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

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

a component unit of the City of Chicago for the year ended December 31, 2010



# **Comprehensive Annual Financial Report**

A Component unit of the City of Chicago for the year ended December 31, 2010

Prepared by John J. Gallagher, Jr. Executive Director Regina Tuczak Comptroller Pacifico V. Panaligan Assistant Comptroller

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

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# Introductory Section

# 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, 2009

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.



President

**Executive Director** 

Members of the Board Representing the Public Michael A. Conway Steven J. Lux Stephanie D. Neely Gene R. Saffold

Representing the Active Police and Disability Beneficiaries Michael Lazzaro, Recording Secretary James P. Maloney, Vice-President Michael K. Shields

Representing the Annuitants Kenneth A. Hauser, President

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

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

> 221 North LaSalle Street-Room 1626 Chicago, Illinois 60601 (312) 744-3891 Outside Chicago: 1-800-656-6606 www.chipabf.org

0 228

John J. Gallagher, Jr. Executive Director

Regina Tuczak, CPA Comptroller

Peter Orris, M.D. Physician

David R. Kugler Attorney for the Board

Samuel Kunz Chief Investment Officer

Address Communications to the Retirement Board

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, 2010. 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, an annual audit conducted by a certified public accountant certifying 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 adopted by the Retirement Board 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, 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, 2010 and 2009, 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 impact of the sub-prime mortgage collapse on U.S. Equity markets in late 2007 preceded an overall economic collapse in 2008. 2008 saw the U.S. stock market suffering its worst year since the Great Depression with equity prices dropping an average of -37.2%. Global equity markets rebounded in 2009 and 2010 which resulted in the Fund achieving returns of 21.5% and 12.7%, respectively, with domestic and foreign equities being the two largest contributors. Domestic equity for the Fund returned 32.9% and 17.3% in 2009 and 2010, respectively, while international equities returned 40.1% and 11.5%, respectively, for 2009 and 2010. Fixed income also delivered a positive return of 11.7% and 7.9%, for 2009 and 2010, respectively. While 2009 and 2010 have been impressive years on an absolute basis relative to losses endured in 2008, the Fund realizes it will take many years for assets to recover to levels seen in 2007 and is proceeding in a prudent manner.

48 professional investment management firms managed the investment portfolio at yearend 2010. There were no investment manager changes in 2010. 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 to monitor investment performance, to aid in the selection of investment management firms, and to assist in the development of investment policy.

# **Economic Condition and Outlook**

Although the collapse in market prices in 2008 has reduced the value of Fund net assets from \$4.3 billion as of year-end 2007 to \$3.4 billion as of year-end 2010, the Board of Directors and the Fund's investment consultant feel that the Fund is sufficiently structured and diversified to sustain prevailing market conditions. The Fund continues to move cautiously toward alternative investments and the Board of Directors approved a revised strategic allocation in late 2010.

Market conditions since 2007 constitute an anomaly rarely seen in the history of the Fund since inception. The Fund needs a sustained recovery in the market value of its assets in order to meet its future obligations to its annuitants. The paramount objective of the Fund is to meet its long-term defined pension benefit obligations. The funding ratio of the Fund on a market value basis declined substantially during 2008, 2009 and 2010, and the Fund is clearly not alone among employee benefit plans in this occurrence.

# **Funding Status**

The actuarial value of assets at year-end 2010, using the GASB 25 and 43 methods, was \$3.719 billion with a corresponding actuarial liability of \$9.375 billion. The GASB 25

actuarial liability increased approximately \$474 million, up from \$8.901 billion in 2009. Fund assets currently fund 39.7% of this liability, decreasing from a funded ratio of 43.7% in 2009. The decrease in the funded ratio largely resulted from the collapse of U.S. and global financial markets in 2008. Under GASB 25 the Fund smoothes its investment returns over a five year period. As more of the losses from 2008 are recognized, the funded ratio will continue to decrease.

While the employer contribution requirement (tax multiplier) since 1982 has remained constant at 2.00 times the employee contributions received two years prior, recent 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 signed into law January 1, 2011, 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. At that time, a budget for only the Fund's administrative expenses was prepared and approved. The 1990 budget and all future budgets, have been expanded to include all revenue and expense categories, including employer and employee contributions, investment income, annuity, death, and disability benefit expenses. The current fiscal planning and budgeting process normally begins in July 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 2010. The Fund works diligently to monitor and control administrative expenses. In 2010, administrative expenses declined by \$.38 million from 2009 amounts. The 2011 budget continues these diligent efforts with an essentially flat administrative expense budget, when compared to 2010 budget and actual expenses.

## **Public Pensions Commission**

Late in 2007, the Mayor of the City of Chicago announced the formation of a special commission to propose ways to improve the financial strength of the City's four pension funds. The Police Pension Fund has been experiencing a drag on its funding progress from the impact that negative cash flows have on long-term investment returns. Negative cash flow occurs when employee and employer contributions are not sufficient to offset total annual benefit expenses, requiring the Fund to liquidate portions of its investment portfolio to assist in paying benefits when due.

The executive directors from each of the four city pension funds served on this Mayoral commission as well as an elected trustee representing each pension fund. Several union-appointed representatives and private-sector business leaders also served on the Commission. The Commission issued its report in 2010 and a copy is available on the Fund's website at www.chipabf.org.

# **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. This system became fully operational in 2009, and the Fund continues to add enhancements to the system. Most notably, 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. Further enhancements are scheduled for 2011, 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.

## **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 for the year ended December 31, 2009. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports and the Fund has received the certificate for 19 out of the past 20 years.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This 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 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. 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. With our new pension administration system, we will be better able to serve you going forward and, as always, welcome your comments or suggestions.

Respectfully submitted,

? Hallaghen J.

John J. Gallagher, Jr. Executive Director June 23, 2011

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

#### December 31, 2010

#### Appointed Trustees

Michael A. Conway Steven J. Lux, Investment Committee Chairman Stephanie D. Neely, Treasurer Gene R. Saffold

#### **Elected Trustees**

Kenneth A. Hauser, President Michael J. Lazzaro, Recording Secretary James P. Maloney, Vice President Michael K. Shields

#### **Office Staff Members**

John J. Gallagher, Jr., Executive Director Sam Kunz, Chief Investment Officer Regina Tuczak, Comptroller Pacifico V. Panaligan, Assistant Comptroller

#### Support Staff

Adarsh Bagai Karina Fruin Carol Lopez Dorothy Miller Alma Rivera Kathy Walsh

Robert Crawford Kay Hylton Kris Matalik Richard Mulhbacher Erwin Santos Richard Wrobel Joseph Ferreri Anthony Kiefer Anne McGowan Ed Rausch Maritza Vazquez

# **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

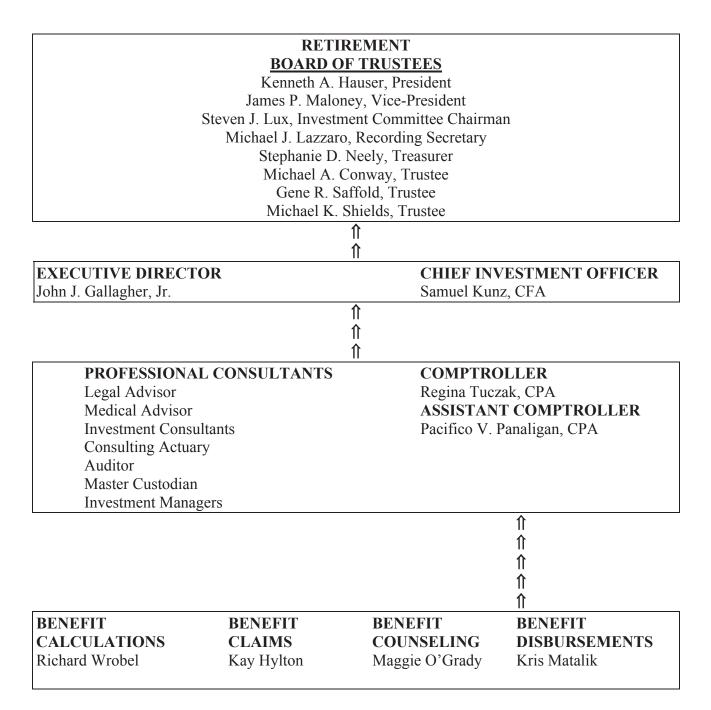
#### **COMMERCIAL BANK**

Chase

## **INVESTMENT MANAGERS**

**ABR Chesapeake Adams Street Partners Aetos Capital LLC AG Realty Apollo Real Estate Advisors Ariel Capital Management Artisan Partners Attucks Asset Management LLC Capital Guardian Trust Co.** The Carlyle Group Chancellor **Channing Capital Chicago Equity Partners Dearborn Partners Declaration Management** Denali Advisors **DRA Advisors LLC DV Urban Realty European Investors Inc. Global Infrastructure Partners Great Lakes Advisors** HarbourVest Partners, LLC **Holland Capital Management ING Clarion Real Estate Invesco Capital Management** JP Morgan Asset Management **K2** Advisors LM Capital Group **Lone Star Funds Macquarie Group McKinley Capital Management Mesa West Capital** Mesirow Montag & Caldwell **Morgan Stanley Real Estate** Muller & Monroe Northern Trust Global Investments **Oaktree Capital Management Piedmont Investment Advisors Prudential Real Estate Ouadrant Real Estate Advisors RCP** Advisors **Shamrock-Hostmark** Taplin, Canida & Habacht **UBS Global Asset Management** Wellington Management Company Wells Capital Management William Blair & Company

# **ORGANIZATION CHART**





# Financial Section

# Mitchell & Titus

 Mitchell & Titus LLP 333 West Wacker Drive Chicago, IL 60606 Phone: (312) 332-4964 Fax: (312) 332-0181 www.mitchelltitus.com

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

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

We have audited the accompanying statements of plan net assets of the Policemen's Annuity and Benefit Fund of Chicago (the Fund) as of December 31, 2010 and 2009, and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Policemen's Annuity and Benefit Fund of Chicago as of December 31, 2010 and 2009, and the changes in plan net assets for the years then ended in conformity with accounting principles generally accepted in the United States.

The accompanying management's discussion and analysis and the required supplementary information as listed in the table of contents are not a required part of the basic financial statements but are supplementary information required by the Governmental Accounting Standards Board (GASB). We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and we express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The other supplementary schedules of administrative expenses, consulting costs, and investment fees are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These other supplementary schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Mitchell : Titus, LLP

June 22, 2011

# **Management's Discussion and Analysis**

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 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 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 \$114 million, or 3.3% to \$3,440 million during 2010; increasing from \$3,326 million at December 31, 2009; and from \$3,001 million at December 31, 2008.
- Fund investment income earned, net of investment-related expenses, approximately \$378 million during 2010 compared to a gain of approximately \$576 million during 2009. The positive return reflects additional improvement in global capital markets, which delivered positive returns, as economic indicators hinted further stabilization following the 2008 credit crisis. All asset classes experienced positive earnings in 2010, and the main contributors to absolute performance were again U.S. and International Equity, as well as

Fixed Income. On a relative basis, Private Capital (comprised of Private Equity, Real Estate and Infrastructure), Fixed Income and Non-U.S. Equity compared favorably to their respective benchmarks. While the overall Equity allocation showed a strong year, U.S. Equity slightly trailed its benchmark on a relative basis. In the Alternatives Investment space, the Fund of Hedge Fund allocation also trailed its benchmark by a small margin in 2010.

- The Fund received contributions of \$108.4 million from members and \$183.8 million from the City of Chicago in 2010, compared to contributions of \$95.6 million from members and \$180.5 million from the City of Chicago in 2009. The number of active members declined by 3.2% from 2009 to 2010; however, the increase in contributions is primarily due to a retroactive wage increase provided to active members in August 2010, which was reflective of a new employment contract between the City of Chicago and collective bargaining groups for various ranks within the Chicago Police Department, with salary increases effective July 1, 2007. The retroactive increases resulted in \$12.3 million of additional member contributions in 2010. Also contributing to the increase is approximately \$2.0 million of incremental purchases of service credit from prior law enforcement positions, including military service. Employer contributions from the City of Chicago decreased by 1.8%. Employer contributions are mandated by a statutorily set multiplier of 2.0 times member contributions collected two years prior. The decrease in contributions is reflective of member contributions from 2009. Active membership declined by 1.6% from 2008 to 2009.
- Benefit payments, excluding death benefits and refunds, increased by approximately \$27.6 million in 2010, from \$506.9 million in 2009 to \$534.5 million in 2010. The number of retirees and beneficiaries increased in 2010 by 226 members or 1.6%, thus contributing to the increase. Another reason for the increase is the annual cost of living adjustments provided to retirees born prior to January 1, 1955, and retroactive retirement and disability benefits provided to members in 2010, reflective of the new salary contract between the City of Chicago and collective bargaining groups for various ranks within the Chicago Police Department, with revised salary increases dating to July 1, 2007. Death benefits and refunds of employee deductions increased slightly from 2009 to 2010 by approximately \$1.5 million, from \$7.9 million to \$9.4 million, respectively.
- Administrative expenses declined by approximately \$.38 million, or 8.8%, from \$4.304 million in 2009 to \$3.925 million in 2010. The decreased administrative expense is primarily due to reduced consulting fees related to actuarial, medical, and software development service fees.
- 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 an insignificant decrease, from 37.4% at December 31, 2009 to 36.7% at December 31, 2010.
- Under Government Accounting Standard Board (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 43.7% at December 31, 2009 to 39.7% at December 31, 2010.

• In compliance with GASB No. 45, the Fund recognizes a liability for other postemployment benefits (OPEB), which represent health insurance coverage for active and retired employees of the Fund. This obligation was first accrued as an expense in the 2008 financial statements in the amount of \$.345 million at December 31, 2008; expense of \$.174 million and \$.440 million was recognized in 2009 and 2010, respectively, resulting in a total accrued liability of \$.831 million as of December 31, 2010.

# PLAN NET ASSETS

A summary of plan net assets is presented below:

#### Plan Net Assets (In millions) As of December 31, 2010, 2009 and 2008

|   |    |                         |    |                                |           |                         |           | Cha                    |                         |
|---|----|-------------------------|----|--------------------------------|-----------|-------------------------|-----------|------------------------|-------------------------|
|   | _  | 2010                    |    | 2009                           |           | 2008                    |           | \$                     | %                       |
| Receivables<br>Brokers – unsettled trades   | \$ | 212.9<br>276.4          | \$ | 204.9<br>121.3                 | \$        | 197.9<br>359.4          | \$        | 8.0<br>155.1           | 3.9<br>127.9            |
| Investments, at fair value<br>Invested securities lending   |    | 3,301.1                 |    | 3,150.0                        |           | 2,847.3                 |           | 151.1                  | 4.8                     |
| collateral<br>Total assets  | -  | <u>295.7</u><br>4,086.1 |    | <u>375.1</u><br><u>3,851.3</u> |           | <u>287.6</u><br>3,692.2 |           | <u>(79.4)</u><br>234.8 | <u>(21.2)</u>           |
| Brokers – unsettled trades<br>Securities lending payable<br>OPEB obligation<br>Accounts payable and accrued |    | 344.2<br>295.7<br>0.8   |    | 144.1<br>376.1<br>0.5          |           | 393.2<br>292.6<br>0.3   |           | 200.1<br>(80.4)<br>0.3 | 138.9<br>(21.4)<br>60.0 |
| expenses<br>Total liabilities   | -  | <u>5.7</u><br>646.4     | _  | <u>4.5</u><br>525.2            |           | <u>5.1</u><br>691.2     |           | <u>1.2</u><br>121.2    | 26.7                    |
| Net assets  | 5  | <u>3,439.7</u>          | \$ | 3,326.1                        | <u>\$</u> | 3,001.0                 | <u>\$</u> | 113.6                  |                         |

The increase in net assets of \$113.6 million in 2010 was primarily driven by investment income. The assets available for investment earned 12.72% in 2010, compared to an investment gain of 21.5% in 2009. The combination of continuous government programs and extremely accommodative monetary policy around the world helped sustain the recovery. This has enabled the Fund to continue to recover part of the severe losses experienced in 2008.

2010-2009

# **CHANGES IN PLAN NET ASSETS**

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

|                                  |             |             |    |           | 2010–2<br>Cha |         |
|----------------------------------|-------------|-------------|----|-----------|---------------|---------|
|                                  | <br>2010    | <br>2009    |    | 2008      | \$            | %       |
| Additions:                       |             |             |    |           |               |         |
| Member contributions             | \$<br>108.4 | \$<br>95.6  | \$ | 93.2      | \$<br>12.8    | 13.4    |
| Employer contributions           | 183.8       | 180.5       |    | 181.5     | 3.3           | 1.8     |
| Net investment gains (losses)    |             |             |    |           |               |         |
| and investment income            | 368.7       | 566.0       |    | (1,104.4) | (197.3)       | (34.9)  |
| Securities lending income (loss) | 0.9         | 1.3         |    | (0.5)     | (0.4)         | (30.8)  |
| Miscellaneous income             | <br>0.0     | <br>0.8     |    | 0.2       | <br>(0.8)     | (100.0) |
| Total additions                  | <br>661.8   | <br>844.2   |    | (830.0)   | <br>(182.4)   | (21.6)  |
| Deductions:                      |             |             |    |           |               |         |
| Annuity, disability, and death   |             |             |    |           |               |         |
| benefits                         | \$<br>536.3 | \$<br>508.5 | \$ | 491.6     | \$<br>27.8    | 5.5     |
| Refunds of contributions         | 7.6         | 6.2         |    | 6.1       | 1.4           | 22.5    |
| OPEB expense                     | 0.4         | 0.2         |    | 0.3       | 0.2           | 100.0   |
| Administrative expenses          | 3.9         | 4.3         |    | 4.2       | (0.4)         | 8.8     |
| Total deductions                 | <br>548.2   | <br>519.2   | _  | 502.2     | <br>29.0      | 5.6     |
|                                  |             |             |    |           |               |         |
| Net increase                     | \$<br>113.6 | \$<br>325.0 | \$ | (1,332.2) | \$<br>(211.4) |         |

#### Changes in Plan Net Assets (In millions) Years Ended December 31, 2010, 2009 and 2008

The Fund continues to experience a net increase in net assets, with net increases in both 2010 and 2009. The increases are primarily due to positive investment returns, with net assets available for investment earning 12.72% and 21.5% in 2010 and 2009, respectively. The net investment gains in 2010 were slightly offset by an increase in deductions of approximately \$29 million, primarily due to increased member benefits as the number of retirees increased in 2010 and retirements were 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 in 2010.

# **INVESTMENT ACTIVITIES**

The Fund continues to move cautiously toward alternative investments and the Board of Trustees approved a revised strategic allocation in late 2010. Overall, rebalancing activity was marginal during 2010, other than continuous selling of U.S. Equity investments to bring the current allocation closer to policy targets. Proceeds from such sales were used immediately for benefit funding requirements.

