## County Employees' and Officers' Annuity and Benefit Fund of Cook County

A Component Unit of Cook County, Illinois



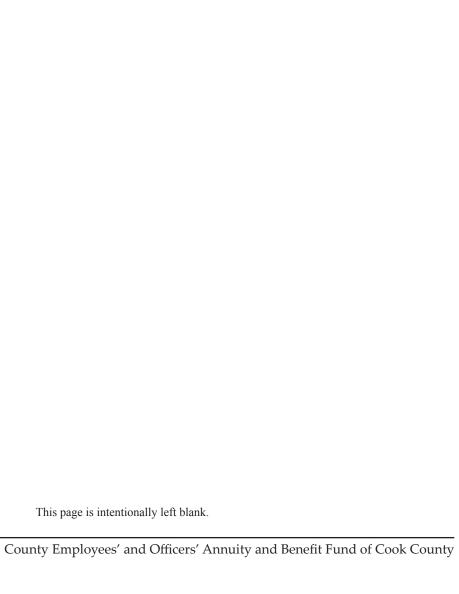
# County Employees' and Officers' Annuity and Benefit Fund of Cook County

A Component Unit of Cook County, Illinois

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 2012

Prepared by the staff of the County Employees' and Officers' Annuity and Benefit Fund of Cook County



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## Introductory Section

This section provides information regarding the County Employees' and Officers' Annuity and Benefit Fund of Cook County's Certificate of Achievement, Board of Trustees, Consultants, and Organizational Structure, as well as a Letter of Transmittal.

### **Certificate of Achievement**

Certificate of Achievement for Excellence in Financial Reporting

Presented to

County Employees' and Officers'
Annuity and Benefit Fund of
Cook County, Illinois

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

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



## **Principal Officials**

#### **Retirement Board**

John E. Fitzgerald

President Elected Cook County Annuitant

Clem Balanoff

Vice-President

Elected Cook County Employee

Robert Benjamin

Ex Officio Cook County Treasurer (Designee)

Diahann Goode

Elected Cook County Employee

Robert Janura

Elected Forest Preserve District Annuitant

**Brent Lewandowski** 

Secretary

Elected Cook County Employee

Patrick J. McFadden

**Elected Cook County Annuitant** 

**Ivan Samstein** 

Ex Officio Cook County Comptroller (Designee)

Samuel Richardson, Jr.

Elected Forest Preserve District Employee

#### **Professional Consultants**

Legal Counsel

Burke Burns & Pinelli, Ltd.

**Investment Consultant** 

Callan Associates, Inc.

**Master Custodian** 

BNY Mellon

Auditor

Legacy Professionals, LLP

**Consulting Actuary** 

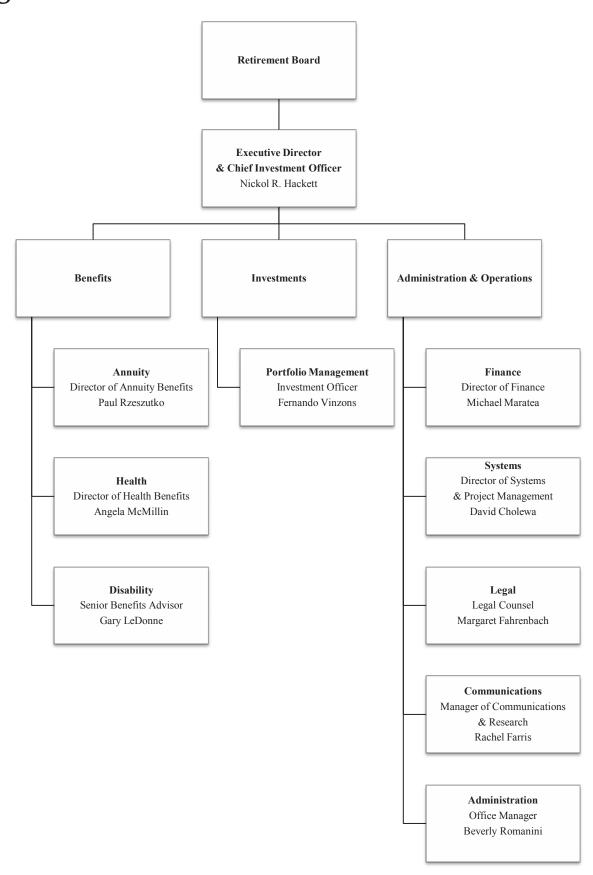
Buck Consultants, LLC

Custodian

Cook County Treasurer

Investment Managers are listed on page 64 - 65. Brokers used by Investment Managers are listed on pages 66 - 67.

## **Organizational Chart**



#### Letter of Transmittal



May 2, 2013

Retirement Board
County Employees and Officers' Annuity and Benefit Fund of Cook County
and *ex officio* for the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
33 N Dearborn St, Suite 1000
Chicago, IL 60602

Dear Trustees and Members of the Fund:

We are pleased to submit to you the Comprehensive Annual Financial Report ("CAFR") of the County Employees' and Officers' Annuity and Benefit Fund of Cook County ("the Fund") for the calendar year ended December 31, 2012. The contents of this report, including the financial, investment, actuarial, and statistical information contained herein, are the responsibility of the management of the Fund.

To the best of our knowledge and belief, the information contained in this report is complete and accurate in all material respects. This report is provided to allow the reader to gain an understanding of the Fund's financial position and operational activities. Readers should review this report in conjunction with the Management's Discussion and Analysis (MD&A) found in the Financial Section.

#### **Fund Profile**

As of December 31, 2012, the Fund consisted of 21,447 active employees, 13,609 retirement annuitants, 2,565 survivor annuitants, and 11,856 inactive members.

The Fund was established in 1926 by an act of the Illinois General Assembly and is administered in accordance with 40 ILCS 5/9-101, et seq. It is a defined benefit pension plan that provides retirement, survivor, death, health, and disability benefits to qualified employees and retirees of Cook County and their eligible dependents and beneficiaries. The Fund is considered to be a component unit of Cook County, Illinois, and is included in the County's financial statements as a pension trust fund.

The Fund is governed by a nine-member Retirement Board ("Board"). The Comptroller and Treasurer of Cook County, or their designees, serve as *ex officio* Trustees. The remaining Trustees are elected as follows: three from among the active employees of Cook County, two from the annuitants of the Fund, one from the active employees of the Forest Preserve District, and one from the annuitants of the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County ("Forest Preserve Fund"). Elected Trustees serve staggered three-year terms, so that not more than three positions are up for election each year.

The Board's authority to invest the Fund's assets is governed by 40 ILCS 5/1-101 et seq. and 40 ILCS 5/9-101 et seq. The Fund's Investment Policy, which provides additional strategies and safeguards for the Fund's investment objectives, can be found at <a href="https://www.cookcountypension.com">www.cookcountypension.com</a>.

County Employees' and Officers' Annuity and Benefit Fund of Cook County
Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
33 N Dearborn St, Suite 1000 | Chicago, IL 60602 | 312.603.1200 | 312.603.9760 fax | www.cookcountypension.com

#### Letter of Transmittal (continued)

#### **Summary of Financial Experience**

The following table summarizes the changes in the Fund's net position between December 31, 2011 and December 31, 2012 (numbers in millions):

	2012	2011	Chang	ge
Total additions	\$ 1,219.2	\$ 423.2	\$ 796.0	188.1%
Total deductions	\$ 600.5	\$ 556.6	\$ 43.9	7.9%
Net increase (decrease) in net position	\$ 618.7	\$ (133.4)	\$ 752.1	563.8%

The investment portfolio increased in fair value in 2012, generating nearly \$900 million in income. This asset growth was offset by a decline in employer contributions and increased benefit payments relative to 2011. A more detailed analysis can be found in the Financial Section.

#### **Investments**

At year end, the total invested assets of the Fund were valued at \$7.9 billion compared to \$7.3 billion at the end of 2011. The investment portfolio's net rate of return for the year ended December 31, 2012 was 12.5% compared to 1.2% for the previous year. The Board works to maintain a diversified asset allocation designed to exceed the Fund's 7.5% long-term actuarial rate of return within acceptable risk parameters. The 2012 return exceeded the policy benchmark of 11.9% as well as the 7.5% actuarial rate.

During 2012, the Board worked with Fund staff and the investment consultant, Callan Associates, to implement an asset allocation strategy adopted in 2011. Rebalancing activities brought 92% of the portfolio in line with target allocations by year end. As of December 31, 2012, approximately 16% of total assets were managed by emerging investment managers, representing an increase of approximately 40% from the previous year.

Additional information regarding performance and investment professionals who provide services to the Fund can be found in the Investment Section.

#### **Funding**

The Fund engages an independent actuary to perform an actuarial valuation on an annual basis pursuant to the provisions of the Illinois Pension Code. In 2012 the Fund's prior actuary announced his retirement. The Fund undertook a competitive search for a new actuary and selected Buck Consultants, LLC, for pension and other post-employment benefit valuation services.

As of December 31, 2012, the actuarial accrued liability for pension benefits was \$13.4 billion and the actuarial value of assets was \$7.8 billion, resulting in an unfunded liability of \$5.6 billion. The funded ratio (the ratio of assets to liabilities) for pension benefits was 58.4%. The Fund's actuarial accrued liability for retiree health benefits was \$1.8 billion. The actuarial value of assets was \$0, resulting in an unfunded liability of \$1.8 billion and a funded ratio for retiree health benefits of 0.0%. The combined actuarial accrued liability for pension and retiree health benefits was \$14.6 billion and the actuarial value of assets was \$7.8 billion, resulting in an unfunded actuarial accrued liability of \$6.8 billion and an overall funded ratio of 53.5%.

As identified by the actuary, the funded status in 2012 was driven by several factors, including the statutory contribution rate and demographic events that increased liabilities overall. These circumstances over time have contributed to the compounding growth of the unfunded liability, causing the funded ratio to decline. Additional information regarding funding can be found in the Actuarial Section.

#### **2012 Initiatives**

Recent initiatives have been directed toward strengthening the Fund's financial position through growth-oriented investment management and resource optimization through process improvements and cost management of Fund operations.

#### Benefits Administration

The Fund makes member service a priority. During the year, Fund staff continued to deliver quality customer service while managing high volumes of benefits requests, including approximately 1,400 annuity applications, 1,200 refund applications, 1,700 disability applications, and 3,700 retirement estimates; counseling over 6,000 members in the office; answering 42,000 phone calls; and responding to almost 1,200 emails.<sup>1</sup>

In the health benefits department, staff partnered with members and vendors to implement cost-effective medical and prescription drug benefit changes that resulted in cost savings of more than \$10 million. These changes included an HMO product migration within Blue Cross Blue Shield of Illinois for a subset of members and prescription programs targeting drug overutilization, drug safety and monitoring, and generic alternatives. In response to member feedback, the Fund also offered a voluntary dental plan for the first time, enrolling approximately 2,300 members.

The Fund continues to make improvements in operations and systems management to better serve members with recent enhancements in document processing, records retention, and case management. Systems upgrades and integration increased the efficiency of benefits administration, while the initial development phase of a document management system, designed to provide enhanced efficiency and security in document storage, was completed. Staff also upgraded the Fund's disaster recovery site and reviewed and updated the Fund's records retention process.

#### Legislation

The Fund supported or introduced legislation to represent members' interests in 2012, with specific proposals to implement a 100% annual required contribution (ARC) funding policy (SB3421); to clarify Tier 2 disability and annuity benefits (SB3630); and other clarifying proposals (HB5210). While none of the bills were passed, the Board and Fund staff continue to allocate resources to tracking and analysis of legislation that would impact public pensions, particularly with respect to pension reform efforts at the Illinois General Assembly.

Public Act 97-0967 (effective August 16, 2012) impacted the Fund as a covered retirement system under the Illinois Reciprocal Retirement Systems Act. The act amended Article 1 of the Illinois Pension Code with regard to reciprocal retirement from the General Assembly Retirement System (GARS).

#### **Accounting System & Internal Control**

This report and the financial statements included within were prepared to conform to the principles of governmental accounting and reporting pronounced by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants.

The financial statements were prepared using the accrual basis of accounting. Under the accrual basis, revenues are recognized in the accounting period in which they are earned, without regard to the date of collection, and

<sup>&</sup>lt;sup>1</sup> Please note that these work volumes are reported on a combined basis; that is, the administrative work volumes for both the Fund and the Forest Preserve Fund have been included.

#### Letter of Transmittal (continued)

expenses are recognized when the corresponding liabilities are incurred, regardless of when payment is made.

The Fund maintains a system of internal controls to adequately safeguard its assets and assure the reliability of its financial records. The controls are designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that first, the cost of the control should not exceed the benefits likely to be derived, and second, the valuation of the cost and benefits requires estimates and judgments by management. Management and the outside auditor continually review the controls for adequacy.

The financial statements included in this report were audited by Legacy Professionals, LLP, who have issued an unqualified opinion for calendar year ended December 31, 2012. A copy of their report is contained in the Financial Section.

#### **Awards**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Fund for its CAFR for the fiscal year ended December 31, 2011. This was the third year that the Fund has earned this prestigious award. In order to be awarded a Certificate of Achievement, the Fund 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 this current CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

#### Acknowledgments

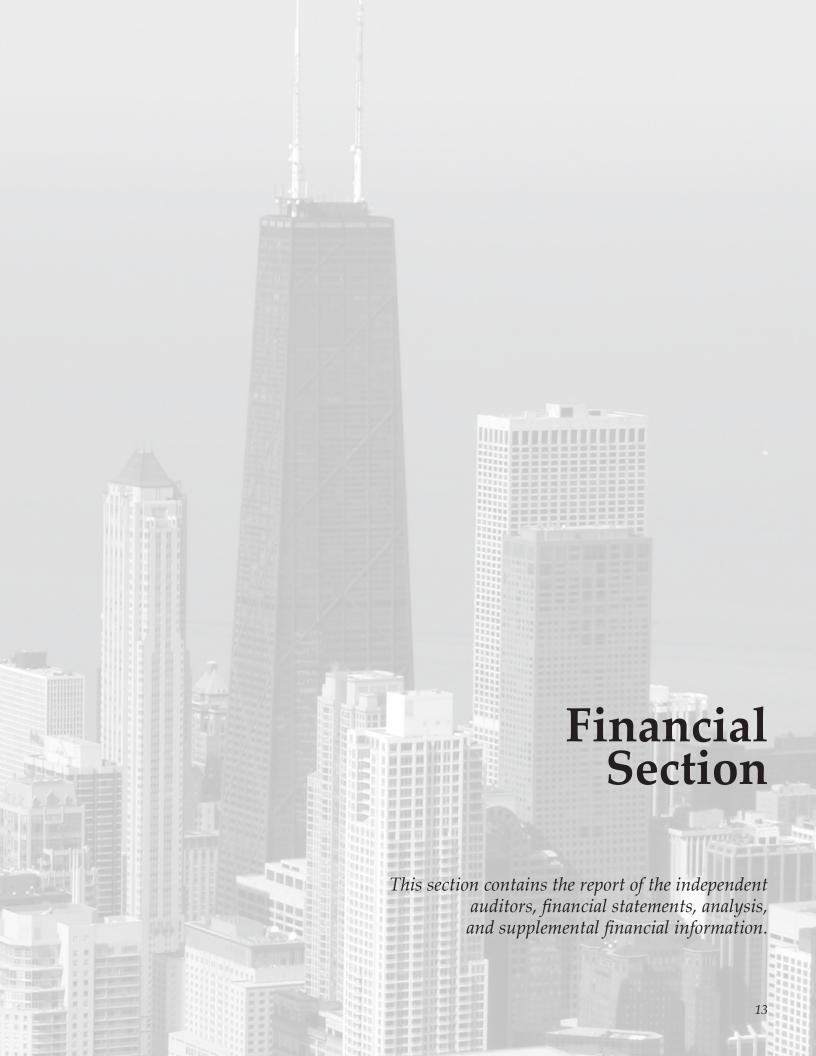
This report was prepared through the combined efforts of the Fund's staff under the direction of the Board. On behalf of the Board, I would like to thank the staff and professional consultants for their efforts in compiling this report.

Respectfully submitted,

John R. Harlest

Nickol R. Hackett

**Executive Director and Chief Investment Officer** 



## **Report of Independent Auditors**



#### REPORT OF INDEPENDENT AUDITORS

To the Board of Trustees of County Employees' and Officers' Annuity and Benefit Fund of Cook County

#### Report on the Financial Statements

We have audited the accompanying financial statements of County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Plan), which comprise the combining statements of pension plan and postemployment healthcare plan net position as of December 31, 2012 and 2011, and the related combining statements of changes in pension plan and postemployment healthcare plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements.

#### Management's Responsibility for the Financial Statements

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

#### Auditor's Responsibility

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

An audit includes performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. 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. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of financial statements.

#### Auditor's Responsibility (continued)

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

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial status of County Employees' and Officers' Annuity and Benefit Fund of Cook County as of December 31, 2012 and 2011, and the changes in its financial status for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and the required supplementary information consisting of the schedule of funding progress, the schedule of employer contributions and the notes to those schedules be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the Plan's basic financial statements as a whole. The accompanying supplementary information, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements. Such information consisting of the schedules of net administrative expenses and professional and consulting fees, schedules of investment expenses, additions by source, deductions by type, and schedule of taxes receivable is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information consisting of the schedules of net administrative expenses and professional and consulting fees, schedules of investment expenses, additions by source, deductions by type, and schedule of taxes receivable is fairly stated in all material respects in relation to the basic financial statements as a whole.

