
63	1.00

ATTAINED AGE	RATE <sup>1</sup>
49	.00
50	.02
51	.02
52	.02
53	.02
54	.08
55	.17
56	.17
57	.17
58	.17
59	.17
60	.25
61	.30
62	.35
63	1.00

For members hired on or after January 1, 2011:

<sup>1</sup> Only for members eligible for a formula annuity.

Turnover Rates:

The following sample rates exemplify the table:

YEARS OF SERVICE	RATE
0	0.028
1	0.022
2	0.014
3	0.013
4-9	0.012
10	0.011
11	0.010
12	0.009
13	0.008
14	0.007
15	0.006
16	0.005
17-25	0.004

#### **B.** Economic Assumptions

Investment Return Rate:	7.75% per annum for pensions effective as of December 31, 2012 and 4.50% for OPEB effective as of December 31, 2005.
General Inflation:	The 7.75% Investment Return Rate assumption contains a 3.00% inflation assumption and a 4.75% real rate of return assumption for pension.

Future Salary Increases:	Assumed rates of individual salary increase at 4.0% per year, plus an
	additional percentage based on the following service scale:

<b>COMPLETED YEARS</b>	
<b>OF SERVICE</b> <sup>*</sup>	SCALE
1	0.250
2	0.060
3	0.050
4	0.050
5	0.040
6-9	0.000
10	0.035
11-14	0.000
15	0.035
16-19	0.000
20	0.035
21-24	0.000
25	0.035
Over 25	0.000

\* Includes increases at 12 and 18 months of service.

Asset Value: For Book-value of Assets, bonds are at amortized value and stocks are at cost.

For statutory funding and GASB #25 and #27 reporting, the actuarial value of assets is smoothed by recognizing each year's difference between actual and expected investment return at the rate of 20 percent per year over a five-year period.

The actuarial value of assets was marked to the market value as of January 1, 2012.

#### C. Other Assumptions

Marital Status:

It is assumed that 85% of members have an eligible spouse. The male spouse is assumed to be three years older than the female spouse. No assumption is made about other dependents.

Group Health Insurance:	Due to P. A. 98-0043 effective June 28, 2013, it is assumed for valuation purposes that the health insurance supplement in effect prior to June 30, 2013, will end on December 31, 2016, for all employee annuitants (and their future surviving spouses). The amount of the Plan paid health insurance from July 1, 2008, until June 30, 2013, is \$95.00 per month for each annuitant (employees and surviving spouses) not qualified to receive Medicare benefits, and \$65.00 if qualified. It is assumed that all annuitants less than age 65 will not be eligible for Medicare. Future widows of retirees are assumed to be eligible for Medicare, as well as widow annuitants that are currently receiving a health insurance supplement.
Required Ultimate Multiple:	The actuarially determined contribution (adjusted for tax levy loss) less expected employee contributions divided by the actual employee contributions made in the second prior year.
Loss in Tax Levy:	4% overall loss on tax levy is assumed for the tax levy year 2014. No tax

levy loss is assumed after 2014.

The projections under the provisions of P.A. 96-1495 were based on the following assumptions and methods:

- (1) Active members who terminate, retire, become disabled or die during the year are replaced by new entrants such that the number of active members remains level during the projection period based on the most recent actuarial valuation. The number of active members as of the valuation at December 31, 2013 is 12,161.
- (2) The entry age of future new entrants, which is summarized below, is based on the profile of current active members hired over the last five years with one or more years of service as of December 31, 2013. These members were hired from January 1, 2009 through December 31, 2012.

Entry Age	Number
20 to 25	27
25 to 30	448
30 to 35	198
35 to 40	95
40 to 45	5

- (3) Approximately 79 percent of the new entrants are assumed to be male.
- (4) Based on the most recent employment contract, new entrants were assumed to earn \$50,104 for the plan year ending December 31, 2014. This amount includes pay provided for duty availability pay. The new entrant pay for members hired after 2014 is assumed to increase by the wage inflation assumption of 4.0 percent.

- (5) Pay for a specific new entrant is assumed to increase in the future by the wage inflation and the service based increases disclosed in the most recent actuarial valuation as of December 31, 2013.
- (6) The projections assume a pay cap of \$109,971 for plan year 2013, increasing by 1.5 percent per year after plan year 2013. The annual increase of 1.5 percent per year is based on 50 percent of the CPI-U increase which is assumed to be 3.0 percent per year.

Year	Members		Current Year		Average		Actuarial	CPI
End	in Service	Increase	Salary	Increase	Salary	Increase	Assumptions	Chicago
1984	12,110	(3.6)%	\$ 379,686,648	(2.8)%	\$ 30,610	0.7 %	6.00	3.8
1985	12,096	(0.1)	395,295,432	6.6	32,680	6.8	6.00	3.8
1986	12,578	4.0	431,883,240	9.3	34,336	5.1	6.00	2.0
1987	12,602	0.2	443,122,728	2.6	35,163	2.4	6.00	4.1
1988 2	12,495	(0.8)	443,669,520	0.1	35,508	1.0	6.00	3.9
1989	12,060	(3.5)	437,121,504	(1.5)	36,246	2.1	6.00	5.1
1990	12,039	(0.2)	471,544,173	7.9	39,168	8.1	6.00	5.5
1991	12,513	3.9	520,015,930	10.3	41,558	6.1	6.00	3.0
1992	12,570	0.5	538,404,098	3.5	42,832	3.1	5.80	3.3
1993	12,591	0.2	561,156,282	4.2	44,568	4.1	5.80	2.3
1994	13,095	4.0	599,073,276	6.8	45,748	2.6	5.80	2.9
1995	13,437	2.6	622,413,737	3.9	46,321	1.3	5.80	2.2
1996	13,475	0.3	654,149,310	5.1	48,545	4.8	5.80	3.8
1997	13,435	(0.3)	675,515,532	3.7	50,280	3.6	5.80	1.7
1998 <sup>3</sup>	13,586	1.1	736,401,756	9.0	54,203	7.8	5.50	1.5
1999	13,829	1.8	755,303,667	2.6	54,617	0.8	5.50	2.6
2000	13,858	0.2	759,343,026	0.5	54,795	0.3	5.50	4.0
2001	13,889	0.2	763,352,475	0.5	54,961	0.3	5.50	0.8
2002	13,720	(1.2)	866,531,789	13.5	63,158	14.9	5.50	2.5
2003	13,746	0.2	887,555,791	2.4	64,568	2.2	5.50	1.7
2004	13,569	(1.3)	874,301,958	(1.5)	64,434	(0.2)	5.50	2.2
2005	13,462	(0.8)	948,973,732	8.5	70,493	9.4	5.50	3.6
2006	13,749	2.1	1,012,983,635	6.7	73,677	4.5	5.50	0.7
2007	13,748	0.0	1,038,957,026	2.6	75,572	2.6	5.50	4.7
2008	13,373	(2.7)	1,023,580,667	(1.5)	76,541	1.3	5.50	(0.6
2009	13,154	(1.6)	1,011,205,359	(1.2)	76,874	0.4	5.50	2.5
2010	12,737	(3.2)	1,048,084,301	3.6	82,287	7.0	5.50	1.2
2011	12,236	(3.9)	1,034,403,526	(1.3)	84,538	2.7	5.50	2.1
2012	12,026	(1.7)	1,015,170,686	(1.9)	84,415	(0.1)	5.50	1.7
2013	12,161	1.1	1,015,426,126	0.0	83,499	(1.1)	5.50 4	0.5
Average								
(Decrease last 5 yea		(1.0)0/		(0.2)0/		100/		1.6 %
iast 5 yea	13.	(1.9)%		(0.2)%		1.8 %		1.0 7