By year-end 2010, the Board of Trustees, working closely with its investment consultant, had established target allocations of: U.S. equities, 21%; international equities, 20%; fixed income, 22%; tactical and opportunistic, 19%; real assets, 4%; private equity, 7%; real estate, 5%; and infrastructure, 2%. The previously established target asset allocation was: U.S. equities, 30%; international equities, 18%; fixed income, 25%; real estate, 7%; private equity, 7%; opportunistic strategies, 9%, and infrastructure, 4%.

#### Investment Returns Years Ended December 31, 2010, 2009 and 2008

|                           | <u>2010</u> | <u>2009</u> | <u>2008</u> |
|---------------------------|-------------|-------------|-------------|
| Total Fund                | 12.72%      | 21.50%      | (27.83)%    |
| Equities                  | 15.60       | 34.78       | (40.16)     |
| Fixed Income              | 7.91        | 11.62       | (4.08)      |
| Alternatives              | 5.29        | 10.96       |             |
| Private Capital           | 11.40       | (16.49)     | (8.06)      |
| Cash and Cash Equivalents | .19         | .48         | 2.55        |

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

#### **Plan Membership**

The following table reflects the plan membership as of December 31, 2010, 2009 and 2008.

|   |        |        |        | 2010-20       | 09    |
|---|--------|--------|--------|---------------|-------|
|   | 2010   | 2009   | 2008   | <u>Change</u> | %     |
| Retirees and beneficiaries                                      |        |        |        |               |       |
| receiving benefits  | 12,380 | 12,154 | 12,183 | 226           | 1.9   |
| Active employees  | 12,737 | 13,154 | 13,373 | (417)         | (3.1) |
| Terminated (inactive members)<br>employees entitled to benefits |        |        |        |               |       |
| or refunds of contributions                                     | 620    | 634    | 636    | (14)          | (2.2) |
| Total   | 25,737 | 25,942 | 26,192 | (205)         |       |

#### Changes in Plan Membership As of December 31, 2010, 2009 and 2008

# **FUNDING STATUS**

The actuarial value of assets, using the GASB 25 and 43 methods, for the December 31, 2010 valuation was \$3,719 million and the actuarial liability was \$9,375 million. The actuarial liability increased by approximately \$474 million in 2009, from \$8,901 million in 2009 to \$9,375 million in 2010. The assets currently fund 39.7% of this liability, a decrease from the 43.7% funded ratio

in 2009. The decrease in the funded ratio resulted largely from the collapse in U.S. and global financial markets in 2008. As the Fund uses a five-year actuarial smoothing method in valuing its assets to determine its funded status, investment losses experienced in 2008 will be reflected in the actuarial value of assets over a five-year period, concluding in 2012.

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 2009 to 2010. Additionally, the annual required contribution for these benefits, as computed under GASB 25 and 43, was not reached in 2010 or 2009. 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, will be 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 which 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 market 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.

#### **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:

Mr. John J. Gallagher, Jr. 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

#### STATEMENTS OF PLAN NET ASSETS

#### AS OF DECEMBER 31, 2010 AND 2009

|   | 2010          |     | 2009     |           |
|---|---------------|-----|----------|-----------|
| ASSETS  |               |     |          |           |
| Cash  | \$            | 250 | \$       | 250       |
| Receivables                                   |               |     |          |           |
| Employer tax levies, net of allowance for     |               |     |          |           |
| loss of \$18,417,241 in 2010 and              |               |     |          |           |
| \$17,476,339 in 2009                          | 199,875,      | 680 | 19       | 1,450,555 |
| Member contributions                          | 4,624,        | 607 | 2        | 4,511,386 |
| Interest and dividends                        | 8,381,        | 341 | 8        | 3,933,655 |
| Accounts receivable—due from brokers          | 276,373,      | 195 | 12       | 1,339,956 |
|   | 489,254,      | 823 | 320      | 5,235,552 |
| Investments at fair value                     |               |     |          |           |
| U.S. common stock and other equity            | 1,041,332,    | 798 | 1,134    | 4,330,611 |
| Collective investment funds, stock            | 285,809,      | 608 | 243      | 3,475,859 |
| Collective investment funds, fixed income     | 260,847,      | 982 | 219      | 9,399,032 |
| International equity                          | 667,432,      | 501 | 54′      | 7,973,699 |
| Bonds and notes                               | 557,575,      | 568 | 472      | 2,823,948 |
| Short-term instruments                        | 91,970,       | 139 | 112      | 2,012,093 |
| Infrastructure                                | 38,165,       | 359 | 3        | ,501,982  |
| Forward contracts and swaps                   | 4,728,        | 596 | 8        | 3,105,495 |
| Hedge fund-of-funds                           | 81,704,       | 551 | 104      | 1,425,380 |
| Real estate                                   | 94,421,       | 845 | 90       | ),428,931 |
| Venture capital and private equity            | 177,116,      | 975 | 18:      | 5,516,853 |
|   | 3,301,105,    | 922 | 3,149    | 9,993,883 |
| Invested securities lending cash collateral   | 295,714,      | 545 | 375      | 5,111,985 |
| Total Assets                                  | 4,086,075,    | 540 | 3,85     | ,341,670  |
| LIABILITIES                                   |               |     |          |           |
| Refunds and accounts payable                  | 5,676,        | 240 | 4        | 1,550,594 |
| Trade accounts payable—due to brokers         | 344,185,      | 437 | 144      | 4,123,721 |
| Securities lending cash collateral            | 295,714,      | 545 | 370      | 5,098,401 |
| OPEB obligation                               | 830,          | 621 |          | 518,200   |
| Total Liabilities                             | 646,406,      | 843 | 52:      | 5,290,916 |
| Net assets held in trust for pension benefits | \$ 3,439,668, | 697 | \$ 3,320 | 5,050,754 |

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

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

#### STATEMENTS OF CHANGES IN PLAN NET ASSETS

#### AS OF DECEMBER 31, 2010 AND 2009

|  | 2010             | 2009             |
|--|------------------|------------------|
| ADDITIONS                                      |                  |                  |
| Contributions                                  |                  |                  |
| Employer                                       | \$ 183,834,639   | \$ 180,510,851   |
| Plan member salary deductions                  | 108,402,353      | 95,614,390       |
| Total contributions                            | 292,236,992      | 276,125,241      |
| Investment income                              |                  |                  |
| Net appreciation in fair value of investments  | 316,282,278      | 512,929,419      |
| Interest                                       | 27,113,326       | 30,186,909       |
| Dividends                                      | 29,784,972       | 30,177,953       |
| Real estate income                             | 5,300,838        | 2,561,835        |
|  | 378,481,414      | 575,856,116      |
| Investment activity expenses                   |                  |                  |
| Investment management fees                     | (9,109,616)      | (8,987,507)      |
| Custodial fees                                 | (183,525)        | (197,804)        |
| Investment consulting fees                     | (542,554)        | (616,179)        |
| Total investment activity expenses             | (9,835,695)      | (9,801,490)      |
| Net income from investing activities           | 368,645,719      | 566,054,626      |
| From securities lending activities             |                  |                  |
| Net depreciation in fair value of investments  | -                | (986,416)        |
| Securities lending income                      | 1,132,624        | 1,513,641        |
| Borrower rebates                               | 10,242           | 1,145,050        |
| Bank fees                                      | (230,530)        | (412,078)        |
| Net income from securities lending activities  | 912,336          | 1,260,197        |
| Total net investment income                    | 369,558,055      | 567,314,823      |
| Miscellaneous income                           | 20,031           | 799,364          |
| Total additions                                | 661,815,078      | 844,239,428      |
| DEDUCTIONS                                     |                  |                  |
| Pension and disability benefits                | 534,462,320      | 506,853,184      |
| Death benefits                                 | 1,782,400        | 1,662,800        |
| Refunds of employee deductions                 | 7,587,436        | 6,193,872        |
|  | 543,832,156      | 514,709,856      |
| Administrative expenses                        | 3,924,928        | 4,303,599        |
| OPEB expense                                   | 440,051          | 173,600          |
| Total deductions                               | 548,197,135      | 519,187,055      |
| Net increase                                   | 113,617,943      | 325,052,373      |
| Net assets held in trust for pension benefits: |                  |                  |
| Beginning of year                              | 3,326,050,754    | 3,000,998,381    |
| End of year                                    | \$ 3,439,668,697 | \$ 3,326,050,754 |

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

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

#### NOTES TO FINANCIAL STATEMENTS

#### YEARS ENDED DECEMBER 31, 2010 AND 2009

#### **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 and other types of investment vehicles as set forth in the Illinois Compiled Statutes.

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

#### Method Used to Value Investments

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Fixed-income securities are valued principally using quoted market prices provided by independent pricing services. For collective investments, net asset value is determined and certified by the investment managers as of the reporting date. Real estate investments are valued at estimated fair value as determined by the general partner, based upon appraisals provided by the investment manager. Hedge fund, venture capital, 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 the 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 has the ability to pledge or sell them without a borrower default. Liabilities resulting from these transactions are reported in the statements of plan net assets.

#### NOTE 2 PENSION PLAN

#### Plan Description and Contribution Information

The 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, their widows, and their children. Any employee of the City 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.

The City of Chicago payrolls for employees covered by the Fund for the years ended December 31, 2010 and 2009 were \$1,048,084,301 and \$1,011,205,359, respectively. At December 31, 2010 and 2009, the Fund membership consisted of the following:

|   | 2010   | 2009   |
|---|--------|--------|
| Active employees  | 12,737 | 13,154 |
| Retirees and beneficiaries currently receiving benefits                   | 12,380 | 12,154 |
| Terminated employees entitled to<br>benefits or a refund of contributions |        |        |
| but not yet receiving them  | 620    | 634    |
|   | 25,737 | 25,942 |

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 ten years of service immediately preceding the date of retirement). The annuity shall not exceed 75% of the highest average annual salary.

#### NOTE 2 PENSION PLAN (continued)

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%.

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.

#### Funded Status and Funding Progress

The funded status of the Fund as of December 31, 2010 and 2009, the most recent actuarial valuation dates, is as follows:

| Actuarial<br>Valuation<br> | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as<br>a Percentage<br>of Covered<br>Payroll<br>((b-a)/c)_ |
|----------------------------|--|---|------------------------------------|--------------------------|---------------------------|--|
| 12/31/10                   | \$ 3,718,954,539                       | \$ 9,210,056,428  | \$ 5,491,101,889                   | 40.38%                   | \$ 1,048,084,301          | 523.92%  |
| 12/31/09                   | 3,884,978,241                          | 8,736,101,666   | 4,851,123,425                      | 44.47                    | 1,011,205,359             | 479.74   |

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

Additional information as of the latest actuarial valuation follows:

| Valuation date                                      | 12/31/2010 and 2009  |
|---|--|
| Actuarial cost method                               | Entry age  |
| Amortization method                                 | Level percent open   |
| Remaining amortization period                       | 30 years   |
| Asset valuation method                              | 5-year smoothed market                                       |
| Actuarial assumptions:<br>Investment rate of return | 8.0%   |
| 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<br>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, with the remaining amount to be paid by all annuitants participating in the City's health care plans. Currently, the Fund pays to 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 \$85 per month from July 1, 2003 through June 30, 2008, and \$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 \$55 per month from July 1, 2003 through June 30, 2008, and \$65 per month from July 1, 2009 through June 30, 2008, and \$65 per month from July 1, 2009 through June 30, 2013 for each annuitant who is qualified to receive Medicare benefits. Health care benefits provided through this

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

supplement are not dependent upon inflation, as the benefits paid are a fixed dollar amount.

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

At December 31, 2010 and 2009, the number of annuitants or surviving spouses who had subsidized health insurance totaled 10,118 and 10,048, respectively. Of the 2,261 remaining annuitants or surviving spouses, 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 620 terminated employees entitled to benefits or a refund, approximately 178 of these terminated employees would be 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 2010 and 2009, the Fund received contributions of \$9,354,163 and \$9,266,431 from the City, and remitted contributions of insurance premiums to the City of \$9,354,163 and \$9,266,431, 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, 2010 or 2009.

#### Funded Status and Funding Progress

The funded status of Fund's health care plans as offered by the City as of December 31, 2010 and 2009, the most recent actuarial valuation dates, is as follows:

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as<br>a Percentage<br>of Covered<br>Payroll<br>_((b-a)/c)_ |
|--------------------------------|--|---|------------------------------------|--------------------------|---------------------------|---|
| 12/31/10                       | \$                                     | \$ 164,796,449  | \$ 164,796,449                     | 0.00%                    | \$ 1,048,084,301          | 15.72%  |
| 12/31/09                       |  | 164,799,819   | 164,799,819                        | 0.00                     | 1,011,205,359             | 16.30   |

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

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

Additional information as of the latest actuarial valuation follows:

| Valuation dates<br>Actuarial cost method<br>Amortization method<br>Remaining amortization period<br>Asset valuation method | 12/31/2010 and 12/31/2009<br>Entry age normal<br>Level percent open<br>30 years<br>No assets (Pay-as-you-go) |
|--|--|
| Actuarial assumptions:<br>OPEB investment rate of return<br>Projected salary increases                                     | <ul><li>4.5%</li><li>4.0% per year, plus additional</li></ul>  |
| Health cost trend rate   | percentage related to service<br>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, 2010 were \$680,800 and (\$3,663), respectively; and \$804,310 and (\$917,989) at December 31, 2009, respectively. These balances exclude \$250 of petty cash. The bank balance at December 31, 2010 and 2009 is on deposit with the City Treasurer and is insured or collateralized by securities held by the City Treasurer in the Fund's name.

#### **Investment Policy**

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

- Maintain a long-term investment horizon for the Fund
- Emphasize equity investments to enhance long-term return
- 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.

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

#### Investment Summary

The following table presents a summary of the Fund's investments by type at December 31, 2010 and 2009.

|   | 2010             | 2009             |
|---|------------------|------------------|
| U.S. Government and agency fixed          |                  |                  |
| income                                    | \$ 280,131,869   | \$ 214,424,267   |
| U.S. corporate fixed income               | 277,443,699      | 258,399,681      |
| U.S. common collective fixed income funds | 260,847,982      | 219,399,032      |
| U.S. equities                             | 1,041,332,798    | 1,134,330,611    |
| U.S. common collective stock funds        | 285,809,608      | 243,475,859      |
| Foreign equities                          | 667,432,501      | 547,973,699      |
| Pooled short-term investment funds        | 39,528,450       | 50,909,140       |
| Infrastructure                            | 38,165,359       | 31,501,982       |
| Real estate                               | 94,421,845       | 90,428,931       |
| Venture capital                           | 177,116,975      | 185,516,853      |
| Forward contracts and swaps               | 4,728,596        | 8,105,495        |
| Hedge fund-of-funds                       | 81,704,551       | 104,425,380      |
| Cash and cash equivalents                 | 52,441,689       | 61,102,953       |
| Total investments at fair value           | \$ 3,301,105,922 | \$ 3,149,993,883 |

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 Northern Trust Collective Daily U.S. Market Cap Equity Index Fund, which amounted to \$285,809,608 and \$243,475,859 at December 31, 2010 and 2009, respectively.

#### 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 that such changes could materially affect the amounts reported in the statements of plan net assets.

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

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 manages its exposure to fair value loss arising from increasing interest rates in several ways. All fixed-income investments are managed by external investment managers. The Fund employed six such managers in 2010 and 2009. 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 manager's portfolio. These guidelines include 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.

At December 31, 2010, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

|   |                | <b>Investment Maturities</b> |                 |                  |                       |  |  |
|---|----------------|------------------------------|-----------------|------------------|-----------------------|--|--|
| Investment Type   | Fair<br>Value  | Less than<br>1 Year          | 1 to 6<br>Years | 7 to 10<br>Years | More than<br>10 Years |  |  |
| Asset backed securities                                   | \$ 32,578,424  | \$ 65,804                    | \$ 19,264,484   | \$ 5,111,930     | \$ 8,136,206          |  |  |
| Commercial mortgage backed securities                     | 37,206,916     | 774,204                      | -               | 221,211          | 36,211,501            |  |  |
| Corporate bonds   | 191,479,418    | 6,572,238                    | 72,928,834      | 64,234,070       | 47,744,276            |  |  |
| Government agency securities                              | 7,891,724      | 352,300                      | 6,610,419       | 929,005          | -                     |  |  |
| Government bonds  | 85,696,817     | 1,507,597                    | 49,840,074      | 9,199,568        | 25,149,578            |  |  |
| Government mortgage backed securities                     | 178,085,262    | -                            | 1,236,546       | 11,050,140       | 165,798,576           |  |  |
| Government issued commercial mortgage backed securities   | 1,736,490      | -                            | -               | 1,736,490        |                       |  |  |
| Guaranteed fixed income                                   | 795,621        | -                            | 795,621         | -                |                       |  |  |
| Index linked government funds                             | 6,721,576      | -                            | 1,812,517       | 4,909,059        | -                     |  |  |
| Municipal principal bonds                                 | 5,211,889      | -                            | -               | 720,789          | 4,491,100             |  |  |
| Non-government backed collateralized mortgage obligations | 10,171,431     |                              | 223,823         | 2,805,996        | 7,141,612             |  |  |
|   | \$ 557,575,568 | \$ 9,272,143                 | \$ 152,712,318  | \$ 100,918,258   | \$ 294,672,849        |  |  |

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

|   |           |               | Investment Maturities |                     |    |                 |    |                  |    |                       |
|---|-----------|---------------|-----------------------|---------------------|----|-----------------|----|------------------|----|-----------------------|
| Investment Type   |           | Fair<br>Value |                       | Less than<br>1 Year |    | 1 to 6<br>Years |    | 7 to 10<br>Years |    | More than<br>10 Years |
| Asset backed securities                                   | \$        | 22,602,827    | \$                    | -                   | \$ | 12,213,394      | \$ | 3,942,795        | \$ | 6,446,638             |
| Commercial mortgage backed securities                     |           | 44,894,255    |                       | -                   |    | 661,503         |    | 622,956          |    | 43,609,796            |
| Corporate bonds   |           | 181,709,894   |                       | 4,013,217           |    | 62,205,179      |    | 68,199,262       |    | 47,292,236            |
| Government agency securities                              |           | 7,872,709     |                       | 422,000             |    | 6,826,078       |    | 624,631          |    | -                     |
| Government bonds  |           | 57,082,993    |                       | 764,531             |    | 10,745,531      |    | 20,486,218       |    | 25,086,713            |
| Government mortgage backed securities                     |           | 135,226,796   |                       | -                   |    | -               |    | 15,176,107       |    | 120,050,689           |
| Government issued commercial mortgage backed securities   |           | 2,122,677     |                       | -                   |    | -               |    | 2,122,677        |    | -                     |
| Guaranteed fixed income                                   |           | 777,053       |                       | -                   |    | 777,053         |    | -                |    | -                     |
| Index linked government funds                             |           | 6,739,265     |                       | -                   |    | 3,073,584       |    | 3,665,681        |    | -                     |
| Municipal principal bonds                                 |           | 5,379,827     |                       | -                   |    | 2,471,827       |    | 487,558          |    | 2,420,442             |
| Non-government backed collateralized mortgage obligations |           | 8,415,652     |                       | -                   |    | 259,444         |    | 2,277,706        |    | 5,878,502             |
|   | <u>\$</u> | 472,823,948   | \$                    | 5,199,748           | \$ | 99,233,593      | \$ | 117,605,591      | \$ | 250,785,016           |

At December 31, 2009, the Fund had the following investments and maturities related to certain fixed-income securities (bonds and notes):

*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's investment policy establishes guidelines for diversification and credit quality of investment portfolios for each investment manager. Suggested levels of credit quality ratings less than investment grade are provided to the external investment managers.

