

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



## COMPREHENSIVE ANNUAL FINANCIAL REPORT

a component unit of the City of Chicago  
for the year ended December 31, 2012







# Comprehensive Annual Financial Report

A Component unit  
of the City of Chicago  
for the year ended  
December 31, 2012

*Prepared by*

**Regina Tuczak**

Acting Executive Director and Comptroller

**Pacifico V. Panaligan**

Assistant Comptroller

221 North LaSalle Street  
Suite 1626  
Chicago, IL 60601

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## Policemen's Annuity and Benefit Fund

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POLICEMEN’S ANNUITY AND BENEFIT FUND OF CHICAGO  
 Comprehensive Unit Financial Report  
 Year Ended December 31, 2012  
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# Introductory Section

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# Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Policemen's Annuity and Benefit Fund of Chicago Illinois

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
December 31, 2011

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



*Christopher P. Morinell*

President

*Jeffrey R. Egan*

Executive Director

Members of the Board  
Representing the Public  
Amer Ahmad  
Juan C. Avila  
Stephanie D. Neely, Vice-President  
Lois A. Scott

Representing the Active Police  
and Disability Beneficiaries  
James P. Maloney, Recording Secretary  
Michael K. Lappe  
Brian E. Wright

Representing the Annuity  
Kenneth A. Hauser, President

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

221 North LaSalle Street-Room 1626  
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Outside Chicago: 1-800-656-6606  
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Regina Tuczak, CPA  
Acting 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 year ending December 31, 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 for each year and the filing of a detailed report of the affairs of the Fund to the State of Illinois Department of Insurance and the City of Chicago each year. 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, 2012 and 2011, 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 \$38 million from December 31, 2011 to December 31, 2012, despite extremely strong returns of +12.39% for the year, which highlights the acuteness of the effects of underfunding on the Fund's operations. All asset classes showed positive returns, with Equities and Private Capital (especially Private Equity and Real Estate) posting exceptionally strong performance. In 2012, the number of professional investment management firms investing on behalf of the Fund declined somewhat, in an effort to streamline the allocation in traditional asset portfolios, such as Equity. These firms make investment decisions under the Prudent Person Rule authorized by State statutes and the Investment Policy guidelines adopted by the Board of Trustees. The Board also employs an 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 (+11.60% 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 2012, using the GASB 25 and 43 methods, was \$3.149 billion with a corresponding actuarial liability of \$10.221 billion. The GASB 25 actuarial liability increased approximately \$512 million, up from \$9.688 billion in 2011. Fund assets currently fund 30.8% of this liability, decreasing from a funded ratio of 35.6% in 2011. The decrease in the funded ratio is the result of many issues, including the change in the Fund's investment return rate from 8.0% to 7.75% as of December 31, 2012 and 2011, respectively. The very-long-term expected returns of the Fund was the most important factor supporting the decision to lower the discount rate. Specifically, the Fund's investment consultant, NEPC, LLC, now projects 30-year returns at 7.7%, down from 8.1% in the prior year.

Other factors contributing to the decline in the funded ratio include continued benefit payments in excess of contributions and increasing applications for benefits with a declining 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 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 0.7% of the total deductions from plan assets in both 2012 and 2011. 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. In 2010, an online estimate program for retirement benefits for members was added and is available at the Fund's website. The estimate program allows members to input various personal data pertinent to their career as sworn officers with the City of Chicago, and receive an on-line estimate of their pension benefit. In 2011, integration of current benefit information between the Fund's pension system and the Fund's benefit payment system was completed to allow for more accurate and efficient processing of payments. Additionally, in 2011, the Fund's website was upgraded for improved functionality and significantly enhanced content. The Fund's website, located at [www.chipabf.org](http://www.chipabf.org), is updated timely with important information for members.

Further enhancements are scheduled for 2013, including an on-line program that will allow members to estimate service purchase costs for military service performed prior to appointment with the Chicago Police Department. Additionally, integration of historical benefit payment information onto the Fund's pension administration system is underway.

### **Professional Services**

The Fund's actuarial services are provided by Gabriel, Roeder, Smith & Company. The annual audit of the financial statements was conducted 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, 2011. 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 three years, the Fund has processed over 1,600 retirement applications and benefits. These are records 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.

I also wish to acknowledge the retirement of John J. Gallagher, Jr. on November 30, 2012. Mr. Gallagher provided over thirty years of service to the Fund, including the last seven years of his career as Executive Director. Mr. Gallagher's service to the Fund is deeply appreciated and we wish Mr. Gallagher and his family an enjoyable and healthy retirement.

It is an honor and a privilege to serve the men and women of the Chicago Police Department and the City of Chicago. 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,

A handwritten signature in black ink that reads "Regina Tuczak". The signature is written in a cursive style with a large, looped "R" and a long, sweeping "T".

Regina Tuczak  
Acting Executive Director  
July 24, 2013

**RETIREMENT BOARD MEMBERS AND OFFICE STAFF**

**December 31, 2012**

**Appointed Trustees**

Amer Ahmad  
Michael A. Conway, Vice President and  
Investment Committee Chairman  
Stephanie D. Neely, Treasurer  
Lois A. Scott

**Elected Trustees**

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

**Office Staff Members**

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

**Support Staff**

Adarsh Bagai  
Karina Fruin  
Carol Lopez  
Dorothy Miller  
Ed Rausch

Robert Crawford  
Kay Hylton  
Kris Matalik  
Richard Mulhbacher  
Alma Rivera

Joseph Ferreri  
Anthony Kiefer  
Anne McGowan  
Maggie O'Grady  
Erwin Santos

# **PROFESSIONAL CONSULTANTS**

## **LEGAL ADVISOR**

David R. Kugler, Esquire

## **MEDICAL ADVISOR**

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**

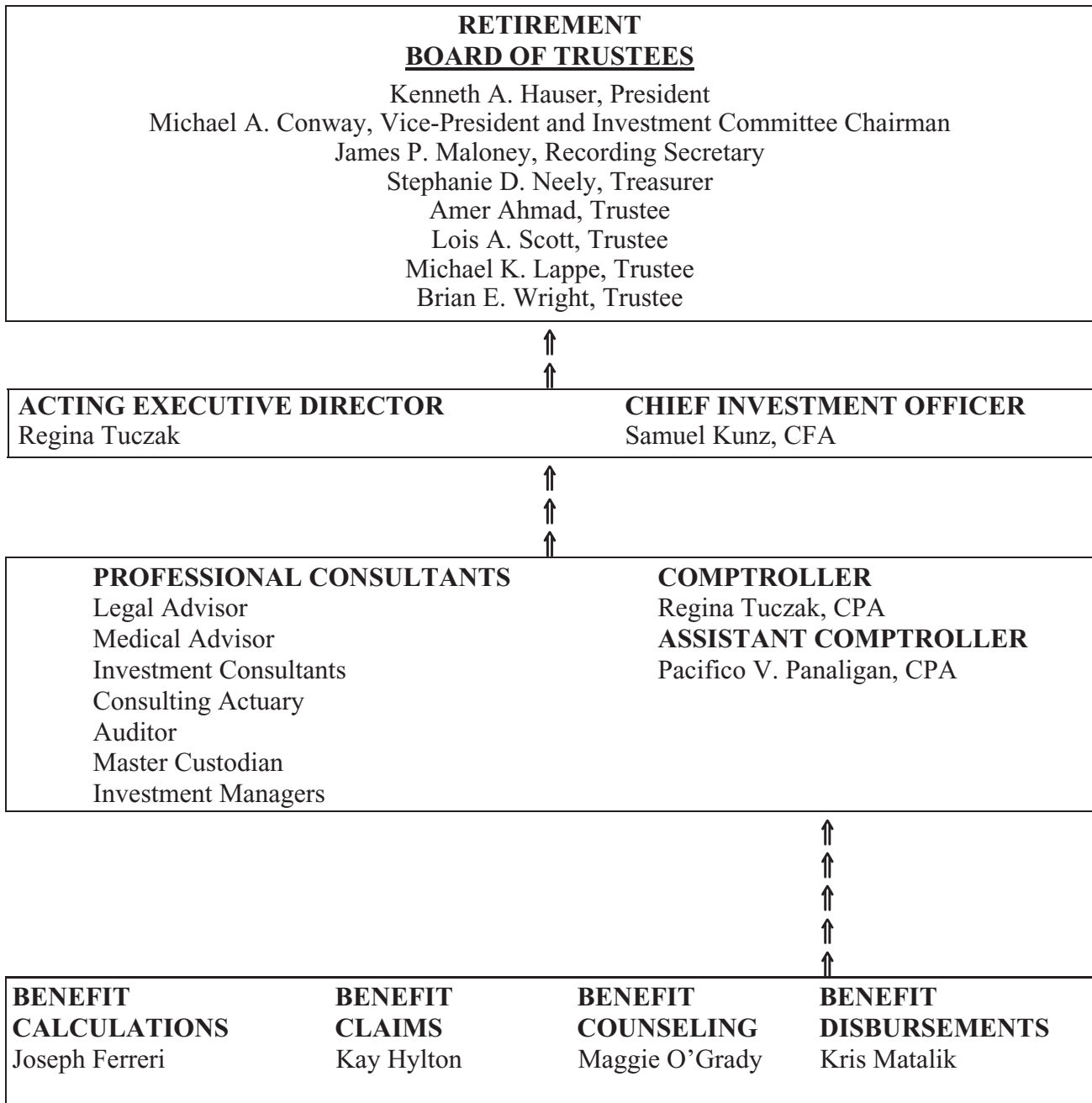
Chase



## **INVESTMENT MANAGERS**

**ABR Chesapeake**  
**Adams Street Partners**  
**Aetos Capital LLC**  
**AG Realty**  
**Apollo Real Estate Advisors**  
**Ariel Capital Management**  
**Artisan Partners**  
**CBRE Clarion Securities**  
**Capital Guardian Trust Co.**  
**The Carlyle Group**  
**Dearborn Partners**  
**Denali Advisors**  
**DRA Advisors LLC**  
**European Investors Inc.**  
**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**  
**Macquarie Group**  
**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**  
**Vanguard Group, Inc.**  
**Wellington Management Company**  
**Wells Capital Management**  
**William Blair & Company**

## ORGANIZATION CHART



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)



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# Financial Section

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## REPORT OF INDEPENDENT AUDITORS

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

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, 2012 and 2011, and the related notes to the financial statements, which collectively comprise the basis financial statements 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 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.

### **Opinion**

In our opinion, based on our audits, the financial statements referred to above present fairly, in all material respects, the statements of plan net assets of the Policemen's Annuity and Benefit Fund of Chicago as of December 31, 2012 and 2011, and the changes in plan net assets for the years then ended in conformity with U.S. generally accepted accounting principles.

### **Required supplementary information**

U.S. generally accepted accounting principles require that 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.

### **Other supplementary information**

Our audits were conducted for the purpose of forming opinions 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.

The schedules of administrative expenses, consulting costs, and investment fees are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied by us 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, based on our audits, the procedures performed as described above, the 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.



June 26, 2013

## MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited)

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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 Plan Net Assets** report the Fund's assets, liabilities, and the resultant net assets where assets minus liabilities equal net assets available held in trust for pension benefits at the end of the year.
- **The Statements of Changes in Plan Net Assets** show the sources and uses of funds during the calendar year, where additions minus deductions equal the net increase (or decrease) in net assets held in trust for pension benefits available 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 net assets of the Fund increased by \$38 million, or 1.2%, to \$3.213 billion during 2012. At December 31, 2011, the net assets of the Fund decreased by \$264 million, or 7.7%, to \$3,176 million from the December 31, 2010 balance of \$3,440 million.
- Fund investment income earned, net of investment-related expenses was approximately \$352.0 million during 2012, compared with a gain of approximately \$32.5 million during 2011. The returns reflect strong performance across all asset classes. Equities in general and non-U.S. Equities in particular showed exceptionally strong returns. Private Capital, especially Private Equity and Real Estate also showed robust increases in values. On a relative basis, non-U.S. Equities, Fixed Income, and Private Equity significantly outperformed their respective benchmarks. On the other hand, U.S. Equity, Infrastructure, and Real Estate somewhat lagged their respective indices. From an allocation perspective, it is worth noting that in late 2011, 10% of the total allocation was reallocated from U.S. Equity to Global Tactical Asset Allocation strategies in order to render the overall allocation somewhat more reactive to rapidly evolving markets.

**Financial Highlights** *(continued)*

- The Fund received contributions of \$95.9 million from members and \$207.2 million from the City of Chicago in 2012, compared to contributions of \$98.2 million from members and \$183.5 million from the City of Chicago in 2011. The number of active members declined 1.7% from 2011 to 2012; which resulted in 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. The one-time payment of retroactive wages resulted in \$12.3 million of additional member contributions in 2010. Consequently, the increase in employer contributions of \$23.7 million in 2012 is reflective of the statutory multiplier of 2.0 times these 2010 member wages.
- Benefit payments, excluding death benefits, increased by approximately \$34.7 million in 2012, from \$566.5 million in 2011 to \$601.2 million in 2012. The number of retirees and beneficiaries increased in 2012 by 303 members, or 2.4%, thus contributing to the increase. Since January 1, 2010, the Fund has experienced approximately 1,600 retirements of active members, which resulted in significant increases in benefits in 2010, 2011 and 2012. Another reason for 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 increased from 2011 to 2012 by approximately \$3.9 million, from \$8.8 million to \$12.7 million, respectively. The increase is due to the large volume of retirements in 2012, with a greater number of retiring officers with a single, unmarried status at retirement, thus receiving a refund of spousal contributions.
- Administrative expenses increased in 2012 by approximately \$0.5 million. The increase is almost entirely relating to a one-time rise in legal fees relating to Fund investment matters. Outside of consultant fees, Fund management has worked vigorously to maintain and control administrative expenses, including a reduction in \$0.1 million in salaries and related benefits.
- 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 decrease, from 32.8% at December 31, 2011 to 31.4% at December 31, 2012. The decrease reflects a significant increase in the actuarial liability at December 31, 2012, as compared to December 31, 2011, primarily due to a decrease in the investment return assumption from 8.0% at December 31, 2011 to 7.75% at December 31, 2012.
- Under GASB numbers 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 funding ratio of the Fund using an actuarial value of assets experienced a decrease, from 35.6% at December 31, 2011 to 30.8% at December 31, 2012.

**MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited)**

**Financial Highlights** *(continued)*

- In compliance with GASB No. 45, the Fund recognizes a liability for other post-employment benefits (OPEB), which represents health insurance coverage for active and retired Fund employees. Expense of \$0.463 million and \$0.492 million was recognized in 2011 and 2012, respectively, resulting in a total accrued liability of \$1,160 million and \$1,482 million as of December 31, 2011, and 2012, respectively.