#### Report of Independent Auditors (continued)

#### Other Matters (continued)

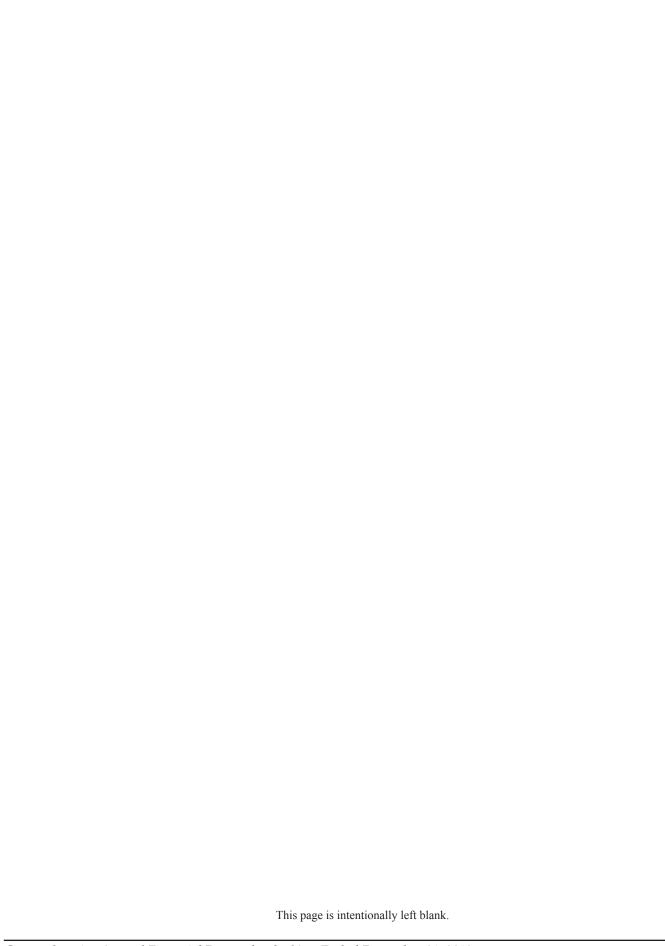
Previously Audited Information

Legacy Professionals LLP

We also have previously audited the basic financial statements for the years ended December 31, 2010, 2009, 2008, and 2007 (which are not presented herein), and we expressed unqualified opinions on those financial statements. In our opinion, the information consisting of schedules of additions by source and deductions by type is fairly stated in all material respects in relation to the basic financial statements from which it has been derived. Our reports for 2010, 2009, 2008 and 2007 on the required supplementary information stated that we applied limited procedures, which consisted principally of inquiries of management regarding the methods of measurements and presentation of the supplementary information, but did not audit the information and expressed no opinion on it.

Chicago, Illinois

May 2, 2013



## Management's Discussion and Analysis

This section presents Management's Discussion and Analysis of the financial position and performance of the County Employees' and Officers' Annuity and Benefit Fund of Cook County (Plan) for the year ended December 31, 2012. This discussion is presented as an overview of the financial activities of the Plan and should be read in conjunction with the Plan's financial statements.

#### Overview of the Basic Financial Statements

The following discussion and analysis is intended to serve as an introduction to the Plan's basic financial statements. The financial statements are prepared on an economic sources focus and accrual basis of accounting in accordance with Governmental Accounting Standards Board (GASB) pronouncements. The basic components of the financial package are described below:

Combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position provides a snapshot of account balances and net position held in trust for future benefit payments and any liabilities as of the Plan's year end. Over time increases and decreases in net position may serve as a useful indicator of whether the financial position of the Plan is improving or deteriorating.

Combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position shows the revenues (additions) and expenses (deductions) during the year, where additions less deductions equal net increase (decrease) in net position. The net increase (decrease) in net position illustrates the change in net assets from the prior year to the current year.

**Notes to the Financial Statements** provides additional information that is essential to achieving a better understanding of the data provided in the basic financial statements.

**Required Supplementary Information** provides two schedules and related notes concerning actuarial information, funding progress and employer contributions.

**Supplementary Information** includes schedules of administrative expenses, professional and consulting fees, investment expenses, additions by source, deductions by type and taxes receivable.

#### **Financial Highlights**

**Net position** increased by \$618,692,378 or 8.31% from \$7,441,243,250 at December 31, 2011 to \$8,059,935,628 at December 31, 2012. Comparatively, net position decreased by \$133,410,362 or 1.76% from \$7,574,653,612 at December 31, 2010 to \$7,441,243,250 at December 31, 2011. The change in net position for both years was primarily due to the fluctuation in the fair market value of the investments.

The rate of return of the Plan's investment portfolio was 12.5% for 2012, 1.2% for 2011 and 12.4% for 2010.

The **actuarial funded ratio** of the combined pension and the postemployment healthcare plans for 2012 was 53.55% compared to 57.54% for 2011. The decrease in the funded ratio during 2012 was due primarily to the smoothing of investment losses incurred in 2008. The 2010 funded ratio was 60.74%.

#### **Plan Net Position**

The condensed combining Statements of Pension Plan and Postemployment Healthcare Plan Net Position reflects the resources available to pay benefits to members. A summary of the Pension Plan and Postemployment Plan Net Position is as follows:

	Plan Net 1	Plan Net Position as of December 31,			Current Year		
				Increase/(De	crease) in		
	<u>2012</u>	<u>2011</u>	<u>2010</u>	<b>Dollars</b>	<b>Percent</b>		
Total assets	\$8,660,955,128	\$8,070,471,176	\$8,595,019,039	\$ 590,483,952	7.3%		
Total liabilities	601,019,500	629,227,926	1,020,365,427	(28,208,426)	-4.5%		
Net position	\$8,059,935,628	\$7,441,243,250	\$7,574,653,612	\$ 618,692,378	8.3%		

#### **Changes in Plan Net Position**

The condensed combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position reflects the changes in the resources available to pay benefits to members. A summary of the Changes in Pension Plan and Postemployment Healthcare Plan Net Position is as follows:

	Chan	ges in Plan Net Posi	Current Year		
	Yes	ars Ended Decembe	Increase/(Dec	crease) in	
	<u>2012</u>	<u>2011</u>	<u>2010</u>	<b>Dollars</b>	<b>Percent</b>
Additions					
Employer contributions	\$ 190,720,776	\$ 195,337,621	\$ 181,509,323	\$ (4,616,845)	-2.4%
Employee contributions	130,570,599	127,577,473	129,449,866	2,993,126	2.3%
Investment income					
(includes securities lending acti	ivities) 887,687,519	82,701,033	833,052,844	804,986,486	973.4%
Other	10,190,689	17,614,316	12,795,846	(7,423,627)	-42.1%
Total additions	1,219,169,583	423,230,443	1,156,807,879	795,939,140	188.1%
Deductions					
Benefits	563,092,126	523,396,627	482,523,408	39,695,499	7.6%
Refunds	33,081,726	29,165,335	25,041,818	3,916,391	13.4%
Administrative expenses	4,303,353	4,078,843	4,074,955	224,510	5.5%
Total deductions	600,477,205	556,640,805	511,640,181	43,836,400	7.9%
Net increase (decrease)	618,692,378	(133,410,362)	645,167,698	752,102,740	563.8%
Net position					
Beginning of year	7,441,243,250	7,574,653,612	6,929,485,914	(133,410,362)	-1.8%
End of year	\$8,059,935,628	\$7,441,243,250	\$7,574,653,612	\$ 618,692,378	8.3%
	·		· · · · · · · · · · · · · · · · · · ·		

#### Management's Discussion and Analysis (continued)

#### Additions to Plan Net Position

Total additions were \$1,219,169,583 in 2012, \$423,230,443 in 2011 and \$1,156,807,879 in 2010.

Employer contributions decreased to \$190,720,776 in 2012 from \$195,337,621 in 2011 and increased from \$181,509,323 in 2010. Employer contributions are statutorily set at 1.54 times employee contributions collected two years prior.

Employee contributions, including permissive service credit purchases, increased to \$130,570,599 in 2012 from \$127,577,473 in 2011 and from \$129,449,866 in 2010. The majority of members contribute 8.5% of covered wages.

Net investment income totaled \$887,687,519 for 2012 compared to \$82,701,033 for 2011 and \$833,052,844 for 2010. Investment earnings fluctuate primarily from the overall performance of the financial markets from year to year.

#### **Deductions to Plan Net Position**

Total deductions were \$600,477,205 in 2012, \$556,640,805 in 2011 and \$511,640,181 in 2010.

Benefits increased to \$563,092,126 in 2012 from \$523,396,627 in 2011 and from \$482,523,408 in 2010 due primarily to the 3% annual cost-of-living increases for annuitants and an increase in the number of retirees.

Refunds increased to \$33,081,726 in 2012 from \$29,165,335 in 2011 and from \$25,041,818 in 2010 due to an increase in refund applications.

The cost to administer the Plan increased by 5.5% to \$4,303,353 in 2012 from \$4,078,843 in 2011. Comparatively, the cost to administer the Plan increased by 0.1% to \$4,078,843 in 2011 from \$4,074,955 in 2010.

#### **Funding Status**

The actuarial assets, liabilities and funding status for the Plan (including the pension and postemployment healthcare plans) are provided below:

## Actuarial Values December 31,

				Current	Year
				Increase/(Dec	crease) in
	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>Dollars</u>	<b>Percent</b>
Actuarial assets	\$ 7,833,882,926	\$7,897,102,116	\$ 7,982,368,659	\$ (63,219,190)	-0.8%
Actuarial liabilities	14,630,250,955	13,724,012,399	13,142,137,175	906,238,556	6.6%
Unfunded actuarial liabilities	\$6,796,368,029	\$5,826,910,283	\$5,159,768,516	\$ 969,457,746	16.6%
Funded ratio	<u>53.55%</u>	<u>57.54%</u>	60.74%		

**Actuarial assets** decreased to \$7,833,882,926 in 2012 from \$7,897,102,116 in 2011. Comparatively, actuarial assets decreased to \$7,897,102,116 in 2011 from \$7,982,368,659 in 2010. The decrease in actuarial assets resulted from the five year smoothing of investment gains and losses.

**Actuarial liabilities** increased to \$14,630,250,955 in 2012 from \$13,724,012,399 in 2011 due to increased benefits accrued by Plan participants. Comparatively, actuarial liabilities increased to \$13,724,012,399 in 2011 from \$13,142,137,175 in 2010.

The **funded ratio** is one indicator of the financial strength of the Plan, measuring the ratio of net assets available to meet the actuarially determined future liabilities of the Plan. The decrease in the funded ratio to 53.55% in 2012 from 57.54% in 2011 was due to the changes in the actuarial assets and actuarial liabilities as explained in the previous paragraph. Comparatively, the funded ratio decreased to 57.54% in 2011 from 60.74% in 2010.

#### **Contact Information**

This financial report is designed to provide the employer, Plan participants and others with a general overview of the Plan's finances and show accountability for money it receives. Questions concerning any data provided in the report or requests for additional information should be addressed to:

County Employees' and Officers' Annuity and Benefit Fund of Cook County Attention: Executive Director 33 North Dearborn Street Suite 1000 Chicago, IL 60602

## Combining Statements of Pension Plan and Postemployment Healthcare Plan Net Position

Year Ended December 31, 2012				
<u>ASSETS</u>	<u>Total</u>	<u>Pension</u>	Postemployment <u>Healthcare</u>	
Receivables				
Employer contributions less allowance of				
\$10,551,286 in 2012	\$ 215,861,641	\$ 211,622,872	\$ 4,238,769	
Employee contributions	5,280,442	5,280,442	-	
Accrued investment income	22,652,456	22,652,456	-	
Receivable for securities sold	34,897,859	34,897,859	-	
Due from Forest Preserve District Employees' Ann	uity			
and Benefit Fund of Cook County	635,820	635,820	-	
Medicare Part D subsidy	887,842	887,842	-	
Other	1,095,945	1,095,945	<del>_</del>	
Total receivables	281,312,005	277,073,236	4,238,769	
Investments				
U.S. and international equities	3,135,494,813	3,135,494,813	-	
U.S. Government and government agency obligations		1,582,287,173	-	
Corporate bonds	831,881,515	831,881,515	-	
Collective international equity fund	54,676,384	54,676,384	-	
Commingled fixed income fund	23,986,193	23,986,193	-	
Exchange traded funds	555,481,344	555,481,344	-	
Private equities	56,090,408	56,090,408	-	
Hedge funds	688,873,338	688,873,338	-	
Real estate	302,749,975	302,749,975	-	
Short-term investments	635,490,514	635,490,514		
Total investments	7,867,011,657	7,867,011,657	-	
Collateral held for securities on loan	512,631,466	512,631,466	_	
Total assets	8,660,955,128	8,656,716,359	4,238,769	
Total assets	0,000,733,120		4,230,703	
<u>LIABILITIES</u>				
Accounts payable	4,595,412	4,595,412	-	
Healthcare insurance payable	4,238,769	-	4,238,769	
Payable for securities purchased	72,893,623	72,893,623	-	
Securities lending collateral	512,631,466	512,631,466	-	
Securities lending payable	6,660,230	6,660,230	<del>_</del>	
Total liabilities	601,019,500	596,780,731	4,238,769	
Not recition held in tweet.				
Net position held in trust:	0.050.025.620	0.050.035.630		
Restricted for pension benefits	8,059,935,628	8,059,935,628	-	
Restricted for postemployment healthcare benefits	Φ0.050.035.555	фо. с. то с. т.	<u>-</u>	
Total	\$8,059,935,628	\$8,059,935,628	\$ -	

Vear	Ended	December	31	2011
icai	Lilucu	December	91.	4011

<u>ASSETS</u>	<u>Total</u>	<u>Pension</u>	Postemployment <u>Healthcare</u>
Receivables			
Employer contributions less allowance of			
\$8,465,721 in 2011	\$ 208,125,986	\$ 201,712,943	\$ 6,413,043
Employee contributions	5,102,986	5,102,986	-
Accrued investment income	24,598,911	24,598,911	-
Receivable for securities sold	117,686,754	117,686,754	-
Due from Forest Preserve District Employees' Ann	uity		
and Benefit Fund of Cook County	554,852	554,852	-
Medicare Part D subsidy	8,062,023	8,062,023	-
Other	1,415,124	1,415,124	
Total receivables	365,546,636	359,133,593	6,413,043
Investments			
U.S. and international equities	2,814,605,044	2,814,605,044	-
U.S. Government and government agency obligations	1,969,108,673	1,969,108,673	-
Corporate bonds	755,644,972	755,644,972	-
Collective international equity fund	44,816,703	44,816,703	-
Commingled fixed income fund	_	-	-
Exchange traded funds	483,793,099	483,793,099	-
Private equities	70,555,750	70,555,750	-
Hedge funds	-	-	-
Real estate	202,393,145	202,393,145	-
Short-term investments	912,458,238	912,458,238	<u>-</u>
Total investments	7,253,375,624	7,253,375,624	-
Collateral held for securities on loan	451,548,916	451,548,916	_
Total assets	8,070,471,176	8,064,058,133	6,413,043
<u>LIABILITIES</u>			
Accounts payable	3,652,739	3,652,739	-
Healthcare insurance payable	6,413,043	-	6,413,043
Payable for securities purchased	160,952,998	160,952,998	-
Securities lending collateral	451,548,916	451,548,916	-
Securities lending payable	6,660,230	6,660,230	
Total liabilities	629,227,926	622,814,883	6,413,043
Net position held in trust:			
Restricted for pension benefits	7,441,243,250	7,441,243,250	-
Restricted for postemployment healthcare benefits	<del>_</del>	<del>_</del>	<del>_</del>
Total	\$7,441,243,250	\$7,441,243,250	\$ -
	·		

## Combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position

#### Year Ended December 31, 2012

Additions	<u>Total</u>	<u>Pension</u>	Postemployment <u>Healthcare</u>
Employer contributions	\$ 190,720,776	\$ 152,734,539	\$ 37,986,237
Employee contributions	<del>*,,,,</del>	<del>*</del>	4 01,500,000
Salary deductions	123,070,923	123,070,923	_
Refund repayments	2,847,550	2,847,550	_
Former and miscellaneous service payments	797,513	797,513	_
Optional payments and deductions	46,681	46,681	-
Deductions in lieu of disability	3,807,932	3,807,932	-
Total employee contributions	130,570,599	130,570,599	
Investment income			
Net appreciation (depreciation) in			
fair value of investments	710,479,251	710,479,25	-
Dividends	95,576,395	95,576,395	-
Interest	98,114,263	98,114,263	<u>-</u> _
	904,169,909	904,169,909	-
Less investment expenses	(19,625,586)	(19,625,586)	
Net investment income	884,544,323	884,544,323	
Securities lending			
Income	3,817,723	3,817,723	-
Expenses	(674,527)	(674,527)	<u>-</u>
Net securities lending income	3,143,196	3,143,196	
Other			
Employer federal subsidized programs	3,790,810	3,790,810	-
Medicare Part D subsidy	3,686,501	-	3,686,501
Prescription plan rebates	2,434,369	-	2,434,369
Early Retirement Reinsurance			
Program reimbursement (repayment)	(142,390)	-	( 142,390)
Employee transfers (to) from Forest Preserve D			
Employees' Annuity and Benefit Fund of Cook	-	205,877	-
Miscellaneous	215,522	215,522	
Total other additions	10,190,689	4,212,209	5,978,480
Total additions	1,219,169,583	1,175,204,866	43,964,717

#### Year Ended December 31, 2011

Additions	<u>Total</u>	<u>Pension</u>	Postemployment <u>Healthcare</u>
Employer contributions	\$ 195,337,621	\$ 162,667,160	\$ 32,670,461
Employee contributions  Employee contributions	\$\frac{175,557,021}{}	<del>\$ 102,007,100</del>	\$ 32,070,401
Salary deductions	120,782,433	120,782,433	_
Refund repayments	3,507,748	3,507,748	_
Former and miscellaneous service payments	770,466	770,466	
Optional payments and deductions	177,460	177,460	
Deductions in lieu of disability	2,339,366	2,339,366	
Total employee contributions	127,577,473	127,577,473	<del></del>
rotal employee contributions	127,377,473		
Investment income			
Net appreciation (depreciation) in			
fair value of investments	(98,992,361)	(98,992,361)	-
Dividends	88,803,655	88,803,655	-
Interest	107,036,379	107,036,379	-
	96,847,673	96,847,673	
Less investment expenses	(16,653,790)	(16,653,790)	-
Net investment income	80,193,883	80,193,883	-
Securities lending			
Income	3,064,099	3,064,099	-
Expenses	(556,949)	(556,949)	
Net securities lending income	2,507,150	2,507,150	-
Other			
Employer federal subsidized programs	3,499,803	3,499,803	
Medicare Part D subsidy	6,140,946	5,499,605	6,140,946
Prescription plan rebates	2,578,088	-	2,578,088
Early Retirement Reinsurance	2,370,000	-	2,370,000
Program reimbursement (repayyment)	5,514,845		5,514,845
Employee transfers (to) from Forest Preserve Distri		-	3,314,043
Employees' Annuity and Benefit Fund of Cook Count		(328,586)	
Miscellaneous	209,220	209,220	-
Total other additions	17,614,316	3,380,437	14,233,879
Total additions	423,230,443	376,326,103	46,904,340
Total additions	423,230,443	370,320,103	40,904,340

Combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position (continued)

Year Ended December 31, 2012					
Deductions Benefits	<u>Total</u>	<u>Pension</u>	Postemployment <u>Healthcare</u>		
Annuity Employee Spouse and children	\$ 469,398,775 35,762,286	\$ 469,398,775 35,762,286	\$ - -		
Disability Ordinary Duty Healthcare	11,576,076 2,390,272 43,964,717	11,576,076 2,390,272	- - 43,964,717		
Total benefits Refunds Net administrative expenses	563,092,126 33,081,726 4,303,353	519,127,409 33,081,726 4,303,353	43,964,717		
Total deductions  Net increase (decrease)	618,692,378	556,512,488	43,964,717		
Net position held in trust  Beginning of year  End of year	7,441,243,250 \$8,059,935,628	7,441,243,250 \$8,059,935,628	<del>-</del> \$		

Combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position (continued)

Year Ended December 31, 2011				
Deductions	<u>Total</u>	<u>Pension</u>	Postemployment <u>Healthcare</u>	
Benefits				
Annuity				
Employee	\$ 429,527,599	\$ 429,527,599	\$ -	
Spouse and children	33,003,057	33,003,057	-	
Disability				
Ordinary	13,290,425	13,290,425	-	
Duty	671,206	671,206	-	
Healthcare	46,904,340	-	46,904,340	
Total benefits	523,396,627	476,492,287	46,904,340	
Refunds	29,165,335	29,165,335	-	
Net administrative expenses	4,078,843	4,078,843	-	
Total deductions	556,640,805	509,736,465	46,904,340	
Net increase (decrease)	(133,410,362)	(133,410,362)	-	
Net position held in trust				
Beginning of year	7,574,653,612	7,574,653,612	-	
End of year	\$7,441,243,250	\$7,441,243,250	\$ -	

### **Notes to Financial Statements**

#### Note 1: Summary of Significant Accounting Policies

The County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Plan) is administered in accordance with Chapter 40, Article 5/9 of the Illinois Compiled Statutes (formerly Chapter 108-1/2, Article 9 of the Illinois Revised Statutes).