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO HISTORY OF AVERAGE ANNUAL SALARIES

<sup>1</sup> Members in service does not include those age 63 and over who are still working.

<sup>2</sup> Figures do not include retroactive raise.

<sup>3</sup> Pay definition changed to include duty availability pay. Of the \$1,015,426,128 current year salary, \$37,327,036 is duty availability pay.

<sup>4</sup> See Appendix 4 in 2013 Actuarial Valuation for a complete description of the current assumptions.

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO SUMMARY OF CHANGES IN ACTIVE PARTICIPANTS FOR FISCAL YEAR ENDING DECEMBER 31, 2013

	Male	Female	Total
Number of Participants at Beginning of Fiscal Year <sup>2</sup>	9,176	2,850	12,026
Increases: Participants Added During Year Participants Returning From Inactive or Disability Status	459 25	114 9	573 34
Totals	9,660	2,973	12,633
Decreases: Terminations During Year	331	141	472
Number of Participants at End of Fiscal Year	9,329	2,832	12,161
Total Inactive Participants			654
Terminations:			
Withdrawal (With Refunds) <sup>1</sup>	6	1	7
Withdrawal (Without Refunds)	73	26	99
Ordinary Disability Benefit	8	11	19
Occupational Disease Disability Benefit	5	1	6
Duty Disability Benefit	13	7	20
Retirements	213	92	305
Deaths (Occupational)	0	0	0
Deaths (Non-occupational)	13	3	16
Totals	331	141	472

<sup>1</sup> This total differs from the total of 31 shown in Exhibit D due to the fact that only 7 of the refunds were paid to participants who were considered to be active as of December 31, 2012.

<sup>2</sup> Includes seven active members reclassified from male to female and ten active members reclassified from female to male.

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES FOR FISCAL YEAR ENDING DECEMBER 31, 2013

	Number at Beginning of Year	Additions During Year	Terminations During Year	Number at End of Year
Service Retirement Annuities	9,035	401	242	9,194
Widow Annuities	3,122	157	149	3,130
Children's Annuities	214	16	24	206
Ordinary Disability Benefit (Non-Occupational)	47	20	21	46
Occupational Disease Disability Benefit	36	6	7	35
Duty Disability Benefit (Occupational)	263	35	29	269
Children's Disability Benefit	180	48	15	213
Widows' Compensation Annuities (Service Connected Death)	69	0	3	66
Totals	12,966	683	490	13,159
Annual Benefits	\$ 595,829,340	\$ 43,380,694	\$ 17,020,751	\$ 622,189,283

# POLICEMEN'S ANNUITY AND BENEFIT FUND TOTAL ANNUITANTS AND BENEFICIARIES (LAST SEVEN YEARS)

	Annuitants & Beneficiaries Beginning <u>of Year</u>	Additions During <u>The Year</u>	During During		Average Annuitants & <u>Beneficiaries</u>
2007	12,026	627	518	12,135	12,081
2008	12,135	603	555	12,183	12,159
2009	12,183	476	505	12,154	12,169
2010	12,154	803	576	12,381	12,268
2011	12,381	741	459	12,663	12,522
2012	12,663	811	508	12,966	12,830
2013	12,966	683	490	13,159	13,078

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO HISTORY OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM BENEFIT PAYROLL

	A	dded to Payroll	led to Payroll Removed from Payroll		Payr	oll End of Year	Average Annual	Increase to Avg.					
Yr.	No.	Annual Benefits.	No.	Annual Benefits	No. Annual Benefits		Benefits	Benefits					
	Employee Annuitants (Male and Female)												
2010	551	\$ 44,873,260	283	\$ 12,055,142	8,495	\$ 450,742,884	\$ 53,060	4.5%					
2011	500	42,603,517	232	10,471,101	8,763	482,875,300	55,104	3.9%					
2012	539	43,830,960	267	12,652,422	9,035	514,053,838	56,896	3.3%					
2013	401	36,004,890	242	11,690,500	9,194	538,368,228	58,556	2.9%					
			Widov	/Widower Annuitan	ts (Not Inclu	ding Compensation) <sup>1</sup>							
2010	145	\$ 2,838,113	177	\$ 2,598,598	3,079	\$ 53,621,501	\$ 17,415	1.5%					
2011	144	3,709,829	132	2,007,664	3,091	55,323,666	17,898	2.8%					
2012	174	4,436,964	143	2,110,153	3,122	57,650,477	18,466	3.2%					
2013	157	3,969,877	149	2,259,835	3,130	59,360,519	18,965	2.7%					

<sup>1</sup>Not including Compensation Annuitants.