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

|  | Fair Value |             |    |             |
|--|------------|-------------|----|-------------|
|  |            | 2010        |    | 2009        |
| Quality Rating:                                    |            |             |    |             |
| AAA  | \$         | 56,463,793  | \$ | 55,095,266  |
| AA   |            | 14,360,688  |    | 16,198,738  |
| А  |            | 69,473,070  |    | 67,074,877  |
| BBB  |            | 96,777,172  |    | 87,518,343  |
| BB   |            | 8,903,126   |    | 6,381,400   |
| В  |            | 2,417,108   |    | 2,534,624   |
| Not rated  |            | 23,956,102  |    | 19,863,946  |
| CCC through D                                      |            | 5,092,640   |    | 3,732,487   |
| Total credit risk of U.S. corporate fixed income   |            | 277,443,699 |    | 258,399,681 |
| U.S. Government and agency fixed income securities |            | 280,131,869 |    | 214,424,267 |
|  | \$         | 557,575,568 | \$ | 472,823,948 |

*Custodial Credit Rate 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, 2010 and 2009 deposits of \$4,244,367 and \$1,236,478, respectively, were exposed to custodial credit risk as uninsured and uncollateralized. The Fund does not have a formal policy regarding custodial credit risk.

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

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

|                                       | Fair Value |             |    |             |
|---------------------------------------|------------|-------------|----|-------------|
|                                       |            | 2010        |    | 2009        |
| Currency                              |            |             |    |             |
| Australian Dollar                     | \$         | 9,385,547   | \$ | 14,334,054  |
| Brazilian Real                        | +          | 8,985,936   | +  | 9,363,148   |
| British Pound Sterling                |            | 96,477,892  |    | 84,107,739  |
| Canadian Dollar                       |            | 22,440,604  |    | 15,818,307  |
| Czech Koruna                          |            | 324         |    | 243,455     |
| Danish Krone                          |            | 7,511,992   |    | 4,130,053   |
| Egyptian Pound                        |            | -           |    | 274,658     |
| Euro Currency Unit                    |            | 117,606,602 |    | 133,425,125 |
| Hong Kong Dollar                      |            | 51,072,671  |    | 36,604,250  |
| Hungarian Forint                      |            | 201         |    | 221         |
| Indian Rupee                          |            | 5,614,096   |    | 8,485,379   |
| Indonesian Rupiah                     |            | 4,201,582   |    | 3,096,460   |
| Japanese Yen                          |            | 85,348,057  |    | 60,586,454  |
| Malaysian Ringgit                     |            | 4,387,940   |    | 1,187,530   |
| Mexican Peso                          |            | 2,173,325   |    | 5,072,079   |
| New Israeli Shekel                    |            | 2,470,998   |    | 1,900,758   |
| New Taiwan Dollar                     |            | -           |    | 10,502,828  |
| Norwegian Krone                       |            | 3,036,361   |    | 4,337,136   |
| Polish Zloty                          |            | 2,768,388   |    | 380,222     |
| Singapore Dollar                      |            | 10,042,919  |    | 11,717,775  |
| South African Rand                    |            | 4,818,026   |    | 5,121,557   |
| South Korean Won                      |            | 15,422,037  |    | 6,566,762   |
| Swedish Krona                         |            | 13,187,507  |    | 7,873,577   |
| Swiss Franc                           |            | 42,507,285  |    | 43,671,940  |
| Taiwan Dollar                         |            | 9,908,375   |    | -           |
| Thai Baht                             |            | 2,653,278   |    | 664,631     |
| Turkish Lira                          |            | 1,898,448   |    | 1,061,630   |
| Total investments in foreign currency | \$         | 523,920,391 | \$ | 470,527,728 |

#### 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 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, 2010, the Fund had interest rate futures contracts to purchase United Kingdom Treasury bonds, LIBOR/Euro dollars, and U.S. Treasury securities with notional amounts of \$6,360,703, \$20,915,475 and \$26,700,094, respectively. The Fund also had interest rate futures contracts to (sell) German Treasury bonds, LIBOR/Euro dollars, and U.S. Treasury securities with notional amounts of (\$9,862,244), (\$44,304,938) and (\$60,466,462), respectively. At December 31, 2009, the Fund had interest rates futures contracts to purchase (sell) Australian Treasury bonds, LIBOR/Euro dollars and United Kingdom Treasury bonds with notional amounts of \$9,859,187, (\$45,425,321), and (9,144,441), respectively. Additionally, the Fund had interest rate futures contracts to purchase (sell) U.S. Treasury securities with notional amounts of \$5,408,862 and (\$5,307,200), respectively. Notional amounts do not quantify risk or represent assets or liabilities of the Fund, but are used in the calculation of cash settlements under the contracts.

The fair value of futures contracts in the statements of plan net assets was zero at December 31, 2010 and 2009, as settlements are by cash daily. The Fund realized (losses) of (\$979,018) on futures contracts in 2010. 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 fair value of swaps outstanding at December 31, 2010 and 2009 was a net unrealized loss of (\$40,300) and (\$2,534,915), respectively.

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 of Australian dollars, Brazilian real, British pound sterling, Canadian dollars, Euros, Hong Kong dollars, Japanese yen, Mexican pesos, New Israeli shekel, Norwegian krone, Polish zloty, South African rand, Swedish krona, Swiss francs, Thai baht and U.S. dollars at Total pending foreign purchases and (sales) were December 31, 2010. \$112,794,150 and (\$113,138,764), respectively, at December 31, 2010. Thus the Fund had a net unrealized (loss) on pending foreign currency forward contracts of (\$344,615) at December 31, 2010. At December 31, 2009, total pending foreign purchases and (sales) were \$88,139,635 and (\$87,629,245), respectively. The Fund had a net unrealized (loss) on pending foreign currency forward contracts of (\$510.390) at December 31, 2009.

*Forward Interest Rate Contracts*: The Fund's external investment managers entered into forward contracts to purchase U.S. Treasury strips during 2010 and 2009. 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.

The fair value of the forward contracts was \$4,132,105 and \$7,098,810 as of December 31, 2010 and 2009, respectively. The unrealized (loss) on the contracts was (\$205,932) and (\$516,467) at December 31, 2010 and 2009, respectively. Sales of the forward contracts generated realized gains of \$1,329,440 during 2010. These earnings are included in net appreciation in the fair value of investments in the statements of changes in net assets.

#### NOTE 5 SECURITIES LENDING PROGRAM

State statutes and Board of Trustees policies permit the Fund to lend 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 in the form of cash, irrevocable letters of credit, or other securities to a minimum of 102% 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) or fail to pay the Fund for income distributions by the securities' issuers while the securities are on loan.

All securities loans can be terminated on demand by either the Fund or the borrower, although the average term of the loans is 101 days and 81 days, as of December 31, 2010 and 2009, respectively. Cash collateral is invested in the lending agent's Core USA Collateral Pool, which at December 31, 2010 and 2009, had a weighted-average life, as measured by interest sensitivity, of 25 days and 41 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.

#### **NOTE 5 SECURITIES LENDING PROGRAM** (continued)

Loans outstanding as of December 31, 2010 and 2009 were as follows:

|  | 2010           | 2009           |
|--|----------------|----------------|
| Market value of securities loaned                  | \$ 289,657,158 | \$ 363,732,687 |
| Market value of cash collateral from<br>Borrowers  | 295,714,545    | 375,111,985    |
| Market value of non-cash collateral from borrowers | 1,581,537      | 731,857        |

As of December 31, 2010 and 2009, the Fund had limited credit risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts owed to the Fund.

There was an unrealized loss of \$986,416 recorded in the financial statements as of December 31, 2009, calculated based on the difference between book value of cash collateral due to borrowers under the securities lending program and the fair value of invested cash collateral under the securities lending program.

#### NOTE 6 UNFUNDED INVESTMENT COMMITMENTS

The Fund had unfunded commitments of approximately \$169 million and \$223 million at December 31, 2010 and 2009, respectively, in connection with real estate, infrastructure, and private equity investments.

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

# (a) <u>Plan Description</u>

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, 2010 and 2009, seven retirees were in the Staff Retiree Health Plan and 21 and 20 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.

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

#### **Funding Policy**

The required contribution is based on projected pay-as-you-go financing requirements. For 2010 and 2009, PABF contributed approximately \$120,990 and \$101,400, respectively, to the Staff Retiree Health Plan for current premiums, with an implicit subsidy of \$6,640 and \$19,600, for 2010 and 2009, respectively. Members receiving benefits contributed approximately \$23,000, or 19% of the total premiums, for 2010, and approximately \$25,000, or 20% of the total premiums, for 2009.

#### Annual OPEB Cost and Net OPEB Obligation

PABF's annual other post-employment benefit (OPEB) expense is calculated based on the annual required contribution of the employer (ARC), 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. The following table shows the components of PABF's annual OPEB cost for 2010 and 2009, the amount actually contributed to the Staff Retiree Health Plan, and changes in PABF's net OPEB obligation to the Staff Retiree Health Plan:

|   |           | 2010                          |           | 2009                          |
|---|-----------|-------------------------------|-----------|-------------------------------|
| Annual required contribution<br>Interest on net OPEB obligation<br>Adjustment to annual required contribution |           | 434,005<br>23,319<br>(17,273) | \$        | 290,600<br>15,500<br>(11,500) |
| Annual OPEB expense<br>Employer contributions made  |           | 440,051<br>127,630            |           | 294,600<br>121,000            |
| Increase in net OPEB obligation   |           | 312,421                       |           | 173,600                       |
| Net OPEB obligation at beginning of year  |           | 518,200                       |           | 344,600                       |
| Net OPEB obligation at end of year  | <u>\$</u> | 830,621                       | <u>\$</u> | 518,200                       |

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

The annual OPEB cost, the percentage of annual OPEB cost contributed to the Staff Retiree Health Plan, and the net OPEB obligation for 2010 and 2009 is as follows:

| Year<br>Ended | Annual<br><u>OPEB Cost</u> | Percentage of<br>Annual OPEB<br><u>Cost Contributed</u> | Net OPEB<br>Obligation |
|---------------|----------------------------|---|------------------------|
| 12/31/2010    | \$ 440,051                 | 29.0%   | \$ 830,621             |
| 12/31/2009    | 294,600                    | 41.1  | 518,200                |

#### Funded Status and Funding Progress

The funded status of PABF's Staff Retiree Health Plan as of December 31, 2010, and 2009, is as follows:

| Actuarial<br>Valuation<br>Date | Val<br>As | uarial<br>lue of<br>ssets<br>a) | Lia | Actuarial<br>Accrued<br>bility (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>_(a/b) | <br>Covered<br>Payroll<br>(c) | UAAL as<br>a Percentage<br>of Covered<br>Payroll<br>_((b-a)/c) |
|--------------------------------|-----------|---------------------------------|-----|--|------------------------------------|---------------------------|-------------------------------|--|
| 12/31/10<br>12/31/09           | \$        | -                               | \$  | 5,588,688<br>3,474,800                                   | \$<br>5,588,688<br>3,474,800       | 0.00%<br>0.00             | \$<br>1,486,848<br>1,256,800  | 375.9%<br>276.5  |

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 required supplementary information (RSI) following the notes to the financial statements, present multiyear 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) and 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.

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

For the December 31, 2010 and 2009 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, 2010, 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, 2009, the annual healthcare cost trend rate is assumed at 9.0% initially, reduced by increments of 1.0 percentage point per year to an ultimate trend rate of 5.0% after four years. At December 31, 2010 and 2009, the wage inflation assumption was 4.5%. The unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll over a period of 30 years.

# 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

|                         | 2010                    | 2009                   |
|-------------------------|-------------------------|------------------------|
| Balances at December 31 | <u>\$ 1,908,133,221</u> | <u>\$1,729,155,112</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

|                         | 2010                   | 2009                   |
|-------------------------|------------------------|------------------------|
| Balances at December 31 | <u>\$1,251,989,944</u> | <u>\$1,190,282,943</u> |

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

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.

Annuity Payment Reserve

|                         | 2010                   | 2009                   |
|-------------------------|------------------------|------------------------|
| Balances at December 31 | <u>\$2,161,395,092</u> | <u>\$1,669,671,740</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

|                         | 2010                     | 2009                     |
|-------------------------|--------------------------|--------------------------|
| Balances at December 31 | <u>\$(1,142,243,383)</u> | <u>\$ (622,643,823</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 \$6,215,148,607 and \$5,683,524,900 as of December 31, 2010 and 2009, respectively.

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

#### Gift Reserve

|                         | <br>2010         |    | 2009       |  |
|-------------------------|------------------|----|------------|--|
| Balances at December 31 | \$<br>13,541,513 | \$ | 13,911,648 |  |

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.

#### (f) 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 (g)

|                         |           | 2010         |           | 2009         |
|-------------------------|-----------|--------------|-----------|--------------|
| Balances at December 31 | <u>\$</u> | (18,155,098) | <u>\$</u> | (16,017,798) |

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

|                         | 2010                    | 2009                     |
|-------------------------|-------------------------|--------------------------|
| Balances at December 31 | <u>\$ (735,439,994)</u> | <u>\$ (638,756,470</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, 2010 and 2009, the Automatic Increase Reserve had a deficit.

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

Supplementary Payment Reserve

| <u> </u>                | <br>2010      | <br>2009      |
|-------------------------|---------------|---------------|
| Balances at December 31 | \$<br>447,402 | \$<br>447,402 |

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.

#### 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.

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 ten year extension on the lease, however, such option has not yet been exercised. Office rental expense amounted to \$233,234 and \$229,294 for the years ended December 31, 2010 and 2009, respectively.

Future minimum rental payments under the office lease at December 31, 2010 are as follows:

| <u>Year</u> | Amount              |
|-------------|---------------------|
| 2011        | 239,258             |
| 2012        | 244,687             |
| 2013        | 248,626             |
| 2014        | 252,562             |
| 2015        | 256,502             |
| Thereafter  | <u>129,073</u>      |
|             | <u>\$ 1,370,708</u> |

#### 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.

# NOTE 12 SUBSEQUENT EVENTS

On December 30, 2010, Public Act 096-1495 was signed into law and became effective January 1, 2011. The legislation included two matters that will impact the Fund in future years.

Members hired after January 1, 2011, will be 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. Additionally, surviving spouse benefits will be calculated at 66-2/3 percent of a policemen's earned annuity at the date of death, and a surviving spouse benefit will be subject to cost of living increases commencing when the survivor reaches age 60.

The financing for the Fund will be changed effective with the City of Chicago tax levy beginning in 2015. Such changes mandate that the Fund will be 90% funded by 2040. The funded level of 90% considers the (a) fair value of the Fund's assets and (b) application of certain required actuarial assumptions and methodologies. If the City of Chicago fails to remit the statutorily required contributions as calculated given criteria (a) and (b), then the State of Illinois could withhold certain grants owed to the City of Chicago and directly deposit the withheld funds with PABF.

# **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF FUNDING PROGRESS – PENSION

#### YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as<br>a Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|--|---|------------------------------------|--------------------------|---------------------------|---|
| 12/31/04                       | \$3,933,031,342                        | \$ 7,034,271,474  | \$ 3,101,240,132                   | 55.91%                   | \$874,301,958             | 354.71%   |
| 12/31/05                       | 3,914,431,654                          | 7,722,737,147   | 3,808,305,493                      | 50.69                    | 948,973,732               | 401.31  |
| 12/31/06                       | 3,997,990,919                          | 7,939,561,277   | 3,941,570,358                      | 50.36                    | 1,012,983,634             | 389.11  |
| 12/31/07                       | 4,231,681,817                          | 8,220,352,638   | 3,988,670,821                      | 51.48                    | 1,038,957,026             | 383.91  |
| 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  |

The accompanying notes are an integral part of this schedule.

# **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF EMPLOYER CONTRIBUTIONS – PENSION

# YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Year        |                | Contributions |                |                    |  |
|-------------|----------------|---------------|----------------|--------------------|--|
| Ended       | Annual         | Annual Actual |                | Percentage         |  |
| December 31 | Required       | Employee      | Employer       | <b>Contributed</b> |  |
| 2004        | \$ 203,757,534 | \$ 78,800,816 | \$ 135,744,173 | 66.62%             |  |
| 2005        | 238,423,459    | 89,109,811    | 178,278,371    | 74.77              |  |
| 2006        | 262,657,025    | 91,965,685    | 150,717,705    | 57.38              |  |
| 2007        | 312,726,608    | 93,299,996    | 170,598,268    | 54.55              |  |
| 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              |  |

The accompanying notes are an integral part of this schedule.

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – PENSION

# YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Valuation date                    | December 31, 2010 and 2009, 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   |
| Actuarial assumptions:            |  |
| Pension investment rate of return | 8.0%   |
| Projected salary increases        | 4.0% per year, plus<br>additional percentage<br>related to service |
| Cost of living allowance          | 3.0% (1.5% for retirees<br>born after January 1, 1955)             |
| General Inflation rate            | 3.0%   |

#### **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF FUNDING PROGRESS – HEALTH INSURANCE

# YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Actuarial<br>Valuation<br>Date | -  | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br><u>(a/b)</u> | Covered<br>Payroll<br>(c) | UAAL as<br>a Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|----|--|---|------------------------------------|---------------------------------|---------------------------|---|
| 12/31/05                       | \$ | -                                      | \$ 176,117,539  | \$ 176,117,539                     | 0.00%                           | \$ 948,973,732            | 18.56%  |
| 12/31/06                       |    | -                                      | 176,981,897   | 176,981,897                        | 0.00                            | 1,012,983,634             | 17.47   |
| 12/31/07                       |    | -                                      | 179,039,841   | 179,039,841                        | 0.00                            | 1,038,957,026             | 17.23   |
| 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   |

The accompanying notes are an integral part of this schedule.

#### **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF EMPLOYER CONTRIBUTIONS – HEALTH INSURANCE

# YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Year                 | Contributions      |                    |   |                    |                                  |
|----------------------|--------------------|--------------------|---|--------------------|----------------------------------|
| Ended<br>December 31 | Annual<br>Required | Actual<br>Employee |   | Actual<br>Employer | Percentage<br><u>Contributed</u> |
| 2006                 | \$ 11,076,022      | \$                 | - | \$ 8,041,573       | 72.60%                           |
| 2007                 | 11,220,081         |                    | - | 8,107,708          | 72.26                            |
| 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                            |

The accompanying notes are an integral part of this schedule.