**New Accounting Pronouncements** - In June 2011, GASB issued Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, which provides financial reporting guidance for deferred outflows of resources and deferred inflows of resources. This Statement amends the net asset reporting requirements in Statement No. 34 and other pronouncements by incorporating deferred outflows of resources and deferred inflows of resources into the definitions of the required components of the residual measure and by renaming that measure as net position, rather than net assets. The Statement is effective for financial statements with periods beginning after December 15, 2011.

**Method of Accounting** - The financial statements are presented using the accrual basis of accounting. Employer contributions are recognized in the levy year. Employee contributions are recognized in the period in which contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

**Investments** - Investments are reported at fair value, which generally represents reported market value as of the last business day of the year. Private equities, hedge funds, and real estate investments are carried at fair value as estimated by each partnership's general partner. Short-term investments are carried at cost which approximates fair value. Where less than an entire investment holding is sold, average value is used to determine realized gain or loss.

**Allocated Expenses** - Administrative expenses are initially paid by the Plan. These expenses are allocated between the Plan and the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (Forest Fund) on a pro rata basis, as applicable.

**Capital Assets** - The Plan has set a capitalization threshold of \$100,000 for all capital asset types. As of December 31, 2012, the Plan does not have any capital assets.

**Estimates** - The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures in the financial statements. Actual results could differ from those estimates.

Reclassifications - Certain prior year amounts have been reclassified to conform to current year presentation.

**Subsequent Events** - Subsequent events have been evaluated through May 2, 2013, which is the date the financial statements were available to be issued.

#### Note 2: Plan Description

The County Employees' and Officers' Annuity and Benefit Fund of Cook County was established on January 1, 1926, and is governed by legislation contained in Illinois Compiled Statutes, particularly Chapter 40, Article 5/9. Effective with the signing of Public Act 96-0889 into law on April 14, 2010, participants that first became contributors on or after January 1, 2011 are Tier 2 participants. All other participants that were contributing prior to January 1, 2011 are Tier 1 participants. The Plan can be amended only by the Illinois Legislature. The County Employees' and Officers' Annuity and Benefit Fund of Cook County is a single-employer defined benefit pension plan with a defined contribution minimum. The Plan was created for the purpose of providing retirement, death and disability benefits for full-time employees of Cook County (County) and the dependents of such employees. The Plan is considered to be a component unit of Cook County, Illinois and is included in the County's financial statements as a pension trust fund.

The Statutes authorize a Board of Trustees (Board) of nine members to carry out the provisions of the Article. According to the Article, two members of the Board are *ex officio*, four are elected by the employee members of the Plan and three are elected by the annuitants of the Plan. The two *ex officio* members are the Comptroller of Cook County, or someone chosen by the Comptroller, and the Treasurer of Cook County, or someone chosen by the Treasurer. All members of the Board are fiduciaries with respect to the Plan and are statutorily mandated to discharge their duties, as such, solely in the interest of the Plan's participants and beneficiaries.

The Board has the powers and duties required in the Article to collect all contributions due to the Plan, to invest the Plan's reserves, to have an annual audit, to appoint employees, to authorize or suspend payment of any benefit and to have exclusive original jurisdiction in all matters relating to or affecting the Plan. The Board approves its own budget which is prepared by the administrative staff of the Plan. The Board is required annually to submit to the County Board of Cook County a detailed report of the financial affairs and status of the Plan. Provisions in other articles of Chapter 40 require the Board to submit its annual audit and actuarial valuation reports to the State of Illinois Department of Insurance, as well as another detailed annual report, the form and content of which is specified by the Department of Insurance.

Covered employees are required to contribute 8.5% (9% for sheriffs) of their salary to the Plan, subject to the salary limitations for Tier 2 participants in Article 5/1-160. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest (3% or 4% depending on when the employee became a participant). The County's total contribution is the amount of contributions made by the employees to the Plan in the calendar year two years prior to the year for which annual applicable tax is levied, multiplied by 1.54. The source of funds for the County's contributions has been designated by State Statute as the County's annual property tax levy. The County's payroll for employees covered by the Plan for 2012 and 2011 was \$1,478,253,368 and \$1,456,444,123 respectively.

The County Employees' and Officers' Annuity and Benefit Fund of Cook County provide retirement as well as death and disability benefits. Tier 1 employees age 50 or older and Tier 2 employees age 62 or older are entitled to receive a minimum formula annuity of 2.4% for each year of credited service if they have at least 10 years of service. The maximum benefit is 80% of the final average monthly salary. For Tier 1 employees under age 60 and Tier 2 employees under age 67, the monthly retirement benefit is reduced by ½% for each month the participant is below that age. The reduction is waived for Tier 1 participants having 30 or more years of credited service.

Participants should refer to the applicable State Statutes for more complete information.

Notes to Financial Statements (continued)

#### Note 2: Plan Description (continued)

At December 31, 2012 and 2011, participants consisted of the following:

	<u>2012</u>	<u>2011</u>
Active members	21,447	22,037
Retired members	13,609	13,023
Beneficiaries	2,565	2,532
Inactive members	<u>11,856</u>	12,584
Total	49,477	50,176

#### **Note 3: Funded Status and Funding Progress**

As of December 31, 2012, the most recent actuarial valuation date, the Plan was 53.55% funded on an actuarial basis. The actuarial accrued liability for benefits was \$14,630,250,955 and the actuarial value of assets was \$7,833,882,926 resulting in an unfunded actuarial accrued liability (UAAL) of \$6,796,368,029. The covered payroll (annual payroll of active employees covered by the Plan) was \$1,478,253,368 and the ratio of the UAAL to the covered payroll was 459.76%.

The Schedule of Funding Progress, presented as required supplemental information (RSI) following the notes to the financial statements, presents multi-year trend information about whether the actuarial values of the Plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

#### Notes to Financial Statements (continued)

#### **Note 3: Funded Status and Funding Progress (continued)**

Additional information as of the latest actuarial valuation is as follows:

Valuation date December 31, 2012
Actuarial cost method Entry Age Normal
Amortization method Level Dollar - Open

Remaining amortization period 30 years

Asset valuation method Five Year Smoothed Average Market

Actuarial assumptions:

Investment return rate 7.5% compounded annually

Projected salary increases

Inflation 3.0% per year Merit 2.0% per year Total 5.0% per year

Postretirement annuity increase 3.0% compounded per year for Tier 1 participants

1.5% simple per year for Tier 2 participants

Mortality rates UP-1994 Mortality Table for Males, rated down 2 years

UP-1994 Mortality Table for Females, rated down 1 year

Termination rates Based on recent experience of the Plan

Retirement rates Rates of retirement for each age from 50 to 75 based on

recent experience of the Plan.

All employees are assumed to retire by age 75

Medical trend rate 7.5% in the first year, decreasing by .5% per year

until an ultimate rate of 5.0% is reached

Notes to Financial Statements (continued)

#### **Note 4: Summary of Employer Funding Policies**

Employer contributions are funded primarily through a County tax levy which is currently limited when extended to an amount not to exceed an amount equal to the total contributions by the employees of the Plan made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 1.54.

The combined actuarial valuations of the pension and retiree health insurance benefits of the Plan as of December 31, 2012 and 2011 indicate the annual required contribution to be \$655,800,100 and \$613,952,848 for 2012 and 2011, respectively. The annual required contribution is based on an annual payroll of \$1,478,253,368 for 21,447 active members as of December 31, 2012 and \$1,456,444,123 for 22,037 active members as of December 31, 2011 and is computed as follows:

	<u>2012</u>	<u>2011</u>
Normal cost	\$181,484,588	\$193,943,250
30-year level dollar amortization of the unfunded liability	474,315,512	420,009,598
Actuarially determined contribution requirement	655,800,100	613,952,848
Expected net employer contribution from tax levy after 3.0% loss	(193,372,210)	(190,901,487)
Expected employer contribution short-fall of		
actuarially determined contribution requirement	<u>\$462,427,890</u>	<u>\$423,051,361</u>
Required tax levy multiple	5.22	4.95
Present authorized multiple	1.54	1.54

A Schedule of Funding Progress is located in the Required Supplementary Information. This schedule provides information about progress made in accumulating sufficient assets to pay benefits when due.

#### **Note 5: Investment Summary**

The Plan is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks, shares, debentures, or other obligations or securities as set forth in the "prudent person" provisions of the State Statutes. All of the Plan's financial instruments are consistent with the permissible investments outlined in the State Statutes and any index-linked financial instruments are limited to those indices that replicate the permissible investments outlined in the State Statutes. The following table presents a summarization of the fair value (carrying amount) of the Plan's investments as of December 31, 2012 and 2011. Investments that represent 5% or more of the Plan's net position held in trust are separately identified.

	<u>2012</u>	<u>2011</u>
<u>Investments</u>		
U.S. and international equities	\$ 3,135,494,813	\$ 2,814,605,044
U.S. Government and government agency obligations	1,582,287,173	1,969,108,673
Corporate bonds	831,881,515	755,644,972
Collective international equity	54,676,384	44,816,703
Commingled fixed income	23,986,193	-
Exchange traded funds	555,481,344	483,793,099
Private equities	56,090,408	70,555,750
Hedge funds	688,873,338	-
Real estate:		
Limited partnerships	302,749,975	202,393,145
Short-term investments:		
EB Temporary Investment Fund	599,311,162	851,600,448
Other	36,179,352	60,857,790
Total investments	\$7,867,011,657	\$7,253,375,624

#### **Investment Risk**

Government Accounting Standards Board (GASB) Statement No. 40, *Deposit and Investment Risk Disclosures*, specifies various disclosure requirements.

#### **Custodial Credit Risk**

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities in the possession of an outside party.

The Plan had no investments that were uninsured and unregistered, with securities held by the counterparty, or by its trust department or agent, but not held in the Plan's name, as of December 31, 2012 and 2011.

#### **Note 5: Investment Summary (continued)**

#### **Investment Risk (continued)**

#### **Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Plan's investment policy is an average credit quality for each manager's total fixed income portfolio (corporate and U.S. Government holdings) of not less than A- by two out of three credit agencies (Moody's Investor Service, Standard & Poor's and/or Fitch). On August 5, 2011, Standard & Poor's downgraded its credit rating of the U.S. Government and government agency obligations from AAA to AA. As of December 31, 2011, U.S. Government and government agency obligations which the Plan owned historically had a credit rating of AAA or nonrated U.S. Government obligations noted as "U.S. Government" had a AA rating. The following table presents a summarization of the Plan's credit quality ratings of investments at December 31, 2012 and 2011 valued by Moody's Investors Service and/or Standard & Poor's and/or Fitch:

<b>Type of Investment</b>	Rating	<u>2012</u>	<u>2011</u>
U.S. Government and			
government agency obligations	Aa/AA	\$ 1,546,677,942	\$1,969,108,673
	A/A	483,030	-
	Not Rated	35,171,201	<del>_</del>
		\$1,582,287,173	<u>\$1,969,108,673</u>
Corporate bonds	Aaa/AAA	\$ 69,366,232	\$ 100,938,979
	Aa/AA	38,426,822	68,601,566
	A/A	225,706,036	278,391,329
	Baa/BBB	332,102,420	258,275,034
	Ba/BB	71,443,307	16,650,299
	B/B	64,964,919	7,535,606
	Caa/CCC	11,283,188	11,510,444
	Ca/CC	2,478,442	30
	C/C	-	201,344
	D/D	128,197	2,719,263
	Not Rated	15,981,952	10,821,078
		\$ 831,881,515	\$ 755,644,972
Commingled fixed income	Ba/BB	\$ 23,986,193	<u> </u>
Short-term investments	Aa/AA	\$ -	\$ 495,000
	Not Rated	635,490,514	911,963,238
		\$ 635,490,514	\$ 912,458,238

## **Note 5: Investment Summary (continued)**

### **Investment Risk (continued)**

#### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments held for longer periods are subject to increased risk of adverse interest rate changes. The Plan's investment policy for duration for each manager's total fixed income portfolio is within plus or minus 30% of the duration for the fixed income performance benchmark (Barclays Capital Aggregate Fixed Income, which was 5.06 years at December 31, 2012 and 4.95 years at December 31, 2011). The following table presents a summarization of the Plan's debt investments at December 31, 2012 and 2011, using the segmented time distribution method:

<b>Type of Investment</b>	<b>Maturity</b>	<u>2012</u>	<u>2011</u>
U.S. Government and government agency obligations	Less than 1 year 1 - 5 years 6 - 10 years Over 10 years	\$ 48,442,275 462,356,799 337,326,616 734,161,483 \$1,582,287,173	\$ 53,164,696 631,533,147 470,741,201 813,669,629 \$1,969,108,673
Corporate bonds	Less than 1 year 1 - 5 years 6 - 10 years Over 10 years	\$ 47,474,439 207,323,422 342,037,738 235,045,916 \$ 831,881,515	\$ 85,474,924 211,764,260 283,534,069 174,871,719 \$ 755,644,972
Commingled fixed income	e 1 - 5 years	\$ 23,986,193	<u> </u>
Short-term investments	Less than 1 year	\$ 635,490,514	<u>\$ 912,458,238</u>

# **Note 5: Investment Summary (continued)**

## **Investment Risk (continued)**

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Plan's investment policy limits the amount of investments in foreign equities to 20% of total Plan assets and foreign fixed income obligations to 2.5% of total Plan assets. The Plan's exposure to foreign currency risk at December 31, 2012 and 2011 is as follows:

	Fair Value (USD)	Fair Value (USD)
Type of Investment	<u>2012</u>	<u>2011</u>
U.S. and international equities:		
Australian dollar	\$ 57,756,044	\$ 44,010,562
Brazilian real	20,047,433	20,303,228
British pound	286,555,201	255,593,865
Canadian dollar	60,495,096	52,995,298
Chilean peso	187,375	-
Czech koruna	279,182	291,312
Danish krone	13,724,122	14,896,400
Egyptian pound	158,767	133,550
European euro	295,288,043	234,792,492
Hong Kong dollar	99,137,374	69,390,082
Hungarian fornit	293,397	297,794
Indian rupee	2,841,886	2,004,561
Indonesian rupiah	3,382,800	4,001,426
Israeli shekel	1,703,794	1,627,003
Japanese yen	173,988,007	165,586,705
Malaysian ringgit	4,444,531	3,239,835
Mexican peso	8,756,371	7,999,967
Moroccan dirham	116,002	-
New Taiwan dollar	16,751,848	16,573,111
New Zealand dollar	3,404,939	3,792,465
Norwegian krone	9,232,759	10,457,873
Philippines peso	5,045,785	3,074,574
Polish zloty	2,175,151	1,764,497
Peruvian sol	-	6,895
Russian rubel	-	83,966
Singapore dollar	18,810,581	14,483,243
South African rand	8,833,254	7,840,531
South Korean won	36,073,084	23,849,269
Swedish krona	42,872,732	22,193,417
Swiss franc	80,581,702	64,844,057
Thailand baht	9,690,902	6,291,947
Turkish lira	1,699,638	1,352,386
U.S. dollar	1,871,167,013	1,760,832,733
Total U.S. and international equities	\$ 3,135,494,813	\$2,814,605,044

## **Note 5: Investment Summary (continued)**

#### **Investment Risk (continued)**

#### Foreign Currency Risk (continued)

	Fair Value (USD)	Fair Value (USD)
<b>Type of Investment</b>	<u>2012</u>	<u>2011</u>
Corporate bonds:		
European euro	\$ 9,269,886	\$ 326,560
Mexican peso	9,397,946	-
Norwegian krone	-	428,192
Philippines peso	1,260,274	-
U.S. dollar	811,953,409	754,890,220
Total corporate bonds	\$831,881,515	\$755,644,972
Private equities:		
European euro	\$ 856,776	\$ 526,618
U.S dollar	55,233,632	70,029,132
Total private equities	\$ 56,090,408	\$ 70,555,750

For the years ended December 31, 2012 and 2011, net realized gain on investments sold, reflecting the difference between the proceeds received and cost value of securities sold, was \$215,404,559 and \$359,307,386 respectively. These amounts are included in the net appreciation (depreciation) in fair value of investments as reported on the Combining Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Position. The calculation of realized gains and losses is independent of the calculation of net appreciation (depreciation) in the fair value of plan investments. Investments purchased in a previous year and sold in the current year result in their realized gains and losses being reported in the current year and their net appreciation (depreciation) in Plan assets being reported in both the current year and the previous years.

#### Note 6: When-Issued Transactions

The Plan may purchase securities on a when-issued basis, that is, obligate itself to purchase securities with delivery and payment to occur at a later date. At the time the Plan enters into a commitment to purchase the security, the transaction is recorded at purchase price which equals value. The value at delivery may be more or less than the purchase price. No interest accrues to the Plan until delivery and payment takes place. As of December 31, 2012 and 2011, the Plan contracted to acquire securities on a when-issued basis with a total principal amount of \$33,015,000 and \$38,670,000 respectively.

#### **Note 7: Derivatives**

The Plan's investment policy permits the use of financial futures for hedging purposes only. Speculation and leveraging of financial futures within the portfolio is prohibited. The Plan uses derivative financial instruments to gain exposure to an asset class, manage portfolio risk or to facilitate international portfolio trading.