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO ACTUARIAL ACCRUED LIABILITY PRIORITIZED SOLVENCY TEST

<b>X7 X</b> /*	(1)	(2)	(3)		Doution (0/)	of Duccout V	alua Cowarad
Valuation Date	Active and Inactive Member	Retirees and	Active and Inactive Members (ER	Actuarial Value of	<b>FOLION</b> (76)	By Assets	alue Covered
12/31	Contribution	Beneficiaries	Financed Portion)	Assets	(1)	(2)	(3)
1999	\$ 763,729,532	\$ 2,939,332,536	\$ 1,691,810,150	\$3,685,681,671	100.00%	99.41%	0.00%
2000 1	818,382,556	3,228,954,418	1,604,693,684	4,019,467,561	100.00%	99.14%	0.00%
2001 2	803,453,930	3,463,944,097	1,665,112,602	4,183,796,025	100.00%	97.59%	0.00%
2002	846,622,627	3,769,125,439	1,769,097,893	4,124,579,960	100.00%	86.97%	0.00%
2003 1,2	893,425,839	3,856,262,804	1,831,744,607	4,039,695,590	100.00%	81.59%	0.00%
2004 2	910,480,098	4,313,531,046	1,810,260,330	3,933,031,342	100.00%	70.07%	0.00%
2005 1,2	950,764,942	4,677,632,909	2,094,339,296	3,914,431,654	100.00%	63.36%	0.00%
2006	1,016,217,810	4,858,554,051	2,241,771,313	3,997,990,919	100.00%	61.37%	0.00%
2007	1,082,742,927	5,006,931,293	2,309,718,259	4,231,681,817	100.00%	62.89%	0.00%
2008	1,144,380,257	5,208,199,833	2,299,966,099	4,093,719,894	100.00%	56.63%	0.00%
2009 1	1,217,645,647	5,391,373,730	2,291,882,108	3,884,978,241	100.00%	49.47%	0.00%
2010	1,251,147,487	5,717,654,520	2,406,050,870	3,718,954,539	100.00%	43.16%	0.00%
2011	1,286,345,939	6,041,684,411	2,360,319,555	3,444,690,362	100.00%	35.72%	0.00%
2012 1	1,309,825,828	6,475,282,318	2,435,530,363	3,148,929,770	100.00%	28.40%	0.00%
2013 2	1,358,193,244	6,594,792,197	2,127,620,103	3,053,881,777	100.00%	25.71%	0.00%

<sup>1</sup>*Change in actuarial assumptions.* 

<sup>2</sup>*Change in benefits.* 

# **POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO DEVELOPMENT OF ANNUAL REQUIRED** CONTRIBUTION UNDER GASB #25 AND GASB #43 FOR 2014<sup>1</sup>

	Pension	Health Ins. Supplement	Total
(1) Total Normal Cost for 2014	\$ 178,643,818	\$ 43	\$ 178,643,861
(2) Actuarial Accrued Liability (AAL) at 12/31/2013 <sup>2</sup>	\$10,282,338,599	\$ 28,375,681	\$10,310,714,280
<ul> <li>(3) Unfunded AAL (UAAL)</li> <li>(a) Actuarial Value of Assets at 12/31/2013</li> <li>(b) UAAL (2-3(a))</li> </ul>	\$ 3,053,881,777 7,228,456,822	\$ 0 28,375,681	\$ 3,053,881,777 7,256,832,503
(4) Amortization Payable at Beginning of Year $^3$	\$ 384,386,169	\$ 9,503,961	\$ 393,890,130
(5) Estimated Member Contributions	\$ 93,563,028	\$ 0	\$ 93,563,028
<ul> <li>(6) Annual Required Contribution (ARC) for 2014</li> <li>(a) Interest Adjustment for Semimonthly Payment</li> <li>(b) Annual Required Contribution (1 + 4 - 5 + 6(a))</li> <li>(c) Annual Required Contribution (Percent of Pay)</li> </ul>	22,184,249 \$ 491,651,208 48.42%	219,617 \$ 9,723,621 0.96%	22,403,866 \$ 501,374,829 49.38%
(7) Estimated City Contribution for 2014	\$ 178,700,098	\$ 9,730,902 <sup>4</sup>	\$ 188,431,000
<ul> <li>(8) Estimated Deficiency/(Excess) for 2014</li> <li>(a) in Dollars (6(b)-7)</li> <li>(b) as a Percentage of Pay</li> </ul>	<u>\$ 312,951,110</u> 30.82%	<u>\$ (7,281)</u> (0.00%)	<u>\$ 312,943,829</u> 30.82%

 <sup>1</sup> Pension liabilities were discounted at 7.75% per year, and OPEB liabilities discounted at 4.5% per year.
 <sup>2</sup> Actuarial Accrued Liabilities calculated using the Entry-Age Normal cost method.
 <sup>3</sup> Amortization is over a 30-year period as a level percent of pay for pension benefits, and a 3-year period as a level percent of pay for OPEB benefits. <sup>4</sup> Represents expected health insurance supplemental benefits for fiscal year 2014.

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO DEVELOPMENT OF ACTUARIAL GAINS AND LOSSES FOR 2013

## Table 5

<u>UNFL</u>	INDED ACTUARIAL ACCRUED LIABILITY - BEGINNING OF 2	2013
(1)	Actuarial Accrued Liability - 12/31/2012	\$10,220,638,509
(2)	Assets at Book Value - 12/31/2012	2,952,874,317
(3)	Unfunded Accrued Actuarial Liability - 12/31/2012	\$7,267,764,192
EXPE	CTED UNFUNDED ACTUARIAL ACCRUED LIABILITY - END	OF 2013
(4)	Normal Cost for 2013	\$ 183,285,557
(5)	Total Contributions for 2013	282,697,513
(6)	Interest on (3), (4), & (5) at Valuation Rates	561,239,766
(7)	Expected Unfunded Actuarial Accrued Liability - 12/31/2013	\$7,729,592,002
	((3)+(4)-(5)+(6))	
	ATIONS FROM EXPECTED	
(8)	(Gain)/Loss on Investment Return (Book Value)	\$ (104,019,662)
(9)	(Gain)/Loss from Salary Changes	(133,771,825)
(10)	(Gain)/Loss from Retirement	17,527,311
(11)	(Gain)/Loss from Turnover	4,391,837
(12)	(Gain)/Loss from Mortality	4,263,263
(13)	(Gain)/Loss from Disability	2,676,814
(14)	(Gain)/Loss from New Entrants	5,065,372
(15)	(Gain)/Loss from All Other Sources	21,199,700
(16)	Composite Actuarial (Gain)/Loss	(\$182,667,190)
(17)	(Gain)/Loss as a percentage of Expected UAAL (16)/(7)	(2.4)%
(18)	(Gain)/Loss from Asset Method Changes	\$ (141,029,201)
(19)	(Gain)/Loss from Funding Method Change	(230,108,736)
(20)	(Gain)/Loss from Provision Changes	(149,063,108)
	INDED ACTUARIAL ACCRUED LIABILITY - END OF 2013	
(21)	Unfunded Accrued Actuarial Liability - 12/31/2013	\$7,026,723,767
	((7)+(16)+(18)+(19)+(20))	