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – HEALTH INSURANCE

# YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Valuation date                 | December 31, 2010 and 2009, 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   |  |
| Actuarial assumptions:         |  |  |
| OPEB investment rate of return | 4.5%   |  |
| Projected salary increases     | 4.0% per year, plus<br>additional percentage<br>related to service |  |
| Healthcare Cost Trend Rate     | 0.00% (fixed dollar subsidy)                                       |  |

# **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF FUNDING PROGRESS – STAFF RETIREE HEALTH PLAN

#### YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Actuarial<br>Valuation<br>Date | GASB<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br><u>(a/b)</u> | Covered<br>Payroll<br>(c) | UAAL as<br>a Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|-----------------------------------|---|------------------------------------|---------------------------------|---------------------------|---|
| 12/31/07                       | \$ -                              | \$ 3,021,300 \$   | 3,021,300                          | 0.00% \$                        | 1,150,900                 | 262.5%  |
| 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   |

The accompanying notes are an integral part of this schedule.

#### **REQUIRED SUPPLEMENTARY INFORMATION**

# SCHEDULE OF EMPLOYER CONTRIBUTIONS - STAFF RETIREE HEALTH PLAN

# YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

| Year                 |                    |                    |                    |                                  |
|----------------------|--------------------|--------------------|--------------------|----------------------------------|
| Ended<br>December 31 | Annual<br>Required | Actual<br>Employee | Actual<br>Employer | Percentage<br><u>Contributed</u> |
| 2007                 | \$ 261,500         | \$ -               | \$ 88,800          | 34%                              |
| 2008                 | 274,600            | -                  | 104,700            | 38                               |
| 2009                 | 290,600            | -                  | 121,000            | 42                               |
| 2010                 | 434,005            | -                  | 127,630            | 29                               |

The accompanying notes are an integral part of this schedule.

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION – STAFF RETIREE HEALTH PLAN

#### YEARS ENDED DECEMBER 31, 2010 AND 2009 (Unaudited)

Valuation date December 31, 2010 and 2009, 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 Actuarial assumptions: OPEB investment rate of return 4.5% per year Wage inflation 4.5% per year Healthcare trend December 31, 2010 8.5% per year, graded down to 5.0% per year, ultimate trend in 0.5% increments December 31, 2009 9.0% per year, graded down to 5.0% per year ultimate trend in 1.0% increments

# OTHER SUPPLEMENTARY INFORMATION

# SCHEDULE OF ADMINISTRATIVE EXPENSES

# YEARS ENDED DECEMBER 31, 2010 AND 2009

|                                 | 2010        | 2009           |
|---------------------------------|-------------|----------------|
| Administrative expenses         |             |                |
| Actuary services                | \$ 147,53   | 9 \$ 265,200   |
| Benefits disbursement           | 193,95      | 1 189,755      |
| Equipment service and rent      | 67,03       | 53,016         |
| External auditors               | 54,52       | 58,805         |
| Fiduciary insurance             | 104,564     | 4 110,343      |
| Legal services                  | 315,26      | 3 291,210      |
| Medical consultant              | 187,07      | 3 240,341      |
| Miscellaneous                   | 589,49      | 855,623        |
| Occupancy and utilities         | 240,07      | 5 240,843      |
| Personnel salaries and benefits | 2,004,17    | 9 1,978,905    |
| Postage                         | 7,50        | 6,000          |
| Supplies                        | 13,74       | 3 13,558       |
|                                 | \$ 3,924,92 | 8 \$ 4,303,599 |

# OTHER SUPPLEMENTARY INFORMATION

# SCHEDULE OF CONSULTING COSTS

# YEARS ENDED DECEMBER 31, 2010 AND 2009

|                         | 2010          | 2009          |
|-------------------------|---------------|---------------|
| Payment to consultants  |               |               |
| External auditors       | \$ 54,520     | \$ 58,805     |
| Medical consultant      | 187,073       | 240,341       |
| Legal services          | 315,263       | 291,210       |
| Actuary service         | 147,539       | 265,200       |
| Investment manager fees | 9,109,616     | 8,987,507     |
| Master trustee fees     | 183,525       | 197,804       |
| Consulting fees         | 542,554       | 616,179       |
|                         | \$ 10,540,090 | \$ 10,657,046 |

# POLICEMEN'S ANNUITY AND BENEFIT FUND OF CHICAGO OTHER SUPPLEMENTARY INFORMATION SCHEDULE OF INVESTMENT FEES YEARS ENDED DECEMBER 31, 2010 AND 2009

|   | <br>2010        | <br>2009        |  |  |
|---|-----------------|-----------------|--|--|
| Investment managers                             |                 |                 |  |  |
| Ariel Capital Management                        | \$<br>320,177   | \$<br>227,946   |  |  |
| Artisan Partners                                | 495,093         | 433,358         |  |  |
| Attucks Asset Management                        | 42,651          | 35,077          |  |  |
| Capital Guardian Trust Co.                      | 467,486         | 482,652         |  |  |
| Channing Capital                                | 164,141         | 132,732         |  |  |
| Chicago Equity Partners                         | 313,561         | 393,057         |  |  |
| Cordillera Asset Management                     | -               | 64,442          |  |  |
| Dearborn Partners LLC                           | 181,294         | 169,346         |  |  |
| Denali Advisors                                 | 103,359         | 86,315          |  |  |
| European Investors                              | 42,733          | 122,723         |  |  |
| Great Lakes Advisors                            | 516,238         | 465,186         |  |  |
| Holland Capital Management                      | 229,200         | 187,463         |  |  |
| ING Clarion                                     | 56,596          | 82,136          |  |  |
| Invesco Capital Management                      | 379,564         | 385,546         |  |  |
| JP Morgan Fleming Asset Management              | 605,289         | 501,214         |  |  |
| LM Capital Group                                | 80,810          | 74,242          |  |  |
| McKinley Capital                                | 367,077         | 318,397         |  |  |
| Montag & Caldwell                               | 732,840         | 633,410         |  |  |
| Northern Trust Global Investments - Index Funds | 106,849         | 88,679          |  |  |
| Piedmont Investment Advisors                    | 214,599         | 138,925         |  |  |
| Taplin, Canida, & Habacht                       | 117,495         | 112,567         |  |  |
| UBS Global Asset Management                     | 1,588,191       | 1,509,302       |  |  |
| Wellington Management                           | 330,776         | 407,513         |  |  |
| Wells Capital Management                        | 410,825         | 377,781         |  |  |
| William Blair & Co.                             | <br>1,242,772   | <br>1,557,498   |  |  |
| Total investment managers fees                  | <br>9,109,616   | 8,987,507       |  |  |
| Investment consultants                          |                 |                 |  |  |
| Elkins McSherry Inc                             | 20,000          | 25,000          |  |  |
| Ennis Knupp & Associates                        | 175,100         | 350,810         |  |  |
| Courtland Partners                              | 54,325          | 107,824         |  |  |
| NEPC LLC  | 187,093         | -               |  |  |
| Kolhberg & Associates                           | <br>106,036     | <br>132,545     |  |  |
| Total investment consultants fees               | 542,554         | 616,179         |  |  |
| Master custodian                                |                 | <br>            |  |  |
| The Northern Trust Company                      | <br>183,525     | 197,804         |  |  |
| Total investment fees                           | \$<br>9,835,695 | \$<br>9,801,490 |  |  |

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# Investment Section



#### **Investments**

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

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

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

**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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|---|--|
| Ρ |  |

Allocation of Assets. As of December 31, 2010, the Fund's asset allocation targets were as follows:

| Asset Class              | Current Asset<br>Allocation | Long-Term Target<br>Allocation |
|--------------------------|-----------------------------|--------------------------------|
| U.S. Equity              | 42%                         | 30%                            |
| Non U.S. Equity          | 20%                         | 18%                            |
| Fixed Income             | 23%                         | 25%                            |
| Private Equity           | 7%                          | 7%                             |
| Real Estate              | 3%                          | 7%                             |
| Opportunistic Strategies | 4%                          | 9%                             |
| Infrastructure           | 1%                          | 4%                             |
| TOTAL                    | <u>100%</u>                 | <u>100%</u>                    |

It should be noted that as of January 1, 2011, the Trustees have selected a new long-term target asset allocation.

**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, 2010, the Fund retained 47 investment managers for a total of 62 different fund strategies. Although there were no new strategies funded during the year, the Trustees are currently looking to expand the Fund's exposure through the addition of global asset allocation strategies.

**Investment Objective.** The return of the Total Fund is compared with the return of a "policy portfolio" comprising of a target policy weighted mix of the Dow Jones U.S. Total Stock Market Index, The MSCI All Country World Ex. US Index, the Barclays Capital Aggregate Bond Index, the NCREIF Property Index, the CPI + 5% annually, the HFRI Fund of Funds Index and the Credit Suisse Leveraged Loan 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 ICC total public fund universe.

**2010 Asset Allocation.** As of December 31, 2010, the Fund was overweight to US Equity and slightly overweight to non-US equity. Concurrently, the Fund was underweight to fixed income, real estate, infrastructure and opportunistic strategies. The Fund's ending market value increased by approximately \$124.9 million during the year. The increase is a combination of investment gains, \$379.6 million, and net outflows of \$254.7 million. The Fund's asset allocation as of December 31, 2010 is shown on the following pages.

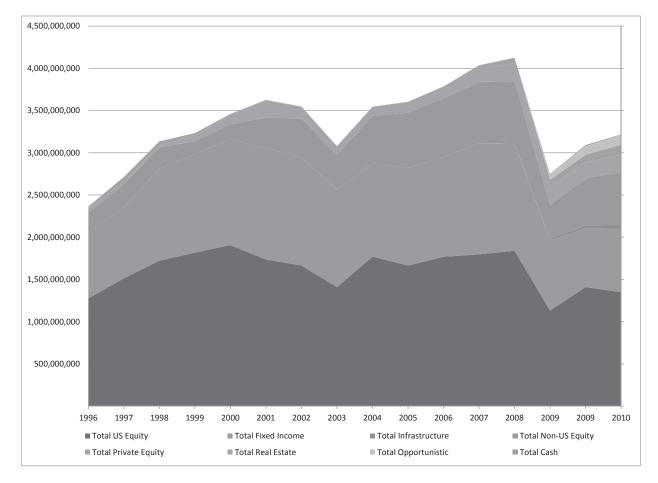


# Fair Value and Asset Allocation As of December 31, 2010 (\$ in thousands)

|  | U.S. Equity | Non-US<br>Equity | U.S. Bond              | Real Estate  | Private<br>Equity | Infrastructure | Opportunistic | Cash                | Total                 | % of Total |
|--|-------------|------------------|------------------------|--------------|-------------------|----------------|---------------|---------------------|-----------------------|------------|
| Ariel Capital Management                   | \$60.711    | Equity           | 0.0. Dona              | Ttear Estate | Equity            | initastractare | opportunistic | \$572               | \$61.283              | 1.9%       |
| Attucks                                    | \$86,874    |                  |                        |              |                   |                |               | \$164               | \$87.038              | 2.7%       |
| Channing Capital                           | \$23,949    |                  |                        |              |                   |                |               | \$534               | \$24,483              | 0.8%       |
| Chicago Equity Partners                    | \$95,038    |                  |                        |              |                   |                |               | \$515               | \$95,553              | 3.0%       |
| Denali Advisors                            | \$22,209    |                  |                        |              |                   |                |               | \$285               | \$22,494              | 0.7%       |
| Great Lakes                                | \$201,652   |                  |                        |              |                   |                |               | \$9,898             | \$211,550             | 6.6%       |
| Holland Capital                            | \$64,149    |                  |                        |              |                   |                |               | \$1,757             | \$65,906              | 2.0%       |
| Montag & Caldwell                          | \$182,692   |                  |                        |              |                   |                |               | \$2,944             | \$185,636             | 5.8%       |
| NT US MarketCap                            | \$285.810   |                  |                        |              |                   |                |               | Ψ <u>2</u> ,044     | \$285,810             | 8.9%       |
| Piedmont                                   | \$44,080    |                  |                        |              |                   |                |               | \$913               | \$44,993              | 1.4%       |
| UBS Global Asset Management                | \$168,522   |                  |                        |              |                   |                |               | \$3,008             | \$171,530             | 5.3%       |
| William Blair and Company                  | \$92,544    |                  |                        |              |                   |                |               | \$1,119             | \$93,663              | 2.9%       |
| U.S. Equity                                | \$1,328,230 |                  |                        |              |                   |                |               | \$21,709            | \$1,349,939           | 42.0%      |
| Artisan International                      | \$1,526,250 | \$71,945         |                        | -            |                   |                |               | \$1,654             | \$73,599              | 2.3%       |
| Capital Guardian Trust                     |             | \$122,460        |                        |              |                   |                |               | \$2,463             | \$124.923             | 3.9%       |
| Global Transition Account                  |             | \$122,400        |                        |              |                   |                |               | φ2,403              | \$6                   | 0.0%       |
| J.P. Morgan Asset Management               |             | \$102,750        |                        |              |                   |                |               | \$2,331             | \$0<br>\$105,081      | 3.3%       |
| McKinley Capital Management                |             | \$67,258         |                        |              |                   |                |               | \$520               | \$67,778              | 2.1%       |
| UBS Global Asset Management                |             | \$67,258         |                        |              |                   |                |               |                     | \$118,365             | 3.7%       |
| William Blair                              |             |                  |                        |              |                   |                |               | \$2,063             |                       | 4.3%       |
| Non-US Equity                              |             | \$133,552        |                        |              |                   |                |               | \$5,060             | \$138,612             | 4.3%       |
| Dearborn (Baird)                           | -           | \$614,273        | -<br>\$90.076          | -            |                   | -              | -             | \$14,091<br>\$3,917 | \$628,364<br>\$93,993 | 2.9%       |
| LM Capital                                 |             |                  | \$90,076<br>\$31,839   |              |                   |                |               | \$3,917<br>\$1,125  | \$32,964              | 2.9%       |
| NT Aggregate Bond                          |             |                  | \$140,404              |              |                   |                |               | \$1,120             | \$140,404             | 4.4%       |
| Taplin, Canida & Habacht                   |             |                  | \$57,218               |              |                   |                |               | \$5,484             | \$62,702              | 4.4 %      |
| Wellington                                 |             |                  | \$212,519              |              |                   |                |               | 90,404              | \$212,519             | 6.6%       |
| Wells Capital Management                   |             |                  | \$212,519<br>\$203,440 |              |                   |                |               | \$5,816             | \$209,256             | 6.5%       |
| Fixed Income                               |             |                  | \$203,440              |              |                   |                |               | \$16,342            | \$209,256             | 23.4%      |
| RCP Advosors VI                            | -           | •                | \$735,496              | •            | -<br>\$4,886      | -              | -             | \$16,342            | \$4,886               | 0.2%       |
| Adams Street Partners                      |             |                  |                        |              | \$4,000           |                |               |                     | \$4,000               | 2.7%       |
| Adams Street Partners<br>Adams St Partners |             |                  |                        |              |                   |                |               |                     |                       | 0.1%       |
| Adams St Partners<br>Adams Street Partners |             |                  |                        |              | \$2,427           |                |               |                     | \$2,427               | 0.1%       |
| Chancellor                                 |             |                  |                        |              | \$1,715           |                |               |                     | \$1,715               |            |
|  |             |                  |                        |              | \$495             |                |               |                     | \$495                 | 0.0%       |
| Harbourvest Partners, LLC                  |             |                  |                        |              | \$758             |                |               |                     | \$758                 | 0.0%       |
| Harbourvest V IPO                          |             |                  |                        |              | \$37,906          |                |               |                     | \$37,906              | 1.2%       |
| Invesco Fund IV Venture                    |             |                  |                        |              | \$8,472           |                |               |                     | \$8,472               | 0.3%       |
| Invesco Fund IV Int'l                      |             |                  |                        |              | \$5,953           |                |               |                     | \$5,953               | 0.2%       |
| Invesco Fund IV U.S.                       |             |                  |                        |              | \$23,069          |                |               |                     | \$23,069              | 0.7%       |
| Mesirow Fund II                            |             |                  |                        |              | \$15,551          |                |               |                     | \$15,551              | 0.5%       |
| Mesirow Fund IV                            |             |                  |                        |              | \$7,437           |                |               |                     | \$7,437               | 0.2%       |
| Muller & Monroe                            |             |                  |                        |              | \$13,521          |                |               |                     | \$13,521              | 0.4%       |
| Muller & Monroe MEPEFF                     |             |                  |                        |              | \$7,431           |                |               |                     | \$7,431               | 0.2%       |
| Zell/Chilmark                              |             |                  |                        |              | \$18              |                |               |                     | \$18                  | 0.0%       |
| Private Equity                             |             |                  | -                      | -            | \$215,219         | •              | •             |                     | \$215,219             | 6.7%       |

|                                | 1           |           |           |             |           |                |               |          |             |            |
|--------------------------------|-------------|-----------|-----------|-------------|-----------|----------------|---------------|----------|-------------|------------|
|                                |             | Non-US    |           |             | Private   |                |               |          |             |            |
|                                | U.S. Equity | Equity    | U.S. Bond | Real Estate |           | Infrastructure | Opportunistic | Cash     | Total       | % of Total |
| Global Infrastructure Partners |             |           |           |             |           | \$30,354       |               |          | \$30,354    | 0.9%       |
| The Carlyle Group              |             |           |           |             |           | \$7,812        |               |          | \$7,812     | 0.2%       |
| Infrastructure                 | -           |           |           |             | -         | \$38,166       | -             |          | \$38,166    | 1.2%       |
| Declaration Management         |             |           |           | \$14        |           |                |               |          | \$14        | 0.0%       |
| ABR Chesapeake III             |             |           |           | \$8,896     |           |                |               |          | \$8,896     | 0.3%       |
| AG Core Plus Realty II         |             |           |           | \$11,667    |           |                |               |          | \$11,667    | 0.4%       |
| Apollo Real Estate Advisors    |             |           |           | \$4,023     |           |                |               |          | \$4,023     | 0.1%       |
| DRA Advosors                   |             |           |           | \$2,035     |           |                |               |          | \$2,035     | 0.1%       |
| DV Urban                       |             |           |           | \$8,962     |           |                |               |          | \$8,962     | 0.3%       |
| Lone Star Fund IV              |             |           |           | \$7,810     |           |                |               |          | \$7,810     | 0.2%       |
| Lone Star Global               |             |           |           | \$4,123     |           |                |               |          | \$4,123     | 0.1%       |
| M.S. Prime Property            |             |           |           | \$9,541     |           |                |               |          | \$9,541     | 0.3%       |
| Macquarie Global               |             |           |           | \$3,399     |           |                |               |          | \$3,399     | 0.1%       |
| Mesa West II                   |             |           |           | \$6,807     |           |                |               |          | \$6,807     | 0.2%       |
| Morgan Stanley RE VI-Int'l     |             |           |           | \$2,064     |           |                |               |          | \$2,064     | 0.1%       |
| PRISA                          |             |           |           | \$8,143     |           |                |               |          | \$8,143     | 0.3%       |
| Quadrant RE Advisors           |             |           |           | \$4,858     |           |                |               |          | \$4,858     | 0.2%       |
| Shamrock-Hostmark              |             |           |           | \$1,623     |           |                |               |          | \$1,623     | 0.1%       |
| UBS Realty Investors           |             |           |           | \$10,693    |           |                |               |          | \$10,693    | 0.3%       |
| European Investors II          |             |           |           | \$6,305     |           |                |               |          | \$6,305     | 0.2%       |
| ING Clarion                    |             |           |           | \$9,842     |           |                |               |          | \$9,842     | 0.3%       |
| Real Estate                    | -           |           |           | \$110,805   |           |                |               |          | \$110,805   | 3.4%       |
| Oaktree Capital                |             |           |           |             |           |                | \$34,392      |          | \$34,392    | 1.1%       |
| Short Term Opportunistic       |             |           |           |             |           |                | \$34,392      |          | \$34,392    | 1.1%       |
| Aetos Capital                  |             |           |           |             |           |                | \$40,937      |          | \$40,937    | 1.3%       |
| K2 Advosors                    |             |           |           |             |           |                | \$40,768      |          | \$40,768    | 1.3%       |
| Hedge Fund of Funds            | -           |           |           | -           | -         | -              | \$81,705      |          | \$81,705    | 2.5%       |
| Cash                           |             |           |           |             |           |                |               | \$6,238  | \$6,238     | 0.2%       |
| Cash                           |             |           |           |             |           |                |               | \$6,238  | \$6,238     | 0.2%       |
| Total Fund                     | \$1,328,230 | \$614,273 | \$735,496 | \$110,805   | \$215,219 | \$38,166       | \$116,097     | \$58,380 | \$3,216,666 | 100.0%     |
| Percent of Total               | 41.3%       | 19.1%     | 22.9%     | 3.4%        | 6.7%      | 1.2%           | 3.6%          | 1.8%     | 100.0%      |            |
| Policy Target                  | 30.0%       | 18.0%     | 25.0%     | 7.0%        | 7.0%      | 9.0%           | 4.0%          | 0.0%     | 100.0%      |            |





# **HISTORICAL ASSET ALLOCATION BY ASSET CLASS**

\*History unavailable prior to 1996



# Summary of 2010 Investment Activity

**Investment Manager Changes.** There was no activity in this area of the portfolio for the year. Due to the change in Investment Advisors, subsequent manager changes have been postponed until a full review of the portfolio is completed in the first half of 2011.