A derivative security is a financial contract whose value is based on, or "derived" from, a traditional security, an asset, or a market index. Derivative instruments include forward currency contracts and futures contracts as part of the Plan's investment portfolio.

Derivative transactions involve, to varying degrees, credit risk, interest rate 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 the previously agreed upon terms. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Market risk is the possibility that a change in interest or currency rates will cause the value of a financial instrument to decrease or become more costly to settle.

Forward currency contracts are used to hedge against fluctuations in foreign currency-denominated assets used primarily in portfolio trade settlements. These contracts are a cash contract in which a seller agrees to deliver a specific cash commodity to a buyer sometime in the future. Forward agreements are subject to the creditworthiness of the counterparties, which are principally large financial institutions. Forward currency contracts are reported at fair value in the receivable for securities sold and payable for securities purchased on the Combining Statement of Pension Plan and Postemployment Healthcare Plan Net Position included in investments. The gain or loss on forward currency contracts is reported as part of investment income on the Combining Statement of Changes in Pension Plan and Postemployment Healthcare Plan Net Position. The foreign currency contracts are short-term in nature, typically ranging from a week to three months.

The Plan uses futures contracts as an investment vehicle to gain exposure to an asset class with minimal market entry costs to the Plan. At December 31, 2012, the Plan had futures contracts with a fair value of \$9,843,966 and a notional value of \$384,140,094 with maturity dates ranging from January 18, 2013 through March 21, 2013. Comparatively, at December 31, 2011 the Plan had futures contracts with a fair value of \$4,987,116 and a notional value of \$695,441,831 with maturity dates ranging from January 20, 2012 through March 30, 2012.

Futures contracts are reported at fair value in the equity investments on the Combining Statement of Pension Plan and Postemployment Healthcare Plan Net Position. The gain or loss on futures contracts is reported as part of investment income on the Combining Statement of Changes in Pension Plan and Postemployment Healthcare Plan Net Position. See Note 5 for investment risk for the Plan's equity investments.

### Note 7: Derivatives (continued)

The Plan's portfolio includes the following derivative instruments at December 31, 2012 and 2011:

	<u>2012</u>	<u>2011</u>
Hedging derivative instruments:		
Forward currency contract receivables	\$ 210,837,236	\$ 239,316,866
Forward currency contract payable	(211,339,312)	(240,056,545)
Total hedging derivative instruments	(502,076)	(739,679)
Investment derivative instruments:		
U.S. Treasury futures contracts	-	1,093,422
U.S. equity index futures contracts	7,454,825	3,667,741
International equity index futures contracts	2,389,141	225,953
Total investment derivative instruments	9,843,966	4,987,116
Total	\$ 9,341,890	\$ 4,247,437

For the years ended December 31, 2012 and December 31, 2011, the change in fair value of the deferred inflows and outflows of the foreign currency contracts was not material to these financial statements.

## **Note 8: Securities Lending**

State Statutes and the investment policy permit the Plan to lend its securities to broker-dealers and other entities with a simultaneous agreement to return collateral for the same securities in the future. The Plan's custodian, acting as the lending agent, lends securities for collateral in the form of cash, U.S. Government obligations and irrevocable letters of credit equal to 102% of the fair value of domestic securities plus accrued interest and 105% of the fair value of foreign securities plus accrued interest.

The Plan has a limit as to the amount of securities on loan of \$750 million. The Plan does not have the right to sell or pledge securities received as collateral unless the borrower defaults. The average term of securities loaned was 80 days for 2012 and 61 days for 2011; however, any loan may be terminated on demand by either the Plan or the borrower. Cash collateral was invested in a separately managed portfolio, which had an average weighted maturity at December 31, 2012 and 2011 of 73 and 55 days, respectively.

As of December 31, 2012 and 2011, the fair value (carrying amount) of loaned securities was \$729,714,627 and \$732,005,817 respectively. As of December 31, 2012 and 2011, the fair value (carrying amount) of cash collateral received by the Plan was \$512,631,466 and \$451,548,916 respectively. The cash collateral is included as an asset and a corresponding liability on the combining statements of pension plan and postemployment healthcare plan net position. As of December 31, 2012 and 2011, the fair value (carrying amount) of non-cash collateral received by the Plan was \$235,494,187 and \$298,249,813 respectively.

## **Note 8: Securities Lending (continued)**

Although the Plan's securities lending activities are collateralized as described above, they involve both market and credit risk. In this context, market risk refers to the possibility that the borrower of securities will be unable to collateralize the loan upon a sudden material change in the fair value of the loaned securities. Credit risk refers to the possibility that counterparties involved in the securities lending program may fail to perform in accordance with the terms of their contracts.

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower. The contract with the lending agent requires indemnification to the Plan if borrowers fail to return the securities or fail to pay the Plan for income distributions by the issuers of securities while the securities are on loan.

During 2008, a security within the collateral pool became insolvent resulting in an insufficiency in the collateral pool. To prevent any one investor from incurring an additional loss should another investor exit the securities lending program, the Plan's custodian allocated a portion of the insolvent security to each investor in the collateral pool. As a result of the allocation, the Plan incurred an unrealized investment loss and corresponding securities lending payable in the amount of \$7,015,497 during the year ended December 31, 2008. That same securities lending payable was \$6,660,230 as of December 31, 2012 and 2011.

During 2012 and 2011, there were no losses due to default of a borrower or the lending agent.

A summary of securities loaned at fair value as of December 31:

	<u>2012</u>	<u>2011</u>
Securities loaned - cash collateral:		
Equities	\$251,417,427	\$256,417,367
U.S. Government and government agency obligations	68,436,815	92,000,554
Exchange traded funds	143,576,006	67,177,205
Corporate bonds	35,569,401	24,386,003
Total securities loaned - cash collateral	498,999,649	439,981,129
Securities loaned - non-cash collateral:		
U.S. Government and government agency obligations	230,714,978	292,024,688
Total	\$729,714,627	\$732,005,817

#### **Note 9: Commitments**

As of December 31, 2012, the Plan had capital commitments of approximately \$29,200,000 for various limited partnerships.

## Note 10: Postemployment Group Healthcare Plan

The Plan has adopted GASB Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, which establishes uniform financial reporting standards for Other Postemployment Benefits (OPEB) plans.

#### **Plan Description**

The County Employees' and Officers' Annuity and Benefit Fund of Cook County administers a Postemployment Group Healthcare Benefit Plan (PGHBP), which is a single-employer defined benefit postemployment health plan. PGHBP provides a healthcare premium subsidy to annuitants who elect to participate in PGHBP. The Plan is currently allowed, in accordance with State Statutes, to pay all or a portion of medical insurance premiums for the annuitants. Presently, the Plan subsidizes approximately 55% and 70% of the monthly premiums for employee and survivor annuitants, respectively. The remaining premium cost is borne by the annuitant.

PGHBP is administered in accordance with Chapter 40, Article 5/9 of the Illinois Compiled Statutes, which assigns the authority to establish and amend benefit provisions to the Plan's Board of Trustees.

At December 31, 2012 and 2011, the number of employee and survivor annuitants who participated in the subsidized program was 8,179 and 7,925 respectively.

The Plan's employees are also participants in the PGHBP. The Plan had 27 and 29 employees at December 31, 2012 and 2011, respectively. During years ended December 31, 2012 and 2011, the Plan paid healthcare premiums for 8 retired Plan employees each year. For active and retired Plan employees, the actuarially determined liability under GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, is included in the total actuarial liability and related GASB Statement No. 43 disclosure.

#### **Summary of Significant Accounting Policies**

**Method of Accounting** - PGHBP's financial statements have been combined with the Plan's financial statements and are presented using the accrual basis of accounting. The Plan considers the premium subsidy an additional retirement benefit, with no contribution rate or asset allocation associated with it. The cost for postemployment group healthcare benefits is approximately equal to the premium subsidy. Actual costs may differ based on claims experience. Healthcare premium subsidies are recognized when due and payable.

**Contributions** - The Plan funds PGHBP on a "pay-as-you-go" basis.

Administrative Costs - Administrative costs associated with PGHBP are paid by the Plan.

**Health Care Cost Trend Rates** - 7.5% in the first year, decreasing by .5% per year until an ultimate rate of 5.0% is reached.

## Note 10: Postemployment Group Healthcare Plan (continued)

Actuarial Valuations - Actuarial valuations of the Plan involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Actuarial calculations of the Plan reflect a long-term perspective and are based on the benefits provided under the terms of the Plan in effect at the time of each valuation and on the historical pattern of sharing of costs between the employer and Plan members to that point.

#### **Funded Status and Funding Progress**

As of December 31, 2012, the most recent actuarial valuation date, the PGHBP was 0% funded on an actuarial basis. The actuarial accrued liability for benefits was \$1,845,609,132 and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$1,845,609,132. The covered payroll (annual payroll of active employees covered by the Plan) was \$1,478,253,368 and the ratio of the UAAL to the covered payroll was 124.85%.

The Schedule of Funding Progress, presented as required supplemental information (RSI) following the notes to the financial statements, presents multi-year trend information about whether the actuarial values of the Plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

# **Note 11: Related Party Transactions**

The Plan has common Trustees and shares office space with the Forest Preserve District Employees' Annuity and Benefit Fund of Cook County (Forest Fund) who reimburses the Plan for shared administrative services provided by the Plan. During the years ended December 31, 2012 and 2011, the Plan allocated administrative expenditures of \$69,653 and \$62,149 respectively to the Forest Fund.

As of December 31, 2012 and 2011, the Forest Fund owes the Plan \$635,820 and \$554,852 respectively. These amounts include plan transfers of Plan members transferring from one plan to another.

## Note 12: Lease Agreements

The Plan leases its office facility under a fifteen year lease arrangement in effect through June 1, 2022. The lease calls for annual adjustments on the anniversary date of the commencement of the lease. Rent expense under this lease, net of rent abatements for the years ended December 31, 2012 and 2011, was \$372,581 and \$353,144 respectively.

The following is a schedule by year of the future minimum rental payments required under the noncancelable lease terms of this operating lease:

Year Ending December 31,		
2013	\$	384,888
2014		394,510
2015		404,372
2016		414,482
2017		424,844
2018		435,465
2019		446,352
2020		457,510
2021		468,948
2022	_	197,401
	\$4	,028,772

#### Note 13: Pronouncements Issued Not Yet Effective

In November 2010, GASB issued Statement No. 61, *The Financial Reporting Entity: Omnibus, an amendment of GASB Statements No. 14 and No. 34.* This Statement improves financial reporting for a governmental financial reporting entity by modifying certain requirements for inclusion of component units in the financial reporting entity. This Statement also amends the criteria for reporting component units as if they were part of the primary government in certain circumstances. The Statement also clarifies the reporting of equity interests in legally separate organizations. Statement No. 61 is effective for the Plan's fiscal year ending December 31, 2013.

In March 2012, GASB issued Statement No. 65, *Items Previously Reported as Assets and Liabilities*. This Statement establishes accounting and financial reporting standards that reclassify, as deferred outflows of resources or deferred inflows of resources, certain items that were previously reported as assets and liabilities and recognizes, as outflows of resources or inflows of resources, certain items that were previously reported as assets and liabilities. Statement No. 65 is effective for the Plan's fiscal year ending December 31, 2013.

In March 2012, GASB issued Statement No. 66, *Technical Corrections - 2012 - an amendment of GASB Statements No. 10 and Statement No. 62.* The objective of this Statement is to improve accounting and financial reporting guidance by reporting conflicting guidance that resulted from the issuance of Statement No. 54, *Fund Balance Reporting and Government Fund Type Definition*, and No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements.* Statement No. 66 is effective for the Plan's fiscal year ending December 31, 2013.

### Note 13: Pronouncements Issued Not Yet Effective (continued)

In June 2012, GASB issued Statement No. 67, Financial Reporting for Pension Plans. This Statement replaces the requirements of Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans and Statement No. 50, Pension Disclosures, as they relate to pension plans that are administered through trusts or similar arrangements meeting certain criteria. For defined benefit plans, the Statement establishes standards of financial reporting for separately issued financial reports and specifies the required approach to measuring the pension liability of employer and nonemployer contributing entities for benefits provided through the pension plan. Statement No. 67 also enhances footnote disclosures and required supplementary information for pension plans. Statement No. 67 is effective for the Plan's fiscal year ending December 31, 2014.

In June 2012, GASB issued Statement No. 68, Accounting and Financial Reporting for Pensions. This Statement replaces the requirements of Statement No. 27, Accounting for Pensions by State and Local Governmental Employers and Statement No. 50, Pension Disclosures, as they relate to pensions that are provided through pension plans administered as trusts or similar arrangements that meet certain criteria. Statement No. 68 details the recognition and disclosure requirements for employers with liabilities to a defined benefit pension plan and for employer whose employees are provided with defined contribution pensions. Statement No. 68 is effective for the Plan's fiscal year ending December 31, 2015.

In January 2013, GASB issued Statement No. 69, Government Combinations and Disposals of Government Operations, which establishes accounting and financial reporting standards related to government combinations and disposals of government operations. This Statement requires disclosures to be made about government combinations and disposals of government operations to enable financial statement users to evaluate the nature and financial effects of those transactions. Statement No. 69 is effective for the Plan's fiscal year ending December 31, 2014.

The Plan is currently evaluating the impact of adopting the above Statements.

# **Required Supplementary Information**

# **Schedule of Funding Progress**

Year E Decem	Ended aber 31,	Actuari Value of A <u>(a)</u>		Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio <u>(a/b)</u>	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (b-a)/(c)
<u>Pensio</u>	on Benefits							
2007		\$8,059,879	,804	\$ 9,386,287,797	\$1,326,407,993	85.87%	\$1,370,844,734	96.76%
2008		\$8,036,074	,797	\$10,097,027,865	\$2,060,953,068	79.59%	\$1,463,372,408	140.84%
2009	(1)	\$7,945,567	,096	\$11,489,081,298	\$3,543,514,202	69.16%	\$1,498,161,713	236.52%
2010		\$7,982,368	,659	\$12,023,222,885	\$4,040,854,226	66.39%	\$1,494,093,569	270.46%
2011		\$7,897,102	,116	\$12,628,274,561	\$4,731,172,445	62.54%	\$1,456,444,123	324.84%
2012		\$7,833,882	,926	\$13,418,486,943	\$5,584,604,017	58.38%	\$1,478,253,368	377.78%
Posten	nplovment (	Group Healtho	are Bene	efit Plan (PGHBP)				
2007		\$	_	\$1,554,123,496	\$1,554,123,496	0.00%	\$1,370,844,734	113.37%
2008		\$	_	\$1,448,828,756	\$1,448,828,756	0.00%	\$1,463,372,408	99.01%
2009	(1)	\$	_	\$1,686,872,018	\$1,686,872,018	0.00%	\$1,498,161,713	112.60%
2010		\$	_	\$1,724,622,462	\$1,724,622,462	0.00%	\$1,494,093,569	115.43%
2011		\$	_	\$1,678,571,388	\$1,678,571,388	0.00%	\$1,456,444,123	115.25%
2012		\$	-	\$1,845,609,132	\$1,845,609,132	0.00%	\$1,478,253,368	124.85%
<u>Chang</u>	ges in Actua	rial Assumpti	<u>ons</u>					
2007	(2)	\$	-	\$ (516,681,393)	\$(516,681,393)	0.00%		
2008	(2)	\$	-	\$ (472,675,272)	\$(472,675,272)	0.00%		
2009	(2)	\$	-	\$ (600,437,567)	\$(600,437,567)	0.00%		
2010	(2)	\$	-	\$ (605,708,172)	\$(605,708,172)	0.00%		
2011	(2)	\$	-	\$ (582,833,550)	\$(582,833,550)	0.00%		
2012	(2)	\$	-	\$ (633,845,120)	\$(633,845,120)	0.00%		
<u>Combi</u>	<u>ined</u>							
2007		\$8,059,879	,804	\$10,423,729,900	\$2,363,850,096	77.32%	\$1,370,844,734	172.44%
2008		\$8,036,074	,797	\$11,073,181,349	\$3,037,106,552	72.57%	\$1,463,372,408	207.54%
2009	(1)	\$7,945,567		\$12,575,515,749	\$4,629,948,653	63.18%	\$1,498,161,713	309.04%
2010		\$7,982,368		\$13,142,137,175	\$5,159,768,516	60.74%	\$1,494,093,569	345.34%
2011		\$7,897,102		\$13,724,012,399	\$5,826,910,283	57.54%	\$1,456,444,123	400.08%
2012		\$7,833,882		\$14,630,250,955	\$6,796,368,029	53.55%	\$1,478,253,368	459.76%
		, , ,	-	. , ,			, , , ,	

<sup>(1)</sup> = Change in actuarial assumption.

See notes to Required Supplementary Information.

<sup>(2) =</sup> Due to a change in the interest rate assumption for the PGHBP (pension benefits and combined reports - 7.5%, PGHBP - 4.5%).

# **Schedule of Employer Contributions**

Annual Required Year Ended December 31, (a)		Required Contribution ARC	Required Statutory Basis (1) (b)		Employer Contributions (2) <u>(c)</u>	Percent of ARC Contributed (c/a)
Pension E	Benefits					
2007		\$287,061,532	\$258,89	9,040	\$230,114,335	80.16%
2008		\$283,892,734	\$180,81	7,908	\$150,227,360	52.92%
2009		\$352,850,988	\$183,80	8,380	\$152,506,089	43.22%
2010		\$454,327,461	\$186,36	0,878	\$144,539,577	31.81%
2011		\$493,724,370	\$190,90	1,487	\$160,652,118	32.54%
2012		\$540,218,287	\$193,37	2,210	\$152,734,539	28.27%
<u>Postemple</u>	oyment Gro	nup Healthcare Benefit Plan (PGI	HBP)			
2007		\$169,154,664	\$	-	\$ 31,420,216	18.57%
2008		\$169,823,905	\$	-	\$ 37,781,310	22.25%
2009		\$157,964,519	\$	-	\$ 35,779,228	22.65%
2010		\$163,823,488	\$	-	\$ 40,183,057	24.53%
2011		\$165,176,771	\$	-	\$ 38,185,306	23.12%
2012		\$156,700,388	\$	-	\$ 37,986,237	24.24%
Changes i	in Actuaria	l Assumptions				
_	(3)	\$ (35,123,851)	\$	-		
2008	(3)	\$ (47,090,866)	\$	-		
2009	(3)	\$ (42,633,564)	\$	-		
2010	(3)	\$ (45,832,565)	\$	-		
2011	(3)	\$ (44,948,293)	\$	-		
2012	(3)	\$ (41,118,575)	\$	-		
Combined	<u>d</u>					
2007		\$421,092,345	\$258,89	9,040	\$261,534,551	62.11%
2008		\$406,625,773	\$180,81	-	\$188,008,670	46.24%
2009		\$468,181,943	\$183,80		\$188,285,317	40.22%
2010		\$572,318,384	\$186,36	-	\$184,722,634	32.28%
2011		\$613,952,848	\$190,90	-	\$198,837,424	32.39%
2012		\$655,800,100	\$193,37	2,210	\$190,720,776	29.08%

<sup>(1)</sup> = Tax levy after 3.0% overall loss.