**Plan Net Assets**

A summary of Plan net assets is presented below:

<b>Plan Net Assets</b>					
<b>(In millions)</b>					
<b>As of December 31, 2012, 2011, and 2010</b>					
	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2012–2011</u>	
				<u>\$</u>	<u>%</u>
Receivables	\$ 221.1	\$ 196.7	\$ 212.9	\$ 24.4	12.4
Brokers–unsettled trades	159.4	194.0	276.4	(34.5)	(17.8)
Investments, at fair value	3,066.8	3,094.8	3,301.1	(28.0)	(0.9)
Invested securities lending collateral	<u>255.4</u>	<u>312.1</u>	<u>295.7</u>	<u>(56.6)</u>	<u>(18.1)</u>
Total assets	<u>\$ 3,702.8</u>	<u>3,797.6</u>	<u>4,086.1</u>	<u>(94.8)</u>	<u>(2.5)</u>
Brokers–unsettled trades	227.7	304.4	344.2	(76.7)	(25.2)
Securities lending payable	255.4	312.1	295.7	(56.6)	(18.1)
OPEB obligation	1.5	1.2	0.8	0.3	27.7
Refunds and accounts payable	<u>4.7</u>	<u>4.4</u>	<u>5.7</u>	<u>0.3</u>	<u>6.7</u>
Total liabilities	<u>489.4</u>	<u>622.1</u>	<u>646.4</u>	<u>(132.7)</u>	<u>(21.3)</u>
Net assets	<u>\$ 3,213.4</u>	<u>\$ 3,175.5</u>	<u>\$ 3,439.7</u>	<u>\$ 37.9</u>	<u>1.2</u>

The increase in net assets of \$37.9 million in 2012 was driven primarily by investment earnings, which were significantly offset by immediate benefit funding needs. The assets available for investment earned 12.39% in 2012, compared to an investment gain of 0.78% in 2011. Mitigation of some of the tail risks associated with the global economy in general and European concerns in particular lifted sentiment towards risky assets. Specifically, global equities showed extremely strong performance, which boosted the overall portfolio during the measurement period.



**MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited)**

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**Changes in Plan Net Assets**

The following table reflects a comparative summary of various changes in Plan net assets.

**Changes in Plan Net Assets  
(In millions)  
Years Ended December 31, 2012, 2011 and 2010**

	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2012-2011</u> <u>Change</u>	
				<u>\$</u>	<u>%</u>
<b>ADDITIONS</b>					
Member contributions	\$ 95.9	\$ 98.2	\$ 108.4	\$ (2.3)	(2.4)
Employer contributions	207.2	183.5	183.8	23.7	12.9
Net investment gains (losses) and investment income	352.0	32.5	368.7	319.5	982.4
Securities lending income (loss)	1.2	1.2	0.9	0.0	3.5
Miscellaneous income	<u>0.4</u>	<u>0.1</u>	<u>0.0</u>	<u>0.3</u>	<u>305.1</u>
Total additions	<u>656.7</u>	<u>315.5</u>	<u>661.8</u>	<u>341.2</u>	<u>108.1</u>
<b>DEDUCTIONS</b>					
Annuity, disability, and death benefits	602.8	568.0	536.3	34.8	6.1
Refunds of contributions	11.2	7.3	7.6	3.8	52.0
OPEB expense	0.5	0.5	0.4	0.0	0.0
Administrative expenses	<u>4.4</u>	<u>3.9</u>	<u>3.9</u>	<u>0.5</u>	<u>12.9</u>
Total deductions	<u>618.8</u>	<u>579.7</u>	<u>548.2</u>	<u>39.1</u>	<u>6.8</u>
Net increase/(decrease)	<u>\$ 37.9</u>	<u>\$ (264.2)</u>	<u>\$ 113.6</u>	<u>\$ 302.1</u>	<u>114.4</u>

The Fund experienced a net increase in net assets in 2012. The increase reflects strong investment returns of 12.39%, which were offset significantly by increasing benefit payments. The Fund continues to liquidate assets as contributions from members and the employer are approximately \$311 million less than benefits to members. This liquidation of assets is consistent with 2011 activity, in which contributions from members and the employer were approximately \$294 million less than benefits to members. The Fund continues to experience retirement levels in 2012, 2011 and 2010 significantly above levels in 2009 and 2008. 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 1,600 active members occurred during the three years of 2012, 2011 and 2010.

**MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited)**

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**Investment Activities**

The strategic allocation was unchanged in 2012. 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 exposure was reduced through the year because of immediate benefit funding requirements. Also, the structure of the U.S. Equity allocation was reviewed in the second half of the year. A few managers were terminated and the portfolio was consolidated in a more efficient configuration.

**Investment Returns  
Years Ended December 31, 2012, 2011 and 2010**

	<u>2012</u>	<u>2011</u>	<u>2010</u>
Total fund (%)	12.39	0.78	12.72
Equities	17.66	(4.68)	15.60
Fixed income	6.72	7.88	7.91
Alternatives	12.05	(2.91)	5.29
Private capital	8.01	12.78	11.40
Cash and cash equivalents	0.14	0.13	0.19

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, 2012, 2011 and 2010.

**Changes in Plan Membership  
As of December 31, 2012, 2011 and 2010**

	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2012-2011</u> <u>Change</u>	<u>%</u>
Retirees and beneficiaries receiving benefits	12,966	12,663	12,380	303	2.4
Active employees	12,026	12,236	12,737	(210)	(1.7)
Terminated (inactive members) employees entitled to benefits or refunds of contributions	<u>664</u>	<u>624</u>	<u>620</u>	<u>40</u>	<u>6.4</u>
Total	<u>25,656</u>	<u>25,523</u>	<u>25,737</u>	<u>133</u>	<u>0.5</u>

## **Funding Status**

The actuarial value of assets, using the GASB 25 and 43 methods, for the December 31, 2012 valuation was \$3,149 million and the actuarial liability was \$10,221 million. The actuarial liability increased by approximately \$532 million in 2012, from \$9,688 million in 2011 to \$10,221 million in 2012. The assets currently fund 30.8% of this liability, a decrease from the 35.6% funded ratio in 2011. The decrease in the funded ratio resulted largely from the change in the investment return assumption in 2012 from 8.0% in 2011 to 7.75% in 2012. Additionally, the significant excess of benefit payments over contributions on an annual basis continues to speed the decline in the funded ratio. Also, the Fund uses a five-year actuarial smoothing method in valuing its assets to determine its funded status, thus investment losses experienced in 2008, which were \$1,104 million, are reflected in the actuarial value of assets over a five-year period, concluding in 2012. Likewise, actuarial investment gains and losses from 2008 through 2012 are also amortized over a five-year period.

The Board of Trustees is very concerned with the funded level of actuarial liabilities. The unfunded accrued actuarial liability for pension benefits and for the health insurance supplement increased from 2011 to 2012. Additionally, the annual required contribution for these benefits, as computed under GASB 25 and 43, was not reached in 2012 or 2011. However, the Board has taken steps to ensure a sufficient level of liquidity within the portfolio to fund monthly benefits, while pursuing its long-term goal of maximum investment performance.

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

Police officers hired after January 1, 2011, are subject to different provisions in their defined benefit pension plan provisions. The changes are similar to other revisions made to various state and local pension systems in Illinois, including a change in the minimum retirement age for a non-reduced benefit, changes in the method of determining final average salary, changes in the calculation of the annual cost of living increase for retirees, changes in survivor benefits, and a salary cap on compensation included in the calculation of pension benefits.

The formula by which the Employer, the City of Chicago, will fund members' pension benefits was significantly changed, effective with the City of Chicago tax levy beginning in 2015. Previously, the City of Chicago met its fiduciary obligation for funding through a tax multiplier calculation that was based upon active member contributions. Public Act 096-1495 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. 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.

**Funding Status** *(continued)*

The financing for the Fund, as measured and reported for the City of Chicago 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 as defined in Public Act 096-1495 will affect the actuarial valuation as of January 1, 2015, and the development of contributions for Plan year-ending December 31, 2015. The Fund intends to adopt the statutory change in the actuarial value of assets, effective for the plan year beginning January 1, 2015. Consequently, the financial statements included herein continue the five-year smoothing method already in place prior to this legislation without a reset of asset values at March 30, 2011.

**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. Tuzak  
Acting 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 Plan Net Assets

As of December 31, 2012 and 2011

	<u>2012</u>	<u>2011</u>
<b>ASSETS</b>		
Cash	\$ 250	\$ 250
<i>Receivables</i>		
Employer tax levies, net of allowance for loss of \$18,678,661 in 2012 and \$17,953,633 in 2011	209,436,721	184,153,465
Member contributions	4,519,144	4,588,788
Interest and dividends	7,137,650	7,995,119
Accounts receivable—due from brokers	159,429,849	193,960,667
	<u>380,523,364</u>	<u>390,698,039</u>
<i>Investments, at fair value</i>		
U.S. common stock and other equity	564,104,261	764,633,977
Collective investment funds, stock	315,897,623	159,441,205
Collective investment funds, international equities	32,031,415	25,893,101
Collective investment funds, fixed income	308,491,943	376,262,936
International equity	667,303,919	554,553,305
Bonds and notes	598,489,579	625,957,258
Short-term instruments	93,899,392	136,445,651
Infrastructure	39,609,925	42,980,775
Forward contracts and swaps	44,645,959	11,243,614
Hedge fund-of-funds	85,754,714	79,205,340
Real estate	125,923,043	120,609,791
Venture capital and private equity	190,685,937	197,576,112
	<u>3,066,837,710</u>	<u>3,094,803,065</u>
Invested securities lending cash collateral	255,434,143	312,160,256
	<u>3,702,795,467</u>	<u>3,797,661,610</u>
Total assets		
<b>LIABILITIES</b>		
Refunds and accounts payable	4,734,680	4,437,278
Trade accounts payable—due to brokers	227,710,970	304,394,921
Securities lending cash collateral	255,434,143	312,160,256
OPEB obligation	1,482,440	1,160,474
	<u>489,362,233</u>	<u>622,152,929</u>
Total liabilities		
<b>Net assets held in trust for pension benefits</b>	<u>\$ 3,213,433,234</u>	<u>\$ 3,175,508,681</u>

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 Plan Net Assets

For the Years Ended December 31, 2012 with and 2011

	<u>2012</u>	<u>2011</u>
<b>ADDITIONS</b>		
<i>Contributions</i>		
Employer	\$ 207,228,022	\$ 183,521,526
Plan member salary deductions	95,892,052	98,222,258
Total contributions	<u>303,120,074</u>	<u>281,743,784</u>
<i>Investment income</i>		
Net appreciation (depreciation) in fair value of investments	300,497,700	(20,412,408)
Interest	22,830,852	23,149,998
Dividends	32,217,299	36,153,795
Real estate income	5,690,917	3,298,599
	<u>361,236,768</u>	<u>42,189,984</u>
<i>Investment activity expenses</i>		
Investment management fees	(8,448,610)	(8,899,000)
Custodial fees	(190,575)	(186,900)
Investment consulting fees	(596,499)	(583,351)
Total investment activity expenses	<u>(9,235,684)</u>	<u>(9,669,251)</u>
Net income from investing activities	<u>352,001,084</u>	<u>32,520,733</u>
<i>From securities lending activities</i>		
Securities lending income	989,371	963,567
Borrower rebates	479,540	455,422
Bank fees	(293,649)	(283,613)
Net income from securities lending activities	<u>1,175,262</u>	<u>1,135,376</u>
Total net investment income	<u>353,176,346</u>	<u>33,656,109</u>
Miscellaneous income	<u>423,216</u>	<u>104,468</u>
Total additions	<u>656,719,636</u>	<u>315,504,361</u>
<b>DEDUCTIONS</b>		
Pension and disability benefits	601,213,032	566,457,386
Death benefits	1,543,000	1,510,800
Refunds of employee deductions	11,150,565	7,337,234
	<u>613,906,597</u>	<u>575,305,420</u>
Administrative expenses	4,396,638	3,895,731
OPEB expense	491,848	463,226
Total deductions	<u>618,795,083</u>	<u>579,664,377</u>
Net increase (decrease)	37,924,553	(264,160,016)
<i>Net assets held in trust for pension benefits</i>		
Beginning of year	<u>3,175,508,681</u>	<u>3,439,668,697</u>
<b>End of year</b>	<u>\$ 3,213,433,234</u>	<u>\$ 3,175,508,681</u>

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)

Notes to Financial Statements

December 31, 2012 and 2011

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## 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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**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 fair value, which approximates cost. 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 plan net assets 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 plan net assets.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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

Recent Accounting Pronouncements

The following standards were adopted by the Fund during 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.

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

GASB's codification standard on *Items Previously Reported as Assets and Liabilities* will be 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—2012—an amendment of GASB Statements No. 10 and No. 62* will be 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.

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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**NOTE 2**      **PENSION PLAN** *(continued)*

Plan Description and Contribution Information *(continued)*

The City of Chicago payrolls for employees covered by the Fund for the years ended December 31, 2012 and 2011 were \$1,015,170,686 and \$1,034,403,526, respectively. At December 31, 2012 and 2011, the Fund membership consisted of the following:

	<b>2012</b>	<b>2011</b>
Active employees	12,026	12,236
Retirees and beneficiaries currently receiving benefits	12,966	12,663
Terminated employees entitled to benefits or a refund of contributions, but not yet receiving them	664	624
	<u>25,656</u>	<u>25,523</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%.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**NOTE 2**      **PENSION PLAN** *(continued)*

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.



**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**NOTE 2 PENSION PLAN** *(continued)*

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 as defined in the new legislation (Public Act 096-1495) will affect the actuarial valuation as of January 1, 2015, and the development of contributions for plan year end December 31, 2015. The Fund intends to adopt the statutory change in the actuarial value of assets effective for the plan year beginning January 1, 2015. Consequently, the 2012 and 2011 financial statements continue the five-year smoothing method already in place prior to this legislation without a reset of asset values at March 30, 2011.