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO SUMMARY OF BASIC ACTUARIAL VALUES

## Table 2

	APV of Projected Benefits	Actuarial Accrued Liability (AAL)
(1) Values for Active Members		
(a) Retirement	\$4,965,351,350	\$3,115,994,391
(b) Termination	64,233,010	40,239,764
(c) Disability	362,887,464	229,846,750
(d) Death	87,363,160	54,649,342
Total for Actives	\$5,479,834,984	\$3,440,730,247
(2) Values for Inactive Members		
(a) Retired	5,802,966,080	5,802,966,080
(b) Survivor	510,252,851	510,252,851
(c) Disability	272,177,986	272,177,986
(d) Inactive (Deferred Vested)	45,083,100	45,083,100
(e) Children	9,395,280	9,395,280
Total for Inactives	6,639,875,297	6,639,875,297
(3) Grand Totals	\$12,119,710,281	\$10,080,605,544
(4) Normal Cost for Active Members	\$ 198,458,616	
(5) Actuarial Present Value of Future Compensation	\$10,730,484,065	

## POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO SCHEDULE OF RETIRED MEMBERS BY TYPES OF BENEFIT AND MONTHLY BENEFIT LEVELS

	Reti	rement	Disa	bility	Wi	dow <sup>1</sup>	Cl	nild	То	tals
Years	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under \$100	6	1					2		8	1
\$100 to under \$250	11	3					137	95	148	98
\$250 to under \$500	20	8					40	33	60	41
\$500 to under \$750	21	2					36	45	57	47
\$750 to under \$1,000	3	3					19	12	22	15
\$1,000 to under \$2,000	122	33			39	2,355			161	2,388
\$2,000 to under \$3,000	420	49	3		5	643			428	692
\$3,000 to under \$4,000	1,273	373	40	34		74			1,313	481
\$4,000 to under \$5,000	2,097	328	127	60		32			2,224	420
\$5,000 to under \$6,000	2,650	254	55	26	3	36			2,708	316
\$6,000 to under \$7,000	968	89	4	1		6			972	96
\$7,000 to under \$8,000	235	22							235	22
\$8,000 to under \$9,000	79	7				1			79	8
\$9,000 to under \$10,000	56	9				1			56	10
\$10,000 and over	49	3				1			49	4
Totals:	8,010	1,184	229	121	47	3,149	234	185	8,520	4,639

<sup>1</sup> Includes reversionary.
 <sup>2</sup> Children's Disability Benefit not tracked before 1993.

## POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO SCHEDULE OF AVERAGE BENEFIT PAYMENTS FOR NEW ANNUITIES GRANTED DURING 2013

	Years of Service:	0-9	10-14	15-19	20-24	25-29	30-34	>= 35	Total
	Number of Retired Members	0	1	13	105	161	140	131	551
2010	Average annual salary used	\$0	\$81,122	\$70,339	\$80,639	\$88,735	\$91,739	\$92,194	\$88,330
	Average Monthly Benefit	\$0	\$2,535	\$2,667	\$3,837	\$5,385	\$5,734	\$5,762	\$5,199
	Number of Retired Members	1	8	16	95	175	103	102	500
2011	Average annual salary used	\$18,730	\$76,848	\$70,140	\$82,778	\$92,829	\$93,780	\$98,280	\$91,097
	Average Monthly Benefit	\$390	\$2,158	\$2,728	\$3,949	\$5,497	\$5,861	\$6,142	\$5,257
	Number of Retired Members	0	9	22	123	217	88	80	539
2012	Average annual salary used	\$0	\$72,245	\$65,305	\$85,175	\$92,825	\$94,854	\$98,415	\$90,773
	Average Monthly Benefit	\$0	\$2,066	\$2,511	\$4,002	\$5,408	\$5,928	\$6,151	\$5,108
	Number of Retired Members	0	6	20	118	161	62	34	401
2013	Average annual salary used	\$0	\$62,730	\$75,088	\$86,979	\$94,193	\$99,759	\$102,980	\$92,252
	Average Monthly Benefit	\$0	\$1,809	\$2,857	\$4,164	\$5,427	\$6,235	\$6,436	\$5,084

PARTICIPANTS	An employee in the police department of the City of Chicago appointed and sworn or designated by law as a peace officer with the title of policeman, policewoman, chief surgeon, police surgeon, police dog catcher, police kennelman, police matron and members of the police force of the police department.
SERVICE	In computing service rendered by a police officer, the following periods shall be counted, in addition to all periods during which he performed the duties of his position, as periods of service for annuity purposes only: All periods of (a) vacation; (b) leave of absence with pay; (c) military service; (d) disability for which the police officer receives disability benefit. The calculation of service is based on a day-to-day basis for most purposes. For the purpose of calculating benefits under the Dominant Formula, one-year of Service is credited for a year in any portion of which a police officer is compensated.
RETIREMENT	
Eligibility	Attainment of age 50 with at least 10 years of service.
	For participants that first became members on or after January 1, 2011, attainment of age 55 with at least 10 years of service. Participants may retire at attainment of age 50 with 10 years of service with a reduced benefit.
Mandatory	Effective in plan year 2003, retirement is mandatory for a participant who has attained age 63.
Accumulation Annuity	At age 50 or more, with 10 or more years of service, the employee is entitled to an annuity based on the sums accumulated for age and service annuity plus 1/10 of the sum accumulated from the contributions by the City for the age and service annuity for each completed year of service after the first 10 years. At age 50 or more with 20 or more years, the employee is entitled to an annuity based on all sums accumulated.
Formula Minimum Annuity	While there are several alternative formulas available with 20 or more years of service, the Dominant Formula is 50% of highest average salary (including duty availability pay) in 48 consecutive months within the last 10 years of service plus 2.5% for each year or fraction of service over 20 years, limited to 75% of average salary.