See notes to Required Supplementary Information.

<sup>(2) =</sup> Includes employer federal subsidized programs.

<sup>(3) =</sup> Due to a change in the interest rate assumption for the PGHBP (pension benefits and combined reports - 7.5%, PGHBP - 4.5%).

#### Required Supplementary Information (continued)

## Notes to Schedule of Funding Progress and Schedule of Employer Contributions

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date December 31, 2012
Actuarial cost method Entry Age Normal
Amortization method Level Dollar - Open

Amortization period 30 years

Asset valuation method Five Year Smoothed Average Market

Actuarial assumptions

Investment rate of return

Pension benefits 7.5% compounded annually Retiree health insurance plan 4.5% compounded annually Combined 7.5% compounded annually

Projected salary increases

 $\begin{array}{ccc} \text{Inflation} & & 3.0\% \text{ per year} \\ \text{Merit} & & \underline{2.0\%} \text{ per year} \\ \text{Total} & & 5.0\% \text{ per year} \end{array}$ 

Postretirement benefit increases 3.0% compounded per year for

employee and widow(er) annuitants

for Tier 1 participants

1.5% simple per year for employee and widow(er) annuitants for Tier 2

participants

Medical trend rate 7.5% in the first year, decreasing by .5%

per year until an ultimate rate of 5.0%

is reached

Mortality rates UP-1994 Mortality Table for Males,

rated down 2 years

UP-1994 Mortality Table for Females,

rated down 1 year

Retirement age assumptions Based on actual past experience

assume all employees retire by age 75

# **Supplementary Information**

# Schedules of Net Administrative Expenses and Professional and Consulting Fees

#### Years Ended December 31, 2012 and 2011

	<u>2012</u>	<u>2011</u>
Administrative expenses		
Bank charges	\$ 31,312	\$ 30,612
Document imaging	50,150	-
Election expense	153,890	115,956
Employee benefits	452,410	456,209
Insurance - fidelity, fiduciary and liability	117,358	79,745
Maintenance of equipment, systems, software and supp	port 487,032	485,793
Membership, conference and training	24,596	18,938
Office expense	79,963	88,510
Postage	79,962	121,428
Printing and stationery	69,669	68,441
Professional and consulting fees	348,987	296,599
Recovery site expense	36,485	16,050
Regulatory filing fees	8,000	8,000
Rent	372,581	353,144
Salaries	2,046,968	1,987,278
Utilities	13,643	14,289
Total	4,373,006	4,140,992
Less administrative expenses allocated to Forest Preser	rve	
District Employees' Annuity and Benefit Fund	(69,653)	(62,149)
of Cook County	\$4,303,353	\$4,078,843
Net administrative expenses		
Professional and consulting fees		
Actuarial service	\$ 95,516	\$ 94,382
Audit	106,619	75,443
Consulting	50,770	30,096
Legal	72,157	72,771
Lobbyist	23,925	23,907
Total	\$ 348,987	\$ 296,599

# **Schedules of Investment Expenses**

### Years Ended December 31, 2012 and 2011

	<u>2012</u>	<u>2011</u>
Investment manager expense		
Amalgamated Bank of Chicago	\$ 54,364	\$ 862,836
American Realty Advisors	630,360	475,018
ARCH Venture Partners	-	65,514
Blackstone Alternative Asset Management	1,742,527	-
BNY Mellon CIS	166,196	176,345
Capri Capital Partners	376,044	380,523
CBRE Global Investors	45,658	-
Channing Capital Management	717,490	507,415
Chicago Equity Partners	414,169	467,711
Cozad Asset Management, Inc.	254,869	189,472
Credit Suisse Securities	72,660	80,763
Diversified Global Asset Management	477,131	-
Evercore Partners	21,116	24,569
Evergreen Venture Partners	26,967	43,984
Fiduciary Management Associates	477,708	277,194
Fortaleza Asset Management, Inc.	102,970	84,869
Franklin Templeton Investments	1,420,409	1,135,262
Frontenac Company	-	17,151
Frontier Capital Management	582,008	1,275,380
Great Lakes Advisors, Inc.	315,319	510,322
Herndon Capital Management	290,711	242,282
J.P. Morgan Asset Management	1,000,133	908,899
John Buck Company	92,045	112,382
Killian Capital Management	154,264	173,107
Lazard Asset Management, LLC	451,156	426,318
Lightspeed Venture Partners	52,629	78,962
LM Capital Group, LLC	443,990	470,645
Loomis Sayles & Company, LP	644,219	-
MacKay Shields	649,306	-
Mesirow Financial	152,100	657,629
Mondrian Investment Partners, Ltd.	731,852	591,664
Morgan Stanley	28,675	447,934

(continued)

## **Supplementary Information (continued)**

# **Schedules of Investment Expenses (continued)**

## Years Ended December 31, 2012 and 2011

	<u>2012</u>	<u>2011</u>
Investment manager expense (continued)		
Muller and Monroe Asset Management	17,818	20,913
NCM Capital	330,917	385,655
New Century Investment Management	367,053	21,522
Optimum Investment Advisors	-	238,866
Opus Capital Group	19,392	24,474
Pacific Venture Group	46,252	64,082
Progress Investment Management	1,158,699	935,869
Prudential Real Estate Investors	142,419	-
RhumbLine Advisers	90,344	159,211
Robeco Investment Management	285,085	317,985
Russell Implementation Services, Inc.	1,026,664	-
SPC Capital Management	100,000	100,000
State Street Global Advisors	250,799	239,300
The Rock Creek Group	364,212	-
Thornburg Investment Management	1,037,626	952,462
TIAA-CREF	627,546	601,055
Trident Capital	63,528	72,584
William Blair & Company	595,758	1,284,868
Wind Point Partners		48,861
	19,113,157	16,151,857
Investment consulting fees		
Callan Associates Inc.	364,799	353,933
Mesirow Financial	_	1,500
	364,799	355,433
Investment custodian fees		
BNY Mellon	147,630	146,500
Total investment expenses	\$19,625,586	\$16,653,790

## **Additions By Source**

			Net Investment and Net Securities		
Year Ende December		Employee Contributions (2)	Lending Income (Loss) (3)	Other (4)	Total <u>Additions</u>
2007	\$258,141,230	\$123,047,516	\$ 476,910,124	\$10,002,552	\$ 868,101,422
2008	\$183,916,221	\$123,776,705	\$(1,858,853,846)	\$ 7,081,386	\$(1,544,079,534)
2009	\$183,713,870	\$127,795,881	\$ 1,013,615,250	\$11,741,894	\$ 1,336,866,895
2010	\$181,509,323	\$129,449,866	\$ 832,882,639	\$12,966,051	\$ 1,156,807,879
2011	\$195,337,621	\$127,577,473	\$ 82,701,033	\$17,614,316	\$ 423,230,443
2012	\$190,720,776	\$130,570,599	\$ 887,687,519	\$10,190,689	\$ 1,219,169,583

- 1 Includes net tax levy
- 2 Includes deductions in lieu of disability.
- 3 Includes realized and unrealized net gain or loss on investments and net securities lending income.
- 4 Includes employer federal subsidized programs, Medicare Part D, prescription/repayment plan rebates and miscellaneous income. Early Retirement Reinsurance Program reimbursement is included in 2011 and 2012.

## **Deductions By Type**

			Net	
Year Ended			Administrative	Total
December 31,	<b>Benefits</b>	<b>Refunds</b>	<b>Expenses</b>	<b>Deductions</b>
2007	\$398,689,231	\$66,623,357	\$3,866,188	\$469,178,776
2008	\$427,453,465	\$24,724,102	\$4,172,536	\$456,350,103
2009	\$452,007,855	\$20,404,911	\$4,248,287	\$476,661,053
2010	\$482,523,408	\$25,041,818	\$4,074,955	\$511,640,181
2011	\$523,396,627	\$26,165,335	\$4,078,843	\$556,640,805
2012	\$563,092,126	\$33,081,726	\$4,303,353	\$600,477,205

## Schedule of Taxes Receivable

#### December 31, 2012

<u>Levy Year</u>	Gross <u>Levy</u>	Uncollected <u>Balance</u>	Reserve for Loss and Costs	Net Uncollected <u>Balance</u>
2011	\$192,234,211	\$ 30,273,444	\$ 5,207,783	\$ 25,065,661
2012	\$196,139,483	196,139,483	5,343,503	190,795,980
Total	\$563,092,126	\$226,412,927	\$10,551,286	\$215,861,641

#### Note:

Uncollected taxes for years 2010 and prior are fully reserved.

2011 tax levy includes net Illinois Replacement Tax of \$53,736,719.

2012 tax levy includes net Illinois Replacement Tax of \$48,170,211.



# **Investment Section**

This section includes an Investment Report, Investment Consultant's Commentary, the Master Custodian's Certification, a Summary of Investment Policy, and summary tables of investment data.

# **Investment Report**



May 2, 2013

Dear Trustees and Members of the Fund:

As an institutional investor, the County Employees' and Officers' Annuity and Benefit Fund of Cook County ("the Fund") employs a prudent investment strategy to meet its long-term actuarial objective of growing the assets to support member benefits. Together with Fund staff and the investment consultant, Callan Associates, the Retirement Board oversees the investment strategy through ongoing study of the portfolio structure, return assumptions, and projected funding needs.

As of December 31, 2012, the Fund's investment portfolio was valued at \$7.9 billion, returning 12.5% net of investment management fees over the previous 12-month period. The Fund's net return exceeded the custom policy benchmark by 0.6% and the assumed 7.5% actuarial rate of return by 5.0%. Performance was supported by robust equity markets and penetration into new investment strategies, with allocations made during the year to hedge funds and emerging markets strategies. The Fund has out-performed the actuarial benchmark over the long term, earning an annualized rate of 8.4% over the past 30 years, net of investment management fees. <sup>1</sup>

Results for fiscal year 2012 were realized together with recent asset allocation restructuring activities. The restructuring effort has served to enhance the portfolio's risk-adjusted return through broader diversification of risk exposures. Primary drivers of the 2012 restructuring include the following:

- Diversification of domestic fixed income. The Fund increased its exposure to core plus assets with the
  addition of three new managers and \$560 million to the asset class to provide greater sector diversity within
  fixed income.
- Increased exposure to alternative strategies. The Fund increased its exposure to alternative strategies with new allocations of \$150 million to private equity, \$675 million to hedge funds, and \$60 million to valueadded real estate.
- **Enhanced global exposure.** The Fund added dedicated exposure to emerging market equities to complement exposure to international developed markets.
- Commitment to emerging managers. Exposure to investment firms owned by women, minorities, and persons with a disability increased by 40% from 2011, accounting for over 16% of total assets by year end.

By year end, rebalancing activities brought 92% of the portfolio in line with strategic allocation targets of 25% in domestic equities, 20% in international equities, 32% in fixed income, 8% in real estate, 9% in hedge funds, and 6% in private equity.

The Consultant's Commentary; Master Custodian's certification letter; a summary of the Fund's goals, objectives, and guidelines; and selected investment schedules follow for your review.

Sincerely,

Nickol R. Hackett

Executive Director and Chief Investment Officer

County Employees' and Officers' Annuity and Benefit Fund of Cook County
Forest Preserve District Employees' Annuity and Benefit Fund of Cook County
33 N Dearborn St, Suite 1000 | Chicago, IL 60602 | 312.603.1200 | 312.603.9760 fax | www.cookcountypension.com

<sup>&</sup>lt;sup>1</sup> Returns have been calculated using geometrically-linked, time and asset-weighted returns.

# **Investment Consultant's Commentary**

Callan

Callan Associates Inc. 120 North LaSalle Street Suite 2100 Chicago, IL 60602 Main 312.346.3536 Fax 312.346.1356

www.callan.com

May 10, 2013

Board of Trustees
County Employees' and Officers' Annuity and Benefit Fund of Cook County
33 North Dearborn Street, Suite 1000
Chicago, IL 60602

Dear Trustees.

Callan Associates, Inc. is pleased to present the County Employees' and Officers' Annuity and Benefit Fund of Cook County ("Fund") results for fiscal year ended December 31, 2012. As of December 31, 2012, the Fund's market value totaled \$7.9 billion, an approximate \$600 million increase since December 31, 2011.

Despite a turbulent economic and political backdrop around the world in 2012, equity results were firmly in the double digits across capitalization, style, and region. Small cap growth stocks rose just shy of 15% and were the weakest area of the equity markets. Foreign developed small caps and U.S. low quality rose at least 20% while U.S. midcap value, US microcap, and Emerging Markets all rose more than 18%.

Concerns over the Fiscal Cliff diminished as a deal became imminent, and stronger-than-anticipated economic reports throughout the fourth quarter resulted in a credit market rally. The Barclays Aggregate Index returned 4.21% for the year, mostly powered by continued investor appetite for risk.

The private real estate markets, measured by the NCREIF Property Index, rose over 10% in 2012.

As noted in the Schedule of Investment Results, the Fund generated a total return of 12.5% net-of-fees for the year ended December 31, 2012, which out-performed the 11.9% return of the Fund's target benchmark (the Policy Benchmark). In aggregate, on a net-of-fee basis the Fund's public domestic equity and private equity managers fell behind their benchmarks, while the Fund's international equity, fixed income, real estate managers generated returns that exceeded their respective benchmarks.

Sincerely,

Michael J. Joecken Vice President

# Master Custodian's Certification



**Asset Servicing** 

Michael J. Beggy Vice President

May 9, 2013

To the Board of Trustees and the Executive Director of the County Employees' and Officers' Annuity & Benefit Fund of Cook County:

BNY Mellon as custodian of the County Employees' and Officers' Annuity & Benefit Fund of Cook County (the "client") has established an "Account" that holds the clients property in safekeeping facilities of the Custodian (or other custodian banks or clearing operations), provided the recordkeeping of certain property of the client and completed the annual accounting certification for the year January 1, 2012 through December 31, 2012.

In addition, in accordance with the terms of the Custody Agreement dated, November 1, 2007, BNY Mellon also provides the following services as Custodian:

- Market settlement of purchases and sales and engage in other transactions, including free receipts and deliveries, exchanges and other voluntary corporate actions, with respect to securities or property received by the Custodian
- Take actions necessary to settle transactions in futures and/or options contracts, short selling programs, foreign exchange or foreign exchange contracts, swaps and other derivative investments with third parties
- Lend the assets of the Account in accordance with a separate Securities Lending Agreement.
- Invest available cash in any collective fund, including a collective investment fund maintained by the Custodian or and affiliate of the Custodian for collective investment of employee benefit trusts or deposit in an interest bearing account of banking department of Custodian.
- Appoint subcustodians, including affiliates of the custodian, as to part or all of the Account.
- Hold property in nominee name, in bearer form or in book entry form, in a clearinghouse corporation or in a depository.
- Take all action necessary to pay for, and settle authorized transactions.
- Collect income payable to and distributions due to the Account.
- Collect all proceeds from securities, certificates of deposit or other investments which may mature or be called.
- Forward to the authorized party as designated by the client, proxies or ballots that are to be a voted by the authorized party.
- Attend to corporate actions that have no discretionary decision requirement
- Report the value of the Account as agreed upon by the client and custodian.
- Credit the account with income and maturity proceeds on securities contractual payment date.

Sincerely,

Michael J. Beggy Service Director

Mull J. Bys

Asset Servicing

Room 410 ~ One Mellon Center ~ Pittsburgh, PA 15258-0001

(412) 234-6933 ~ (412) 236-1928 Fax

The Bank of New York Mellon

# **Summary of Investment Policy**

Under the guidance and direction of the Board and governed by the "prudent man rule," it is the mission of the Fund and the Investment Staff to optimize the total return of the Fund's investment portfolio through a policy of diversified investments using parameters of prudent risk management as measured on the total portfolio, acting at all times in the exclusive interest of the participants and beneficiaries of the Fund.

To accomplish this mission, the Board and Investment Staff understand and accept their fiduciary obligations to the members of the Fund. These obligations are legal in nature and are outlined in the Illinois Pension Code [40 ILCS 5]. Investments made by the Fund shall satisfy the conditions of the Illinois Pension Code and applicable Illinois law and, in particular, the prudent man rule set forth in the Illinois Pension Code [40 ILCS 5/1-109].

Subject to these fiduciary standards, the Board and Investment Staff shall endeavor at all times to implement the Statement of Investment Policy in a manner consistent with the stated mission of the Fund, while ensuring transparency and compliance with all applicable laws and regulations.

The Policy is set forth by the Board in order to:

- Establish a clear understanding of all involved parties of the investment goals and objectives of the Fund.
- Define and assign the responsibilities of all involved parties.
- Establish the relevant investment horizon for which the Fund assets will be managed.
- Establish risk parameters governing assets of the Fund.
- Establish target asset allocation and re-balancing procedures.
- Establish a methodology and criteria for selecting, retaining and terminating Investment Professionals.
- Offer specific guidance to and define limitations for all Investment Managers regarding the investment of Fund assets.

In summary, the purpose of the Statement of Investment Policy is to formalize the Board's investment objectives, policies and procedures and to define the duties and responsibilities of the various entities involved in the investment process. The Statement of Investment Policy is intended to serve as a guide, reference tool and communication link between the Board, Investment Staff and Investment Professionals.

### Summary of Investment Policy (continued)

#### **Investment Objectives**

The primary return objectives of the Fund are to:

- Preserve the safety of principal.
- Exceed, after investment management fees, a customized blended benchmark consistent with prudent levels of risk.
- Create a stream of investment returns to ensure the systematic and adequate funding of actuarially determined benefits through contributions and professional management of Fund assets.

To achieve these objectives, the assets of the Fund have been allocated to meet its actuarial assumed rate of return of 7.5%. To evaluate success, the Board compares the performance of the Fund to the actuarial assumed rate of return and its custom benchmark. This benchmark represents a passive implementation of the historical investment policy targets and it is rebalanced regularly.

While achieving the return objectives, the Fund is able to tolerate certain levels of risk, which are:

- To accept prudent levels of short-term and long-term volatility consistent with the near-term cash flow needs, funding level, and long-term liability structure of the Fund.
- To tolerate appropriate levels of downside risk relative to the Fund's actuarial assumed rate of return of 7.5%. In doing so, the Board will attempt to minimize the probability of underperforming the Fund's actuarial assumed rate of return over the long-term and to minimize the shortfall in the event such underperformance occurs.
- To accept certain variances in the asset allocation structure of the Fund relative to the broad financial markets and peer groups.
- To tolerate certain levels of short-term underperformance by the Fund's Investment Managers.