Funded Status and Funding Progress

The funded status of the Fund as of December 31, 2012 and 2011, the most recent actuarial valuation dates, is as follows:

<u>Actuarial Valuation Date</u>	<u>Actuarial Value of Assets (a)</u>	<u>Actuarial Accrued Liability (AAL) Entry Age (b)</u>	<u>Unfunded AAL (UAAL) (b-a)</u>	<u>Funded Ratio (a/b)</u>	<u>Covered Payroll (c)</u>	<u>UAAL as a Percentage of Covered Payroll ([b-a]/c)</u>
12/31/12	\$ 3,148,929,770	\$ 10,051,827,391	\$ 6,902,897,621	31.33%	\$ 1,015,170,686	679.97%
12/31/11	3,444,690,362	9,522,395,036	6,077,704,674	36.17	1,034,403,526	587.56

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

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

(A Component Unit of the City of Chicago)

Notes to Financial Statements

December 31, 2012 and 2011

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**NOTE 2 PENSION PLAN** *(continued)*

Funded Status and Funding Progress *(continued)*

Additional information as of the latest actuarial valuation follows:

Valuation date	December 31, 2012 and 2011
Actuarial cost method	Entry age normal
Amortization method	Level percent open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
<i>Actuarial assumptions</i>	
Investment rate of return	8.0% - 2011; 7.75%-2012
Projected salary increases	4.0% per year, plus additional percentage related to service
Cost of living allowance	3.0% (1.50% for retirees born after January 1, 1955)
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 June 30, 2013 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 June 30, 2013 for each annuitant who is qualified to receive Medicare benefits. These subsidy rates expire on June 30, 2013. As of December 31, 2012, a renewal agreement with the City of Chicago for continuation of the subsidy is not in place.

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

Plan Description and Contribution Information *(continued)*

The disclosures herein assume continuation of the agreement and the current subsidy amounts. Should the agreement not be renewed or should the subsidy rates change, differences in the liabilities disclosed could be materially significant.

These supplemental payments by the Fund are included in employer contributions on the statements of changes in plan net assets. 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 pay-as-you-go basis. There is no separate healthcare account or assets to pay the health insurance supplement.

At December 31, 2012 and 2011, the number of annuitants or surviving spouses who had subsidized health insurance totaled 10,738 and 10,368, respectively. Of the 2,228 and 2,295 remaining annuitants or surviving spouses, at December 31, 2012 and 2011, 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 664 and 624 terminated employees entitled to benefits or a refund, at December 31, 2012 and 2011, respectively, approximately 203 and 123 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 2012 and 2011, the Fund received contributions of \$9,765,686 and \$9,591,394, respectively, from the City, and remitted contributions of insurance premiums to the City of \$9,765,686 and \$9,591,394, 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, 2012 or 2011.

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**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, 2012 and 2011, which are 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)
12/31/12	\$ -	\$ 168,811,118	\$ 168,811,118	0.00%	\$ 1,015,170,686	16.63%
12/31/11	-	165,954,869	165,954,869	0.00	1,034,403,526	16.04

The schedule of funding progress, presented as Required Supplementary Information (RSI) following the notes to the financial statements, present multi-year 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	12/31/2012 and 12/31/2011
Actuarial cost method	Entry age normal
Amortization method	Level percent open
Remaining amortization period	30 years
Asset valuation method	No assets (pay-as-you-go)
<i>Actuarial assumptions</i>	
OPEB investment rate of return	4.5%
Projected salary increases	4.0% per year, plus additional percentage related to service
Health cost trend rate	0.0% (fixed dollar subsidy)

**NOTE 4 CASH AND INVESTMENT RISK**

Cash

The bank balance and carrying amount of the Fund's deposits at December 31, 2012 were \$1,028,256 and (\$751,337), respectively; and \$493,439 and (\$1,261,343) at December 31, 2011, respectively. These balances excluded \$250 of petty cash. The bank balance at December 31, 2012 and 2011 is on deposit with the City Treasurer and is insured or collateralized by securities held by the City Treasurer in the Fund's name.

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**NOTE 4 CASH AND INVESTMENT RISK** *(continued)*

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, 2012 and 2011.

	<u>2012</u>	<u>2011</u>
U.S. Government and agency fixed income	\$ 280,359,077	\$ 371,075,296
U.S. corporate fixed income	318,130,502	254,881,962
U.S. common collective fixed income funds	179,601,366	266,262,936
Global common collective fixed income funds	128,890,577	110,000,000
U.S. equities	564,104,261	764,633,977
U.S. common collective stock funds	315,897,623	159,441,205
International equity common collective fund	32,031,415	25,893,101
Foreign equities	667,303,919	554,553,305
Pooled short-term investment funds	58,023,962	71,017,150
Infrastructure	39,609,925	42,980,775
Real estate	125,923,043	120,609,791
Venture capital	190,685,937	197,576,112
Forward contracts and swaps	44,645,959	11,243,614
Hedge fund-of-funds	85,754,714	79,205,340
Cash and cash equivalents	35,875,430	65,428,501
<b>Total investments at fair value</b>	<u><u>\$ 3,066,837,710</u></u>	<u><u>\$ 3,094,803,065</u></u>

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**NOTE 4**      **CASH AND INVESTMENT RISK** (*continued*)

Investment Summary

There are no individual investments held by the Fund that represent 5% or more of net assets held in trust for pension benefits, except for the Fund's investment in the MFO GMO Global Asset Allocation Fund, which amounted to \$176,026,045 and \$159,441,205 at December 31, 2012 and 2011, respectively.

The Fund's investments were managed by approximately 47 external investment managers during 2012 and 2011, 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, and foreign currency risk. 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 plan net assets.

*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 2012 and 2011. 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.

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



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**NOTE 4 CASH AND INVESTMENT RISK** *(continued)*

Investment Risks *(continued)*

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

<u>Investment Type</u>	<u>Fair Value</u>	<u>Investment Maturities</u>			
		<u>Less than 1 Year</u>	<u>1 to 6 Years</u>	<u>7 to 10 Years</u>	<u>More than 10 Years</u>
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>	<u>\$ 11,097,760</u>	<u>\$ 204,602,648</u>	<u>\$ 101,296,604</u>	<u>\$ 281,492,568</u>

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**NOTE 4 CASH AND INVESTMENT RISK (continued)**

Investment Risks (continued)

At December 31, 2011, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

Investment Type	Fair Value	Investment Maturities			
		Less than 1 Year	1 to 6 Years	7 to 10 Years	More than 10 Years
Asset-backed securities	\$ 35,752,259	\$ -	\$ 18,017,079	\$ 2,884,423	\$ 14,850,756
Commercial mortgage-backed securities	30,262,053	-	-	257,092	30,004,961
Corporate bonds	172,368,570	3,299,204	72,208,005	52,633,404	44,227,957
Government agency securities	7,027,300	-	5,565,767	1,074,122	387,411
Government bonds	140,236,547	-	79,531,167	20,425,055	40,280,325
Government mortgage-backed securities	212,973,337	-	1,317,988	3,564,253	208,091,096
Government issued commercial mortgage-backed securities	3,488,511	-	-	3,488,511	-
Guaranteed fixed income	790,733	790,733	-	-	-
Index-linked government funds	7,349,601	560,421	1,294,361	5,494,819	-
Municipal principal bonds	7,608,318	-	155,552	1,942,872	5,509,894
Non-government-backed collateralized mortgage obligations	8,100,029	-	166,745	2,128,022	5,805,262
	<u>\$ 625,957,258</u>	<u>\$ 4,650,358</u>	<u>\$ 178,256,664</u>	<u>\$ 93,892,573</u>	<u>\$ 349,157,662</u>

*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.

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**NOTE 4 CASH AND INVESTMENT RISK** *(continued)*

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

	<b>Fair Value</b>	
	<b>2012</b>	<b>2011</b>
<b>Quality Rating</b>		
AAA	\$ 44,665,030	\$ 42,043,466
AA	33,840,143	19,942,594
A	83,462,424	66,680,101
BBB	96,908,753	85,993,665
BB	12,408,998	9,247,168
B	2,125,064	2,765,016
Not rated	35,375,518	20,716,106
CCC through D	<u>9,344,572</u>	<u>7,493,846</u>
Total credit risk of U.S. corporate fixed income	318,130,502	254,881,962
U.S. Government and agency fixed income securities	<u>280,359,077</u>	<u>371,075,296</u>
	<u>\$ 598,489,579</u>	<u>\$ 625,957,258</u>

*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, 2012 and 2011 deposits of \$7,422,728 and \$5,597,226, 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.

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**NOTE 4 CASH AND INVESTMENT RISK** *(continued)*

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:

	<u>Fair Value</u>	
	<u>2012</u>	<u>2011</u>
<u>Currency</u>		
Australian Dollar	\$ 11,763,761	\$ 9,930,392
Brazilian Real	7,120,637	7,198,246
British Pound Sterling	106,139,596	104,128,663
Canadian Dollar	24,745,718	26,997,593
Chinese Yuan Renminbi	(604,634)	1,904,861
Czech Koruna	319	91,170
Danish Krone	4,500,501	4,250,216
Euro Currency Unit	154,870,339	115,151,982
Hong Kong Dollar	60,149,973	39,076,595
Hungarian Forint	189	172
Indian Rupee	7,993,682	2,840,703
Indonesian Rupiah	6,528,444	5,575,641
Japanese Yen	75,714,367	62,513,696
Malaysian Ringgit	2,469,364	1,682,800
Mexican Peso	5,582,891	7,129,667
New Israeli Shekel	1,202,667	703,127
New Taiwan Dollar	6,684,631	4,274,584
Nigerian Naira	355,138	782
Norwegian Krone	7,005,742	3,814,658
Polish Zloty	1,623,069	1,782,972
Singapore Dollar	8,035,118	5,656,373
South African Rand	5,020,198	5,974,553
South Korean Won	14,478,173	11,744,146
Swedish Krona	10,611,473	10,459,335
Swiss Franc	42,018,747	35,246,370
Taiwan Dollar	-	-
Thai Baht	5,376,538	3,399,319
Turkish Lira	1,397,633	916,122
	<u>570,784,274</u>	<u>472,444,738</u>
<b>Total investments in foreign currency</b>	<u>\$ 570,784,274</u>	<u>\$ 472,444,738</u>

## POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

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### NOTE 4 CASH AND INVESTMENT RISK *(continued)*

#### 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 plan net assets. The credit risk associated with these contracts is minimal, as they are traded on organized exchanges and settled daily.

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 rate future contracts to (sell) U.S. Treasury securities and German Treasury securities with notional amounts of \$3,592,696 and \$3,045,744, respectively. At December 31, 2011, the Fund had interest rate futures contracts to purchase LIBOR/Euro dollars, U.K. Treasury securities, and U.S. Treasury securities with notional amounts of \$54,609,434, \$2,847,910, and \$6,577,730, respectively. At December 31, 2011, the Fund also had interest rate future contracts to (sell) Australian treasury securities, Canadian treasury securities, LIBOR/Euro dollars, and U.S. Treasury securities with notional amounts of (\$2,828,955), (\$4,339,073), (\$7,863,552), and (\$26,498,150), respectively.

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**NOTE 4 CASH AND INVESTMENT RISK** *(continued)*

Derivatives *(continued)*

The fair value of futures contracts in the statements of plan net assets was zero at December 31, 2012 and 2011, as settlements are by cash daily. The Fund had net investment earnings (losses) of \$751,333 and (\$3,841,888) on futures contracts in 2012 and 2011, respectively. These losses are accounted for as net appreciation (depreciation) 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 plan net assets. The notional value of credit default swaps was \$64,941,778 and \$38,150,729 as of December 31, 2012 and 2011, respectively. The Fund did not hold any interest rate swaps as of December 31, 2012 and 2011. The fair value of swaps outstanding at December 31, 2012 and 2011 was a net asset (liability) of \$898,322 and (\$386,497), respectively. Investment (loss) from holdings and sales of interest rate and credit default swaps was (\$1,436,465) and (\$159,145) in 2012 and 2011, 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, 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, 2012 and 2011. Total pending foreign currency purchases and (sales) were \$60,132,136 and (\$60,041,639), respectively, at December 31, 2012, and \$94,810,186 and (\$94,383,075), respectively, at December 31, 2011.



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### NOTE 4 CASH AND INVESTMENT RISK *(continued)*

#### Derivatives *(continued)*

Thus, the Fund had a net unrealized gain on pending foreign currency forward contracts of \$90,497 and \$427,111 at December 31, 2012 and 2011, respectively. Investment income from holdings and sales of foreign currency forward contracts was \$1,994,441 and \$322,791 in 2012 and 2011, respectively.

*Forward interest rate contracts:* The Fund's external investment managers entered into forward contracts to purchase or sell bond securities during 2012 and 2011. 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 plan net assets. The Fund's external investment managers attempt to mitigate this credit risk through structured trading with reputable parties.

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. At December 31, 2011, the Fund held forward contracts to buy U.S. Treasury notes and (sell) U.S. TIPS (Treasury Inflation Protected Securities) with fair values of \$9,570,276 and (\$9,231,257), respectively. The unrealized (loss) on these contracts was \$1,511,176 and \$217,289 at December 31, 2012 and 2011, respectively. Investment (loss) income from holdings and sales of interest rate forwards was (\$1,442,350) and \$488,154 in 2012 and 2011, respectively. These earnings are included in net (depreciation) appreciation in the fair value of investments in the statements of changes in net assets.

#### 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 plan net assets. 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.

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**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 market 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 131 days and 108 days, as of December 31, 2012 and 2011, respectively. Cash open collateral is invested in the lending agent's Core USA Collateral Pool, which at December 31, 2012 and 2011, had a weighted-average life, as measured by interest sensitivity, of 45 days and 31 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, 2012 and 2011 were as follows:

	<u>2012</u>	<u>2011</u>
Fair market value of securities loaned	\$ 258,285,331	\$ 309,349,594
Fair market value of cash collateral from Borrowers	255,434,143	312,160,256
Fair market value of non-cash collateral from borrowers	7,679,609	5,446,514

As of December 31, 2012 and 2011, 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 \$103 million and \$133 million at December 31, 2012 and 2011, respectively, in connection with real estate, infrastructure, and private equity investments.

## POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

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### 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, 2012, nine retirees were in the Staff Retiree Health Plan and 20 active employees could be eligible at retirement. As of December 31, 2011, seven retirees were in the Staff Retiree Health Plan and 21 active employees, respectively, 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 2012 and 2011, PABF contributed approximately \$159,011 and \$126,431, respectively, to the Staff Retiree Health Plan for current premiums, with an implicit subsidy of \$10,871 and \$6,942, for 2012 and 2011, respectively. Members receiving benefits contributed approximately \$29,000, or 18%, of the total premiums, for 2012, and approximately \$27,000, or 21%, of the total premiums, for 2011.