Mandatory Retirement Minimum Annuity	A police officer who is required to withdraw from service due to attainment of mandatory retirement age who has less than 20 years of service credit may elect to receive an annuity equal to 30% of average salary for the first 10 years of service, plus 2% of average salary for each completed year of service in excess of 10, to a maximum of 48% of average salary. This benefit qualifies for post retirement increases.
Post-Retirement Increase	A retiree born before January 1, 1955, with at least 20 years of service or receiving a mandatory retirement minimum annuity, receives an increase of 3% of the original annuity, starting on the first of the month following the first anniversary of his retirement or the first of the month following attainment of age 55, whichever is later, and shall not be subject to a 30% maximum increase. For retirees born after January 1, 1955, automatic increases are 1.5% of the original annuity, commencing at age 60, or the first anniversary of retirement, if later, to a maximum of 30%.
	For participants that first became members on or after January 1, 2011, increases are equal to the lesser of 3.00 percent and 50 percent of CPI-U of the original benefit, commencing at age 60.
Minimum Annuity	The benefit of any retiree who retired from the service before January 1, 1986, at age 50 or over with at least 20 years of service, or due to termination of disability is not less than \$1,050 per month.
	For participants that first became members on or after January 1, 2011, the member is entitled to an annuity based on an accrual rate of 2.5 percent of the final average salary for each fraction of service. Maximum is 75 percent of the final average salary. Final average salary is calculated using salary from the eight highest consecutive years within the last 10 years of service prior to retirement. Pensionable salary is limited to \$106,800 in 2011, increased by the lesser of 3 percent and one-half of the annual unadjusted percentage increase in the Consumer Price Index-U (but not less than zero) as measured in the preceding 12- month period ending with the September preceding the November 1, which is the date that the new amount will be calculated and made available to the pension funds.
	For participants that first became members on or after January 1, 2011, who retire after age 50 but before age 55 is attained, the member is entitled to an annuity based on an accrual rate of 2.5 percent of the final average salary for each fraction of service, reduced by one half of one percent per month for retirement prior to age 55, subject to a maximum benefit of 75 percent.

<b>Reversionary</b> Annuity	A member, prior to retirement, may elect to reduce his own annuity, and
	provide a reversionary annuity, to begin upon the officer's death, for the officer's spouse.

#### SURVIVOR INCOME BENEFITS PAYABLE ON DEATH

Death in Service (Non-	Generally, a money-purchase benefit is provided, based on total salary
Duty):	deductions and City contributions. However, if a policeman dies in
	service after December 31, 1985, with at least 1.5 years of service, the
	widow's annuity is the greater of (a) 30% of the annual maximum salary
	attached to the classified civil service position of a first class patrolman
	at the time of his death (without dollar limit) or (b) 50% of the benefit
	accrued by the policeman at date of death.

The lifetime benefit is payable until death.

Death in Service (Duty Related)

**Compensation Annuity** 75% of the member's salary attached to the civil service position that would ordinarily have been paid to such member as though in active discharge of his duties at the time of death payable until the date the policeman would have attained age 63.

- **Supplemental Annuity** Payable for life and is equal to the difference between the money purchase annuity for the spouse and an amount equal to 75% of the annual salary (including all salary increases and longevity raises) the police officer would have been receiving when he attained age 63 if the police officer had continued in service at the same rank last held in the department.
- **Death after Retirement** If a police officer retires on or after January 1, 1986, and subsequently dies, the widow's annuity is 40% before 1988 and 50% on and after January 1, 1988 of the retired policeman's annuity at the time of death (without dollar limit).
- *Maximum Annuity* \$500 a month (after discount for age difference) under both the accumulation method and the old formula method. There is no dollar limit on the 30%, 40% or 50% benefit.

Minimum Annuity	Any spouse is entitled to a minimum annuity of \$1,000 a month.
	For participants that first became members on or after January 1, 2011, widow benefits are equal to 66-2/3 percent of the officer's earned annuity at the date of death. Automatic increases to the annuity are equal to the lesser of 3.00 percent and 50 percent of CPI-U, commencing when the survivor reaches age 60, and applied to the original granted retirement annuity.
CHILDREN'S ANNUITIES	5
Eligibility	Payable at death of the policeman to all unmarried children less than 18 years of age.
Benefit	10% of the annual maximum salary of a first class patrolman during widow (widower) life, 15% otherwise.
Payable Until	Age 18. If the child is disabled, benefit is payable for life or as long as such disablement exists.
Family Maximum	60% (non-duty death) or 100% (duty death) of the salary that would ordinarily been paid to the policeman, if he had been in the active discharge of his duties.
Parent's Annuities	
Eligibility	Payable to a dependent parent at the death of a policeman who is in either active service, or receiving a disability benefit, or on leave of absence, or in receipt of an annuity granted after 20 years of service, or waiting to start receiving an annuity granted for 20 years of service. The benefit is only payable if there are no surviving spouses or children eligible for benefits.
Benefit	18% of the current salary attached to the rank at separation from service.
Payable until	Death of the dependent parent.

#### **DUTY DISABILITY BENEFIT**

Eligibility	Disabling condition incurred in the performance of duty.
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**Benefit** 75% of salary at the time the disability is allowed plus \$100.00 per month for each unmarried child less than age 18, (total amount of child's benefits shall not exceed 25% of salary). Beginning January 1, 2000, after 7 years of payment, the benefit shall not be less than 60% of the current salary attached to the rank held by the policemen at the time of disability. Payable to employee's age 63 or by operation of law, whichever is later. Salary deductions are contributed by the City.