The investment objectives of the Fund are constrained by applicable law, time, taxes and liquidity. The Fund will operate in accordance with applicable law, as amended. The Fund has a long-term time horizon as the assets are used to pay qualified participant pension benefits. The Fund is a tax-exempt entity, but can be subject to taxes involving unrelated business taxable income ("UBTI"). UBTI is income earned by a tax-exempt entity that does not result from tax-exempt activities. The Fund will attempt to minimize or to avoid incurring UBTI. The liquidity needs of the Fund are to meet the regular cash flow requirements of the Fund.

### **Summary of Investment Policy (continued)**

#### **Asset Allocation and Rebalancing Procedures**

The Board reviews the target asset allocation of the Fund at least once every three years. It will take into consideration applicable statutes, the actuarial rate of return of the Fund, the long term nature of the asset pool, the cash flow needs of the Fund and the general asset allocation structure of the Fund's peers. It will make assumptions on the capital markets over the long term and optimize the asset allocation to best meet the actuarial and cash flow needs of the Fund at prudent levels of risk.

The Board establishes the asset allocation targets and ranges and reviews them periodically. To ensure that the allocations meet the risk/return objectives of the Fund, the target allocations will be reviewed annually for reasonableness relative to significant economic market changes or changes to the long-term goals and objectives. Proper implementation of this guideline may require that a periodic adjustment or rebalancing be made to ensure conformance with asset allocation targets. Rebalancing requirements shall be reviewed on a continual basis. Rebalancing may also occur in the event of a change in the allocation percentages by asset class by the Board or as a result of extraordinary market events. Rebalancing shall take place as soon as practical after said change or amendment has been approved.

# Schedule of Investment Results

## **Schedule of Investment Results**

	For Year Ended December 31,	Annualize	d Roturns
	2012	3 Years	5 Years
Total Fund	12.5%	8.6%	2.7%
Policy Benchmark *	11.9%	8.5%	3.4%
Domestic Equity	14.6%	10.2%	1.6%
Russell 3000	16.4%	11.3%	2.2%
International Equity	19.3%	6.0%	-1.2%
MSCI ACWI ex-US Index	17.3%	3.6%	-3.7%
Fixed Income	5.9%	6.8%	5.9%
BarCap Aggregate	4.2%	6.2%	6.0%
Real Estate	14.2%	13.9%	3.0%
NCREIF	10.6%	12.6%	2.1%
Private Equity	13.1%	13.0%	2.6%
Wilshire 5000	16.1%	11.2%	2.0%
Hedge Funds**	6.1%	N/A	N/A
Libor + 4%	2.2%	4.39%	5.02%

<sup>\*</sup>The Policy Benchmark is as follows:

- As of December 31, 2011: 38% Russell 3000 Index, 25% Barclays Aggregate Index, 17% MSCI ACWI ex. U.S., 10% BarCap Int. Gov./Credit Inter, 5% Barclays US TIPS Index, 3% S&P Global ex.U.S. <\$2B. and 2% NCREIF Total Index.
- Prior to December 31, 2011: 17% S&P 500, 7% Russell Midcap Growth, 7% Russell 2000 Value, 6% Russell 1000 Value, 6% Russell 1000 Growth, 12% MSCI ACWI ex. U.S., 25% BarCap Aggregate, 10% BarCap Int. Gov./Cred., 5% BarCap TIPS, 3% S&P Global ex.U.S. <\$2B. and 2% NCREIF.
- Prior to August 31, 2010: 20% S&P 500, 7% Russell Midcap Growth, 7% Russell 2000 Value, 6% Russell 1000 Value, 6% Russell 1000 Growth, 12% MSCI ACWI ex. U.S., 25% BarCap Aggregate, 10% BarCap Int. Gov./Cred., 5%BarCap TIPS, and 2% NCREIF.
- Prior to Februay 28, 2010: 25% S&P 500, 7% Russell Midcap Growth, 7% Russell 2000 Value, 6% Russell 1000 Value, 6% Russell 1000 Growth, 12% MSCI ACWI ex. U.S., 30% BarCap Aggregate, 5% BarCap Int. Gov./Cred., and 2% NCREIF.
- Prior to June 30, 2008: 55% Wilshire 5000 and 45% LB Aggregate.

N/A-Not Available.

Note: Returns are calculated using geometrically-linked, time and asset-weighted returns. Returns are calculated net of investment manager fees.

<sup>\*\*</sup> Return based on partial year, as funding was completed during the second half of 2012.

# Schedule of Investment Summary and Asset Allocation

	For Year Ended December 31, 2012		<i>'</i>			ber 31,
		Percent of			Percent of	
Asset Class	Fair Value	<u>Total</u>	<b>Target</b>	<u>Fair Value</u>	<u>Total</u>	<b>Target</b>
Domestic Equity	\$2,049,564,917	26%	25%	\$1,916,448,595	26%	25%
International Equity	1,415,384,550	18%	20%	1,187,685,457	16%	20%
Fixed Income	2,438,154,881	31%	32%	2,725,265,565	38%	32%
Real Estate	583,453,049	7%	8%	440,962,019	6%	8%
Hedge Funds-of-Funds	688,873,338	9%	9%	-	0%	9%
Private Equity	56,090,408	1%	6%	70,555,750	1%	6%
Cash	635,490,514	8%	0%	912,458,238	13%	0%
Total Investments	\$7,867,011,657	100%	100%	\$7,253,375,624	100%	100%

# Schedule of Top Ten Largest Holdings

# Schedule of Top Ten Largest Holdings (Excludes Commingled Funds)

	For year	ended	December	31,	2012
--	----------	-------	----------	-----	------

T 10 D 11 T 11 T 11	6 .	C.	F W.	0/ 675 / 1
Top 10 Domestic Equity Holdings	<u>Sector</u>	Shares 54.102	Fair Value	% of Total
Apple Inc.	Technology	54,183	\$ 28,834,730	1.4%
Exxon Mobil Corp.	Energy	274,045	23,805,145	1.2%
Microsoft Corp.	Technology	513,970	13,728,139	0.7%
Chevron Corp	Energy	116,241	12,570,302	0.6%
IBM Corp.	Technology	63,704	12,202,501	0.6%
Google Inc.	Technology	15,614	11,045,031	0.5%
General Electric Co.	Capital Goods	519,390	10,901,996	0.5%
Johnson & Johnson	Health Care	145,735	10,216,024	0.5%
Pfizer Inc.	Health Care	406,972	10,206,451	0.5%
AT & T Inc.	Technology	295,363	9,956,687	0.5%
<b>Total Top 10 Domestic Equity Holdings</b>		2,405,217	\$ 143,467,006	7.0%
Total Domestic Equity			\$2,049,564,917	100.0%
	_	-		
Top 10 International Equity Holdings	Sector	<b>Shares</b>	<u>Fair Value</u>	% of Total
British American Tobacco (United Kingdom)	Sector Tobacco	<u>Shares</u> 340,579	<b>Fair Value</b> \$ 17,278,205	<b>% of Total</b> 1.2%
			<u> </u>	
British American Tobacco (United Kingdom)	Tobacco	340,579	\$ 17,278,205	1.2%
British American Tobacco (United Kingdom) Novartis (Switzerland)	Tobacco Health Care	340,579 223,057	\$ 17,278,205 13,999,699	1.2% 1.0%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom)	Tobacco Health Care Mobile Telecommunications	340,579 223,057 5,484,520	\$ 17,278,205 13,999,699 13,769,352	1.2% 1.0% 1.0%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom) Nestle (Switzerland)	Tobacco Health Care Mobile Telecommunications Consumer Goods	340,579 223,057 5,484,520 205,337	\$ 17,278,205 13,999,699 13,769,352 13,369,842	1.2% 1.0% 1.0% 0.9%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom) Nestle (Switzerland) Sanofi-Aventis (France)	Tobacco Health Care Mobile Telecommunications Consumer Goods Health Care	340,579 223,057 5,484,520 205,337 137,607	\$ 17,278,205 13,999,699 13,769,352 13,369,842 12,951,650	1.2% 1.0% 1.0% 0.9% 0.9%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom) Nestle (Switzerland) Sanofi-Aventis (France) Standard Chartered (United Kingdom)	Tobacco Health Care Mobile Telecommunications Consumer Goods Health Care Banking	340,579 223,057 5,484,520 205,337 137,607 501,848	\$ 17,278,205 13,999,699 13,769,352 13,369,842 12,951,650 12,835,888	1.2% 1.0% 1.0% 0.9% 0.9% 0.9%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom) Nestle (Switzerland) Sanofi-Aventis (France) Standard Chartered (United Kingdom) Compagnie Financiere (France)	Tobacco Health Care Mobile Telecommunications Consumer Goods Health Care Banking Retail	340,579 223,057 5,484,520 205,337 137,607 501,848 154,088	\$ 17,278,205 13,999,699 13,769,352 13,369,842 12,951,650 12,835,888 12,019,319	1.2% 1.0% 1.0% 0.9% 0.9% 0.9% 0.8%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom) Nestle (Switzerland) Sanofi-Aventis (France) Standard Chartered (United Kingdom) Compagnie Financiere (France) Mitsubishi Financial Group (Japan)	Tobacco Health Care Mobile Telecommunications Consumer Goods Health Care Banking Retail Financial Services	340,579 223,057 5,484,520 205,337 137,607 501,848 154,088 2,044,581	\$ 17,278,205 13,999,699 13,769,352 13,369,842 12,951,650 12,835,888 12,019,319 10,900,634	1.2% 1.0% 1.0% 0.9% 0.9% 0.9% 0.8%
British American Tobacco (United Kingdom) Novartis (Switzerland) Vodafone Group (United Kingdom) Nestle (Switzerland) Sanofi-Aventis (France) Standard Chartered (United Kingdom) Compagnie Financiere (France) Mitsubishi Financial Group (Japan) Prudential (United Kingdom)	Tobacco Health Care Mobile Telecommunications Consumer Goods Health Care Banking Retail Financial Services Financial Services Consumer Manufacturing	340,579 223,057 5,484,520 205,337 137,607 501,848 154,088 2,044,581 705,700	\$ 17,278,205 13,999,699 13,769,352 13,369,842 12,951,650 12,835,888 12,019,319 10,900,634 9,928,283	1.2% 1.0% 1.0% 0.9% 0.9% 0.9% 0.8% 0.8%

**Schedule of Top Ten Largest Holdings (continued)** 

# Schedule of Top Ten Largest Holdings (Excludes Commingled Funds)

### For year ended December 31, 2012

Top 10 Fixed Income Holdings	<u>Sector</u>	<u>Par</u>	Fair Value	% of Total
U.S. Treasury Note 3.125% 05/15/2021	U.S. Governments	28,225,000	\$ 32,006,586	1.3%
U.S. Treasury Note 3.625% 02/15/2020	U.S. Governments	22,860,000	26,710,538	1.1%
U.S. Treasury Note .875% 02/28/2017	U.S. Governments	20,472,000	20,740,797	0.9%
U.S. Treasury Inflation Index 2.0% 01/15/2014	U.S. Governments	18,807,339	19,408,233	0.8%
U.S. Treasury Bond 3.125% 11/15/2041	U.S. Governments	17,360,000	18,171,059	0.7%
U.S. Treasury Note .25% 02/28/2014	U.S. Governments	17,200,000	17,209,460	0.7%
U.S. Treasury Note 2.625% 08/15/2020	U.S. Governments	15,642,000	17,176,950	0.7%
U.S. Treasury Inflation Index .125% 04/15/2017	U.S. Governments	15,692,652	16,804,634	0.7%
U.S. Treasury Inflation Index 1.625% 01/15/2015	U.S. Governments	15,159,819	16,106,095	0.7%
U.S. Treasury Note .625% 01/31/2013	U.S. Governments	16,050,000	16,056,260	0.7%
<b>Total Top 10 Fixed Income Holdings</b>		187,468,810	\$ 200,390,612	8.2%
<b>Total Fixed Income</b>			\$2,438,154,881	100.0%

A complete list of the portfolio holdings is available for review upon request.

# **Schedule of Investment Manager Fees**

# **Schedule of Investment Manager Fees**

Asset Category	Manager Fees
Domestic Equity Channing Capital Management	\$ 717,490
Fiduciary Management Associates	477,708
Fortaleza Asset Management, Inc.	102,970
Frontier Capital Management	582,008
Great Lakes Advisors, Inc.	315,319
Herndon Capital Management	290,711
Killian Asset Management	154,264
Progress Investment Management	649,328
RhumbLine Advisers	90,344
Robeco Investment Management	285,085
Russell Implementation Services, Inc.	429,999
William Blair & Company	
- ·	580,024
Total Domestic Equity	4,675,250
International Equity Franklin Templeton Investments	1,420,409
J.P. Morgan Asset Management	1,000,133
Lazard Asset Management, LLC	451,156
Mondrian Investment Partners, Ltd.	731,852
Progress Investment Management	509,372
Russell Implementation Services, Inc.	127,432
State Street Global Advisors	173,305
Thornburg Investment Management	1,037,626
Total International Equity	5,451,285
Fixed Income	
Amalgamated Bank of Chicago	54,364
BNY Mellon CIS	166,196
Chicago Equity Partners	414,169
LM Capital Group, LLC	443,990
Loomis Sayles & Company, LP	644,219
MacKay Shields	649,306
Morgan Stanley	28,675
NCM Capital	330,917
New Century Investment Management	367,053
Russell Implementation Services, Inc.	28,913
State Street Global Advisors	77,494
Total Fixed Income	3,205,298

# Schedule of Investment Manager Fees (continued)

Asset Category	Manager Fees
Real Estate	(20.260
American Realty Advisors	630,360
Capri Capital Partners	376,044
CBRE Global Investors	45,658
Cozad Asset Management, Inc.	254,869
John Buck Company	92,045
Prudential Real Estate Investors	142,419
TIAA-CREF	627,546
Total Real Estate	2,168,941
Private Equity	
Credit Suisse Securities	72,660
Evercore Partners	21,116
Evergreen Venture Partners	26,967
Lightspeed Venture Partners	52,629
Mesirow Financial Private Equity	152,100
Muller and Monroe Asset Management	17,818
Opus Capital Group	19,392
Pacific Venture Group	46,252
Russell Implementation Services, Inc.	357,329
SPC Capital Management	100,000
Trident Capital	63,528
William Blair & Company	15,734
Total Private Equity	945,525
Hedge Funds	
Blackstone Alternative Asset Management	1,742,527
Diversified Global Asset Management	477,131
Russell Implementation Services, Inc.	82,990
The Rock Creek Group	364,212
Total Hedge Funds	2,666,860
<b>Total Investment Manager Expense</b>	\$19,113,157

# **Schedule of Brokerage Commissions**

# **Schedule of Brokerage Commissions**

Broker Name	Number of Shares	<b>Commissions</b>	Cost per Share
<b>Domestic Equity Commissions</b>			
Loop Capital Markets, LLC*	6,001,082	\$123,480	\$0.021
Credit Suisse	1,997,801	65,788	0.033
Citigroup Global Markets, Inc.	1,705,392	47,023	0.028
Cheevers & Co., Inc.*	1,992,459	46,726	0.023
M.R. Beal & Co.*	1,515,159	41,278	0.027
Williams Capital Group, LP*	2,119,761	41,143	0.019
M. Ramsey King Securities, Inc.*	1,612,968	37,303	0.023
Cabrera Capital Markets*	1,884,460	33,655	0.018
Stifel, Nicolaus & Co.	865,873	31,053	0.036
Robert W. Baird & Co., Inc.	843,089	29,490	0.035
Cantor Fitzgerald & Co.	972,331	27,046	0.028
Merrill Lynch Securities	1,154,409	23,224	0.020
Brokers with < \$25,000 of Commission	ns 14,308,133	377,441	0.026
<b>Total Domestic Equity Commissions</b>	36,972,917	\$924,650	\$0.025

# **Schedule of Brokerage Commissions (continued)**

Broker Name	Number of Shares	<b>Commissions</b>	Cost per Share
<b>International Equity Commissions</b>			
Credit Agricole Cheuvreux	3,875,925	\$ 55,603	\$0.014
Merrill Lynch Securities	5,535,186	42,720	0.008
Cabrera Capital Markets*	2,069,633	39,385	0.019
Credit Suisse	3,398,862	37,479	0.011
G-Trade Services, LTD	13,350,711	37,043	0.003
Deutsche Bank Securities, Inc.	5,341,426	34,552	0.006
Pershing, LLC	2,990,205	31,318	0.010
Morgan Stanley & Co.	2,840,080	25,927	0.009
UBS Securities	5,058,319	25,706	0.005
J.P. Morgan Securities	2,101,622	25,979	0.012
Citigroup Global Markets, Inc.	3,792,894	20,580	0.005
Nomura Securities	2,391,511	19,185	0.008
Loop Capital Markets, LLC*	4,952,583	17,903	0.004
Credit Lyonnais Securities	10,570,091	17,383	0.002
Goldman Sachs	1,731,726	17,039	0.010
Barclays Capital	2,117,348	16,868	0.008
Brokers with < \$15,000 of Commissions	35,977,164	223,729	0.006
Total International Equity Commission	108,095,286	\$688,399	\$0.006

<sup>\*</sup>Women/minority-owned brokerage firm. The Retirement Board's brokerage policy encourages investment manager, as they search for best possible trade execution, to utilize women/minority-owned enterprises, specifically firms headquartered in the State of Illinois.



# **Actuarial Section**

This section includes the actuarial reports and summarizes actuarial liability and unfunded actuarial liability. Schedules of data summarizing information about members and beneficiaries, actuarial assumptions, principal provisions, and a glossary of terms are also included.

# **Actuarial Certification - Pension Benefits**

# **buck**consultants

A Xerox Company

April 30, 2013

Board of Trustees County Employees' and Officers' Annuity and Benefit Fund of Cook County Chicago, Illinois

#### Certification of Actuarial Valuation

Ladies and Gentlemen:

This report summarizes the annual actuarial valuation results of the County Employees' and Officers' Annuity and Benefit Fund of Cook County ("CEABF" or "the Fund") as of December 31, 2012 performed by Buck Consultants, LLC.

The actuarial valuation is based on audited financial and member data provided by the CEABF staff and summarized in this report. The benefits considered are those delineated in the Plan, the CEABF was established on January 1, 1926 and is governed by legislation contained in the Illinois Compiled statutes, particularly Chapter 40, as amended and restated effective December 31, 2012. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Certain historical information with respect to costs, liabilities, assets, accounting disclosure information, etc. has been derived from the prior actuary's reports and information provided by the Plan sponsor. That information is presented for comparison purposes and Buck Consultants has not verified the validity of any of those calculations or data. Buck Consultants, LLC is solely responsible for the actuarial data and actuarial results presented in this report, excluding the historical information and data just described. This report fully and fairly discloses the actuarial position of the Plan.