#### 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.

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

(A Component Unit of the City of Chicago)

Notes to Financial Statements

December 31, 2012 and 2011

**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 2012 and 2011, the amount actually contributed to the Staff Retiree Health Plan, and changes in PABF's net OPEB obligation to the Staff Retiree Health Plan:

	<u>2012</u>	<u>2011</u>
Annual required contribution	\$ 478,309	\$ 453,535
Interest on net OPEB obligation	52,221	37,378
Adjustment to annual required contribution	<u>(38,682)</u>	<u>(27,687)</u>
Annual OPEB expense	491,848	463,226
Employer contributions made	<u>(169,882)</u>	<u>(133,373)</u>
Increase in net OPEB obligation	321,966	329,853
Net OPEB obligation at beginning of year	<u>1,160,474</u>	<u>830,621</u>
Net OPEB obligation at end of year	<u>\$ 1,482,440</u>	<u>\$ 1,160,474</u>

The annual OPEB cost, the percentage of annual OPEB cost contributed to the Staff Retiree Health Plan, and the net OPEB obligation for 2012 and 2011 is as follows:

<u>Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Percentage of Annual OPEB Cost Contributed</u>	<u>Net OPEB Obligation</u>
12/31/2012	\$ 491,848	34.5%	\$ 1,482,440
12/31/2011	463,226	28.8	1,160,474

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

(A Component Unit of the City of Chicago)

Notes to Financial Statements

December 31, 2012 and 2011

**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, 2012, and 2011, is as follows:

<u>Actuarial Valuation Date</u>	<u>Actuarial Value of Assets (a)</u>	<u>Unfunded Liability (AAL) Entry Age (b)</u>	<u>Unfunded AAL (UAAL) (b-a)</u>	<u>Funded Ratio (a/b)</u>	<u>Covered Payroll (c)</u>	<u>UAAL as a Percentage of Covered Payroll ((b-a)/c)</u>
12/31/12	\$ -	\$ 6,376,689	\$ 6,376,689	0.00%	\$ 1,623,675	392.7%
12/31/11	-	5,971,137	5,971,137	0.00	1,553,756	384.3

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, 2012 and 2011 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, 2012 and 2011, 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, 2012 and 2011, the wage inflation assumption was 4.5%. The unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll over a 30-year period.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**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

	<b>2012</b>	<b>2011</b>
Balances at December 31	<u>\$ 1,900,644,977</u>	<u>\$1,756,616,672</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

	<b>2012</b>	<b>2011</b>
Balances, at December 31	<u>\$1,304,605,726</u>	<u>\$1,288,178,539</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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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

Annuity Payment Reserve

	<b>2012</b>	<b>2011</b>
Balances, at December 31	<u>\$2,152,547,904</u>	<u>\$2,011,129,797</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

	<b>2012</b>	<b>2011</b>
Balances, at December 31	<u>\$(1,173,789,394)</u>	<u>\$(1,031,063,600)</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 \$7,267,764,193 and \$6,614,740,813 as of December 31, 2012 and 2011, respectively.

Gift Reserve

	<b>2012</b>	<b>2011</b>
Balances, at December 31	<u>\$ 13,114,372</u>	<u>\$ 13,390,856</u>

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.



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

(A Component Unit of the City of Chicago)

Notes to Financial Statements

December 31, 2012 and 2011

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**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

	<u>2012</u>	<u>2011</u>
Balances, at December 31	\$ <u>(22,350,262)</u>	\$ <u>(20,166,678)</u>

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

	<u>2012</u>	<u>2011</u>
Balances, at December 31	\$ <u>(961,787,490)</u>	\$ <u>(843,024,309)</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, 2012 and 2011, the Automatic Increase Reserve had a deficit.

Supplementary Payment Reserve

	<u>2012</u>	<u>2011</u>
Balances, at December 31	\$ <u>447,402</u>	\$ <u>447,402</u>

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.

## POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO

(A Component Unit of the City of Chicago)

Notes to Financial Statements

December 31, 2012 and 2011

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### NOTE 8 RESERVES *(continued)*

The following reserves have a \$0 balance at December 31, 2012 and 2011. 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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Financial Statements  
December 31, 2012 and 2011

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**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 \$244,687 and \$239,258 for the years ended December 31, 2012 and 2011, respectively.

Future minimum rental payments under the office lease at December 31, 2012 are as follows:

<u>Year</u>	<u>Amount</u>
2013	\$ 248,626
2014	252,562
2015	256,502
2016	129,073

**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**

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Required Supplementary Information  
Schedule of Funding Progress—Pension  
For the Years Ended December 31, 2012 and 2011

(Unaudited)

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ([b-a]/c)</b>
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

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Required Supplementary Information  
Schedule of Employer Contributions—Pension  
For the Years Ended December 31, 2012 and 2011

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(Unaudited)

<b>Year Ended December 31,</b>	<b>Contributions</b>			<b>Employer Percentage Contributed</b>
	<b>Annual Required</b>	<b>Actual Employee</b>	<b>Actual Employer</b>	
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	207,228,022	48.08

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

(A Component Unit of the City of Chicago)

Notes to Required Supplementary Information—Pension

For the Years Ended December 31, 2012 and 2011

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(Unaudited)

Valuation date	December 31, 2012 and 2011, respectively
Actuarial cost method	Entry age normal
Amortization method	Level percent open
Remaining amortization period	30 years
Actuarial value of assets	5-year smoothed market
<i>Actuarial assumptions</i>	
Pension investment rate of return	8.0%- 2011; 7.75%-2012
Projected salary increases	4.0% per year, plus additional percentage related to service
Cost of living allowance	3.0% (1.5% for retirees born after January 1, 1955)
General inflation rate	3.0%



**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Required Supplementary Information  
Schedule of Funding Progress—Health Insurance Supplement  
For the Years Ended December 31, 2012 and 2011

(Unaudited)

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll (b-a/c)</b>
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

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Required Supplementary Information  
Schedule of Employer Contributions—Health Insurance Supplement  
For the Years Ended December 31, 2012 and 2011

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(Unaudited)

<b>Year Ended December 31,</b>	<b>Contributions</b>			<b>Percentage Contributed</b>
	<b><u>Annual Required</u></b>	<b><u>Actual Employee</u></b>	<b><u>Actual Employer</u></b>	
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

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Required Supplementary Information—Health Insurance Supplement  
For the Years Ended December 31, 2012 and 2011

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(Unaudited)

Valuation date	December 31, 2012 and 2011, respectively
Actuarial cost method	Entry age normal
Actuarial value of assets	No assets (pay-as-you-go)
Amortization method	Level percent open
Remaining amortization period	30 years
<i>Actuarial assumptions</i>	
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)

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(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, 2012 and 2011

(Unaudited)

<u>Actuarial Valuation Date</u>	<u>GASB Value of Assets (a)</u>	<u>Actuarial Accrued Liability (AAL) Entry Age (b)</u>	<u>Unfunded AAL (UAAL) (b-a)</u>	<u>Funded Ratio (a/b)</u>	<u>Covered Payroll (c)</u>	<u>UAAL as a Percentage of Covered Payroll ([b-a]/c)</u>
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

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(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, 2012 and 2011

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(Unaudited)

<u>Year Ended December 31,</u>	<u>Contributions</u>			<u>Percentage Contributed</u>
	<u>Annual Required</u>	<u>Actual Employee</u>	<u>Actual Employer</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

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Notes to Required Supplementary Information—Staff Retiree Health Plan  
For the Years Ended December 31, 2012 and 2011

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(Unaudited)

Valuation date	December 31, 2012 and 2011
Actuarial cost method	Entry age normal
Actuarial value of assets	No assets (pay-as-you-go)
Amortization method	Level percent open
Remaining amortization period	30 years
<i>Actuarial assumptions</i>	
OPEB investment rate of return	4.5% per year
Wage inflation	4.5% per year
Healthcare trend	8.5% per year, graded down to 5.0% per year, ultimate trend in 0.5% increments

**OTHER SUPPLEMENTARY INFORMATION**



**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Schedule of Administrative Expenses  
For the Years Ended December 31, 2012 and 2011

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	<b>2012</b>	<b>2011</b>
<b>Administrative expenses</b>		
Actuary services	\$ 84,961	\$ 104,774
Benefits disbursement	205,800	195,618
Equipment service and rent	188,844	73,007
External auditors	46,700	63,300
Fiduciary insurance	133,430	103,989
Legal services	753,508	270,867
Medical consultant	374,528	238,718
Miscellaneous	444,116	582,563
Occupancy and utilities	250,415	247,275
Personnel salaries and benefits	1,894,271	1,995,711
Postage	7,935	7,500
Supplies	12,130	12,409
	<b>\$ 4,396,638</b>	<b>\$ 3,895,731</b>

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
(A Component Unit of the City of Chicago)  
Schedule of Consulting Costs  
For the Years Ended December 31, 2012 and 2011

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	<b>2012</b>	<b>2011</b>
<b>Payments to consultants</b>		
External auditors	\$ 46,700	\$ 63,300
Medical consultant	374,528	238,718
Legal services	753,508	270,867
Actuary service	84,961	104,774
Investment manager fees	8,448,610	8,899,000
Master trustee fees	190,575	186,900
Consulting fees	596,499	583,351
	<b>\$ 10,495,381</b>	<b>\$ 10,346,910</b>

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

(A Component Unit of the City of Chicago)

Schedule of Investment Fees

For the Years Ended December 31, 2012 and 2011

	<u>2012</u>	<u>2011</u>
<b>Investment managers</b>		
Ariel Capital Management	\$ 320,577	\$ 325,396
Artisan Partners	578,060	546,648
Attucks Asset Management	8,842	37,115
Capital Guardian Trust Co.	478,327	470,515
Channing Capital	32,296	136,453
Chicago Equity Partners	109,837	299,380
Dearborn Partners LLC	208,821	193,310
Denali Advisors	126,522	115,084
European Investors	54,491	46,976
Great Lakes Advisors	490,392	506,981
Holland Capital Management	256,263	254,010
ING Clarion	70,342	64,934
Invesco Capital Management	379,117	378,678
JP Morgan Fleming Asset Management	830,924	511,839
LM Capital Group	92,353	85,551
McKinley Capital	385,268	402,104
Montag & Caldwell	544,540	541,860
Northern Trust Global Investments - Index Funds	45,705	112,960
Piedmont Investment Advisors	51,599	228,920
PRISA Prudential	73,192	
Taplin, Canida, & Habacht	98,995	123,876
UBS Global Asset Management	1,100,114	1,357,377
Wellington Management	511,835	600,362
Wells Capital Management	475,510	437,678
William Blair & Co.	1,124,688	1,120,993
Total investment manager fees	<u>8,448,610</u>	<u>8,899,000</u>
<b>Investment consultants</b>		
Elkins McSherry Inc	20,000	20,000
NEPC LLC	465,354	451,800
The Townsend Group	5,109	5,515
Kolhberg & Associates	106,036	106,036
Total investment consultants fees	<u>596,499</u>	<u>583,351</u>
<b>Master custodian</b>		
The Northern Trust Company	190,575	186,900
<b>Total investment fees</b>	<u>\$ 9,235,684</u>	<u>\$ 9,669,251</u>



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# Investment Section

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NEPC, LLC

## **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, 2012, the Fund’s asset allocation targets were as follows:

<u>Asset Class</u>	<u>Current Asset Allocation</u>	<u>Long-Term Target Allocation</u>
U.S. Equity	24%	21%
Non U.S. Equity	22%	20%
Fixed Income	26%	22%
Opportunistic Strategies	13%	19%
Private Equity	8%	7%
Real Estate	4%	5%
Infrastructure	2%	2%
Real Assets	0%	4%
Cash	1%	0%
<b><u>TOTAL</u></b>	<b><u>100%</u></b>	<b><u>100%</u></b>

**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, 2012, the Fund retained 45 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 IF total public fund universe.



**2012 Asset Allocation** As of December 31, 2012, the Fund was overweight to US Equity, Fixed Income and Non US Equity. Concurrently, the Fund was underweight to Real Estate, Infrastructure, Real Assets and Opportunistic Strategies. The Fund's ending market value increased by approximately \$37.5 million during the year. The increase is a combination of investment gains of \$272.9 million, and net outflows of \$235.4 million. The Fund's asset allocation as of December 31, 2012 is shown on the following pages.