#### **OCCUPATIONAL DISEASE DISABILITY BENEFIT**

EligibilityHeart attack or any disability heart disease after 10 years of service.Benefit65% of salary attached to the rank held by the police officer at the time of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the police department payroll with a minimum of his or her removal from the

after 10 years of 50% of the current salary attached to the rank. Each natural or legally adopted unmarried child of the officer under the age of 18 is entitled to a benefit of \$100 per month. This benefit is not terminated at age 18 if the child is then dependent by reason of physical or mental disability. Salary deductions are contributed by the City.

#### **ORDINARY DISABILITY BENEFIT**

*Eligibility* Disabling condition other than duty or occupational related.

*Benefit* 50% of salary at the time of injury, payable for a period not more than 25% of service (excluding any previous disability time) rendered prior to injury, nor more than 5 years. Disability shall cease at age 63. Salary deductions are contributed by the City.

#### DEATH BENEFIT

Eligibility

Payable upon the death of a police officer whose death occurs while in active service; on authorized leave of absence; within 60 days of receipt of salary; while receiving duty or ordinary disability benefit; occurring within 60 days of termination of such benefit; or occurring on retirement while in receipt of annuity and separation was effective after 20 years of service. This benefit is payable to beneficiaries or, if none, to estate.

#### Benefit

Death in Service:	AGE AT DEATH	BENEFIT		
	49 and under 50-62	\$12,000 \$12,000 less \$400 for each year by which age at death exceeds 49		
Death after Retirement:	AGE AT DEATH	BENEFIT		
	50 and over	\$6,000		
		injury incurred in performance of duty before the benefit payable is \$12,000 regardless of the		
GROUP HEALTH HOSPITAL AND SURGICAL INSURANCE PROGRAM	for non-Medicare elig	provide payments in the amount of \$95 per month gible city annuitants and \$65 per month for nnuitants through December 31, 2016.		
REFUNDS				
Policemen	Without regard to service and under age 50, or with less than 10 years of service and under age 57 at withdrawal: a refund of all salary deductions together with 1.5% simple interest until the date of withdrawal.			
For Spouse's Annuity	Upon retirement an unmarried policeman will receive a refund of contributions for spouse's annuity, accumulated at 3% compounded annually.			
Of Remaining Amounts		policeman the total member contributions paid total retirement benefits paid to date of death, the		
CONTRIBUTIONS				
Salary Deductions	Employee	7 %		
	Spouse Annuity Increas	$1\frac{1}{2}\%$ e $\frac{1}{2}\%$		
	Annuity meleas	$\frac{7270}{9\%}$		

City Contributions <sup>1</sup>	Employee Spouse Annuity Increase	$\frac{9-5/7\%}{2\%} \\ \frac{\frac{1}{2}\%}{12-3/14\%} $ Unallocated				
	<sup>1</sup> Credited to Participant's Accumulation Annuity and Widow's Annuity Account In addition to the above contributions, a contribution is made to support the Death Benefit. Policemen contribute \$2.50 per month. City contributes a total of \$224,000 for all policemen.					
	The total City contribution is generated by a tax equal to double contributions by the policemen to the Fund two years prior to the year the tax levy.					
	Starting in tax levy year 2015, employer contributions combined member contributions and other fund revenue must be equal to amount, as a level percentage of payroll, that is sufficient to pro 90% funding by the end of fiscal year 2040.					
"PICK UP" OF EMPLOYEE SALARY DEDUCTIONS	by the employer. The W-2 salary contribution. For pension pur Income tax will be paid when a	mployee contributions were "picked up" y is therefore reduced by the amount of poses the salary remains unchanged. refund or annuity is received. For the pontributions, these contributions will be				

# SALARY CAP AND COLA DEVELOPMENT FOR MEMBERS HIRED ON OR AFTER JANUARY 1, 2011

Year Ending	CPI-U	<sup>1</sup> / <sub>2</sub> CPI-U	COLA	Maximum Annual Pensionable Earnings
2011			3.00%	\$106,800.00
2012	3.90%	1.95%	1.95%	\$108,882.60
2013	2.00%	1.00%	1.00%	\$109,971.43
2014	1.20%	0.60%	0.60%	\$110,631.26



# Statistical Section

#### SUPPLEMENTAL INFORMATION

The following section contains special schedules designed to supplement benefit payment data contained elsewhere in this Comprehensive Annual Financial Report.

- **Revenues by Source and Expenses by Type** details the specific sources and uses of funds: Employee contributions obtained from participants through payroll deductions, employer contributions from the City of Chicago's real estate tax levy (Calculated using a 2.0 multiplier that matches employee contributions on a two year lag basis) and finally, investment income derived from the Fund's portfolio of assets. On the expense side, the largest component is benefit payments to participants, followed by refunds of contributions to participants and finally, the Fund's own administrative expenses.
- Schedule of Benefit Expenses by Type (Last 10 Years) further details the total annual benefit expense by breaking it down into payments to annuitants, survivors, disability payments, death benefits, and health insurance supplements.
- Average Employee Retirement Benefits Payable provides some key demographics of the annuitant population including average annual benefit paid, average current age, average age at retirement, and average years of service prior to retirement.
- **Retirees and Beneficiaries by Type of Benefit** provides totals for each type of benefit payment including those to annuitants and their survivors as well as to employees receiving disability benefits from the Fund.