The CEABF is funded by Employer and Member Contributions. The County levies a tax annually equal to the total amount of contributions made by the members in the calendar year 2 years prior to the year of the levy, multiplied by 1.54. This funding mechanism is insufficient to meet the needs of the CEABF. We project that the CEABF will become insolvent in 2034. We recommend that a funding policy be legislated that is sufficient to pay the Normal Costs of active Plan members, Plan expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percent of payroll (or salary) over a period no longer than 30 years.

The actuary for the CEABF performs an analysis of Plan experience periodically and recommends changes in basic assumptions if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. Many of the assumptions used in this valuation are based on an experience analysis of the CEABF, over the period 2005 through 2008. This experience study was performed by the prior actuary, and the results of that study have not been evaluated by Buck for reasonableness and suitability for this purpose. We relied on the analysis of the prior actuary for our report. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 4.

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#### **Actuarial Certification - Pension Benefits (continued)**

The assumptions and methods used to determine the Annual Required Contributions (ARC) of the CEABF as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of Governmental Accounting Standards Board (GASB) Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. Based on member data and asset information provided by the CEABF staff, we have prepared the Schedule of Funding Progress and Schedule of Employer Contributions that are included in the Financial Section of the Comprehensive Annual Financial Report.

No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck.

The undersigned is an Enrolled Actuary, an Associate of the Society of Actuaries and Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. He is available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,

**BUCK CONSULTANTS, LLC** 

Larry Langer, EA, ASA, MAAA, FCA Principal, Retirement

cc: Emily Urbaniak

buckconsultants

# **Actuarial Valuation - Pension Benefits**

#### Overview

The County Employees' and Officers' Annuity and Benefit Fund of Cook County ("CEABF" or "the Fund) provides pension and ancillary benefit payments to the active, retired and separated employees of Cook County. A Retirement Board comprised of retiree, employee, and appointed representatives is responsible for administering the Plan and providing oversight of the investment policy. This report presents the results of the actuarial valuation of the Plan benefits as of the valuation date of December 31, 2012.

### **Purpose**

An actuarial valuation is performed on the Plan annually as of the end of the fiscal year. The main purposes of the actuarial valuation detailed in this report are:

- 1. To determine the employer contribution necessary to fund the CEABF in an actuarially sound manner;
- 2. To disclose the funding assets and liability measures as of the valuation date;
- 3. To disclose the accounting measures for the Plan required by GASB No. 25 as of the end of the last fiscal year;
- 4. To review the current funded status of the Plan;
- 5. To compare actual and expected experience under the Plan during the last fiscal year;
- 6. And to report trends in contributions, assets, liabilities, and funded status over the last several years.

No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck. This actuarial valuation provides a "snapshot" of the funded position of the Plan based on the Plan provisions, membership, assets, and actuarial assumptions as of the valuation date.

*Actives:* As of December 31, 2012, there were 21,447 employees in active service (including 260 on disability) covered under the provisions of the Plan. The significant age, service, salary and accumulated contribution information for these employees is summarized below, along with comparative figures from the last actuarial valuation one year earlier.

	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Number of active employees	21,447	22,037
Average age	47.5	47.3
Average years of service	14.0	13.7
Total annual valuation salary	\$1,478,253,368	\$1,456,444,123
Average annual salary	\$ 68,926	\$ 66,091
Total accumulated contributions	\$1,677,883,900	\$1,641,038,477
Average accumulated contributions	\$ 78,234	\$ 74,467

The number of active members decreased by 2.7% from the previous valuation date. The average age of the active members increased by 0.2 years, and the average service increased by 0.3 years.

The total annual valuation salary increased by 1.5%. The average salary increased by 4.3% from the previous valuation.

**Disabilities:** There were 260 disabled members (included in the active data). There were 311 disabilities in the prior year.

**Retirees and Beneficiaries:** In addition to the active members, there were 13,609 retired members and 2,565 beneficiaries who are receiving monthly benefit payments on the valuation date. The significant age and annual benefit information for these members are summarized below with comparative figures from the last actuarial valuation performed one year earlier.

	<b>December 31, 2012</b>	<u>December 31, 2011</u>
Number of members receiving payments		
Retirees	13,609	13,023
Beneficiaries	2,565	2,532
Total	16,714	15,555
Average age	71.2	71.1
Annual benefit amounts		
Retirees	\$ 487,135,164	\$ 447,109,007
Beneficiaries	\$ 37,092,921	\$ 33,844,980
Total	\$ 524,228,085	\$ 480,953,987
Average annual benefit payments	\$ 32,412	\$ 30,920

The number of retired members and beneficiaries increased by 4.0% from the previous valuation date. The average age of the retired members increased by 0.1 years. The total annual benefit payments for these members increased by 9.0% from the previous valuation date.

### Membership (continued)

*Inactives:* In addition to the active and retired members, there were 11,856 inactive members who did not elect to receive their accumulated contributions when they left covered employment. The age information for these inactive members is summarized below with comparative figures from the last actuarial valuation one year earlier.

	<u>December 31, 2012</u>	<u>December 31, 2011</u>
Number of inactive members	11,856	12,584
Average age	44.8	44.7

The number of inactive members decreased by 5.8% from the previous valuation. The average age of the inactive members increased by 0.1 years.

In our opinion, the membership data collected and prepared for use in this actuarial valuation meets the data quality standards required under Actuarial Standards of Practice No. 23.

### **Plan Assets**

The Plan's assets are held in trust and invested for the exclusive benefit of Plan members. The trust is funded by member and employer contributions, and pays benefits directly to eligible members in accordance with Plan provisions. The assets are audited annually and are reported at fair value. On a fair value basis, the Plan has Net Assets Available for Benefits of \$8.06 billion as of December 31, 2012. This includes an increase of \$618.7 million over the Net Assets Available for Benefits of \$7.44 billion as of December 31, 2011. During 2012, the fair value of assets experienced an investment rate of return of 12.5%, as reported by the investment consultant.

In order to reduce the volatility investment gains and losses can have on the Plan's actuarially required contribution and funded status, the Board has adopted a five-year smoothing method to determine the actuarial value of assets used for funding purposes. This method recognizes gains and losses, i.e. the difference between actual investment return during the year and the expected return based on the valuation interest rate, on a level basis over a five year period. In our opinion, this method complies with Actuarial Standards of Practice No. 44.

As of December 31, 2012, the assets available for benefits on an actuarial value basis were \$7.83 billion. This includes a decrease of \$63.2 million over the actuarial value of assets of \$7.90 billion as of December 31, 2011. During 2012, the actuarial value of assets experienced an actuarial rate of return of 3.1%.

A summary of the assets held for investment, a summary of changes in assets, and the development of the actuarial value of assets is shown in Section 2.

### **Actuarial Experience**

Differences between the expected experience based on the actuarial assumptions and the actual experience create changes in the actuarial accrued liability, actuarial value of assets, and the unfunded actuarial accrued liability from one year to the next. These changes create an actuarial gain if the experience is favorable, and an actuarial loss if the experience is unfavorable. The Plan experienced a total net actuarial loss of \$675.6 million during the prior year. This net loss is about 5.4% of the Plan's prior year actuarial accrued liability. The net loss is a combination of two principal factors, demographic experience and investment performance under actuarial smoothing. Below is a more detailed discussion.

The demographic experience tracks actual changes in the Plan's population compared to the assumptions for decrements such as mortality, turnover, and retirement, as well as pay increases. The Plan experienced a demographic loss of \$299.0 million during the year ending December 31, 2012. This loss increased the unfunded actuarial accrued liability by \$299.0 million and decreased the funded ratio by 1.3%.

There were 20,194 active members who were also reported active in the December 31, 2011 actuarial valuation. The total salary for this group increased by 5.2%, which was higher than the 5.0% increase we expected for the group.

Continued tracking of the demographic experience is warranted in order to confirm the appropriateness of the actuarial assumptions. Details of the demographic, economic, and other assumptions used to value the Plan liabilities and normal cost can be found in Section 4. In our opinion, the economic assumptions comply with Actuarial Standards of Practice No. 27 and the demographic assumptions comply with Actuarial Standards of Practice No. 35.

On the asset side, the Plan experienced a loss on an actuarial value of assets basis. The actual rate of return on the actuarial value of Plan assets for the year ending December 31, 2012 was approximately 3.1% compared to the assumption of 7.5%, resulting in an asset loss of \$376.6 million. This loss increased the unfunded actuarial accrued liability by \$376.6 million and decreased the funded ratio by 1.7%.

The rate of return on the fair value of assets for the year ending December 31, 2012 was higher than the assumed rate of 7.5%. The actuarial value of the assets recognizes only 20% of the 2012 gain on fair value, delaying the recognition of the remaining 80% over the next four years. Moreover, the actuarial value of assets also recognizes deferred portions of prior years' gains and losses on fair value. The investment loss recognized this year is primarily due to the investment loss suffered in 2008. It should be noted that the Plan's assumed asset return of 7.5% is a long-term rate and short-term performance is not necessarily indicative of expected long-term future returns.

A summary of the actuarial gains and losses experienced during the prior year is shown in Section 1.3.

### **Actuarial Contributions**

The current contribution mechanism is not sufficient to fund the CEABF in an actuarially sound manner. The County levies a tax annually equal to the total amount of contributions made by the members in the calendar year 2 years prior to the year of the levy, multiplied by 1.54. This funding policy is insufficient to meet the needs of the CEABF. We project that the CEABF will become insolvent in 2034. We recommend that a funding policy be legislated that is sufficient to pay the Normal Costs of active Plan members, Plan expenses, and amortize the unfunded actuarial accrued liability as a level percent of payroll (or salary) over a period no longer than 30 years. We summarize those costs in the next paragraph.

The normal cost represents the cost of the benefits that accrue during the year for active members under the Entry Age Actuarial Cost Method. It is determined as a level percentage of pay which, if paid from entry age to the assumed retirement age, assuming all the actuarial assumptions are exactly met by experience, would accumulate to a fund sufficient to pay all benefits provided by the Plan. The expected member contributions are subtracted from this amount to determine the employer normal cost. The employer normal cost for 2012 has been determined to be \$155.5 million, or 10.52% of pay. This represents a decrease in the employer normal cost rate of 0.13% of pay from last year's employer normal cost rate of 10.65%.

The cost method also determines the actuarial accrued liability which represents the value of all accumulated past normal cost payments. This amount is compared to the actuarial value of assets to determine if the Plan is ahead or behind in funding as of the valuation date. The difference between the total actuarial accrued liability and the actuarial value of assets equals the amount of unfunded actuarial accrued liability or surplus (if negative) on the valuation date. This amount is amortized and added to the employer normal cost to determine the annual actuarially required employer contribution for the year.

The unfunded actuarial accrued liability as of December 31, 2012 is \$5.6 billion. This represents an increase of \$853.4 million in the unfunded actuarial accrued liability from last year's amount of \$4.7 billion. The annual payment required to amortize the unfunded actuarial accrued liability of \$5.6 billion as of December 31, 2012 is \$439.9 million, or 29.76% of pay.

The annual actuarially required employer contribution for 2013 is \$595.4 million, or 40.3% of pay. This represents an increase of \$55.2 million in the employer contribution amount of \$540.2 million for 2012, or an increase of 3.2% of pay from last year's employer contribution rate of 37.1%.

The actuarial liabilities and development of the annual actuarial employer contribution is shown in Sections 1.1 and 1.2.

In our opinion, the measurement of the benefit obligations and determination of the actuarial cost of the Plan is performed in compliance with Actuarial Standards of Practice No. 4.

### **Funded Status**

The funded status is a measure of the progress that has been made in funding the Plan as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a plan that is ahead in funding, and a ratio of less than 100% represents a plan that is behind in funding on the valuation date.

As of December 31, 2012 the funded ratio of the Plan is 58.4%. This represents a decrease of 4.1% from last year's funded ratio of 62.5% as of December 31, 2011.

A history of the unfunded actuarial accrued liability and the funded ratio is shown in Section 1.6.

### **Accounting Information**

The Governmental Accounting Standards Board (GASB) issues statements which establish financial reporting standards for defined benefit pension plans and accounting for the pension expenditures and expenses for governmental employers. The required financial reporting information for the plan and the employer under GASB No. 25 can be found in Section 3.

## **Changes in Plan Provisions**

There were no changes in benefits or other plan provisions considered in this actuarial valuation since the last valuation performed as of December 31, 2011.

## Changes in Actuarial Assumptions, Methods, or Procedures

There have been no changes in the actuarial assumptions, actuarial cost method, asset valuation method, or valuation procedures since the last actuarial valuation performed as of December 31, 2011.

# Comparative Summary of Key Actuarial Valuation Results

	Actuarial Valuation as of	
	December 31, 2012 December 31, 2012	
Summary of Member Data		
Number of Members Included in the Valuation		
Active Members	21,447	22,037
Retirees and Beneficiaries	16,174	15,555
Inactive Members	11,856	12,584
Total	49,477	50,176
Annual Payroll		
Average (actual)	\$68,926	\$66,091
Annual Benefit Payments		
Retirees and Beneficiaries (Average) <sup>1</sup>	\$32,412	\$30,920
Investment Returns		
Fair Value - Rate of Return (7.5% expected)	12.5%	1.2%
Actuarial Value - Rate of Return	3.1%	1.7%
Summary of Assets and Liabilities		
Total Actuarial Accrued Liability	\$13,418,486,943	\$12,628,274,561
Actuarial Value of Assets	\$ 7,833,882,926	\$ 7,897,102,116
Unfunded Actuarial Accrued Liability	\$ 5,584,604,017	\$ 4,731,172,445
Funded Ratio	58.38%	62.54%
Employer Actuarial Required Contribution		
Employer Normal Cost	\$ 155,504,629	\$ 155,096,778
Amortization of Unfunded Actuarial Accrued Liability (Surplus)	\$ 439,865,417	\$ 385,121,509
Employer Actuarial Required Contribution	\$ 595,370,046	\$ 540,218,287

<sup>&</sup>lt;sup>1</sup> The average annual benefit payments for retirees only is \$35,795 as of December 31, 2012.

# **Actuarial Liabilities and Normal Cost**

# Section 1.1

### For The Fiscal Year ending December 31, 2012

Actuarial Liabilities	<b>Totals</b>
1. Present Value of Projected Benefits	
for Active Members	
Retirement Benefits	\$ 7,535,625,570
Withdrawal Benefits	596,460,140
Death Benefits	171,712,933
Total	8,303,798,643
2. Retired Members and Beneficiaries Receiving Benefits	6,431,295,762
3. Inactive Members with Deferred Benefits	811,347,220
4. Total Present Value of Projected Benefits (1. + 2. + 3.)	15,546,441,625
5. Present Value of Future Normal Costs	2,127,954,682
6. Total Actuarial Accrued Liability (4. – 5.)	\$13,418,486,943

Normal Cost		<b>Totals</b>	% of Pay
1. Active Members			
a. Retirement Benefits	\$	208,602,016	14.11%
b. Withdrawal Benefits		55,625,745	3.76%
c. Duty Disability Benefits		62,254	0.00%
d. Ordinary Disability Benefits		6,351,860	0.43%
e. Death Benefits		6,180,310	0.42%
f. Administrative Expenses		4,518,521	0.31%
2. Total Normal Cost	_	281,340,706	19.03%
3. Expected Member Contribution	_	125,836,077	8.51%
4. Employer Normal Cost (2 3.)	\$	155,504,629	10.52%

## **Actuarial Contributions**

	Fiscal Year Ending December 31,	
Development of Employer Contribution	<u>2013</u>	<u>2012</u>
1. Annual Payroll	\$ 1,478,253,368	\$1,456,444,123
2. Total Actuarial Accrued Liability		
a. Active Members		
i. Retirement Benefits	5,804,734,425	
ii. Withdrawal Benefits	249,465,720	
iii. Death Benefits	121,643,816	
iv. Total	6,175,843,961	5,898,999,012
b. Retired Members and Beneficiaries Receiving Benefits	6,431,295,762	5,902,779,764
c. Inactive Members with Deferred Benefits	811,347,220	826,495,785
d. Total $(2.a.iv. + 2.b. + 2.c.)$	13,418,486,943	12,628,274,561
3. Actuarial Value of Assets	7,833,882,926	7,897,102,116
4. Unfunded Actuarial Accrued Liability (UAAL) (2.d 3.)	5,584,604,017	4,731,172,445
5. Funded Ratio (3. / 2.d.)	58.38%	62.54%
6. UAAL as a Percent of Annual Payroll (4. / 1.)	377.78%	324.84%
7. Amortization Payment for UAAL		
a. Amount	439,865,417	385,121,509
b. As a % of pay	29.76%	26.44%
8. Employer Normal Cost		
a. Amount	155,504,629	155,096,778
b. As a % of pay	10.52%	10.65%
9. Employer Actuarial Required Contribution		
a. Amount	595,370,046	540,218,287
b. As a % of pay	40.28%	37.09%
10. Funding Period (years)	30	30

<sup>\*</sup> The contribution rates above are amounts needed to fund the CEABF in an actuarially responsible manner.