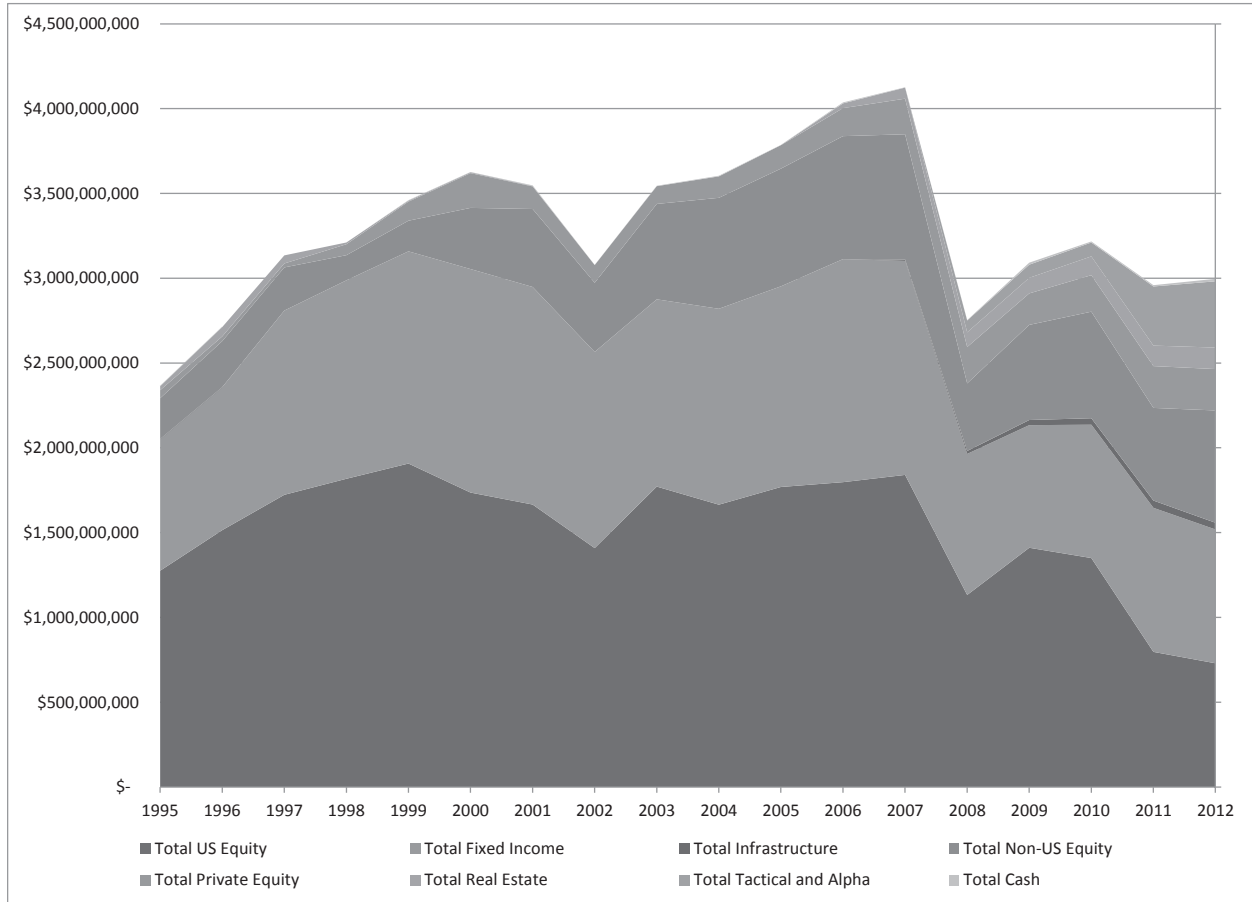


**Fair Value and Asset Allocation**  
**As of December 31, 2012**  
**(\$ in thousands)**

	U.S. Equity	Non-US Equity	Bonds	Real Estate	Private Equity	Infrastructure	Tactical	Real Assets	Cash	Total	% of Total	Policy
Ariel Capital Management	\$55,289								\$739	\$56,028	1.9%	
Denali Advisors	\$25,757								\$420	\$26,177	0.9%	
Great Lakes	\$177,196								\$7,890	\$185,086	6.2%	
Holland Capital	\$64,889								\$2,658	\$67,547	2.3%	
Montag & Caldwell	\$135,611								\$11,822	\$147,433	4.9%	
NTGI Russell	\$139,872								\$0	\$139,872	4.7%	
William Blair and Company	\$105,920								\$1,419	\$107,339	3.6%	
<b>U.S. Equity</b>	<b>\$704,534</b>	-	-	-	-	-	-	-	<b>\$24,948</b>	<b>\$729,482</b>	<b>24.3%</b>	<b>21.0%</b>
Global Transition		\$2							\$0	\$2	0.0%	
Artisan International		\$86,505							\$489	\$86,994	2.9%	
Capital Guardian Trust		\$120,084							\$5,396	\$125,480	4.2%	
J.P. Morgan Asset Management		\$112,471							\$1,726	\$114,197	3.8%	
Global Transition		\$2							\$0	\$2	0.0%	
McKinley Capital Management		\$64,994							\$1,314	\$66,308	2.2%	
UBS Global Asset Management		\$117,786							\$1,012	\$118,798	4.0%	
William Blair		\$145,808							\$4,665	\$150,473	5.0%	
<b>Non-US Equity</b>	-	<b>\$647,650</b>		-	-	-	-	-	<b>\$14,602</b>	<b>\$662,253</b>	<b>22.1%</b>	<b>20.0%</b>
Dearborn (Baird)			\$106,685						\$1,921	\$108,606	3.6%	
LM Capital			\$36,667						\$1,359	\$38,026	1.3%	
Vanguard ETF			\$37,910						\$0	\$37,910	1.3%	
Taplin, Canida & Habacht			\$69,218						\$4,759	\$73,977	2.5%	
Wellington			\$242,678						\$5,141	\$247,819	8.3%	
Wells Capital Management			\$232,013						\$12,263	\$244,276	8.2%	
Oaktree Capital			\$38,300						\$0	\$38,300	1.3%	
Transition Account			\$0						\$0	\$0	0.0%	
<b>Fixed Income</b>	-	-	<b>\$763,471</b>	-	-	-	-	-	<b>\$25,443</b>	<b>\$788,914</b>	<b>26.3%</b>	<b>22.0%</b>
	U.S. Equity	Non-US Equity	Bonds	Real Estate	Private Equity	Infrastructure	Opportunistic	Real Assets	Cash	Total	% of Total	Policy
RCP Advisors VI					\$10,034					\$13,710	0.5%	
Adams Street Partners					\$2,477					\$2,604	0.1%	
Adams St Partners					\$3,400					\$5,149	0.2%	
Adams Street Partners					\$84,803					\$77,730	2.6%	
Chancellor					\$432					\$394	0.0%	
Harbourvest V IPO					\$52,516					\$53,412	1.8%	
HVP Partners					\$467					\$176	0.0%	
Invesco Fund IV Venture					\$11,742					\$8,461	0.3%	
Invesco Fund IV Int'l					\$5,980					\$5,879	0.2%	
Invesco Fund IV U.S.					\$21,488					\$20,582	0.7%	
Mesirow Fund II					\$18,685					\$17,180	0.6%	
Mesirow Fund IV					\$13,078					\$13,913	0.5%	
Muller & Monroe					\$12,751					\$12,306	0.4%	
Muller & Monroe MEPEFF					\$11,148					\$12,609	0.4%	
<b>Private Equity</b>	-	-	-	-	<b>\$249,001</b>	-	-	-	<b>\$0</b>	<b>\$244,105</b>	<b>8.1%</b>	<b>7.0%</b>
Global Infrastructure Partners						\$22,278				\$22,278	0.7%	
The Carlyle Group						\$17,332				\$17,332	0.6%	
<b>Infrastructure</b>	-	-	-	-	-	<b>\$50,399</b>	-	-	-	<b>\$39,610</b>	<b>1.3%</b>	<b>2.0%</b>
ABR Chesapeake III				\$8,970						\$8,295	0.3%	
AG Core Plus Realty II				\$9,356						\$8,237	0.3%	
Apollo Real Estate Advisors				\$7,921						\$7,893	0.3%	
Lone Star Fund IV				\$3,000						\$5,984	0.2%	
Lone Star Global				\$5,517						\$2,531	0.1%	
Mesa West II				\$6,825						\$18,515	0.6%	
Morgan Stanley MSREF				\$2,981						\$2,666	0.1%	
Newport Capital Partners				\$6,346						\$5,517	0.2%	
DRA Advisors				\$14,395						\$3,058	0.1%	
Macquire Global				\$2,556						\$6,637	0.2%	
Meisrow RE Value Fund				\$5,676						\$5,970	0.2%	
Morgan Stanley PRIME				\$567						\$12,039	0.4%	
Quadrant R.E. Advisors				\$12,503						\$6,021	0.2%	
Shamrock-Hostmark				\$6,965						\$567	0.0%	
UBS Realty Advisors				\$12,866				\$126		\$12,992	0.4%	
CBRE Clarion				\$11,704				\$126		\$11,830	0.4%	
European Investors II				\$7,726				\$126		\$7,852	0.3%	
<b>Real Estate</b>	-	-	-	<b>\$125,874</b>	-	-	-	-	<b>\$378</b>	<b>\$126,604</b>	<b>4.2%</b>	<b>5.0%</b>
Aetos Capital							\$41,877			\$43,459	1.5%	
K2 Advisors							\$39,817			\$42,295	1.4%	
GMO	\$38,550	\$64,954	\$34,853				\$37,494		\$176	\$176,026	5.9%	
Pimco	\$1,160	\$23,587	\$86,614	\$1,031			\$6,960	\$9,280	\$257	\$128,891	4.3%	
<b>Tactical &amp; Alpha</b>	<b>\$39,710</b>	<b>\$88,541</b>	<b>\$121,467</b>	<b>\$1,031</b>	<b>\$0</b>	<b>\$0</b>	<b>\$126,148</b>	<b>\$9,280</b>	<b>\$433</b>	<b>\$390,671</b>	<b>13.0%</b>	<b>19.0%</b>
<b>Real Assets</b>	-	-	-	-	-	-	-	-	-	<b>\$0</b>	<b>0.0%</b>	<b>4.0%</b>
Cash									\$14,816	\$14,816	0.5%	
<b>Cash</b>									<b>\$14,816</b>	<b>\$14,816</b>	<b>0.5%</b>	<b>0.0%</b>
<b>Total Fund</b>	<b>\$744,244</b>	<b>\$736,191</b>	<b>\$884,938</b>	<b>\$126,905</b>	<b>\$249,001</b>	<b>\$50,399</b>	<b>\$126,148</b>	<b>\$9,280</b>	<b>\$80,620</b>	<b>\$2,996,455</b>	<b>100.0%</b>	<b>100.0%</b>
% of Total	24.8%	24.6%	29.5%	4.2%	8.3%	1.7%	4.2%	0.3%	2.7%	100.0%		



## HISTORICAL ASSET ALLOCATION BY ASSET CLASS



\*History unavailable prior to 1995



## **Summary of 2012 Investment Activity**

**Investment Manager Changes** throughout 2012, two additional managers were hired. The first was Northern Trust, who was hired to manage a Russell 1000 index fund. Northern was funded through a rebalance of the US Equity allocation. Additionally, Mesirow was hired to manage a Value Add real estate strategy. This allocation was funded from a rebalance of the real estate allocation.

### **Market Environment**

The global equity markets experienced yet another volatile year in 2012, with the market reacting to events such as the prolonged European Debt Crisis, slowing Chinese growth, the US election, the sluggish US economy, and uncertainty surrounding the “fiscal cliff”. Despite the negativity in the headlines, the broad markets ended the year in positive territory.

During the year, risk was generally rewarded, as stocks outperformed bonds, international stocks did better than US stocks, and emerging market equities did better than both their International and US counterparts. Corporate bonds did better than government bonds and high yield outperformed investment grade. In general, all sectors generated a positive return in 2012, with cyclical sectors such as Financial Services and Consumer Discretionary leading the pack, while more defensive sectors such as Health Care and Consumer Staples lagged.

### **Global Equity Markets**

The first quarter of 2012 was the best quarter for US stocks since 1998. Global equity markets delivered strong gains as macro fears continued to subside and attention turned to improving fundamentals. In both dollar and local currency terms, US markets outperformed international markets and emerging markets outperformed developed international markets. US equity markets delivered the strongest first quarter gains in more than 10 years.

US equity markets reversed in the second quarter of 2012 as global economic fears mounted and ended the quarter in negative territory. Globally, the second quarter saw growth equity indices struggle on the back of greater political concerns in Europe and slowing GDP in China. Political events again triggered a sell-off starting with the election of the Socialist party in France and further fears that the Greek political parties would not be able to support the country’s austerity measures. Bad news appeared beyond the Eurozone during the quarter, as China announced an official lowering of GDP growth targets. Nevertheless, the quarter ended on a positive note as the European Union announced its willingness to start a process to unify bank oversight in order to shore up confidence in the financial system. All international markets were down for the quarter, with Greece presenting the weakest return of all.

Global equities did well in the third quarter, thanks to the collective monetary easing by central banks in the US and Europe. While returns were positive across all sectors, the financial sector led the pack and the information technology sector trailed behind with flat to modest returns for the quarter. Among countries, Japan was the only region with negative returns.



US equities posted mixed results for the fourth quarter amid uncertainties around the outcomes of the presidential election and the fiscal cliff. Macroeconomic concerns also took a toll. International equity markets, buoyed by positive news flow within the Eurozone, Japanese export-driven stocks, and stronger economic data from China, beat domestic and emerging markets during the quarter.

<b>Equity Index Returns as of 12/31/2012</b>				
<b>Global Equity</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
MSCI World	2.1%	13.2%	4.9%	-3.2%
<b>US Equity</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
S&P 500	-0.4%	16.0%	10.9%	1.7%
Dow Jones Industrial Average	-2.5%	7.3%	8.6%	-0.2%
NASDAQ Composite	-3.1%	15.9%	11.0%	2.8%
Russell 1000 Growth	-1.3%	15.3%	11.4%	3.1%
Russell 1000 Value	1.5%	17.5%	10.9%	0.6%
Russell 2000	1.9%	16.3%	11.8%	3.6%
Russell 2000 Growth	0.4%	14.6%	12.4%	3.5%
Russell 2000 Value	3.2%	18.1%	11.0%	3.5%
<b>International Equity</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
MSCI EAFE	6.6%	17.3%	3.7%	-3.7%
MSCI Emerging Markets	5.6%	18.2%	5.0%	-0.9%
MSCI Europe	7.0%	19.1%	3.5%	-4.3%
MSCI UK	3.4%	10.8%	3.1%	-5.1%
MSCI Japan	5.8%	8.2%	2.1%	-4.3%
MSCI Far East	5.4%	9.1%	1.2%	-4.8%

Source: Bloomberg

### **Global Fixed Income Markets**

In the first quarter of 2012, corporate credit and emerging markets led fixed income returns, with the riskiest sectors – among them US high yield bonds – performing the best. US Treasuries and other high-quality developed market sovereign bond markets posted the weakest results in the quarter as investors favored riskier assets and shunned the relative safety of government bonds. Fears over the solvency of the European banking sector ebbed with the apparent early success of the European Central Banks' Long-Term Recovery Operation liquidity window for European banks, which was launched in December.

Long-term US Treasury bonds led fixed-income returns during the second quarter as yields touched all-time lows in response to slowing growth in both the US and China. Economic weakness in Europe continued to weigh on the markets as concerns escalated about that continent's banking and sovereign debt crisis. Credit market indices performed reasonably well, largely due to their interest-rate sensitivity. Credit spreads rose modestly during the quarter, with the largest increases occurring across non-investment-grade issues.



In the third quarter, all fixed income sectors experienced gains, with debt issued by emerging markets and high-yield companies leading the way. Spreads on high-yield debt continued to tighten to end the quarter hovering near record lows. Debt issued by emerging markets rallied. Dollar-denominated issues got a boost as investors sought solace in the emerging market's higher returns and healthier economic fundamentals relative to their developed market counterparts.

In the fourth quarter, emerging markets debt and high yields experienced the highest returns as yield hungry investors sought higher returns in the low interest rate environment. Even as massive government stimulus poured into Treasuries, the yield curve shifted upwards in the quarter, retreating from all-time lows in the summer.

<b>Fixed Income Index Returns as of 12/31/2012</b>				
<b>Global Fixed Income</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
Citi WGBI	-1.7%	1.6%	4.4%	5.3%
JPM EMBI Plus	3.2%	18.0%	14.7%	12.8%
<b>Domestic Fixed Income</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
BC Aggregate	0.2%	4.2%	6.2%	5.9%
BC US Agg. Treasury	-0.1%	3.0%	5.7%	5.4%
BC US Credit	1.1%	9.4%	8.7%	7.7%
BC Mortgage Backed	-0.2%	2.6%	4.7%	5.7%
BC Intern. Gov't/Credit	0.3%	3.9%	5.5%	5.7%
BC 1-10 Yr TIPS	0.5%	5.0%	6.3%	5.6%
BC High Yield	3.3%	15.8%	11.9%	10.3%
S&P LSTA Lev. Loan	1.4%	9.7%	7.1%	5.7%
3 Month T-Bills	-0.1%	0.0%	0.0%	-0.6%
<b>10-Year Bond Yields</b>	<b>Dec-12</b>	<b>Sep-12</b>	<b>Jun-12</b>	<b>Dec-11</b>
US	1.8%	1.6%	1.6%	1.9%
Germany	1.3%	1.4%	1.6%	1.8%
UK	1.8%	1.7%	1.7%	2.0%
Japan	0.8%	0.8%	0.8%	1.0%

**Total Fund Performance (gross of fees)** For 2012, on a gross of fee basis, the Total Fund returned 12.7% which outperformed the policy index return of 12.5%. This ranked the Fund in the 37<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 11.9%. Over the trailing three year period, the Fund's 8.8% return outperformed the policy index return of 8.3%. This ranked the Fund in the 34<sup>th</sup> percentile of the IF Public DB Universe. The median (50%) return of the IF Public Fund for this time period was 8.4%. Over the trailing five years, the Fund's 2.0% return slightly trailed the policy index return of 2.7% and ranked the Fund in the 75<sup>th</sup> percentile. The median (50%) return of the IF Public Fund for this time period was 3.5%.