**Market Environment.** The market experience of 2010 can be summed up in one word, volatile. While investors enjoyed the benefit of strong performance for the year, they also endured a volatile roller coaster ride in order to reap the rewards from their investments. As world markets tried to build on the rally which started in 2009, cracks in the recovery started to show, particularly in the heavily indebted developed markets. What started off as a very promising year, quickly pulled back as another debt crisis impacted the markets, this time in continental Europe and, particularly, Greece. In order to avoid another potential disaster in the fragile world recovery, the European Union was forced to help Greece restructure by providing a bailout of its own. As the year went on, this and other macro driven events continued to have an impact on markets, with investors trading on sentiment rather than fundamentals.

Within the US, the economy grew at an estimated 2.8%, which is slower than economists had hoped. Although corporations posted solid profits and strong balance sheets for the year, neither attributed to significant job growth as the unemployment rate continued to hover around 9.7%, only a slight decrease from the 10% unemployment rate at the end of 2009. Inflation, as measured by the Consumer Price Index, remained very modest at 1.5% for the year. With a backdrop of low growth, continued high unemployment and low inflation, the US Government once again rolled out another round of quantitative easing in hopes of maintaining the fragile recovery and spurring further growth.

The US stock market finished the year up 15.1%, as measured by the S&P 500. In a sign of investors willing to take on more risk, small cap stocks outpaced their large cap counterparts, returning 26.9% for the year. The dispersion in results can also be attributed to the global nature of large cap securities, which are more sensitive to a global slowdown in demand, relative to the more locally focused small cap securities. From a style standpoint, growth continued to outperform value securities.

Relative to US stocks, non-US equities underperformed for the year, returning 11.2% as measured by the MSCI ACWI Ex. US Index. Much of the underperformance can be attributed to continental Europe, specifically the debt issues that occurred throughout the year. Non-US developed equities also underperformed emerging markets equities, 7.8% v. 18.9%, as measured by the MSCI EAFE and MSCI EME, respectively. The growth experienced by emerging economies continues to help drive their performance.

The US fixed income market generated a 6.5% return for year, which was led by credit and asset backed securities. Treasuries returned 5.8% for the year, while MBS returned 5.5%. In another sign of improving credit markets overall, as credit spreads tightened, investors benefited from the strong performance, particularly in ABS and Investment Grade Corporates which returned 6.9% and 9.0% respectively. High Yield as a whole returned 15.1%, a return that matched US equities for the year.

Real Estate, as measured by the NCREIF property index, returned 13.1% for the year, marking year over year increase in overall values since before the crisis. Although property valuations appear to have improved, demand and transaction volumes are still below historic levels. Additionally, debt issuance has slowed with significant debt maturities coming due in the next few years, producing further pressure on this asset class.



**Total Fund Performance**. For 2010, the Total Fund returned 12.7% which slightly trailed the policy index return of 12.8%. Over the trailing three year period, the Fund's -0.4% return trailed the policy index and ICC Median Public Fund by 1.7% and 1.3% respectively. Over the trailing five years, the Fund's 3.8% return trailed both the policy index as well as the median ICC Public Fund.

**Asset Class Performance.** The Fund's US equity portfolio returned 17.3%, which underperformed its benchmark by 20 basis points. The non-US equity portfolio returned 11.5% and outpaced the MSCI ACWI Ex US by 30 basis points. Overall, however, the total equity allocation outperformed the MSCI ACWI ND by 2.93%. Within fixed income, the composites return of 7.8% handily outperformed the Barclays Capital Aggregate return of 6.5%. The total real estate allocation returned 7.3%, underperforming the NCREIF Property Index by 5.8% for the year. The private equity portfolio, which is valued on a lag, returned 13.0% for the year, trailing public equity markets. The Fund's hedge fund allocation, with fund of fund strategies, underperformed the HFR Fund of Funds Index by 17 basis points.

**Longer Term Performance.** On the following pages, a detailed analysis of the Fund's 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

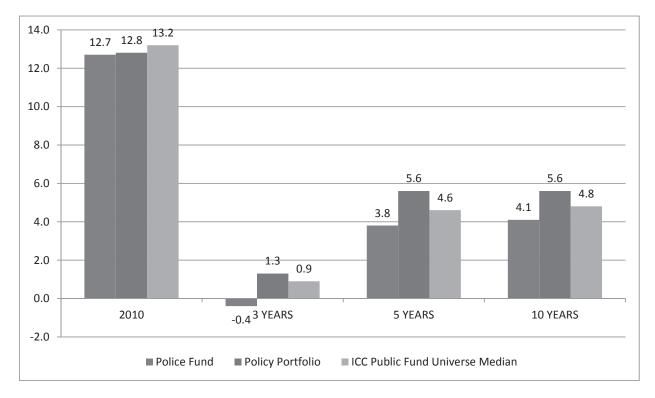
|                                   |       |       |        |       |       | Cumulativ | e<br>Returns | Annualized |
|-----------------------------------|-------|-------|--------|-------|-------|-----------|--------------|------------|
|                                   | 2006  | 2007  | 2008   | 2009  | 2010  | 3 Years   | 5 Years      | 10 Years   |
| TOTAL FUND                        |       |       |        |       |       |           |              |            |
| Police Fund                       | 12.1% | 8.8%  | -27.8% | 21.5% | 12.7% | -0.4%     | 3.8%         | 4.1%       |
| Policy Portfolio                  | 14.0  | 10.7  | -20.9  | 16.6  | 12.8  | 1.3       | 5.6          | 5.6        |
| ICC Public Funds Universe Median  | 13.8  | 8.7   | -25.5  | 19.8  | 13.2  | 0.9       | 4.6          | 4.8        |
| Inflation                         | 2.5   | 4.1   | 0.1    | 2.7   | 1.4   | 1.4       | 2.1          | 2.3        |
| U.S EQUITY                        |       |       |        |       |       |           |              |            |
| Police Fund                       | 12.2% | 7.5%  | -37.7% | 32.9% | 17.3% | -0.9%     | 3.3%         | 3.2%       |
| DJ U.S. Total Stock Market Index  | 15.8  | 5.6   | -37.2  | 28.6  | 17.5  | -1.8      | 3.0          | N/A        |
| ICC US Equity Universe Median     | 14.3  | 5.2   | -37.9  | 28.6  | 19.5  | -0.1      | 4.1          | 5.2        |
| NON-U.S EQUITY                    |       |       |        |       |       |           |              |            |
| Police Fund                       | 23.7% | 16.4% | -46.3% | 40.1% | 11.5% | -5.7%     | 3.8%         | 4.1%       |
| Performance Benchmark             | 26.7  | 16.7  | -45.5  | 41.4  | 11.2  | -5.0      | 4.8          | N/A        |
| ICC Non US Equity Universe Median | 25.1  | 14.1  | -44.1  | 36.6  | 10.7  | -5.0      | 4.3          | 6.6        |
| FIXED INCOME                      |       |       |        |       |       |           |              |            |
| Police Fund                       | 4.6%  | 5.1%  | -4.1%  | 11.7% | 7.8%  | 4.9%      | 4.9%         | 5.4%       |
| Barclays Capital Aggregate Bond   |       |       |        |       |       |           |              |            |
| Index                             | 4.3   | 7.0   | 5.2    | 5.9   | 6.5   | 5.9       | 5.8          | 5.8        |
| ICC Bond Universe Median          | 4.4   | 6.5   | -0.4   | 11.8  | 8.7   | 6.9       | 6.5          | 6.4        |
| REAL ESTATE                       |       |       |        |       |       |           |              |            |
| Police Fund <sup>2</sup>          | N/A   | -5.5  | -11.2  | -9.1  | 7.3   | -4.7      | N/A          | N/A        |
| NCREIF Net Property Index         | N/A   | 15.8  | -6.5   | -16.9 | 13.1  | -4.2      | N/A          | N/A        |
| Asset Allocation                  |       |       |        |       |       |           |              |            |
| US Stocks                         | 45%   | 45%   | 41%    | 41%   | 42%   |           |              |            |
| Non US Stocks                     | 18%   | 18%   | 15%    | 18%   | 20%   |           |              |            |
| Private Equity                    | 4%    | 5%    | 8%     | 6%    | 7%    |           |              |            |
| Fixed Income                      | 33%   | 31%   | 30%    | 28%   | 23%   |           |              |            |
| Infrastructure                    |       |       | <1%    | 1%    | 1%    |           |              |            |
| Opportunistic                     |       |       | 3%     | 3%    | 4%    |           |              |            |
| Real Estate                       | <1%   | 2%    | 3%     | 3%    | 3%    |           |              |            |

<sup>1</sup> All performance presented net 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**



As of December 31, 2010



#### **Real Estate Investments**

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

#### **2010 Private Real Estate Market Review**

The U.S. economy continued to rebound somewhat in 2010. U.S. real gross domestic product (GDP) growth rate has been positive since the third quarter of 2009. The unemployment rate, which peaked at 10% in 2009, has declined somewhat as well and private sector hiring shows signs of improvement. The Case-Shiller Home Price Index, which tracks the price of single-family homes, has partially stabilized after a multiyear slide starting in 2006. Given that the health of the real estate market is dependent on that of the general economy, these signs provide some positive indicators for the commercial real estate market. However, many of the governmental programs designed to support the economy during the early stages of the recession (e.g. quantitative easing, expanded federal mortgage loan guarantees, etc.) are ending. This places the economic recovery at a tenuous position where continued improvement must be driven by the private sector.

The real estate market has responded to this economic stabilization. Real estate values, still 30% off peak values reached in 2007-2008, have rebounded since their lows. Capitalization rates have steadily declined since the second half of 2009 and real estate yields look attractive relative to other fixed income vehicles. Transaction volumes have increased, especially in the core real estate segment. After two years of exit queues where investors were unable to redeem from open-end real estate funds, many funds now have entrance queues showing a demand for real estate. As of year-end 2010, the cumulative entrance queue for the U.S. core open-end funds was ~\$6.0 billion. This compares to an exit queue of almost \$8.0 billion in 2009.

Despite these improving signs, many issues still persist in commercial real estate. Outside of the core segment of the real estate market, much distress remains. The largest issue is capital structure distress caused by properties that have too much debt relative to value and/or are unable to support debt service on outstanding debt. This has caused a significant increase in the volume of distressed assets over the last two years. It is estimated that \$1.7 trillion of commercial mortgage will mature over the next five years. Much of this debt was originated at peak real estate values from 2004 to 2007. As this debt matures, it is estimated that approximately \$500 billion of equity will be required to rebalance debt levels (or recapitalize assets). Compounding this problem is a lack of CMBS issuance, which currently accounts for approximately 20% of all outstanding commercial real estate debt. CMBS origination, ground to a halt after the financial crisis, and has yet to rebound significantly. These factors create an investment opportunity for non-traditional financing, both in the debt/control segment as well as the debt/non-control segment.

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

As of year-end 2010, PABF's real estate portfolio had a total reported value of \$114.4 million (~3.6% of total plan assets). In addition, PABF had unfunded commitments to real estate of \$33.6 million bringing the total plan real estate exposure to \$148.1 million (or 4.6% of total plan assets). PABF's target allocation to real estate is 7.0% of total plan assets. The real estate portfolio was split 44% in core, 11% in core-plus, 15% in value-add and 30% in opportunistic investments. For 2010, the return for the fund real estate allocation was negative 0.8%.

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#### **Core Real Estate**

U.S core commercial real estate improved in 2010. The NCREIF Property Index ("NPI") had a total gross return of 13.1% in 2010. The appreciation return for the year was 6.1% and the income return was 6.8%. The NCREIF Fund Index Open-End Diversified Core ("ODCE") had a total gross return of 16.4% in 2010. The appreciation return for the year was positive 9.2% and the income return was 6.6%. Core real estate has had significant positive funds flow in 2010. After two years of exit queues where investors were unable to redeem from open-end real estate funds, many funds now have entrance queue showing a demand for real estate. As of year-end 2010, the cumulative entrance queue for the U.S. core open-end funds was ~\$6.0 billion. This compares to an exit queue of almost \$8.0 billion in 2009. The table below shows the performance of PABF's core funds for 2010 relative to the NPI and ODCE.

| Investment Fund            | Vintage<br>Year | Commit-<br>ment | Fund<br>2010<br>Return | NPI<br>2010<br>Return | ODCE<br>2010<br>Return |
|----------------------------|-----------------|-----------------|------------------------|-----------------------|------------------------|
| Prime Property Fund        | 2006            | \$13.5          | 15.1%                  | 13.1%                 | 16.4%                  |
| Prudential PRISA I         | 2007            | \$13.7          | 15.6%                  | 13.1%                 | 16.4%                  |
| Quadrant Fund              | 2006            | \$11.7          | 18.5%                  | 13.1%                 | 16.4%                  |
| UBS Trumbull Property Fund | 2006            | \$13.6          | 15.5%                  | 13.1%                 | 16.4%                  |

Note: commitment in millions.

#### Value-Add Real Estate

The average gross total return for value-add real estate in 2010 was 13.4% based on NCREIF all value-add fund data. The table below shows the performance of PABF's value-add real estate funds for 2010 and since inception relative to the applicable vintage year index benchmark. The AG Core Plus Realty Fund II is included with the value-add investments for lack of an applicable benchmark.

| Investment Fund             | Vintage<br>Year | Commit-<br>ment | Fund<br>2010<br>Return | Fund<br>Return<br>Since<br>Inception | NCREIF<br>Vintage<br>Year<br>Return<br>Since<br>Inception |
|-----------------------------|-----------------|-----------------|------------------------|--------------------------------------|---|
| AG Core Plus Realty Fund II | 2006            | \$15            | 19.7%                  | 0.3%                                 | (8.4%)  |
| ABR Chesapeake Fund III     | 2006            | \$10            | 1.9%                   | (1.1%)                               | (8.4%)  |
| DRA G&I Fund VI LLC         | 2007            | \$5             | 11.2%                  | (3.0%)                               | (8.4%)  |
| Mesa West R.E. Inc. Fund II | 2008            | \$20            | NA                     | (6.7%)                               | NA  |
| DMR Mortgage Opportunity    | 2009            | \$10            | NA                     | 53.7%                                | NA  |

Note: commitment in millions.

*Note:* NCREIF Vintage Year Return Since Inception per the median net NCREIF and The Townsend Group Vintage Period Performance Trends as of December 31, 2010 for Value-Added Closed-end Funds



#### **Opportunistic Real Estate**

The average gross total return for opportunistic real estate in 2010 was 24.3% based on NCREIF opportunistic fund data. The table below shows the performance of PABF's opportunistic real estate funds for 2010 and since inception relative to the applicable vintage year index benchmark.

| Investment Fund             | Vintage<br>Year | Commit-<br>ment | Fund<br>2010<br>Return | Fund<br>Return<br>Since<br>Inception | NCREIF<br>Vintage<br>Year<br>Return<br>Since<br>Inception |
|-----------------------------|-----------------|-----------------|------------------------|--------------------------------------|---|
| DV Urban Realty Partners I  | 2006            | \$15.0          | (7.7%)                 | (16.2%)                              | (2.2%)  |
| Apollo Europe R.E. Fund III | 2007            | \$10.0          | 5.9%                   | (10.2%)                              | (5.8%)  |
| MGP Asia Fund III           | 2007            | \$10.0          | 130.3%                 | (9.8%)                               | (5.8%)  |
| Morgan Stanley R.E. VI Intl | 2007            | \$11.6          | (80.2%)                | (50.5%)                              | (5.8%)  |
| Shamrock Hotel Fund         | 2007            | \$5.0           | (23.0%)                | (33.5%)                              | (5.8%)  |
| Lone Star Fund VI (U.S.)    | 2008            | \$10.0          | 19.6%                  | 16.2%                                | NA  |
| Lone Star R.E. Fund (U.S.)  | 2008            | \$5.0           | 10.5%                  | 10.4%                                | NA  |

Note: commitment in millions.