#### **REVENUES BY SOURCE AND EXPENSES BY TYPE**

Year	Employee Contributions(1)	Employer Contributions(2)	Investment Income (3)	Total	Employer Cont. as a percent of Current Year Payroll
2004	78,800,816	135,744,173	367,908,110	582,453,099	15.53%
2005	89,109,811	178,278,371	261,389,227	528,777,409	18.79%
2006	91,965,685	158,759,277	447,275,047	698,000,009	15.67%
2007	93,299,996	178,705,975	349,914,156	621,920,127	17.20%
2008	93,207,408	181,685,991	(1,104,909,466)	(830,016,067)	17.75%
2009	95,614,390	180,510,851	567,314,823	844,239,428	17.85%
2010	108,402,353	183,834,639	369,558,055	661,815,078	17.54%
2011	98,222,258	183,521,528	33,656,109	315,504,361	17.51%
2012	95,892,052	207,228,022	353,176,346	656,719,636	20.41%
2013	93,328,944	188,889,240	415,293,612	697,991,124	18.60%

Year	Benefits Expenses	Administrative Expenses	Refunds	Total	Income Less Payouts
2004	401,519,101	2,626,056	5,781,659	409,926,816	172,526,283
2005	431,445,018	2,660,819	5,644,241	439,750,078	89,027,331
2006	452,788,081	2,700,475	5,271,842	460,760,398	237,239,611
2007	471,478,513	3,077,073	6,206,813	480,762,399	141,157,728
2008	491,602,860	4,153,570	6,118,449	501,874,879	(1,331,890,946)
2009	508,515,984	4,303,599	6,193,872	519,013,455	325,225,973
2010	536,244,720	3,924,928	7,587,436	548,197,135	113,617,943
2011	567,968,186	3,895,731	7,337,234	579,664,377	(264,160,016)
2012	602,756,032	4,396,638	11,150,565	618,795,083	37,924,553
2013	633,839,274	3,891,329	8,087,018	646,223,804	51,767,320

(1) Includes deductions in lieu for disability

(2) Net tax levy and miscellaneous income

(3) Includes realized net gain or loss on sale and exchange of assets, and net of investment expense

# SCHEDULE OF BENEFIT EXPENSES BY TYPE (LAST 10 YEARS)

				Ordinary, Duty and			
Year	Employee	Spouse	Dependent	Children Disability	Death	Hospitalization	Total
2004	322,926,347	47,527,540	1,230,130	20,250,689	1,837,006	5 7,747,390	401,519,102
2005	347,272,478	51,283,810	1,228,497	22,184,105	1,500,000	) 7,976,128	431,445,018
2006	366,275,912	53,432,655	1,368,446	21,783,830	1,886,443	8 8,040,795	452,788,081
2007	384,061,774	54,134,067	1,287,970	22,132,157	1,754,836	5 8,107,708	471,478,512
2008	401,472,930	56,142,862	1,351,770	22,005,912	1,779,200	) 8,850,186	491,602,860
2009	417,879,734	56,616,500	1,326,895	21,803,624	1,622,800	9,266,431	508,515,984
2010	442,653,907	57,739,825	1,344,265	23,370,160	1,782,400	9,354,163	536,244,720
2011	472,856,232	59,935,287	1,340,422	22,184,051	1,510,800	9,591,394	567,968,186
2012	506,760,531	61,250,640	1,416,014	21,427,161	1,543,000	9,756,686	602,756,032
2013	535,187,961	63,236,393	1,409,221	22,003,790	1,634,600	9,847,310	633,319,275

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Years Ended	Average Annual Benefit	Average Current Age of Retirees	Average Age at Retirement Current Year <sup>*</sup>	Average Years of Benefit Service at Retirement Current Year <sup>*</sup>
1984	\$ 11,782	68	58.6	29.9
1985	13,070	68	58.7	30.2
1986	15,033	67	57.7	30.0
1987	16,257	67	58.1	30.1
1988	17,855	67	58.8	30.9
1989	19,315	67	58.6	30.7
1990	21,120	68	58.9	30.2
1991	21,782	68	58.4	30.8
1992	23,128	68	57.7	30.3
1993	24,724	68	56.9	29.6
1994	25,636	68	55.7	29.5
1995	26,996	67	55.3	29.2
1996	28,412	67	55.5	29.8
1997	29,867	67	55.0	29.3
1998	31,682	66	54.6	30.0
1999	33,220	66	54.8	29.9
2000	34,880	66	56.3	31.6
2001	36,428	66	56.4	29.8
2002	38,199	66	55.6	29.4
2003	38,998	66	57.1	30.2
2004	41,914	66	57.5	30.4
2005	43,930	67	57.3	30.6
2006	45,680	67	58.0	29.6
2007	47,392	67	58.1	29.3
2008	49,239	68	58.3	29.4
2009	50,799	68	59.2	28.6
2010	53,060	68	59.1	28.1
2011	55,104	68	59.5	27.4
2012	56,896	69	58.7	26.7
2013	58,556	69	58.2	26.1

\* Averages for New Annuitants in 2013.

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO **RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT**

	AN	NUITANTS			DISABILITY			Widow	
Years	Employee	Spouse <sup>1</sup>	Child	Ordinary	Duty	Occup.	Child <sup>2</sup>	Comp.	Total
1984	3,723	3,152	435	87	113			74	7,584
1985	3,861	3,234	406	95	126			70	7,792
1986	4,212	3,145	380	78	144			69	8,028
1987	4,467	3,100	354	66	156			75	8,218
1988	4,595	3,184	350	63	167			78	8,437
1989	4,772	3,202	335	58	179			71	8,617
1990	4,936	3,214	335	51	187			66	8,789
1991	5,033	3,137	329	75	192			68	8,834
1992	5,109	3,129	310	83	204			66	8,901
1993	5,195	3,151	294	59	211		160	66	9,136
1994	5,309	3,123	281	51	221		159	64	9,208
1995	5,510	3,133	254	51	231	1	144	60	9,384
1996	5,714	3,120	252	67	256	12	158	59	9,638
1997	5,945	3,104	240	59	270	36	130	59	9,843
1998	6,241	3,093	228	56	279	57	150	57	10,161
1999	6,520	3,118	249	57	291	76	150	58	10,519
2000	6,876	3,107	267	48	274	87	149	59	10,867
2001	7,192	3,114	255	52	265	95	143	59	11,175
2002	7,392	3,092	235	38	289	103	150	59	11,358
2003	7,498	3,083	247	29	285	97	139	63	11,441
2004	7,815	3,133	249	44	287	85	130	65	11,808
2005	8,026	3,107	247	35	298	82	139	65	11,999
2006	8,083	3,093	255	39	291	69	132	64	12,026
2007	8,155	3,137	242	52	284	65	136	64	12,135
2008	8,210	3,148	237	39	286	58	139	66	12,183
2009	8,227	3,111	232	44	284	52	138	66	12,154
2010	8,495	3,079	222	37	284	40	155	69	12,381
2011	8,763	3,091	214	43	270	36	176	70	12,663
2012	9,035	3,122	214	47	263	36	180	69	12,966
2013	9,194	3,130	206	46	269	35	213	66	13,159

<sup>1</sup> Includes reversionary.
 <sup>2</sup> Children's Disability Benefit not tracked before 1993.