**Asset Class Performance (net of fees)** The Fund's US equity portfolio returned 15.0%, which underperformed the Russell 3000 Index return of 16.4%. The non-US equity portfolio returned 20.6% outpacing the MSCI ACWI Ex US return of 16.8%. The combined equity



portfolio, including domestic and non-U.S., returned 17.7%, outperforming the MSCI ACWI Index return of 16.1%. Within the fixed income portfolio, the composite's return of 6.8% outperformed the Barclays Capital Aggregate return of 4.2%. The total real estate portfolio returned 10.1% for the year. The private equity portfolio, which is valued on a lag, returned 9.3% for the year. The Fund's opportunistic portfolio returned 12.1%, outperforming the HFR Fund of Funds Index return of 4.8% and the return of a 60/40 equity bond 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 - December 31, 2012

	2007	2008	2009	2010	2011	2012	Cumulative Annualized Returns		
							3 Years	5 Years	10 Years
<b>TOTAL FUND</b>									
Police Fund	8.8%	-27.8%	21.5%	12.7%	0.8%	12.4%	8.5%	2.3%	7.0%
Policy Portfolio	10.7	-20.9	16.6	12.8	0.3	12.5	8.3	3.2	8.0
IF Public DB Universe Median	8.7	-25.5	19.8	13.2	1.1	11.9	8.4	3.5	7.4
Inflation	4.1	0.1	2.7	1.4	3.1	1.3	1.9	1.7	2.4
<b>U.S EQUITY</b>									
Police Fund	7.5%	-37.7%	32.9%	17.3%	0.3%	15.0%	10.6%	2.3%	7.9%
Russell 3000 Index	5.1	-37.3	28.3	16.9	1.0	16.4	11.2	2.0	7.7
eVestment US Equity Universe Median	5.2	-37.9	28.6	19.5	-0.1	-0.1	11.7	3.2	9.6
<b>NON-U.S EQUITY</b>									
Police Fund	16.4%	-46.3%	40.1%	11.5%	-13.5%	20.6%	5.2%	-2.6%	8.8%
Performance Benchmark	16.7	-45.5	41.4	11.2	-13.7	16.8	3.9	-2.9	9.7
eVestment Non US Equity Universe Median	14.1	-44.1	36.6	10.7	-12.1	20.4	6.1	-1.8	10.0
<b>FIXED INCOME</b>									
Police Fund	5.1%	-4.1%	11.7%	7.8%	7.9%	6.8%	7.5%	6.2%	5.0%
Barclays Capital Aggregate Bond Index	7.0	5.2	5.9	6.5	7.8	4.2	6.2	5.9	5.2
eVestment Bond Universe Median	6.5	-0.4	11.8	8.7	7.4	6.1	7.0	6.5	5.6
<b>REAL ESTATE</b>									
Police Fund <sup>2</sup>	-5.5	-11.2	-9.1	7.3	6.4	10.1	7.9	0.3	N/A
NCREIF Net Property Index	15.8	-6.5	-16.9	13.1	16.1	11.0	10.9	2.3	8.3
<b>Asset Allocation</b>									
US Stocks	45%	41%	41%	42%	27%	24%			
Non US Stocks	18%	15%	18%	20%	19%	22%			
Private Equity	5%	8%	6%	7%	8%	8%			
Fixed Income	31%	30%	28%	23%	29%	26%			
Infrastructure	--	<1%	1%	1%	2%	2%			
Opportunistic	--	3%	3%	4%	12%	13%			
Real Estate	2%	3%	3%	3%	4%	4%			

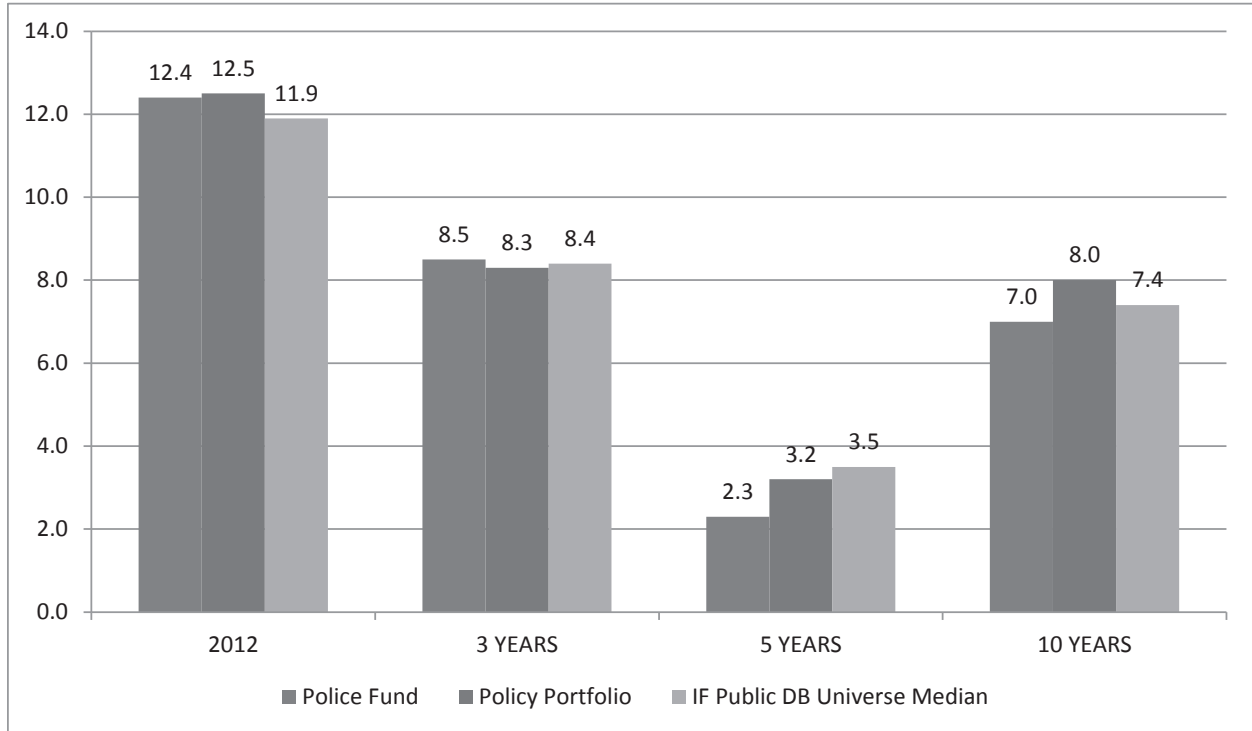
<sup>1</sup> All Chicago PABF performance presented net of fees. IF and eVestment universe returns are presented gross of fees

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



## **ANNUAL AND CUMULATIVE RETURNS (net of fees)**

As of December 31, 2012







## Real Estate Investments

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

### **2012 US Real Estate Market Review**

In 2012, values of non-core or distressed real estate properties remained depressed relative to the values of core real estate. Although the overall volume of distressed assets in the US has begun to decline, pricing for these assets is approximately 30% below peak values. US property fundamentals improved moderately, with occupancy rates increasing for industrial, office, and retail properties while apartments have stabilized at approximately 95% occupancy. New development remains at historic lows for all property types except apartments (although apartment completion rates still remain below historical averages). In the core market, average income yields have been decreasing but remain strong relative to traditional fixed income yields. Transaction volumes have continued to rise (and were above the long-term average for the last 3 quarters of 2012), further indicating that markets are again functioning (i.e. buyers and sellers can transact). Significant capital flows, both equity and debt, moved into the core and REIT markets in 2012. At year-end, open-end funds had multiple-quarter entrance queues, and US public REITs/REOCs issued over \$75 billion of equity and debt in 2012. While debt was more readily available at attractive terms for stabilized core properties due to limited new supply, core properties were still viewed as valued below replacement cost.

NEPC remains positive about the opportunity in the non-core market, particularly in Europe. In the US non-core real estate space, although the significant operating and capital structure distress that followed the global financial crisis has moderated, select attractive opportunities remain. Skilled firms with a proven ability to identify undervalued assets, buy right, and create value may be able to achieve out-sized returns as distress persists in the non-core market. In Europe, non-core properties are still undervalued relative to core, and significant capital structure distress remains. This is compounded by macroeconomic and structural uncertainty. In addition, bank deleveraging has also contributed to continued capital structure weakness and has provided opportunities for buyers as banks in Europe have historically provided over 90% of real estate lending (vs. roughly 50% in the US). NEPC believes that the opportunity within European non-core real estate is still in the early stages. NEPC also believes that real estate debt strategies remain attractive today, particularly in Europe, given the distressed lending environment.

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

As of year-end 2012, PABF's real estate portfolio had a total reported value of \$127.5 million (~4.3% of total plan assets). In addition, PABF had unfunded commitments to real estate of \$19.7 million, bringing the total plan real estate exposure to \$147.1 million (or 4.9% of total plan assets). PABF's target allocation to real estate is 5.0% of total plan assets. The real estate portfolio was split 24% in core, 39% in value-add, 22% in opportunistic, and 15% in REIT/REOC investments. For 2012, the return for the total real estate portfolio was 9.7%.



### Core Real Estate

US core commercial real estate continued to improve in 2012. The NCREIF Property Index ("NPI") had a total gross return of 10.5% in 2012. The NCREIF Fund Index Open-End Diversified Core ("ODCE") had a total net return of 9.7% in 2012.<sup>1</sup> Core real estate continued to receive significant positive funds flow in 2012 (continuing the trend from 2011 and 2010). Aggregate open-end core fund entrance queues totaled over \$4 billion at the end of 2012, with some funds estimating a wait of up to 6 quarters for new investor capital to be called. The table that follows shows the performance of PABF's core funds for 2012 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, and that PABF liquidated its investment in Prudential PRISA at the end of the third quarter of 2012.

Investment Fund	Vintage Year	Commitment	Fund 2012 Return	NPI Gross 2012 Return	ODCE Net 2012 Return
Prime Property Fund	2006	\$13.5	11.6%	10.5%	9.7%
Prudential PRISA I	2007	\$13.7	9.2%	10.5%	9.7%
Quadrant Fund	2006	\$13.1	11.6%	10.5%	9.7%
UBS Trumbull Property Fund	2006	\$14.3	7.9%	10.5%	9.7%

Note: commitment in millions. Prudential PRISA I was liquidated at the end of 3Q 2012.

### Value-Add Real Estate

The table below shows the performance of PABF's value-add real estate funds for 2012 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	Commitment	Fund 2012 Return	Fund Return Since Inception	Benchmark Vintage Year Return Since Inception
AG Core Plus Realty Fund II	2006	\$15.0	14.5%	7.3%	(6.3%)
ABR Chesapeake Fund III	2006	\$10.0	5.4%	2.3%	(6.3%)
DRA G&I Fund VI LLC	2007	\$5.0	2.1%	5.2%	(1.8%)
Mesa West R.E. Inc. Fund II	2008	\$20.0	43.9%	27.7%	3.4%
DMR Mortgage Opportunity	2009	\$10.0	NA	53.7%	15.5%
Mesirow Financial RE Value	2012	\$10.0	0.8%	0.8%	(5.6%)

Note: commitment in millions.

Note: for benchmarking purposes, we compared Fund performance to the Thomson One Value-Add/Opportunistic Real Estate Fund universe (December 31, 2012).<sup>2</sup>

<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.

<sup>2</sup> Fund performance was compared to both value-add and opportunistic funds in order to provide a more meaningful sample size.



### Opportunistic Real Estate

The table that follows shows the performance of PABF’s opportunistic real estate funds for 2012 and since inception relative to the applicable vintage year index benchmark.

Investment Fund	Vintage Year	Commitment	Fund 2012 Return	Fund Return Since Inception	Benchmark Vintage Year Return Since Inception
DV Urban Realty Partners I	2006	\$15.0	(84.3%)	(54.0%)	(6.3%)
Apollo Europe R.E. Fund III	2007	\$10.0	(3.0%)	(4.1%)	(1.8%)
MGP Asia Fund III	2007	\$10.0	8.3%	2.9%	(1.8%)
Morgan Stanley R.E. VI	2007	\$11.0	8.4%	(28.5%)	(1.8%)
Shamrock Hotel Fund	2007	\$5.0	(96.3%)	(96.8%)	(1.8%)
Lone Star Fund VI (U.S.)	2008	\$10.0	6.3%	14.7%	3.4%
Lone Star R.E. Fund (U.S.)	2008	\$5.0	(3.0%)	5.4%	3.4%

Note: commitment in millions.

Note: for benchmarking purposes, we compared Fund performance to the Thomson One Value-Add/Opportunistic Real Estate Fund universe (December 31, 2012).<sup>3</sup>

### Real Estate Securities

In 2012, the real estate securities markets had another strong year with the FTSE NAREIT Equity REIT Index (“FNERTR”) posting a 19.7% return for the year. This brings the cumulative return of the index above the 2007 peak as the returns since the financial crisis have outpaced long-term averages. Publicly-traded real estate companies in the US raised over \$75 billion in 2012, and have raised over \$200 billion since 2010. The table below shows the performance of PABF’s real estate securities fund performance for 2012 compared to the FTSE NAREIT Equity REIT Total Return Index.

Investment Fund	Vintage Year	Commitment	Fund 2012 Return	FNERTR 2012 Return
EII World Fund	2008	\$10.0	29.9%	19.7%
ING Clarion Global RE Securities	2008	\$20.0	26.3%	19.7%

Note: commitment in millions.

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

<sup>3</sup> Fund performance was compared to both value-add and opportunistic funds in order to provide a more meaningful sample size.