*Note:* NCREIF Vintage Year Return Since Inception per the median net NCREIF and The Townsend Group Vintage Period Performance Trends as of December 31, 2010 for Opportunistic Closed-end Funds

#### **Real Estate Securities**

In 2010, the real estate securities markets had a strong year following a strong 2009. During the year, public real estate companies, in the U.S. alone, raised over \$57 billion of equity and debt capital to improve their balance sheets. The FTSE NAREIT Equity REIT Index ("FNERTR") posted a total return of 27.9% in 2010. The table below shows the performance of PABF's real estate securities fund performance for 2010 compared to the FTSE NAREIT Equity REIT Total Return Index.

| Investment Fund                  | Vintage<br>Year | Commit-<br>ment | Fund<br>2010<br>Return | FNERTR<br>2010<br>Return |
|----------------------------------|-----------------|-----------------|------------------------|--------------------------|
| EII World Fund                   | 2008            | \$10.0          | 19.1%                  | 27.9%                    |
| ING Clarion Global RE Securities | 2008            | \$20.0          | 16.8%                  | 27.9%                    |

Note: commitment in millions.

## Largest Stock Holdings as of December 31, 2010

|    | Shares    | Stocks                               | Fair Value    |
|----|-----------|--------------------------------------|---------------|
| 1  | 6,891,926 | HARBOURVEST GL PVT EQUITY 'A' SHARES | \$ 37,905,593 |
| 2  | 266,758   | EXXON MOBIL CORP COM                 | 19,505,345    |
| 3  | 59,065    | APPLE INC COM STK                    | 19,052,006    |
| 4  | 438,437   | MERCK & CO. INC NEW COM              | 15,801,269    |
| 5  | 268,281   | QUALCOMM INC COM                     | 13,277,227    |
| 6  | 21,794    | GOOGLE INC CL A                      | 12,944,982    |
| 7  | 194,546   | PROCTER & GAMBLE COM                 | 12,515,144    |
| 8  | 185,534   | PEPSICO INC COM                      | 12,120,936    |
| 9  | 122,526   | OCCIDENTAL PETROLEUM CORP            | 12,019,801    |
| 10 | 168,307   | COCA COLA CO COM                     | 11,069,551    |

## Largest Bond Holdings as of December 31, 2010

|    | Par        | Bonds   | Fair Value    |
|----|------------|---|---------------|
| 1  | 17,750,000 | UNITED STATES TREAS NTS NT 1.375% DUE 10/15/2012 REG                  | \$ 18,011,404 |
| 2  | 14,300,000 | GNMA I SINGLE FAMILY MORTGAGE 4% 30 YEARS                             | 14,396,082    |
| 3  | 14,200,000 | FNMA SINGLE FAMILY MORTGAGE 4% 30 YEARS                               | 14,124,570    |
| 4  | 13,000,000 | FNMA SINGLE FAMILY MORTGAGE 3.5% 30 YEARS                             | 12,415,000    |
| 5  | 8,462,000  | UNITED STATES TREAS NTS 2.125 DUE 12/31/2015                          | 8,506,950     |
| 6  | 4,975,000  | UNITED STATES TREAS BDS DTD 08/15/1993 6.25%<br>DUE 08/15/2023 REG    | 6,252,953     |
| 7  | 5,318,778  | FEDERAL HOME LN MTG CORP POOL #G01820 5.5% 06/01/2035 BEO             | 5,706,267     |
| 8  | 4,910,000  | UNITED STATES TREAS BDS DB DTD 11/16/1998<br>5.25% DUE 11/15/2028 REG | 5,627,322     |
| 9  | 4,946,048  | FNMA POOL #725229 6% 03/01/2034 BEO                                   | 5,448,567     |
| 10 | 5,060,000  | UNITED STATES TREAS NTS DTD 00323 .75% DUE 12/15/2013 REG             | 5,024,028     |

A complete list of portfolio holdings is available upon request.

| Commissions | Paid | by | Investment | Managers in |
|-------------|------|----|------------|-------------|
| 2010        |      |    |            |             |

| Manager                           | Total Number<br>of Trades | Total Number<br>of Shares | Total<br>Commissions |
|-----------------------------------|---------------------------|---------------------------|----------------------|
| Ariel Capital Management          | 518                       | 1,208,475                 | \$ 42,112            |
| Artisan Partners                  | 2,455                     | 12,569,553                | 150,504              |
| Attucks Asset Management          | 42                        | 247,570                   | 107                  |
| Capital Guardian Trust Co.        | 1,692                     | 18,505,230                | 133,424              |
| Channing Capital                  | 200                       | 761,138                   | 21,960               |
| Chicago Equity Partners           | 2,037                     | 10,182,170                | 235,313              |
| Denali Advisors                   | 549                       | 1,714,220                 | 24,485               |
| Great Lakes Advisors              | 141                       | 1,017,676                 | 36,968               |
| Holland Capital Management        | 101                       | 441,801                   | 14,357               |
| ING Clarion Real Estate           | 1,218                     | 1,988,497                 | 12,556               |
| JP Morgan Global Asset Management | 357                       | 4,053,996                 | 40,214               |
| McKinley Capital Management       | 1,450                     | 21,212,390                | 205,484              |
| Montag & Caldwell                 | 349                       | 5,201,720                 | 167,514              |
| Piedmont Investment               | 248                       | 2,566,568                 | 72,806               |
| UBS Global Asset Management       | 492                       | 18,030,497                | 130,903              |
| UBS US Equity Fund                | 1,521                     | 8,223,619                 | 253,356              |
| William Blair & Company           | 3,138                     | 33,805,650                | 534,345              |
|                                   | 16,508                    | 141,730,769               | \$ 2,076,407         |

|                                | <b>Total Number</b> | Total       |
|--------------------------------|---------------------|-------------|
| Broker                         | of Shares           | Commissions |
| Merrill Lynch                  | 16,481,475          | \$ 133,433  |
| Loop Capital Markets           | 4,152,299           | 111,870     |
| Gardner Rich & Co              | 3,151,369           | 102,360     |
| Cabrera Capital Markets        | 5,931,713           | 99,877      |
| Melvin Securities              | 2,627,806           | 80,111      |
| Liquidnet Inc                  | 3,963,507           | 73,682      |
| Morgan Stanley                 | 7,032,900           | 72,803      |
| UBS                            | 3,889,336           | 68,957      |
| Goldman Sachs & Co             | 7,249,558           | 66,385      |
| Citigroup Global Markets       | 4,420,287           | 61,514      |
| CSFB                           | 9,161,236           | 60,827      |
| G-Trade Services Ltd           | 3,744,111           | 56,119      |
| Credit Suisse                  | 2,771,790           | 49,313      |
| JP Morgan Securities           | 5,881,768           | 49,085      |
| BNY ESI Securities             | 1,294,161           | 47,356      |
| Deutsche Bank                  | 2,253,067           | 43,370      |
| Bear Stearns                   | 2,190,571           | 42,682      |
| Mr. Beal and Company           | 1,324,916           | 40,556      |
| Investment Technology Group    | 2,760,244           | 38,738      |
| Cheevers & Co.                 | 1,077,697           | 37,790      |
| Macquarie Securities           | 5,031,828           | 36,722      |
| Barclays Capital               | 1,772,352           | 34,192      |
| Cheuvreux De Virieu Paris      | 1,953,628           | 30,126      |
| Williams Capital Group LP      | 876,777             | 27,495      |
| Jefferies & Co.                | 1,073,722           | 26,063      |
| Pershing LLC                   | 1,127,565           | 23,441      |
| Robert W Baird & Co.           | 647,342             | 21,359      |
| Instinet                       | 1,843,552           | 20,048      |
| Weeden and Company             | 641,224             | 19,846      |
| Goldman Executing and Clearing | 654,073             | 18,537      |
| Nomura Securities              | 1,587,771           | 17,413      |
| Credit Lyonnais                | 3,060,630           | 15,259      |
| Bernstein, Sanford & Co.       | 573,363             | 14,734      |
| Citation Group                 | 396,400             | 12,278      |
| HSBC                           | 1,450,001           | 12,034      |
| Exane Paris                    | 376,875             | 11,112      |
| Cowen LLC                      | 295,596             | 11,091      |
|                                | 1,429,320           | 10,994      |

#### **Commissions Paid to Brokers in 2010**

| Knight Securities                             |             |              |
|---|-------------|--------------|
| Stifel Nicolaus and Company                   | 289,094     | 9,708        |
| ABN Amro                                      | 933,256     | 9,380        |
| Societe Generale                              | 176,296     | 8,534        |
| Keefe Bruyette & Woods                        | 234,312     | 8,465        |
| Daiwa Secs                                    | 402,519     | 8,398        |
| Nomura International PLC                      | 940,453     | 8,359        |
| Morgan Keegan & Co                            | 232,085     | 7,911        |
| Pipeline Trading Systems                      | 521,176     | 7,885        |
| DSP Merrill Lynch                             | 256,960     | 7,523        |
| Multitrade Securities LLC                     | 243,567     | 7,307        |
| Brokers with less than \$7,000 in commissions | 21,349,212  | 293,365      |
| Totals  | 141,730,769 | \$ 2,076,407 |

## Investment Summary as of 12/31/10

| <u>Investment Type</u>      | <u>Fair Value</u>  | Percent of<br>Total<br><u>Fair Value</u> |
|-----------------------------|--------------------|--|
| Fixed Income                |                    |  |
| <b>Government Bonds</b>     | \$ 280,131,869     | 8.5%                                     |
| Corporate Bonds             | 277,443,699        | <u>8.4%</u>                              |
| Total Bonds:                | 557,575,568        | 16.9%                                    |
| Pooled Bond Index Fund      | 260,847,982        | <u>7.9%</u>                              |
| <b>Total Fixed Income:</b>  | 818,423,550        | 24.8%                                    |
| Equities                    |                    |  |
| U.S. Equities               | 1,041,332,798      | 31.5%                                    |
| International Equities      | 667,432,501        | 20.2%                                    |
| Stock Index Funds           | <u>285,809,608</u> | <u>8.7%</u>                              |
| <b>Total Equities:</b>      | 1,994,574,907      | 60.4%                                    |
| Other Investments           |                    |  |
| Hedge Fund-of-Funds         | 81,704,551         | 2.5%                                     |
| Infrastructure              | 38,165,359         | 1.1%                                     |
| Real Estate                 | 94,421,845         | 2.9%                                     |
| Swaps/Forward Contracts     | 4,728,596          | 0.1%                                     |
| Venture Capital             | <u>177,116,975</u> | <u>5.4%</u>                              |
| <b>Total Other:</b>         | 396,137,326        | 12.0%                                    |
| Short-term funds and Cash:  | 91,970,139         | 2.8%                                     |
| Total Assets at Fair Value: | \$ 3,301,105,922   | 100.0%                                   |



# Actuarial Section



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April 21, 2011

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, 2010

Dear Members of the Board:

At your request, we have performed an actuarial valuation for the Policemen's Annuity and Benefit Fund of Chicago ("the Fund") as of December 31, 2010. This valuation has been performed to measure the funded status of the Fund and to determine the contribution levels for 2011. 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
- 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.

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

**Plan Provisions** — The actuarial valuation is based on plan provisions in effect as of December 31, 2010.

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 a ratio of 6.19:1 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

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

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

#### 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.

#### A. Demographic Assumptions

 Mortality:
 1994 Group Annuity Mortality Table.

 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
 Bate

| Attained Age | Rate  |
|--------------|-------|
| 22           | .0003 |
| 27           | .0006 |
| 32           | .0012 |
| 37           | .0015 |
| 42           | .0020 |
| 47           | .0045 |
| 52           | .0050 |
| 57           | .0060 |
| 62           | .0060 |
|              |       |

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:

| Attained Age | Rate <sup>1</sup> |
|--------------|-------------------|
| 49           | .00               |
| 50           | .80               |
| 51           | .80               |
| 52           | .80               |
| 53           | .80               |
| 54           | .15               |
| 55           | .15               |
| 56           | .15               |
| 57           | .15               |
| 58           | .15               |
| 59           | .15               |
| 60           | .25               |
| 61           | .30               |
| 62           | .35               |
| 63           | 1.00              |

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

Turnover Rates:

The following sample rates exemplify the table:

| Years of Service | Rate  |
|------------------|-------|
| 0                | 0.028 |
| 1                | 0.022 |
| 2                | 0.014 |
| 3                | 0.013 |
| 4-9              | 0.012 |
| 10               | 0.011 |
| 11               | 0.010 |
| 12               | 0.009 |
| 13               | 0.008 |
| 14               | 0.007 |
| 15               | 0.006 |
| 16               | 0.005 |
| 17-25            | 0.004 |

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

| Investment Return Rate: | 8.00% per annum for pensions and 4.50% for OPEB. OPEB rate effective as of December 31, 2005. |
|-------------------------|---|
| General Inflation Rate: | 3.00% per annum.  |

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

| Completed Years<br>of Service <sup>a</sup> | Scale |
|--|-------|
| 1  | 0.250 |
| 2  | 0.060 |
| 3  | 0.050 |
| 4  | 0.050 |
| 5  | 0.040 |
| 6-9  | 0.000 |
| 10   | 0.035 |
| 11-14                                      | 0.000 |
| 15   | 0.035 |
| 16-19                                      | 0.000 |
| 20   | 0.035 |
| 21-24                                      | 0.000 |
| 25   | 0.035 |
| Over 25                                    | 0.000 |

<sup>a</sup> Includes increases at 12 and 18 months of service.

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<br>supplement will continue for life for all employee annuitants (and their<br>future widows). The amount of the Fund-paid health insurance is \$95.00<br>per month for each annuitant (employees and widows) not qualified to<br>receive Medicare benefits and \$65.00 if qualified. It is assumed that all<br>annuitants age 65 and over will be eligible for Medicare and all<br>annuitants less than age 65 will not be eligible for Medicare. Future<br>widows of retirees are assumed to be eligible for Medicare, as well as<br>widow annuitants that are currently receiving a health insurance<br>supplement. |
|----------------------------|---|
| Retroactive Pay Increases: | Retroactive pay rates from the newly negotiated contract would increase<br>benefits for member's retired between July 1, 2007, and the valuation<br>date. For those members whose benefits had not been recalculated as of<br>the valuation date, their benefit adjustments were estimated based on pay<br>increases from July 1, 2007 through the date of retirement.  |

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.

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Loss in Tax Levy: 4% overall loss on tax levy is assumed.
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## **HISTORY OF AVERAGE ANNUAL SALARIES**

| Year<br>End       | Members<br>in Service | Increase | Current Year<br>Salary | Increase | Average<br>Salary | Increase | Actuarial<br>Assumptions | CPI<br>Chicago |
|-------------------|-----------------------|----------|------------------------|----------|-------------------|----------|--------------------------|----------------|
| 1968              | 12,427                | 6.8      | \$108,057,504          | 11.2     | \$8,895           | 6.5      | 3.50                     | 4.3            |
|                   |                       |          |                        |          |                   |          |                          | 4.5<br>5.4     |
| 1969              | 12,595                | 1.4      | 136,846,000            | 26.6     | 10,865            | 22.1     | 3.50                     |                |
| 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            |
| Average In        |                       |          |                        |          |                   |          |                          |                |
| (Decrease)        |                       |          |                        |          |                   |          |                          |                |
| last 5 years      | 5:                    | (1.1)%   |                        | 2.0 %    |                   | 3.2 %    |                          | 1.7 %          |
| <u> </u>          |                       |          |                        |          |                   |          |                          |                |

<sup>1</sup> Members in service does not include those age 63 and over who are still working.
 <sup>2</sup> Figures do not include retroactive raise.
 <sup>3</sup> Pay definition changed to include duty availability pay. Of the \$1,048,084,301 current year salary, \$36,730,459 is duty availability pay.

## SUMMARY OF CHANGES IN ACTIVE PARTICIPANTS FOR FISCAL YEAR ENDING DECEMBER 31, 2010

|   | Male      | Female | Total            |
|---|-----------|--------|------------------|
| Number of Participants at Beginning of Fiscal Year  | 9,962     | 3,192  | 13,154           |
| Increases:<br>Participants Added During Year<br>Participants Returning From Inactive or Disability Status | 133<br>26 | 40     | 173<br><u>31</u> |
| Totals  | 10,121    | 3,237  | 13,358           |
| Decreases:<br>Terminations During Year  | 481       | 140    | 621              |
| Number of Participants at End of Fiscal Year  | 9,640     | 3,097  | 12,737           |
| Total Inactive Participants   |           |        | 620              |
| Terminations:   |           |        |                  |
| Withdrawal (With Refunds) <sup>1</sup>  | 9         | 3      | 12               |
| Withdrawal (Without Refunds)  | 59        | 15     | 74               |
| Ordinary Disability Benefit   | 7         | 7      | 14               |
| Occupational Disease Disability Benefit   | 2         | 0      | 2                |
| Duty Disability Benefit   | 22        | 4      | 26               |
| Retirements   | 369       | 104    | 473              |
| Deaths (Occupational)   | 4         | 0      | 4                |
| Deaths (Non-occupational)   | 9         | 7      | 16               |
| Totals  | 481       | 140    | 621              |

## SUMMARY OF CHANGES IN ANNUITANTS AND BENEFICIARIES FOR FISCAL YEAR ENDING DECEMBER 31, 2010

|   | Number at<br>Beginning<br>of Year | Additions<br>During<br>Year | Terminations<br>During<br>Year | Number at<br>End of<br>Year |
|---|-----------------------------------|-----------------------------|--------------------------------|-----------------------------|
| Service Retirement Annuities                                | 8,227                             | 551                         | 283                            | 8,495                       |
| Widow Annuities   | 3,111                             | 145                         | 177                            | 3,079                       |
| Children's Annuities  | 232                               | 17                          | 27                             | 222                         |
| Ordinary Disability Benefit<br>(Non-Occupational)           | 44                                | 15                          | 22                             | 37                          |
| Occupational Disease Disability Benefit                     | 52                                | 2                           | 14                             | 40                          |
| Duty Disability Benefit<br>(Occupational)                   | 284                               | 34                          | 34                             | 284                         |
| Children's Disability Benefit                               | 138                               | 35                          | 18                             | 155                         |
| Widows' Compensation Annuities<br>(Service Connected Death) | 66                                | 4                           | 1                              | 69                          |
| Totals  | 12,154                            | 803                         | 576                            | 12,381                      |
| Annual Benefits   | \$496,796,644                     | 51,503,602                  | 18,076,298                     | 528,223,948                 |

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

|      | Annuitants &<br>Beneficiaries<br>Beginning<br><u>of Year</u> | Additions<br>During<br><u>The Year</u> | Terminations<br>During<br><u>The Year</u> | Annuitants &<br>Beneficiaries<br><u>at Year-end</u> | Average<br>Annuitants &<br><u>Beneficiaries</u> |
|------|--|--|---|---|---|
| 2004 | 11,441   | 858                                    | 491                                       | 11,808  | 11,625  |
| 2005 | 11,808   | 676                                    | 485                                       | 11,999  | 11,904  |
| 2006 | 11,999   | 542                                    | 515                                       | 12,026  | 12,013  |
| 2007 | 12,026   | 627                                    | 518                                       | 12,135  | 12,081  |
| 2008 | 12,135   | 603                                    | 555                                       | 12,183  | 12,159  |
| 2009 | 12,183   | 476                                    | 505                                       | 12,154  | 12,169  |
| 2010 | 12,154   | 803                                    | 576                                       | 12,381  | 12,268  |

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

|                     | (1)                 | (2)              | (3)                                      |                  |             |                          |       |
|---------------------|---------------------|------------------|--|------------------|-------------|--------------------------|-------|
| Valuation           | Active and Inactive | Retirees         | Active and Inactive Actuarial Portion (% |                  | Portion (%) | of Present Value Covered |       |
| Date                | Member              | and              | Members (ER                              | Value of         |             | By Assets                |       |
| 12/31               | Contribution        | Beneficiaries    | Financed Portion)                        | Assets           | (1)         | (2)                      | (3)   |
| 1996                | \$ 717,890,959      | \$ 2,150,952,000 | \$ 1,498,186,586                         | \$ 2,599,760,692 | 100.00%     | 87.49%                   | 0.00% |
| 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 1              | 818,382,556         | 3,228,954,418    | 1,604,693,684                            | 4,019,467,561    | 100.00%     | 99.14%                   | 0.00% |
| 2001 2              | 803,453,930         | 3,463,944,097    | 1,665,112,602                            | 4,183,796,025    | 100.00%     | 97.59%                   | 0.00% |
| 2002                | 846,622,627         | 3,769,125,439    | 1,769,097,893                            | 4,124,579,960    | 100.00%     | 86.97%                   | 0.00% |
| 2003 1,2            | 893,425,839         | 3,856,262,804    | 1,831,744,607                            | 4,039,695,590    | 100.00%     | 81.59%                   | 0.00% |
| 2004 <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 1,2            | 950,764,942         | 4,677,632,909    | 2,094,339,296                            | 3,914,431,654    | 100.00%     | 63.36%                   | 0.00% |
| 2006                | 1,016,217,810       | 4,858,554,051    | 2,241,771,313                            | 3,997,990,919    | 100.00%     | 61.37%                   | 0.00% |
| 2007                | 1,082,742,927       | 5,006,931,293    | 2,309,718,259                            | 4,231,681,817    | 100.00%     | 62.89%                   | 0.00% |
| 2008                | 1,144,380,257       | 5,208,199,833    | 2,299,966,099                            | 4,093,719,894    | 100.00%     | 56.63%                   | 0.00% |
| 2009 1              | 1,217,645,647       | 5,391,373,730    | 2,291,882,108                            | 3,884,978,241    | 100.00%     | 49.47%                   | 0.00% |
| 2010                | 1,251,147,487       | 5,717,654,520    | 2,406,050,870                            | 3,718,954,539    | 100.00%     | 43.16%                   | 0.00% |

<sup>1</sup>Change in actuarial assumptions. <sup>2</sup>Change in benefits.