#### Schedule of Active Member Data - Last 10 Years

	Number of Members at Year	Annual	% Increase in Average
Year	End	Average Salary	Salary
2004	13,569	64,434	%
2005	13,462	70,493	9.4%
2006	13,749	73,677	4.5%
2007	13,748	75,572	2.6%
2008	13,373	76,541	1.3%
2009	13,154	76,874	0.4%
2010	12,737	82,287	7.0%
2011	12,236	84,538	2.7%
2012	12,026	84,414	-0.1%
2013	12,161	83,499	-1.1%

## Schedule of Retired Member Data - Last 10 Years

Year	Number of Annuitants at Year End	Average Annual Benefit	Average Monthly Benefit	Average Age at Retirement	Average Age of Current Retirees	Average Years of Service at Retirement
2004	7,815	41,914	3,493	57.5	66	30.4
2005	8,026	43,930	3,661	57.3	67	30.6
2006	8,083	45,680	3,807	58.0	67	29.6
2007	8,155	47,392	3,949	58.1	67	29.3
2008	8,210	49,239	4,103	58.3	68	29.4
2009	8,227	50,799	4,233	59.2	68	28.6
2010	8,495	53,060	4,422	59.1	68	28.1
2011	8,763	55,104	4,592	59.5	68	27.4
2012	9,035	56,896	4,741	58.7	69	26.7
2013	9,194	58,556	4,880	58.2	69	26.1

	Number	Average	% Increase
	at Year	Annual	in Average
Year	End	Benefit	Benefit
2004	3,133	14,239	%
2005	3,107	15,339	7.7%
2006	3,093	15,903	3.7%
2007	3,137	16,464	3.5%
2008	3,148	16,992	3.2%
2009	3,111	17,159	1.0%
2010	3,079	17,415	1.5%
2011	3,091	17,898	2.8%
2012	3,122	18,466	3.2%
2013	3,130	18,965	2.7%

#### Schedule of Widow Annuitants - Last 10 Years

#### Schedule of Children's Annuities - Last 10 Years

	Number of Annuitants at Year	Average Annual	% Increase in Average
Year	End	Benefit	Benefit
2004	249	4,682	%
2005	247	4,967	6.1%
2006	255	5,053	1.7%
2007	242	5,518	9.2%
2008	237	5,615	1.8%
2009	232	5,749	2.4%
2010	222	5,683	(1.1)%
2011	214	5,992	5.4%
2012	214	6,365	6.2%
2013	206	6,388	0.4%

N/	Number of Annuitants at Year	Average Annual	% Increase in Average
Year	End	Benefit	Benefit
2004	44	32,607	%
2005	35	35,984	10.4%
2006	39	39,004	8.4%
2007	52	39,075	0.2%
2008	39	37,407	-4.3%
2009	44	38,081	1.8%
2010	37	40,665	6.8%
2011	43	41,864	2.9%
2012	47	42,164	0.7%
2013	46	41,958	-0.5%

#### Schedule of Ordinary Disability Recipients Data - Last 10 Years

#### Schedule of Duty Disability Recipients Data - Last 10 Years

	Number of Annuitants at Year	Average Annual	% Increase in Average
Year	End	Benefit	Benefit
2004	287	42,358	%
2005	298	45,447	7.3%
2006	291	47,503	4.5%
2007	284	48,713	2.5%
2008	286	48,682	-0.1%
2009	284	49,842	2.4%
2010	284	52,822	6.0%
2011	270	54,703	3.6%
2012	263	54,910	0.4%
2013	269	55,587	1.2%

Schedule of Occupational	<b>Disease Disability</b>	<b>Recipients Dat</b>	a - Last 10 Years
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Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2004	85	40,752	%
2005	82	41,537	1.9%
2006	69	42,640	2.7%
2007	65	44,360	4.0%
2008	58	45,548	2.7%
2009	52	46,427	1.9%
2010	40	48,439	4.3%
2011	36	49,341	1.9%
2012	36	50,375	2.1%
2013	35	52,191	3.6%

#### Schedule of Children's Disability Recipients Data - Last 10 Years

Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2004	130	1,230	%
		· · · · · · · · · · · · · · · · · · ·	
2005	139	1,200	-2.5%
2006	132	1,200	0.0%
2007	136	1,193	-0.5%
2008	139	1,200	0.5%
2009	138	1,200	0%
2010	155	1,200	0%
2011	176	1,200	0%
2012	180	1,200	0%
2013	213	1,200	0%

NOTE: Child disability benefits are \$100 per month.

#### Schedule of Widow's Compensation Annuities - Last 10 Years

	Number of Annuitants at Year	Average Annual	% Increase in Average
Year	End	Benefit	Benefit
2004	65	45,411	%
2005	65	52,595	15.8%
2006	64	55,096	4.8%
2007	64	56,056	1.7%
2008	66	55,386	-1.2%
2009	66	56,596	2.2%
2010	69	57,529	1.6%
2011	70	61,122	6.2%
2012	69	61,566	0.7%
2013	66	63,079	2.5%

#### Schedule of Health Insurance Supplement Data – Last 7 Years

Year	Number of Members at Year End	Annual Average Benefit Subsidy	% Increase in Average Benefit Subsidy
2007	9,890	\$820	%
2008	10,017	\$884	7.7%
2009	10,048	\$922	4.3%
2010	10,118	\$925	0.3%
2011	10,368	\$925	0.0%
2013	10,738	\$909	-1.7%
2013	10,809	\$911	0.2%

Note: Health Insurance Supplement benefits are \$95 per month for each annuitant that is not qualified to receive Medicare benefits or \$65 per month for each annuitant that is qualified to receive Medicare benefits. Health insurance supplement benefits are not based upon final average salary or credited service year. The benefit amount is exclusively determined by Medicare eligibility.

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