## Largest Stock Holdings as of December 31, 2012

	Shares	Stocks	Fair Value
1	6,891,926	HARBOURVEST GLOBAL	\$ 53,412,427
2	187,478	NESTLE SA CHF	12,207,012
3	542,600	GENERAL ELECTRIC CO	11,389,174
4	2,630,400	AIA GROUP LTD	10,265,919
5	122,500	PHILIP MORRIS INTL COM	10,245,900
6	1,525,500	QUALCOM INC COM	9,458,050
7	6,231	SAMSUNG ELECTRONIC	8,858,400
8	15,972	APPLE INC COM	8,513,555
9	247,800	WELLS FARGO& CO. NEW COM STOCK	8,469,804
10	568,104	PRUDENTIAL GBP 0.05	7,992,487

## Largest Bond Holdings as of December 31, 2012

	Par	Bonds	Fair Value
1	8,775,000	UNITED STATES TREAS NTS .25 DUE 6-30-2014	\$ 8,778,431
2	8,646,000	UNITED STATES TREAS NTS 1/30/2012 .25% DUE 1-31-2014	8,651,404
3	5,575,000	UNITED STATES TREAS BDS 4.375 DUE 2-15-2038	7,233,563
4	7,229,000	UNITED STATES NTS .25 DUE 10/15/2015	7,212,619
5	6,721,000	UNITED STATES TREAS ZERO CPN .375% DUE 11-15-2015	6,727,304
6	6,159,000	UNITED STATES TREAS NTS .625% DUE 11-30-2017	6,138,312
7	5,800,000	FNMA SINGLE FAMILY MTG 2.5% 15 YRS SETTLES FEB	6,055,548
8	4,100,000	UNITED STATES TREAS BDS DTD 11/16/1998 5.25% DUE 11/15/2028	5,664,404
9	3,225,000	UNITED STATES TREAS BDS DTD 8-15-1993 6.25% DUE 8-15-2023	4,623,844
10	4,300,000	FNMA SINGLE FAMILY MORTGAGE 3% 30 YEARS SETTLES MAR	4,486,104

**A complete list of portfolio holdings is available upon request.**

## Commissions Paid by Investment Managers in 2012

<b>Manager</b>	<b>Total Number of Trades</b>	<b>Total Number of Shares</b>	<b>Total Commissions</b>
Ariel Capital Management	358	1,138,900	\$ 36,657
Artisan Partners	2,024	8,414,824	102,947
Capital Guardian Trust Co.	1,498	16,540,154	96,533
Chicago Equity Partners	549	5,619,278	113,333
Denali Advisor	599	2,049,750	31,869
Great Lakes Advisors	123	862,454	28,963
Holland Capital Management	114	337,295	11,347
ING Clarion Real Estate	1,776	2,265,855	10,614
JP Morgan Global Asset Management	403	3,889,281	43,393
McKinley Capital Management	911	13,616,097	166,631
Montag & Caldwell	220	2,578,930	77,009
Piedmont Investment	76	540,052	15,784
Transition Account	1,559	248,543,203	121,914
UBS Global Asset Management	649	7,707,704	80,084
UBS US Equity Fund	2,680	12,017,442	144,658
Vanguard	13	1,359,050	23,783
William Blair & Company	4,528	16,312,917	313,825
	<b>18,080</b>	<b>343,793,300</b>	<b>\$ 1,419,346</b>

## Commissions Paid to Brokers in 2012

Broker	Total Number of Shares	Total Commissions
Barclays Capital	2,070,249	\$ 31,452
Bear Sterns	334,049	11,529
Bernstein, Sanford & Co.	456,030	9,084
BNY ESI Securities	819,555	33,463
Cabrera Capital Markets	1,959,516	54,106
Castleoak Securities Inc.	631,304	13,635
Cheevers & Co.	1,313,906	44,772
Citigroup Global Markets	4,331,201	42,409
CLSA Securities	2,549,050	12,405
Credit Agricole Securities	1,478,656	18,326
Credit Suisse	9,512,651	205,690
Deutsche Bank	3,279,019	37,097
Goldman Sachs & Co	5,147,918	57,544
G-Trade Services Ltd	2,479,535	42,360
HSBC	861,740	11,029
Instinet	305,681	10,779
Investment Technology Group	3,610,369	52,572
Jefferies & Co	4,456,105	58,400
JP Morgan Securities	6,042,638	46,229
Liquidnet Inc	1,971,800	26,252
Loop Capital Markets	2,159,455	65,518
Macquarie Securities	2,850,328	18,568
Merrill Lynch	5,634,006	81,378
Morgan Stanley	6,572,938	70,802
Mr. Beal and Company	1,339,080	35,364
Nomura Securities	1,245,170	17,057

## Commissions Paid to Brokers in 2012 (Con'd)

Broker	Total Number of Shares	Total Commissions
Pershing LLC	2,333,005	38,651
Sanford C. Bernstein Ltd	614,504	8,666
UBS	4,962,750	36,972
Williams Capital Group LP	396,869	13,725
Brokers with less than \$7,000 in commissions	9,800,351	213,513
<b>Totals</b>	<b>91,519,428</b>	<b>\$ 1,419,346</b>

**Investment Summary  
as of 12/31/12**

<u>Investment Type</u>	<u>Fair Value</u>	<u>Percent of Total Fair Value</u>
<b><u>Fixed Income</u></b>		
Government Bonds	\$ 280,359,077	9.1%
Corporate Bonds	<u>318,130,502</u>	<u>10.4%</u>
Total Bonds	598,489,579	19.5%
 Fixed Income Funds	 <u>308,491,943</u>	 <u>10.1%</u>
Total Fixed Income	906,981,522	29.6%
<b><u>Equities</u></b>		
U.S. Equities	564,104,261	18.4%
International Equities	667,303,919	21.8%
Stock Index Funds	<u>347,929,038</u>	<u>11.3%</u>
Total Equities:	1,579,337,218	51.5%
<b><u>Other Investments</u></b>		
Hedge Fund-of-Funds	85,754,714	2.8%
Infrastructure	39,609,925	1.3%
Real Estate	125,923,043	4.1%
Swaps	2,164,750	0.1%
Forward Contracts	42,481,209	1.4%
Venture Capital	<u>190,685,937</u>	<u>6.2%</u>
Total Other:	486,619,578	15.9%
 Short-term funds and Cash:	 93,899,392	 3.0%
Total Assets at Fair Value:	<u><u>\$ 3,066,837,710</u></u>	<u><u>100.0%</u></u>





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# Actuarial Section

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April 8, 2013

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

**Subject: Actuarial Valuation Report for the Year Ending December 31, 2012**

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, 2012. This valuation has been performed to measure the funded status of the Fund and to determine the contribution levels for 2013. In addition, it includes disclosure information required under GASB Statement No. 25, Statement No. 27, Statement No. 43, and Statement No. 45. 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. 25 and No. 43
- 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
- Schedule of Employer Contributions
- Notes to Required Supplementary Information

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** – The value of assets of the Fund was provided by the Fund's staff. Book values of assets are used to develop actuarial results for the state reporting basis. Actuarial value of assets are used 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 Entry-Age Normal Actuarial Cost Method. The objective of this method is to amortize the costs of Fund benefits over the entire career of each member as a level of percentage of compensation. 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.

**Actuarial Assumptions** – On February 26, 2013, the Board approved a change in the investment return assumption from 8.00 percent to 7.75 percent. All other 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, 2012.

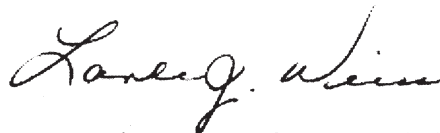
The funding objective is to provide employer and employee contributions sufficient to provide the benefits of the Fund when due. State Law currently constrains employer contributions to be twice the employee contribution level in the second prior fiscal year. Thus, with an administrative lag, the employer contribution is designed to match the employee contribution in a 2:1 relationship. The most recent actuarial valuation of the Fund on the State reporting basis shows that an employer to employee contribution ratio of 6.73:1 is needed to meet the actuarially determined contribution requirement.

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,



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



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

**Gabriel Roeder Smith & Company**

**POLICEMEN’S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**ACTUARIAL METHODS AND ASSUMPTIONS AS OF DECEMBER 31, 2012**

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**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 all purposes is the Entry Age Normal Actuarial Cost Method.

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.
- Rate of Disability: Rates at which members are assumed to become disabled under the provisions of the Fund. Sample rates assumed are as follows:

ATTAINED AGE	RATE
22	.0003
27	.0006
32	.0012
37	.0015
42	.0020
47	.0045
52	.0050
57	.0060
62	.0060

**ACTUARIAL METHODS AND ASSUMPTIONS  
AS OF DECEMBER 31, 2012 (CONT'D)**

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The distribution of disability types is assumed to be as follows:

Duty Disability	45%
Occupational Disease Disability	15%
Ordinary Disability	40%

Rate of Retirement: Rates at which members are assumed to retire under the provisions of the Fund. The rates assumed are as follows:

For members hired before January 1, 2011:

<u>ATTAINED AGE</u>	<u>RATE <sup>1</sup></u>
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

For members hired on or after January 1, 2011:

<u>ATTAINED AGE</u>	<u>RATE <sup>1</sup></u>
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

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

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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Turnover Rates:                      The following sample rates exemplify the table:

<u>YEARS OF SERVICE</u>	<u>RATE</u>
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:

<u>COMPLETED YEARS OF SERVICE</u> *	<u>SCALE</u>
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.

**POLICEMEN’S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF DECEMBER 31, 2012 (CONT’D)**

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Asset Value: For State reporting, bonds are at amortized value and stocks are at cost.

For GASB #25 and #27, 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.

***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: It is assumed for valuation purposes that the current health insurance supplement will continue for life for all employee annuitants (and their future widows). The amount of the Fund-paid health insurance is \$95.00 per month for each annuitant (employees and widows) not qualified to receive Medicare benefits and \$65.00 if qualified. It is assumed that all annuitants age 65 and over will be eligible for Medicare and 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.

## HISTORY OF AVERAGE ANNUAL SALARIES

Year End	Members in Service	Increase	Current Year Salary	Increase	Average Salary	Increase	Actuarial Assumptions	CPI Chicago
1969	12,595	1.4	136,846,000	26.6	10,865	22.1	3.50	5.4
1970	12,948	2.8	160,682,780	17.4	12,410	4.2	3.50	5.6
1971	13,296	2.7	178,077,405	10.8	13,393	7.9	5.00	3.9
1972	13,318	0.2	185,841,384	4.4	13,954	4.2	5.00	2.9
1973	13,692	2.8	196,404,600	5.7	14,344	2.8	5.00	6.2
1974	13,291	(2.9)	205,212,984	4.5	15,440	7.6	5.00	10.7
1975	13,163	(1.0)	226,348,320	10.3	17,196	11.4	5.00	7.9
1976	13,353	1.4	244,004,592	7.8	18,273	6.3	5.00	4.8
1977	13,446	0.7	259,475,784	6.3	19,298	5.6	5.00	6.4
1978	13,107	(2.5)	270,132,744	4.1	20,610	6.8	5.00	8.6
1979	12,635	(3.6)	277,077,160	2.5	21,924	6.4	5.00	12.5
1980	12,587	(0.4)	292,438,368	5.5	23,233	6.0	5.00	14.4
1981	12,465	(1.0)	310,153,128	6.1	24,882	7.1	5.00	9.6
1982	12,810	2.8	348,850,944	12.5	27,233	9.4	6.00	6.8
1983	12,557	(2.0)	381,553,344	9.4	30,386	11.6	6.00	4.0
1984 <sup>1</sup>	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 <sup>2</sup>	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
<b>Average Increase (Decrease) for the last 5 years:</b>		<b>(2.6)%</b>		<b>(0.5%)</b>		<b>2.3 %</b>		<b>1.4 %</b>

<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.



**SUMMARY OF CHANGES IN ACTIVE PARTICIPANTS  
FOR FISCAL YEAR ENDING DECEMBER 31, 2012**

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Number of Participants at Beginning of Fiscal Year	<b>9,270</b>	<b>2,966</b>	<b>12,236</b>
Increases:			
Participants Added During Year	350	92	442
Participants Returning From Inactive or Disability Status	<u>36</u>	<u>12</u>	<u>48</u>
Totals	9,656	3,070	12,726
Decreases:			
Terminations During Year	<u>483</u>	<u>217</u>	<u>700</u>
Number of Participants at End of Fiscal Year	<b>9,173</b>	<b>2,853</b>	<b>12,026</b>
Total Inactive Participants			664
<u>Terminations:</u>			
Withdrawal (With Refunds)	10	8	18
Withdrawal (Without Refunds)	99	37	136
Ordinary Disability Benefit	12	15	27
Occupational Disease Disability Benefit	2	1	3
Duty Disability Benefit	11	5	16
Retirements	337	149	486
Deaths (Occupational)	0	0	0
Deaths (Non-occupational)	<u>12</u>	<u>2</u>	<u>14</u>
<b>Totals</b>	<b>483</b>	<b>217</b>	<b>700</b>

**SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES  
FOR FISCAL YEAR ENDING DECEMBER 31, 2012**

	<b>Number at Beginning of Year</b>	<b>Additions During Year</b>	<b>Terminations During Year</b>	<b>Number at End of Year</b>
Service Retirement Annuities	8,763	539	267	9,035
Widow Annuities	3,091	174	143	3,122
Children's Annuities	214	21	21	214
Ordinary Disability Benefit (Non-Occupational)	43	27	23	47
Occupational Disease Disability Benefit	36	3	3	36
Duty Disability Benefit (Occupational)	270	20	27	263
Children's Disability Benefit	176	27	23	180
Widows' Compensation Annuities (Service Connected Death)	70	0	1	69
<b>Totals</b>	<b>12,663</b>	<b>811</b>	<b>508</b>	<b>12,966</b>
Annual Benefits	<b>\$562,386,796</b>	<b>\$ 50,931,101</b>	<b>\$ 17,488,557</b>	<b>\$595,829,340</b>

**POLICEMEN’S ANNUITY AND BENEFIT FUND**  
**TOTAL ANNUITANTS AND BENEFICIARIES (LAST SEVEN YEARS)**

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	<b>Annuitants &amp; Beneficiaries Beginning of Year</b>	<b>Additions During The Year</b>	<b>Terminations During The Year</b>	<b>Annuitants &amp; Beneficiaries at Year-end</b>	<b>Average Annuitants &amp; Beneficiaries</b>
<b>2006</b>	11,999	542	515	12,026	12,013
<b>2007</b>	12,026	627	518	12,135	12,081
<b>2008</b>	12,135	603	555	12,183	12,159
<b>2009</b>	12,183	476	505	12,154	12,169
<b>2010</b>	12,154	803	576	12,381	12,268
<b>2011</b>	12,381	741	459	12,663	12,522
<b>2012</b>	12,663	811	508	12,996	12,830