## **POLICEMEN'S ANNUITY AND BENEFIT FUND DEVELOPMENT OF ANNUAL REQUIRED** CONTRIBUTION UNDER GASB #25 AND GASB #43 FOR 2011 $^1$

|  | Pension                                | Health Ins.<br>Supplement         | Total                                  |
|--|--|-----------------------------------|--|
| (1) Normal Cost  | \$ 179,725,076                         | \$ 4,416,339                      | \$ 184,141,415                         |
| (2) Actuarial Accrued Liability (AAL)  | \$9,210,056,428                        | \$ 164,796,449                    | \$9,374,852,877                        |
| (3) Unfunded AAL (UAAL)<br>(a) Actuarial Value of Assets<br>(b) UAAL (2-3(a))  | \$3,718,954,539<br>5,491,101,889       | \$ 0<br>164,796,449               | \$3,718,954,539<br>5,655,898,338       |
| (4) Amortization Payable at Beginning of Year <sup>2</sup>   | \$ 300,103,592                         | \$ 5,883,764                      | \$ 305,987,356                         |
| (5) Estimated Member Contributions   | \$ 96,577,751                          | \$ 0                              | \$ 96,577,751                          |
| <ul> <li>(6) Annual Required Contribution (ARC) for 2011</li> <li>(a) Interest Adjustment for Semimonthly Payment</li> <li>(b) Annual Required Contribution (1 + 4 - 5 + 6(a))</li> <li>(c) Annual Required Contribution (Percent of Pay)</li> </ul> | 19,501,044<br>\$ 402,751,961<br>38.43% | 238,013<br>\$ 10,538,116<br>1.01% | 19,739,057<br>\$ 413,290,077<br>39.43% |
| (7) Estimated City Contribution for 2011   | \$ 176,216,406                         | \$ 9,443,594 <sup>3</sup>         | \$ 185,660,000                         |
| <ul> <li>(8) Estimated Deficiency/(Excess) for 2011</li> <li>(a) in Dollars (6(b)-7)</li> <li>(b) as a Percentage of Pay</li> </ul>  | <u>\$ 226,535,555</u><br>21.61%        | <u>\$ 1,094,522</u><br>0.10%      | <u>\$ 227,630,077</u><br>21.72%        |

<sup>1</sup> Pension liabilities were discounted at 8.0% 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 2011.

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

| UNFUNDED ACTUARIAL ACCRUED LIABILITY - BEGINNING OF 2010 |   |                 |  |  |  |  |  |
|--|---|-----------------|--|--|--|--|--|
| (1)  | (1) Actuarial Accrued Liability - 12/31/2009 \$8,900,901,485              |                 |  |  |  |  |  |
| (2)  | Assets at Book Value - 12/31/2009 3,217,376,585                           |                 |  |  |  |  |  |
| (3)  | Unfunded Accrued Actuarial Liability - 12/31/2009                         | \$5,683,524,900 |  |  |  |  |  |
|  |   |                 |  |  |  |  |  |
| EXPE   | EXPECTED UNFUNDED ACTUARIAL ACCRUED LIABILITY - END OF 2010               |                 |  |  |  |  |  |
| (4)  | Normal Cost for 2010  | \$ 178,396,098  |  |  |  |  |  |
| (5)  | Total Contributions for 2010  | 292,257,023     |  |  |  |  |  |
| (6)  | Interest on (3), (4), & (5) at Valuation Rates                            | 451,720,414     |  |  |  |  |  |
| (7)  | Expected Unfunded Actuarial Accrued Liability - 12/31/2010                | \$6,021,384,389 |  |  |  |  |  |
|  | ((3)+(4)-(5)+(6))   |                 |  |  |  |  |  |
|  |   |                 |  |  |  |  |  |
| DEVL   | ATIONS FROM EXPECTED  |                 |  |  |  |  |  |
| (8)  | (Gain)/Loss on Investment Return (Book Value)                             | \$53,617,895    |  |  |  |  |  |
| (9)  | (Gain)/Loss from Salary Changes <sup>1</sup>                              | 108,341,557     |  |  |  |  |  |
| (10)   | (Gain)/Loss from Retroactive adjustments to Benefits                      | 23,378,655      |  |  |  |  |  |
| (11)   | (Gain)/Loss from Retirement   | 30,625,751      |  |  |  |  |  |
| (12)   | (Gain)/Loss from Turnover   | 7,597,006       |  |  |  |  |  |
| (13)   | (Gain)/Loss from Mortality  | (28,957,694)    |  |  |  |  |  |
| (14)   | (Gain)/Loss from Disability   | 1,747,220       |  |  |  |  |  |
| (15)   | (Gain)/Loss from New Entrants   | 1,914,190       |  |  |  |  |  |
| (16)   | (Gain)/Loss from All Other Sources  | (4,500,361)     |  |  |  |  |  |
| (17)   | Composite Actuarial (Gain)/Loss   | \$193,764,219   |  |  |  |  |  |
| (18)   | (Gain)/Loss as a percentage of Expected UAAL ( (17)/(7) )                 | 3.2%            |  |  |  |  |  |
|  |   |                 |  |  |  |  |  |
| UNFUNDED ACTUARIAL ACCRUED LIABILITY - END OF 2010       |   |                 |  |  |  |  |  |
| (19)   | (19) Unfunded Actuarial Liability - 12/31/2010 ((7)+(17)) \$6,215,148,608 |                 |  |  |  |  |  |
|  |   |                 |  |  |  |  |  |

<sup>1</sup>Salary (Gain) Loss include retroactive salary adjustments.

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

|  | APV of<br>Projected<br>Benefits | Actuarial<br>Accrued<br>Liability<br>(AAL) |
|--|---------------------------------|--|
| (1) Values for Active Members                      |                                 | (1112)                                     |
| (a) Retirement                                     | \$4,940,676,223                 | \$3,414,803,180                            |
| (b) Termination                                    | 68,263,227                      | 7,469,269                                  |
| (c) Disability                                     | 418,392,200                     | 170,496,929                                |
| (d) Death  | 88,342,593                      | 22,065,984                                 |
| Total for Actives                                  | \$5,515,674,243                 | \$3,614,835,362                            |
| (2) Values for Inactive Members                    |                                 |  |
| (a) Retired  | 4,967,511,862                   | 4,967,511,862                              |
| (b) Survivor                                       | 480,239,555                     | 480,239,555                                |
| (c) Disability                                     | 261,419,473                     | 261,419,473                                |
| (d) Inactive (Deferred Vested)                     | 42,362,995                      | 42,362,995                                 |
| (e) Children                                       | 8,483,630                       | 8,483,630                                  |
| Total for Inactives                                | 5,760,017,515                   | 5,760,017,515                              |
| (3) Grand Totals                                   | \$11,275,691,758                | \$9,374,852,877                            |
| (4) Normal Cost for Active Members                 | \$ 184,141,415                  |  |
| (5) Actuarial Present Value of Future Compensation | \$11,166,162,713                |  |

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

|                           | Ann   | uitants | Disal | bilitants | Widowe | rs/Widows | Ch   | ildren | Т     | otals    |
|---------------------------|-------|---------|-------|-----------|--------|-----------|------|--------|-------|----------|
| Monthly Benefit Amount    | Male  | Female  | Male  | Female    | Male   | Female    | Male | Female | Male  | Female   |
|                           |       |         |       |           |        |           |      |        |       |          |
| Under \$100               | 7     | 1       |       |           |        |           | 2    |        | 9     | 1        |
| \$100 to under \$250      | 12    | 3       |       |           |        |           | 108  | 71     | 120   | 74       |
| \$250 to under \$500      | 21    | 7       |       |           |        |           | 64   | 37     | 85    | 44       |
| \$500 to under \$750      | 18    | 1       |       |           | 1      | 1         | 41   | 40     | 60    | 42       |
| \$750 to under \$1,000    | 2     | 1       |       |           |        |           | 7    | 7      | 9     | 8        |
| \$1,000 to under \$2,000  | 216   | 35      |       |           | 36     | 2,540     |      | 1      | 252   | 2,576    |
| \$2,000 to under \$3,000  | 640   | 66      | 6     | 1         | 2      | 450       |      |        | 648   | 517      |
| \$3,000 to under \$4,000  | 1,730 | 311     | 64    | 41        |        | 49        |      |        | 1,794 | 401      |
| \$4,000 to under \$5,000  | 2,423 | 178     | 165   | 38        | 3      | 39        |      |        | 2,591 | 255      |
| \$5,000 to under \$6,000  | 1,942 | 130     | 34    | 7         |        | 22        |      |        | 1,976 | 159      |
| \$6,000 to under \$7,000  | 480   | 38      | 3     |           |        | 1         |      |        | 483   | 39       |
| \$7,000 to under \$8,000  | 109   | 5       |       |           |        |           |      |        | 109   | 5        |
| \$8,000 to under \$9,000  | 51    | 6       |       | 1         |        | 2         |      |        | 51    | 9        |
| \$9,000 to under \$10,000 | 47    | 3       | 1     |           |        |           |      |        | 48    | 3        |
| \$10,000 and over         | 12    |         |       |           |        | 1         |      |        | 12    | 1        |
| Totals:                   | 7,710 | 785     | 273   | 88        | 42     | 3,105     | 222  | 156    | 8,247 | 4,134    |
|                           | ,     |         |       |           |        | ,         |      |        | · ·   | <i>,</i> |

## SCHEDULE OF AVERAGE BENEFIT PAYMENTS FOR NEW ANNUITIES GRANTED IN 2010

| Years of Service:       | 10-14     | 15-19  | 20-24  | 25-29  | 30-34  | >= 35  | Total     |
|-------------------------|-----------|--------|--------|--------|--------|--------|-----------|
| Number of New           |           |        |        |        |        |        |           |
| Annuitants              | 1         | 13     | 105    | 161    | 140    | 131    | 551       |
| Average Annual Salary   | \$ 81,122 | 70,339 | 80,639 | 88,735 | 91,739 | 92,194 | \$ 88,330 |
| Average Monthly Benefit | \$ 2,535  | 2,667  | 3,837  | 5,385  | 5,734  | 5,762  | \$ 5,199  |

NOTE: THERE WERE NO NEW ANNUITANTS IN 2010 WITH LESS THAN 10 YEARS OF SERVICE.

## SUMMARY OF PRINCIPAL ELIGIBILITY AND BENEFIT PROVISIONS AS OF DECEMBER 31, 2010

| PARTICIPANTS                            | An employee in the police department of the City of Chicago appointed<br>and sworn or designated by law as a peace officer with the title of<br>policeman, policewoman, chief surgeon, police surgeon, police dog<br>catcher, police kennelman, police matron and members of the police<br>force of the police department.   |  |  |
|---|--|--|--|
| SERVICE                                 | In computing service rendered by a police officer, the following periods<br>shall be counted, in addition to all periods during which he performed<br>the duties of his position, as periods of service for annuity purposes only:<br>All periods of (a) vacation; (b) leave of absence with pay; (c) military<br>service; (d) disability for which the police officer receives disability<br>benefit. The calculation of service is based on a day-to-day basis for<br>most purposes. For the purpose of calculating benefits under the<br>Dominant Formula, one-year of Service is credited for a year in any<br>portion of which a police officer is compensated. |  |  |
| RETIREMENT                              |  |  |  |
| Eligibility                             | Attainment of age 50 with at least 10 years of service.  |  |  |
| 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<br>entitled to an annuity based on the sums accumulated for age and service<br>annuity plus 1/10 of the sum accumulated from the contributions by the<br>City for the age and service annuity for each completed year of service<br>after the first 10 years. At age 50 or more with 20 or more years, the<br>employee is entitled to an annuity based on all sums accumulated.   |  |  |
| Formula Minimum<br>Annuity              | While there are several alternative formulas available with 20 or more years of service, the Dominant Formula is 50% of highest average salary (including duty availability pay) in 48 consecutive months within the last 10 years of service plus 2.5% for each year or fraction of service over 20 years, limited to 75% of average salary.  |  |  |
| Mandatory Retirement<br>Minimum Annuity | A police officer who is required to withdraw from service due to attainment of mandatory retirement age who has less than 20 years of service credit may elect to receive an annuity equal to 30% of average salary for the first 10 years of service, plus 2% of average salary for each completed year of service in excess of 10, to a maximum of 48% of average salary. This benefit qualifies for post retirement increases.  |  |  |

| Post-Retirement Increase    | A retiree born before January 1, 1955, with at least 20 years of service or |
|-----------------------------|---|
|                             | receiving a mandatory retirement minimum annuity, receives an increase      |
|                             | of 3% of the original annuity, starting on the first of the month following |
|                             | the first anniversary of his retirement or the first of the month following |
|                             | attainment of age 55, whichever is later, and shall not be subject to a     |
|                             | 30% maximum increase. For retirees born after January 1, 1955,              |
|                             | automatic increases are 1.5% of the original annuity, commencing at age     |
|                             | 60, or the first anniversary of retirement, if later, to a maximum of 30%.  |
|                             |   |
| 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.               |
|                             | 5 1   |
| <b>Reversionary</b> Annuity | A member, prior to retirement, may elect to reduce his own annuity, and     |
|                             | provide a reversionary annuity, to begin upon the officer's death, for the  |
|                             | officer's spouse.   |
|                             | ·   |

#### SURVIVOR INCOME BENEFITS PAYABLE ON DEATH

*Death in Service (Non-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 |

department.

police officer had continued in service at the same rank last held in the

| Death after Retirement | If a police officer retires on or after January 1, 1986, and subsequently dies, the widow's annuity is 40% before 1988 and 50% on and after January 1, 1988 of the retired policeman's annuity at the time of death (without dollar limit). |
|------------------------|---|
| Maximum Annuity        | \$500 a month (after discount for age difference) under both the accumulation method and the old formula method. There is no dollar limit on the 30%, 40% or 50% benefit.   |
| Minimum Annuity        | Any spouse is entitled to a minimum annuity of \$1,000 a month.   |

#### 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. |

| Eligibility   | Payable to a dependent parent at the death of a policeman who is in<br>either active service, or receiving a disability benefit, or on leave of<br>absence, or in receipt of an annuity granted after 20 years of service, or<br>waiting to start receiving an annuity granted for 20 years of service. The<br>benefit is only payable if there are no surviving spouses or children<br>eligible for benefits. |
|---------------|--|
| Benefit       | 18% of the current salary attached to the rank at separation from service.   |
| Payable until | Death of the dependent parent.   |

#### **DUTY DISABILITY BENEFIT**

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

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

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

*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.