**POLICEMEN'S ANNUITY AND BENEFIT FUND**  
**ACTUARIAL ACCRUED LIABILITY PRIORITIZED SOLVENCY TEST**

Valuation Date 12/31	(1)	(2)	(3)	Actuarial Value of Assets	Portion (%) of Present Value Covered By Assets		
	Active and Inactive Member Contribution	Retirees and Beneficiaries	Active and Inactive Members (ER Financed Portion)		(1)	(2)	(3)
1997	\$ 750,341,108	\$ 2,333,523,000	\$ 1,525,303,810	\$ 2,896,754,452	100.00%	91.98%	0.00%
1998 <sup>1,2</sup>	777,205,937	2,690,216,494	1,690,773,788	3,249,729,847	100.00%	91.91%	0.00%
1999	763,729,532	2,939,332,536	1,691,810,150	3,685,681,671	100.00%	99.41%	0.00%
2000 <sup>1</sup>	818,382,556	3,228,954,418	1,604,693,684	4,019,467,561	100.00%	99.14%	0.00%
2001 <sup>2</sup>	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 <sup>1,2</sup>	893,425,839	3,856,262,804	1,831,744,607	4,039,695,590	100.00%	81.59%	0.00%
2004 <sup>2</sup>	910,480,098	4,313,531,046	1,810,260,330	3,933,031,342	100.00%	70.07%	0.00%
2005 <sup>1,2</sup>	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 <sup>1</sup>	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	1,309,825,828	6,475,282,318	2,435,530,363	3,148,929,770	100.00%	28.40%	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 2013 <sup>1</sup>**

	Pension	Health Ins. Supplement	Total
<u>(1) Normal Cost (see Table 2)</u>	\$ 179,118,343	\$ 4,167,214	\$ 183,285,557
<u>(2) Actuarial Accrued Liability (AAL)</u>	\$10,051,827,391	\$ 168,811,118	\$10,220,638,509
<u>(3) Unfunded AAL (UAAL)</u>			
(a) Actuarial Value of Assets	\$ 3,148,929,770	\$ 0	\$ 3,148,929,770
(b) UAAL (2-3(a))	6,902,897,621	168,811,118	7,071,708,739
<u>(4) Amortization Payable at Beginning of Year <sup>2</sup></u>	\$ 367,073,974	\$ 6,027,100	\$ 373,101,074
<u>(5) Estimated Member Contributions</u>	\$ 93,535,532	\$ 0	\$ 93,535,532
<u>(6) Annual Required Contribution (ARC) for 2013</u>			
(a) Interest Adjustment for Semimonthly Payment	21,520,819	235,568	21,756,387
(b) Annual Required Contribution (1 + 4 - 5 + 6(a))	\$ 474,177,604	\$ 10,429,882	\$ 484,607,486
(c) Annual Required Contribution (Percent of Pay)	46.71%	1.03%	47.74%
<u>(7) Estimated City Contribution for 2013</u>	\$ 182,784,614	\$ 9,779,386 <sup>3</sup>	\$ 192,564,000
<u>(8) Estimated Deficiency/(Excess) for 2013</u>			
(a) in Dollars (6(b)-7)	\$ 291,392,990	\$ 650,496	\$ 292,043,486
(b) as a Percentage of Pay	28.70%	0.06%	28.77%

<sup>1</sup> Pension liabilities were discounted at 7.75% per year, and OPEB liabilities discounted at 4.5% per year.

<sup>2</sup> Amortization is over a 30-year period as a level percent of pay.

<sup>3</sup> Represents expected health insurance supplemental benefits for fiscal year 2013.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**DEVELOPMENT OF ACTUARIAL GAINS AND LOSSES FOR 2012**

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UNFUNDED ACTUARIAL ACCRUED LIABILITY - BEGINNING OF 2012

(1) Actuarial Accrued Liability - 12/31/2011	\$9,688,349,905
(2) Assets at Book Value - 12/31/2011	3,073,609,092
(3) Unfunded Accrued Actuarial Liability - 12/31/2011	<u>\$6,614,740,813</u>

EXPECTED UNFUNDED ACTUARIAL ACCRUED LIABILITY - END OF 2012

(4) Normal Cost for 2012	\$ 177,910,993
(5) Total Contributions for 2012	303,543,290
(6) Interest on (3), (4), & (5) at Valuation Rates	<u>525,710,463</u>
(7) Expected Unfunded Actuarial Accrued Liability - 12/31/2012	\$7,014,818,979
((3)+(4)-(5)+(6))	

DEVIATIONS FROM EXPECTED

(8) (Gain)/Loss on Investment Return (Book Value)	\$44,084,492
(9) (Gain)/Loss from Salary Changes	(115,345,955)
(10) (Gain)/Loss from Retirement	33,065,081
(11) (Gain)/Loss from Turnover	(1,414,675)
(12) (Gain)/Loss from Mortality	(8,048,677)
(13) (Gain)/Loss from Disability	2,652,583
(14) (Gain)/Loss from New Entrants	4,433,995
(15) (Gain)/Loss from All Other Sources	<u>37,342,595</u>
(16) Composite Experience (Gain)/Loss	(\$3,230,561)
(17) (Gain)/Loss as a percentage of Expected UAAL ( (16)/(7) )	(0.0)%
(18) (Gain)/Loss from Assumption Changes	256,175,774

UNFUNDED ACTUARIAL ACCRUED LIABILITY - END OF 2012

(19) Unfunded Accrued Actuarial Liability - 12/31/2012 ((7)+(16)+(18))	\$7,267,764,192
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**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF BASIC ACTUARIAL VALUES**

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	<b>APV of Projected Benefits</b>	<b>Actuarial Accrued Liability (AAL)</b>
<u>(1) Values for Active Members</u>		
(a) Retirement	\$5,040,060,158	\$3,497,680,048
(b) Termination	68,099,962	7,707,851
(c) Disability	365,005,353	151,403,724
(d) Death	89,794,102	23,624,172
Total for Actives	\$5,562,959,575	\$3,680,415,795
 <u>(2) Values for Inactive Members</u>		
(a) Retired	5,683,911,713	5,683,911,713
(b) Survivor	513,867,069	513,867,069
(c) Disability	267,807,543	267,807,543
(d) Inactive (Deferred Vested)	64,940,396	64,940,396
(e) Children	9,695,993	9,695,993
Total for Inactives	6,540,222,714	6,540,222,714
 <u>(3) Grand Totals</u>	 \$12,103,182,289	 \$10,220,638,509
 <u>(4) Normal Cost for Active Members</u>	 \$ 183,285,557	
 <u>(5) Actuarial Present Value of Future Compensation</u>	 \$10,746,060,973	

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

Years	Retirement		Disability		Widow <sup>1</sup>		Child <sup>2</sup>		Totals	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under \$100	6	1					1		7	1
\$100 to under \$250	11	3					118	85	129	88
\$250 to under \$500	20	7					43	33	63	40
\$500 to under \$750	21	1					37	42	58	43
\$750 to under \$1,000	3	3					21	13	24	16
\$1,000 to under \$2,000	148	35			38	2,430			186	2,465
\$2,000 to under \$3,000	489	59	3		5	577			497	636
\$3,000 to under \$4,000	1,411	358	42	35		64			1,453	457
\$4,000 to under \$5,000	2,196	287	148	46		28		1	2,344	362
\$5,000 to under \$6,000	2,526	220	49	17	3	37			2,578	274
\$6,000 to under \$7,000	783	59	6			6			789	65
\$7,000 to under \$8,000	200	21							200	21
\$8,000 to under \$9,000	56	6				1			56	7
\$9,000 to under \$10,000	65	7				1			65	8
\$10,000 and over	32	1				1			32	2
<b>Totals:</b>	<b>7,967</b>	<b>1,068</b>	<b>248</b>	<b>98</b>	<b>46</b>	<b>3,145</b>	<b>220</b>	<b>174</b>	<b>8,481</b>	<b>4,485</b>

<sup>1</sup> Includes reversionary.

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

**SCHEDULE OF AVERAGE BENEFIT PAYMENTS FOR NEW ANNUITIES GRANTED DURING 2012**

Years of Service:		0-9	10-14	15-19	20-24	25-29	30-34	>= 35	Total
2010	Number of Retired Members	0	1	13	105	161	140	131	551
	Average annual salary [4 out of 10]	\$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
2011	Number of Retired Members	1	8	16	95	175	103	102	500
	Average annual salary [4 out of 10]	\$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
2012	Number of Retired Members	0	9	22	123	217	88	80	539
	Average annual salary [4 out of 10]	\$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



**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012**

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***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.

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***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.

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***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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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***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.

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***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.*

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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***Reversionary 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.

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***SURVIVOR INCOME BENEFITS PAYABLE ON DEATH***

***Death in Service (Non-Duty):***            Generally, a money-purchase benefit is provided, based on total salary 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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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***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.*

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***CHILDREN'S ANNUITIES***

***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.

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***DUTY DISABILITY BENEFIT***

***Eligibility*** Disabling condition incurred in the performance of duty.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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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.

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***OCCUPATIONAL DISEASE DISABILITY BENEFIT***

***Eligibility*** Heart attack or any disability heart disease after 10 years of service.

***Benefit*** 65% 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 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.

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***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.

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***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.

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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***Benefit***

<b><i>Death in Service:</i></b>	<b><u>AGE AT DEATH</u></b>	<b><u>BENEFIT</u></b>
	49 and under	\$12,000
	50-62	\$12,000 less \$400 for each year by which age at death exceeds 49.
	63 and Over	\$6,000

<b><i>Death after Retirement:</i></b>	<b><u>AGE AT DEATH</u></b>	<b><u>BENEFIT</u></b>
	50 and over	\$6,000

If death results from injury incurred in performance of duty before retirement on annuity, the benefit payable is \$12,000 regardless of the attained age.

***GROUP HEALTH HOSPITAL AND SURGICAL INSURANCE PROGRAM***

The pension fund shall provide payments in the amount of \$95 per month for non-Medicare eligible city annuitants and \$65 per month for Medicare eligible city annuitants through June 30, 2013.

***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***

If at death of a retired policeman the total member contributions paid while active exceed the total retirement benefits paid to date of death, the difference is payable.

***CONTRIBUTIONS***

***Salary Deductions***

Employee	7 %
Spouse	1½%
Annuity Increase	½%
	<hr style="width: 100%;"/>
	9 %

**POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO**  
**SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS**  
**AS OF DECEMBER 31, 2012 (CONT'D)**

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<i>City Contributions</i> <sup>1</sup>	Employee	9-5/7%	
	Spouse	2 %	
	Annuity Increase	1/2%	Unallocated
		12-3/14%	

<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 the contributions by the policemen to the Fund two years prior to the year of the tax levy.

***"PICK UP" OF  
EMPLOYEE SALARY  
DEDUCTIONS***

Beginning January 1, 1982, the employee contributions were "picked up" by the employer. The W-2 salary is therefore reduced by the amount of contribution. For pension purposes the salary remains unchanged. Income tax will be paid when a refund or annuity is received. For the purpose of benefits, refunds or contributions, these contributions will be treated as employee contributions.

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

Year Ending	CPI-U	½ 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

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# Statistical Section

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## 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**

<b>Year</b>	<b>Employee Contributions(1)</b>	<b>Employer Contributions(2)</b>	<b>Investment Income (3)</b>	<b>Total</b>	<b>Employer Cont. as a percent of Current Year Payroll</b>
2003	79,816,332	140,807,354	627,291,033	847,914,719	15.86%
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%

<b>Year</b>	<b>Benefits Expenses</b>	<b>Administrative Expenses</b>	<b>Refunds</b>	<b>Total</b>	<b>Income Less Payouts</b>
2003	370,696,206	3,166,145	4,806,372	378,668,723	469,245,996
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

(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)**

<b>Year</b>	<b>Employee</b>	<b>Spouse</b>	<b>Dependent</b>	<b>Ordinary, Duty and Children Disability</b>	<b>Death</b>	<b>Hospitalization</b>	<b>Total</b>
2003	297,127,105	43,938,085	1,178,671	19,938,927	1,783,627	6,720,792	370,687,207
2004	322,926,347	47,527,540	1,230,130	20,250,689	1,837,006	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	8,040,795	452,788,081
2007	384,061,774	54,134,067	1,287,970	22,132,157	1,754,836	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

## AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Years Ended	Average Annual Benefit	Average Current Age of Retirees	Average Age at Retirement Current Year *	Average Years of Service at Retirement Current Year *
1983	10,770	68	59.4	29.3
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

\* Averages for New Annuitants in 2012.

## RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT

Years	ANNUITANTS		DISABILITY				Widow	Total	
	Employee	Spouse <sup>1</sup>	Child	Ordinary	Duty	Occup.	Child <sup>2</sup>		Comp.
1983	3,642	3,202	446	104	86			70	7,550
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

<sup>1</sup> Includes reversionary.

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

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

Year	Number of Members at Year End	Annual Average Salary	% Increase in Average Salary
2003	13,746	64,568	--%
2004	13,569	64,434	-0.2%
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%
<b>2012</b>	<b>12,026</b>	<b>84,414</b>	<b>-0.1%</b>

### 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
2003	7,498	38,998	3,250	57.1	66	30.2
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
<b>2012</b>	<b>9,035</b>	<b>56,896</b>	<b>4,741</b>	<b>58.7</b>	<b>69</b>	<b>26.7</b>

### Schedule of Widow Annuitants - Last 10 Years

<b>Year</b>	<b>Number at Year End</b>	<b>Average Annual Benefit</b>	<b>% Increase in Average Benefit</b>
2003	3,083	12,950	--%
2004	3,133	14,239	10.0%
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%
<b>2012</b>	<b>3,122</b>	<b>18,466</b>	<b>3.2%</b>

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

<b>Year</b>	<b>Number of Annuitants at Year End</b>	<b>Average Annual Benefit</b>	<b>% Increase in Average Benefit</b>
2003	247	4,521	--%
2004	249	4,682	3.6%
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%
<b>2012</b>	<b>214</b>	<b>6,365</b>	<b>6.2%</b>



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

Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2003	29	23,272	-18.1%
2004	44	32,607	40.1%
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%
<b>2012</b>	<b>47</b>	<b>42,164</b>	<b>0.7%</b>

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

Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2003	285	41,147	--%
2004	287	42,358	2.9%
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%
<b>2012</b>	<b>263</b>	<b>54,910</b>	<b>0.4%</b>

## Schedule of Occupational Disease Disability Recipients Data - Last 10 Years

Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2003	97	38,665	--%
2004	85	40,752	5.4%
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%
<b>2012</b>	<b>36</b>	<b>50,375</b>	<b>2.1%</b>

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

Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2003	139	1,235	--%
2004	130	1,230	-0.4%
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%
<b>2012</b>	<b>180</b>	<b>1,200</b>	<b>0%</b>

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

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

Year	Number of Annuitants at Year End	Average Annual Benefit	% Increase in Average Benefit
2003	63	47,567	--%
2004	65	45,411	-4.5%
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%
<b>2012</b>	<b>69</b>	<b>61,566</b>	<b>0.7%</b>

## 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
2006	9,656	\$833	--%
2007	9,890	\$820	-1.5%
2008	10,017	\$884	7.7%
2009	10,048	\$922	4.3%
2010	10,118	\$925	0.3%
2011	10,368	\$925	0.0%
<b>2012</b>	<b>10,738</b>	<b>\$909</b>	<b>-1.7%</b>

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.

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