#### ORDINARY DISABILITY BENEFIT

| <i>Eligibility</i> Disabling c                                |   | n other than duty or occupational related.  |  |  |  |
|---|---|---|--|--|--|
| Benefit   | 50% of salary at the time of injury, payable for a period not more than 25% of service (excluding any previous disability time) rendered prior to injury, nor more than 5 years. Disability shall cease at age 63. Salary deductions are contributed by the City. |   |  |  |  |
| DEATH BENEFIT   |   |   |  |  |  |
| Eligibility   | active service; on a<br>of salary; while re<br>within 60 days of t<br>while in receipt of   | death of a police officer whose death occurs while in<br>authorized leave of absence; within 60 days of receipt<br>ceiving duty or ordinary disability benefit; occurring<br>ermination of such benefit; or occurring on retirement<br>annuity and separation was effective after 20 years of<br>it is payable to beneficiaries or, if none, to estate. |  |  |  |
| Benefit   |   |   |  |  |  |
| Death in Service:   | Age at Death49 and under50-6263 and Over  | Benefit<br>\$12,000<br>\$12,000 less \$400 for each year by which age at<br>death exceeds 49.<br>\$6,000  |  |  |  |
| Death after Retirement:                                       | Age at Death Benefit  |   |  |  |  |
|   |   | \$6,000<br>rom injury incurred in performance of duty before<br>nity, the benefit payable is \$12,000 regardless of the   |  |  |  |
| GROUP HEALTH<br>HOSPITAL AND<br>SURGICAL INSURANCE<br>PROGRAM | for non-Medicare  | hall provide payments in the amount of \$95 per month<br>eligible city annuitants and \$65 per month for<br>tity 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  | -   | an unmarried policeman will receive a refund of spouse's annuity, accumulated at 3% compounded  |  |  |  |

| Of Remaining Amounts                          | If at death of a retired policema<br>while active exceed the total retir<br>difference is payable.  |  | -  |
|---|---|--|--|
| CONTRIBUTIONS                                 |   |  |  |
| Salary Deductions                             | Employee<br>Spouse<br>Annuity Increase  | 7 %<br>1½%<br>½%<br>9 %  | _  |
| City Contributions <sup>1</sup>               | Employee<br>Spouse<br>Annuity Increase<br><sup>1</sup> Credited to Participant's Accumulation<br>In addition to the above contribut<br>the Death Benefit. Policement<br>contributes a total of \$224,000 fo<br>The total City contribution is g<br>contributions by the policement to<br>the tax levy.  | tions, a contribution contribute \$2<br>r all policemen.<br>generated by a t | ution is made to support<br>2.50 per month. City<br>ax equal to double the |
| "PICK UP" OF<br>EMPLOYEE SALARY<br>DEDUCTIONS | the tax levy.<br>Beginning January 1, 1982, the employee contributions were "picked up"<br>by the employer. The W-2 salary is therefore reduced by the amount of<br>contribution. For pension purposes the salary remains unchanged.<br>Income tax will be paid when a refund or annuity is received. For the<br>purpose of benefits, refunds or contributions, these contributions will be<br>treated as employee contributions. |  |  |



# Statistical Section

## SUPPLEMENTAL INFORMATION

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

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

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

|      | Employee         | Employer         | Investment      |               | Employer Cont.<br>as a percent<br>of Current |
|------|------------------|------------------|-----------------|---------------|--|
| Year | Contributions(1) | Contributions(2) | Income (3)      | Total         | Year Payroll                                 |
| 2001 | 71,146,651       | 139,675,766      | (214,033,382)   | (3,210,965)   | 18.37%                                       |
| 2002 | 79,238,513       | 141,989,025      | (335,936,484)   | (114,708,946) | 18.30%                                       |
| 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%                                       |
|      |                  |                  |                 |               |  |
|      | Benefits         | Administrative   |                 |               | Income Less                                  |
| Year | Expenses         | Expenses         | Refunds         | Total         | Payouts                                      |
| 2001 | 324,836,320      | 2,451,822        | 5,664,009       | 332,952,151   | (336,163,116)                                |
| 2002 | 350,413,759      | 2,544,860        | 5,238,860       | 358,197,479   | (472,906,425)                                |
| 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                                  |
|      |                  |                  |                 |               |  |

(1) Includes deductions in lieu for disability

(2) Net tax levy and miscellaneous income

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

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

|      |             |            |           | Ordinary,            |           |                 |             |
|------|-------------|------------|-----------|----------------------|-----------|-----------------|-------------|
|      |             |            |           | Duty and<br>Children |           |                 |             |
| Year | Employee    | Spouse     | Dependent | Disability           | Death     | Hospitalization | Total       |
| 2001 | 257,540,559 | 40,169,959 | 1,189,323 | 18,536,460           | 1,736,900 | 5,663,121       | 324,836,322 |
| 2002 | 278,369,295 | 42,773,551 | 1,197,537 | 20,563,408           | 1,610,800 | 5,899,168       | 350,413,759 |
| 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 |

## AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

| Years<br>Ended | Average<br>Annual<br>Benefit | Average<br>Current Age<br>of Retirees | Average Age at<br>Retirement<br>Current Year * | Average Years of<br>Service at<br>Retirement<br>Current Year <sup>*</sup> |
|----------------|------------------------------|---------------------------------------|--|---|
| 1979           | 7,920                        | 68                                    | 57.3   | 28.1  |
| 1980           | 8,573                        | 68                                    | 57.6   | 28.2  |
| 1981           | 9,292                        | 68                                    | 58.4   | 28.6  |
| 1982           | 10,020                       | 68                                    | 59.1   | 29.2  |
| 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  |

\* Averages for New Annuitants in 2010.

#### **RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT**

| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       | ANNUITANTS |                     |       | DISABILITY |      |        | Widow              |       |        |
|---|-------|------------|---------------------|-------|------------|------|--------|--------------------|-------|--------|
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   | Years | Employee   | Spouse <sup>1</sup> | Child | Ordinary   | Duty | Occup. | Child <sup>2</sup> | Comp. | Total  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       |            |                     |       |            |      |        |                    |       |        |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$  |       |            | ,<br>,              |       |            |      |        |                    |       | 7,412  |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$  |       |            | -                   |       |            |      |        |                    |       | 7,497  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       |            | -                   |       |            |      |        |                    |       | 7,587  |
| 1984 $3,723$ $3,152$ $435$ $87$ $113$ $74$ $7,5$ 1985 $3,861$ $3,234$ $406$ $95$ $126$ $70$ $7,7$ 1986 $4,212$ $3,145$ $380$ $78$ $144$ $69$ $8,0$ 1987 $4,467$ $3,100$ $354$ $66$ $156$ $75$ $8,2$ 1988 $4,595$ $3,184$ $350$ $63$ $167$ $78$ $8,4$ 1989 $4,772$ $3,202$ $335$ $58$ $179$ $71$ $8,6$ 1990 $4,936$ $3,214$ $335$ $51$ $187$ $66$ $8,7$ 1991 $5,033$ $3,137$ $329$ $75$ $192$ $68$ $88$ 1992 $5,109$ $3,123$ $281$ $51$ $221$ $159$ $64$ $9,2$ 1993 $5,195$ $3,151$ $294$ $59$ $211$ $160$ $66$ $8,7$ 1994 $5,309$ $3,123$ $281$ $51$ $221$ $159$ $64$ $9,2$ 1995 $5,510$ $3,133$ $254$ $51$ $231$ $1$ $144$ $60$ $9,3$ 1996 $5,714$ $3,003$ $228$ $56$ $279$ $57$ $150$ $57$ $10,1$ 1998 $6,241$ $3,093$ $228$ $56$ $279$ $57$ $150$ $57$ $10,1$ 1999 $6,520$ $3,118$ $249$ $57$ $291$ $76$ $150$ $58$ $10,5$ 2000 $6,876$ $3,107$ $26$             |       |            | -                   |       |            |      |        |                    |       | 7,573  |
| 1985 $3,861$ $3,234$ 40695126707,71986 $4,212$ $3,145$ $380$ 78 $144$ 1987 $4,467$ $3,100$ $354$  |       |            | -                   |       |            |      |        |                    |       | 7,550  |
| 1986 $4,212$ $3,145$ $380$ $78$ $144$ $446$ $69$ $8,0$ 1987 $4,467$ $3,100$ $354$ $66$ $156$ $75$ $8,2$ 1988 $4,595$ $3,184$ $350$ $63$ $167$ $78$ $8,4$ 1989 $4,772$ $3,202$ $335$ $58$ $179$ $71$ $8,6$ 1990 $4,936$ $3,214$ $335$ $51$ $187$ $66$ $8,7$ 1991 $5,033$ $3,137$ $329$ $75$ $192$ $68$ $88$ 1992 $5,109$ $3,129$ $310$ $83$ $204$ $66$ $8,9$ 1993 $5,195$ $3,151$ $294$ $59$ $211$ $160$ $66$ $9,1$ 1994 $5,309$ $3,123$ $281$ $51$ $231$ $1$ $144$ $60$ $9,3$ 1995 $5,510$ $3,133$ $254$ $51$ $231$ $1$ $144$ $60$ $9,3$ 1996 $5,714$ $3,120$ $252$ $67$ $256$ $12$ $158$ $59$ $9,6$ 1997 $5,945$ $3,104$ $240$ $59$ $270$ $36$ $130$ $59$ $9,8$ 1998 $6,241$ $3,093$ $228$ $56$ $279$ $57$ $150$ $57$ $10,1$ 1999 $6,520$ $3,118$ $249$ $57$ $291$ $76$ $150$ $58$ $10,5$ 2000 $6,876$ $3,107$ $267$ $48$ $274$ $87$ $149$ $59$ $11,3$             |       |            | -                   |       |            |      |        |                    |       | 7,584  |
| 1987 $4,467$ $3,100$ $354$ $66$ $156$ $75$ $8,2$ $1988$ $4,595$ $3,184$ $350$ $63$ $167$ $78$ $8,4$ $1989$ $4,772$ $3,202$ $335$ $58$ $179$ $71$ $8,6$ $1990$ $4,936$ $3,214$ $335$ $51$ $187$ $66$ $8,7$ $1991$ $5,033$ $3,137$ $329$ $75$ $192$ $68$ $8,8$ $1992$ $5,109$ $3,129$ $310$ $83$ $204$ $66$ $8,9$ $1993$ $5,195$ $3,151$ $294$ $59$ $211$ $160$ $66$ $9,1$ $1994$ $5,309$ $3,123$ $281$ $51$ $231$ $1$ $144$ $60$ $9,3$ $1995$ $5,510$ $3,133$ $254$ $51$ $231$ $1$ $144$ $60$ $9,3$ $1996$ $5,714$ $3,120$ $252$ $67$ $256$ $12$ $158$ $59$ $9,6$ $1997$ $5,945$ $3,104$ $240$ $59$ $270$ $36$ $130$ $59$ $9,8$ $1998$ $6,241$ $3,093$ $228$ $56$ $279$ $57$ $150$ $57$ $10,1$ $1999$ $6,520$ $3,118$ $249$ $57$ $291$ $76$ $150$ $58$ $10,5$ $2000$ $6,876$ $3,107$ $267$ $48$ $274$ $87$ $149$ $59$ $11,3$ $2002$ $7,392$ $3,092$ $235$ $38$ $289$ |       |            | -                   |       |            |      |        |                    |       | 7,792  |
| 1988 $4,595$ $3,184$ $350$ $63$ $167$ 78 $8,4$ 1989 $4,772$ $3,202$ $335$ $58$ $179$ 71 $8,6$ 1990 $4,936$ $3,214$ $335$ $51$ $187$ 66 $8,7$ 1991 $5,033$ $3,137$ $329$ $75$ $192$ 68 $8,8$ 1992 $5,109$ $3,129$ $310$ $83$ $204$ 66 $8,9$ 1993 $5,195$ $3,151$ $294$ $59$ $211$ $160$ $66$ $9,1$ 1994 $5,309$ $3,123$ $281$ $51$ $231$ $1$ $144$ $60$ $9,3$ 1995 $5,510$ $3,133$ $254$ $51$ $231$ $1$ $144$ $60$ $9,3$ 1996 $5,714$ $3,120$ $252$ $67$ $256$ $12$ $158$ $59$ $9,6$ 1997 $5,945$ $3,104$ $240$ $59$ $270$ $36$ $130$ $59$ $9,8$ 1998 $6,241$ $3,093$ $228$ $56$ $279$ $57$ $150$ $57$ $10,1$ 1999 $6,520$ $3,118$ $249$ $57$ $291$ $76$ $150$ $58$ $10,5$ 2000 $6,876$ $3,107$ $267$ $48$ $274$ $87$ $149$ $59$ $10,8$ 2001 $7,192$ $3,144$ $255$ $52$ $265$ $95$ $143$ $59$ $11,1$ $2002$ $7,392$ $3,092$ $235$ $38$ $289$ $103$ <                 |       |            | -                   |       |            |      |        |                    |       | 8,028  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       | · · · · ·  | ,<br>,              |       |            |      |        |                    |       | 8,218  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       |            | -                   |       |            |      |        |                    |       | 8,437  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       | · · · · ·  | -                   |       |            |      |        |                    |       | 8,617  |
| 19925,1093,12931083204668,919935,1953,15129459211160669,119945,3093,12328151221159649,219955,5103,133254512311144609,319965,7143,1202526725612158599,619975,9453,1042405927036130599,819986,2413,09322856279571505710,119996,5203,11824957291761505810,520006,8763,10726748274871495910,820017,1923,11425552265951435911,120027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,920058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,137242522846513664   |       |            | -                   |       |            |      |        |                    |       | 8,789  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   |       |            | -                   |       |            |      |        |                    |       | 8,834  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   | 1992  | 5,109      | 3,129               |       | 83         | 204  |        |                    | 66    | 8,901  |
| 19955,5103,133254512311144609,319965,7143,1202526725612158599,619975,9453,1042405927036130599,819986,2413,09322856279571505710,119996,5203,11824957291761505810,520006,8763,10726748274871495910,820017,1923,11425552265951435911,120027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,920058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1  | 1993  |            | 3,151               | 294   | 59         | 211  |        | 160                | 66    | 9,136  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   | 1994  | 5,309      | 3,123               | 281   | 51         | 221  |        | 159                | 64    | 9,208  |
| 19975,9453,1042405927036130599,819986,2413,09322856279571505710,119996,5203,11824957291761505810,520006,8763,10726748274871495910,820017,1923,11425552265951435911,120027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1   | 1995  | 5,510      | 3,133               | 254   | 51         | 231  | 1      | 144                | 60    | 9,384  |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$   | 1996  | 5,714      | 3,120               | 252   | 67         | 256  | 12     | 158                | 59    | 9,638  |
| 19996,5203,11824957291761505810,520006,8763,10726748274871495910,820017,1923,11425552265951435911,120027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1  | 1997  | 5,945      | 3,104               | 240   | 59         | 270  | 36     | 130                | 59    | 9,843  |
| 20006,8763,10726748274871495910,820017,1923,11425552265951435911,120027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1   | 1998  | 6,241      | 3,093               | 228   | 56         | 279  | 57     | 150                | 57    | 10,161 |
| 20017,1923,11425552265951435911,120027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1  | 1999  | 6,520      | 3,118               | 249   | 57         | 291  | 76     | 150                | 58    | 10,519 |
| 20027,3923,092235382891031505911,320037,4983,08324729285971396311,420047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1   | 2000  | 6,876      | 3,107               | 267   | 48         | 274  | 87     | 149                | 59    | 10,867 |
| 20037,4983,08324729285971396311,420047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1   | 2001  | 7,192      | 3,114               | 255   | 52         | 265  | 95     | 143                | 59    | 11,175 |
| 20047,8153,13324944287851306511,820058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1  | 2002  | 7,392      | 3,092               | 235   | 38         | 289  | 103    | 150                | 59    | 11,358 |
| 20058,0263,10724735298821396511,920068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1   | 2003  | 7,498      | 3,083               | 247   | 29         | 285  | 97     | 139                | 63    | 11,441 |
| 20068,0833,09325539291691326412,020078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1  | 2004  | 7,815      | 3,133               | 249   | 44         | 287  | 85     | 130                | 65    | 11,808 |
| 20078,1553,13724252284651366412,120088,2103,14823739286581396612,120098,2273,11123244284521386612,1   | 2005  | 8,026      | 3,107               | 247   | 35         | 298  | 82     | 139                | 65    | 11,999 |
| 20088,2103,14823739286581396612,120098,2273,11123244284521386612,1  | 2006  | 8,083      | 3,093               | 255   | 39         | 291  | 69     | 132                | 64    | 12,026 |
| 2009 8,227 3,111 232 44 284 52 138 66 12,1  | 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 12,3  | 2010  | 8,495      | 3,079               | 222   | 37         | 284  | 40     | 155                | 69    | 12,381 |

1) Includes reversionary.

2) New benefit classification enacted by law in 1995.

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

| Year | Number of<br>Members<br>at Year<br>End | Annual<br>Average<br>Salary | % Increase<br>in Average<br>Salary |
|------|--|-----------------------------|------------------------------------|
| 2001 | 13,889                                 | 54,961                      | 0.3%                               |
| 2002 | 13,720                                 | 63,158                      | 14.9%                              |
| 2003 | 13,746                                 | 64,568                      | 2.2%                               |
| 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%                               |

## Schedule of Retired Member Data - Last 10 Years

|      | Number of<br>Annuitants<br>at Year | Average<br>Annual | Average<br>Monthly | Average<br>Age at | Average<br>Age of<br>Current | Average<br>Years of<br>Service at |
|------|------------------------------------|-------------------|--------------------|-------------------|------------------------------|-----------------------------------|
| Year | End                                | Benefit           | Benefit            | Retirement        | Retirees                     | Retirement                        |
| 2001 | 7,192                              | 36,428            | 3,036              | 56.4              | 66                           | 29.8                              |
| 2002 | 7,392                              | 38,199            | 3,183              | 55.6              | 66                           | 29.4                              |
| 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                              |

|      | Number  | Average | % Increase |
|------|---------|---------|------------|
|      | at Year | Annual  | in Average |
| Year | End     | Benefit | Benefit    |
| 2001 | 3,114   | 12,305  |            |
| 2002 | 3,092   | 12,965  | 5.4%       |
| 2003 | 3,083   | 12,950  | -0.1%      |
| 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%       |

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

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

|      | Number of<br>Annuitants<br>at Year | Average<br>Annual | % Increase<br>in Average |
|------|------------------------------------|-------------------|--------------------------|
| Year | End                                | Benefit           | Benefit                  |
| 2001 | 255                                | 4,343             |                          |
| 2002 | 235                                | 4,490             | 3.4%                     |
| 2003 | 247                                | 4,521             | 0.7%                     |
| 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)%                   |

| Year | Number of<br>Annuitants<br>at Year<br>End | Average<br>Annual<br>Benefit | % Increase<br>in Average<br>Benefit |
|------|---|------------------------------|-------------------------------------|
| 2001 | 52  | 21,895                       |                                     |
| 2002 | 38  | 28,400                       | 29.7%                               |
| 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%                                |

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

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

|      | Number of<br>Annuitants<br>at Year | Average<br>Annual | % Increase<br>in Average |
|------|------------------------------------|-------------------|--------------------------|
| Year | End                                | Benefit           | Benefit                  |
| 2001 | 265                                | 35,594            |                          |
| 2002 | 289                                | 41,350            | 16.2%                    |
| 2003 | 285                                | 41,147            | -0.5%                    |
| 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%                     |

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

| Year | Number of<br>Annuitants<br>at Year<br>End | Average<br>Annual<br>Benefit | % Increase<br>in Average<br>Benefit |
|------|---|------------------------------|-------------------------------------|
|      |   |                              | Denent                              |
| 2000 | 87  | \$37,241                     |                                     |
| 2001 | 95  | 37,518                       | 0.7%                                |
| 2002 | 103                                       | 40,360                       | 7.6%                                |
| 2003 | 97  | 38,665                       | -4.2%                               |
| 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%                                |

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

|      | Number of<br>Annuitants<br>at Year | Average<br>Annual | % Increase<br>in Average |
|------|------------------------------------|-------------------|--------------------------|
| Year | End                                | Benefit           | Benefit                  |
| 2001 | 143                                | 1,200             |                          |
| 2002 | 150                                | 1,540             | 28.3%                    |
| 2003 | 139                                | 1,235             | -19.8%                   |
| 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%                       |

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

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

|      | Number of<br>Annuitants<br>at Year | Average<br>Annual | % Increase<br>in Average |
|------|------------------------------------|-------------------|--------------------------|
| Year | End                                | Benefit           | Benefit                  |
| 2001 | 59                                 | 40,453            | -1.9%                    |
| 2002 | 59                                 | 46,130            | 14.0%                    |
| 2003 | 63                                 | 47,567            | 3.1%                     |
| 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%                     |

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