# Actuarial (Gain)/Loss

Development of Actuarial (Gain) / Loss	<b>Amount</b>
1. Expected Actuarial Accrued Liability	
a. Actuarial Accrued Liability at December 31, 2011	\$12,628,274,561
b. Normal Cost at December 31, 2011	155,096,778
c. Interest on a. + b. to End of Year	958,752,850
d. Benefit Payments and Administrative Expenses	
for December 31, 2011, with Interest to End of Year	622,588,016
e. Expected Actuarial Accrued Liability Before Changes	
(a. + b. + c d.)	13,119,536,173
f. Change in Actuarial Accrued Liability at December 31, 2012,	
due to Change in Actuarial Assumptions	0
g. Change in Actuarial Accrued Liability at December 31, 2012,	
due to Change in Plan Provisions	0
h. Expected Actuarial Accrued Liability at December 31, 2012	
(e. + f. + g.)	13,119,536,173
2. Actuarial Accrued Liability at December 31, 2012	13,418,486,943
3. Liability (Gain) / Loss (2. – 1.h.)	298,950,770
4. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets at December 31, 2011	7,897,102,116
b. Interest on a. to End of Year	592,282,659
c. Contributions Made for December 31, 2011	331,482,063
d. Interest on c. to End of Year	12,205,855
e. Benefit Payments and Administrative Expenses	
for December 31, 2011, with Interest to End of Year	622,588,016
f. Change in Actuarial Value of Assets at December 31, 2012	
due to Change in Method	0
g. Expected Actuarial Value of Assets at December 31, 2012	
(a. + b. + c. + d e f.)	8,210,484,677
5. Actuarial Value of Assets as of December 31, 2012	7,833,882,926
6. Actuarial Asset (Gain) / Loss (4.g 5.)	376,601,751
7. Actuarial (Gain) / Loss (3. + 6.)	675,552,521

# **Analysis of Financial Experience**

## Section 1.4

### Analysis of Actuarial (Gains) and Losses Resulting From Differences Between Assumed Experience and Actual Experience

Type of (Gain) or Loss	Year End December 31, 2012	As % of Last Year's AAL
1. COLA Experience	\$ 0	0.00%
2. Salary Experience	34,073,219	0.27%
3. Investment Experience	(339,499,232)	-2.69%
4. Retiree Mortality Experience	(87,322,837)	-0.69%
5. Contribution Shortfall	349,497,511	2.77%
6. (Gain) or Loss During Year From Experience,		
(1. + 2. + 3. + 4. + 5.)	(43,251,339)	-0.34%
7. Asset Valuation Method	716,100,983	5.67%
8. Past Service Amortization Change	0	0.00%
9. Assumption and Method Changes	0	0.00%
10. Benefit Changes	0	0.00%
11. Other (turnover, retirement ages, service purchase, etc.)	2,702,877	0.02%
12. Total (Gain) or Loss During Year,	675,552,521	5.35%
(6. + 7. + 8. + 9. + 10. + 11.)		

## **Actuarial Balance Sheet**

Financial Resources	<u>December 31, 2012</u>
1. Actuarial Value of Assets	\$ 7,833,882,926
2. Present Value of Future Contributions	
a. Expected Member Contributions	951,776,488
b. Employer Normal Cost	1,176,178,194
c. Total	2,127,954,682
3. Unfunded Actuarial Accrued Liability/(Reserve)	5,584,604,017
4. Total Assets (1. + 2.c. + 3.)	15,546,441,625
Benefit Obligations	
1. Present Value of Future Benefits	
a. Active Members	8,303,798,643
b. Retirees and Beneficiaries	6,431,295,762
c. Inactive Members	811,347,220
d. Total	15,546,441,625

# History of UAAL and Funded Ratio

## Section 1.6

	Actuarial	Actuarial		Unfunded
Valuation Dat	te Accrued	Value	<b>Funded Ratio</b>	Actuarial
December 31,	Liability (AAL)	of Assets (AVA)	(AVA as a % of AAL)	<b>Accrued Liability (UAAL)</b>
2003	\$ 8,780,969,704	\$5,929,201,142	67.52%	\$2,851,768,562
2004	9,450,784,086	6,700,845,111	70.90%	2,749,938,975
2005	9,269,944,133	7,027,508,138	75.81%	2,242,435,995
2006 1	8,826,581,465	7,462,683,122	84.55%	1,363,898,343
2007 1	9,386,287,797	8,059,879,804	85.87%	1,326,407,993
2008 1	10,097,027,865	8,036,074,797	79.59%	2,060,953,068
2009 1	11,489,081,298	7,945,567,096	69.16%	3,543,514,202
2010 1	12,023,222,885	7,982,368,659	66.39%	4,040,854,226
2011 1	12,628,274,561	7,897,102,116	62.54%	4,731,172,445
2012 1	13,418,486,943	7,833,882,926	58.38%	5,584,604,017

<sup>&</sup>lt;sup>1</sup> Pension benefits only

# Reconciliation of Change in Unfunded Actuarial Liability

Development of Unfunded Actuarial Liability	<u>Amount</u>
1. Unfunded Actuarial Accrued Liability as of December 31, 2011	\$4,731,172,445
2. Employer Contribution Requirement of Normal Cost Plus Interest	
on Unfunded Liability for Period January 1, 2012 to December 31, 2012	366,470,192
3. Actual Employer Contribution for the Year, Plus Interest	197,743,509
4. Increase in Unfunded Liability Due to Employer Contribution Plus	
Interest Being Less Than Normal Cost Plus Interest on Unfunded Liability (2 3.)	168,726,683
5. Increase in Unfunded Liability Due to Investment Return Lower Than Assumed	376,601,751
6. Increase in Unfunded Liability Due to Salary Increases Higher Than Assumed	34,073,219
7. Increase in Unfunded Liability Due to Other Sources	274,029,919
8. Net Increase in Unfunded Liability for the Year (4. + 5. + 6. + 7.)	853,431,572
9. Unfunded Actuarial Liability as of December 31, 2012 (1.+ 8.)	\$5,584,604,017

# **Summary of Fair Value of Assets**

**Section 2.1** 

		Fair Value	e as of December 31,	
	<u>201</u>	<u>2012</u> <u>2011</u>		
Asset Category	<b>Amount</b>	<u>%</u>	<b>Amount</b>	<u>%</u>
1. Short-Term Investments	\$ 635,490,514	7.58%	\$ 912,458,238	11.84%
2. Investments at Fair Value				
a. U.S. and International Equities	3,135,494,813	37.42%	2,814,605,044	36.52%
b. U.S. Government and Government Agency Obligations	1,582,287,173	18.88%	1,969,108,673	25.56%
c. Corporate Bonds	831,881,515	9.93%	755,644,972	9.81%
d. Collective International Equity Fund	54,676,384	0.65%	44,816,703	0.58%
e. Commingled Fixed Income Fund	23,986,193	0.29%	0	0.00%
f. Exchange Traded Funds	555,481,344	6.63%	483,793,099	6.28%
g. Private Equities	56,090,408	0.67%	70,555,750	0.92%
h. Hedge Funds	688,873,338	8.22%	0	0.00%
i. Real Estate	302,749,975	3.61%	202,393,145	2.63%
j. Total	7,231,521,143	86.30%	6,340,917,386	82.30%
3. Collateral Held for Securities Lending	512,631,466	6.12%	451,548,916	5.86%
4. Total Assets (1. + 2.j. + 3.)	8,379,643,123	100.00%	7,704,924,540	100.00%
5. Receivables				
a. Interest and Dividends	22,652,456		24,598,911	
b. Investments Sold	34,897,859		117,686,754	
c. Other Receivables	223,761,690		223,260,971	
d. Total	281,312,005		365,546,636	
6. Payables				
a. Investments Purchased	72,893,623		160,952,998	
b. Securities Lending Collateral	512,631,466		451,548,916	
c. Other Payables	15,494,411		16,726,012	
d. Total	601,019,500		629,227,926	
7. Net Assets for Pension Benefits [4. + 5.d. – 6.d.]	8,059,935,628		7,441,243,250	

# **Changes in Fair Value of Assets**

Section 2.2

Transactions	<u>December 31, 2012</u>	<u>December 31, 2011</u>	
Additions			
1. Contributions			
a. Contributions from Employers	\$ 190,720,776	\$ 195,337,621	
b. Contributions from Plan Members	130,570,599	127,577,473	
c. Total	321,291,375	322,915,094	
2. Net Investment Income			
a. Interest and Dividends	193,690,658	195,840,034	
b. Net Appreciation (Depreciation)	710,479,251	(98,992,361)	
c. Net Securities Lending Income	3,143,196	2,507,150	
d. Total	907,313,105	99,354,823	
e. Less Investment Expense	19,625,586	16,653,790	
f. Net Investment Income	887,687,519	82,701,033	
g. Miscellaneous	9,984,812	17,942,902	
h. Employee Transfers	205,877	(328,586)	
3. Total Additions	1,219,169,583	423,230,443	
Deductions			
4. Benefits and Expenses			
a. Retirement Benefits	563,092,126	523,396,627	
b. Refund of Contributions	33,081,726	29,165,335	
c. Administrative Expenses	4,303,353	4,078,843	
5. Total Deductions	600,477,205	556,640,805	
6. Net Increase (Decrease)	618,692,378	(133,410,362)	
7. Net Assets Held in Trust for Pension Benefits			
a. Beginning of Year	7,441,243,250	7,574,653,612	
b. End of Year	8,059,935,628	7,441,243,250	

# **Actuarial Value of Assets**

Section 2.3

Development of Actuarial Value of As	ssets		<b>Amount</b>
1. Actuarial Value of Assets as of Decer	nber 31, 2011		\$7,897,102,116
2. Unrecognized Return as of Decembe	r 31, 2011		(455,858,866)
3. Fair Value of Assets as of December			7,441,243,250
4. Contributions			
a. Member (includes purchased ser	vice)		130,570,599
b. Employer			190,720,776
c. Miscellaneous contributions			10,190,689
d. Total			331,482,064
5. Distributions			
a. Benefit payments			563,092,126
b. Refund of contributions			33,081,726
c. Administrative expenses			4,303,353
d. Total			600,477,205
6. Expected Return at 7.50% on			
a. Item 1.			592,282,659
b. Item 2.			(34,189,415)
c. Item 4.d.			12,205,855
d. Item 5.d.			22,110,812
e. Total $(a. + b. + c d.)$			548,188,287
7. Actual Return on Fair Value for Fisca	al Year, Net of Investmen	t Expenses	887,687,519
8. Return to be Spread for Fiscal Year (	7. – 6.e.)		339,499,232
9. Total Fair Value of Assets as of Dece	mber 31, 2012		8,059,935,628
10. Return to be Spread			
Eigent Voor	Return to	Unrecognized	Unrecognized
<u>Fiscal Year</u> 2012	<u>be Spread</u> 339,499,232	Percent 80%	<u>Return</u> 271,599,386
2012	(477,440,319)	60%	(286,464,191)
2010	320,259,720	40%	128,103,888
2009	564,068,096	20%	112,813,619
2008	(2,458,448,408)	0%	0
		Total	226,052,702
11. Actuarial Value of Assets (9. – 10.)			7,833,882,926
12. Recognized Rate of Return for the Ye	ear on Actuarial Value of	Assets	3.10%
13. Rate of Return for the Year on Marke	et Value of Assets (report	ed by investment consulta	ant) 12.50%

# **Schedule of Funding Progress**

Section 3.1

The GASB Statement No. 25 liabilities and assets resulting from the last ten actuarial valuations are as follows:

		<b>Actuarial Accrued</b>				UAAL as a
	Actuarial	Liability (AAL)	Unfunded AAL	Funded	Covered	Percentage of
Actuarial	Value of Assets	Entry Age	(UAAL)	Ratio	Payroll	Covered Payroll
Valuation Date	<u>(a)</u>	<u>(b)</u>	<u>(b-a)</u>	<u>(a/b)</u>	<u>(c)</u>	$\frac{(b-a)/(c)}{(c)}$
December 31, 2003	\$5,929,201,142	\$ 8,780,969,704	\$2,851,768,562	67.52%	\$1,307,079,312	218.18%
December 31, 2004	6,700,845,111	9,450,784,086	2,749,938,975	70.90%	1,371,540,481	200.50%
December 31, 2005	7,027,508,138	9,269,944,133	2,242,435,995	75.81%	1,387,459,142	2 161.62%
December 31, 2006 1	7,462,683,122	8,826,581,465	1,363,898,343	84.55%	1,412,878,627	96.53%
December 31, 2007 <sup>1</sup>	8,059,879,804	9,386,287,797	1,326,407,993	85.87%	1,370,844,734	96.76%
December 31, 2008 1	8,036,074,797	10,097,027,865	2,060,953,068	79.59%	1,463,372,408	3 140.84%
December 31, 2009 1	7,945,567,096	11,489,081,298	3,543,514,202	69.16%	1,498,161,713	3 236.52%
December 31, 2010 1	7,982,368,659	12,023,222,885	4,040,854,226	66.39%	1,494,093,569	270.46%
December 31, 2011 1	7,897,102,116	12,628,274,561	4,731,172,445	62.54%	1,456,444,123	324.84%
December 31, 2012 <sup>1</sup>	7,833,882,926	13,418,486,943	5,584,604,017	58.38%	1,478,253,368	377.78%

<sup>&</sup>lt;sup>1</sup> Pension benefits only

# **Schedule of Employer Contributions**

Section 3.2

The GASB Statement No. 25 required contributions and actual percentages contributed over the last ten years are as follows:

Fiscal Year Ended	<b>Employer Annual Required</b>		Percentage
December 31,	Contribution (ARC)	<b>Employer Contribution</b>	<b>Contributed</b>
2003	\$364,658,305	\$185,608,032	50.90%
2004	457,427,014	201,957,937	44.15%
2005	428,971,126	218,292,478	50.89%
2006	282,223,686 1	198,619,984 1	70.38%
2007	287,061,532 1	230,114,335 1	80.16%
2008	283,892,734 1	150,227,360 1	52.92%
2009	352,850,988 1	152,506,089 1	43.22%
2010	454,327,461 1	144,539,577 1	31.81%
2011	493,724,370 1	160,652,118 1	32.54%
2012	540,218,287 1	152,734,539 1	28.27%

<sup>&</sup>lt;sup>1</sup> Pension benefits only

# **Net Pension Obligation and Annual Pension Cost**

Section 3.3

Net Pension Obligation as of December 31, 2012	<b>Amount</b>
1. NPO as of December 31, 2011	\$1,830,261,882
2. Annual Required Contribution (ARC)	540,218,287
3. Interest on NPO	137,269,641
4. Adjustment to ARC	(144,158,638)
5. Annual Pension Cost for 2012 (2. + 3. + 4.)	533,329,290
6. Total Employer Contribution for 2012	152,734,539
7. NPO as of December 31, 2012 (1. + 5. + 6.)	2,210,856,633

### **Notes to Trend Data**

Section 3.4

#### Actuarial Assumptions, Method and Additional Information under GASB No. 25

Valuation Date: 12/31/2012 Actuarial Cost Method: Entry Age

Amoritization Method: Level dollar, open

Remaining amoritzation period: 30

Asset valuation method: 5 year smoothed market value

Actuarial assumptions:

Investment Rate of Return 7.50% Projected Salary Increases 5.00% Inflation Assumption 3.00%

### **Brief Summary of Benefit Provisions**

Section 4.1

<u>Participant.</u> A person employed by the County whose salary or wages is paid in whole or in part by the County. An employee in service on or after January 1, 1984 shall be deemed as a participant regardless of when he or she became an employee.

<u>Service</u>. For all purposes except the minimum retirement annuity and ordinary disability benefit, service during four months in any calendar year constitutes one year of service. For the minimum retirement annuity, all service is computed in whole calendar months. Service for any 15 days in a calendar month shall constitute a month of service.

For purposes of the minimum retirement annuity, service shall include:

- a. Any time during which the employee performed the duties of his or her position and contributed to the County Employees' and Officers' Annuity and Benefit Fund of Cook County (CEABF).
- b. Vacations and leaves of absence with whole or part pay.
- c. Periods during which the employee receives a disability benefit from the CEABF, and
- d. Certain periods of accumulated sick leave.

<u>Retirement Annuity - Eligibility</u>. An employee who withdraws from service with 10 or more years of service is entitled to a retirement annuity upon attainment of age 50.

#### **Retirement Annuity - Amount**

Money Purchase Annuity. The amount of annuity based on the sum accumulated from the employee's salary deductions for age and service annuity plus 1/10 of the sum accumulated from the contributions by the County for age and service annuity for each completed year of service after the first 10.

Minimum Formula Annuity. The amount of annuity provided is equal to 2.4% of final average salary for each year of service. Final average salary is the highest average monthly salary for any 48 consecutive months within the last 10 years of service. Salary for pension purposes is actual salary earned exclusive of overtime or extra salary. The maximum amount of annuity is 80% of final average salary.

If an employee retires before age 60, the annuity is reduced by .5% for each full month or fraction thereof that the employee is under age 60 when the annuity begins, unless the employee has 30 or more years of service, in which case there is no reduction for retirement before age 60.

If the Minimum Formula Annuity is greater than the Money Purchase Annuity, the employee is entitled to receive the Minimum Formula Annuity.

<u>Automatic Increase in Retirement Annuity</u>. Employees who retire from service having attained age 60 or more, or, if retirement occurs on or after January 1, 1991, with at least 30 years of service, 3% of the annuity beginning January of the year following the year in which the first anniversary of retirement occurs. If retirement is before age 60 with less than 30 years of service, increases begin in January of the year immediately following the year in which age 60 is attained. Beginning January 1, 1998, increases are calculated as 3% of the monthly annuity payable at the time of the increase.

### **Brief Summary of Benefit Provisions (continued)**

Section 4.1

Optional Plan of Contributions and Benefits. During the period through June 30, 2005, an employee may establish optional credit for additional benefits by making additional contributions of 3% of salary. The additional benefit is equal to 1% of final average salary for each year of service for which optional contributions have been paid. The additional benefit shall be included in the calculation of the automatic annual increase and the calculation of the survivor's annuity.

Alternate Annuity for County Officers. An alternate annuity is available for county officers elected on or before January 1, 2008. The amount of this alternate annuity is equal to 3% of final salary for the first 8 years of service, 4% for the next 4 years of service, and 5% thereafter, subject to a maximum of 80% of final salary. The elected county officer is required to contribute an additional 3% of salary to be eligible for the alternate annuity. The alternate survivor's annuity for survivors of elected county officers is 66-2/3% of the amount of the elected county officer's earned retirement annuity on the date of death, subject to a minimum payment of 10% of salary.

<u>Annuities for Members of the Cook County Police Department.</u> In lieu of the regular of minimum retirement annuity, a deputy sheriff who is a member of the County Police Department may be entitled to the following annuity:

Upon withdrawal from service after having attained age 50 in service with 20 or more years of service credit as a police officer, the officer shall be entitled to an annuity computed as follows: 50% of final average salary, plus 2% of final average salary for each year of service in excess of 20 years, subject to a maximum of 80% of final average salary.

#### Surviving Spouse's Annuity - Death in Service

Money Purchase Annuity. The amount of annuity based on the accumulated salary deductions and County contributions for both the employee and the spouse.

Minimum Formula Annuity. A minimum annuity is provided for the eligible surviving spouse of an employee who dies in service with any number of years of service. The amount of such minimum spouse's annuity is equal to 65% of the annuity the employee would have been entitled to as of the date of death, provided the spouse on such date is age 55 or older, or that the employee had 30 or more years of service. If the spouse is under age 55 and the employee had less than 30 years of service, the amount of the spouse's annuity shall be discounted by .5% for each month that the spouse is less than age 55 on the date of the employee's death. The amount of the surviving spouse's annuity shall not be less than 10% of the employee's final average salary as of the date of death.

If the Minimum Formula Annuity is greater than the Money Purchase Annuity, the surviving spouse shall be entitled to receive the Minimum Formula Annuity.

Surviving Spouse's Annuity - Death after Retirement. The amount of the annuity is the greater of the money purchase annuity or the minimum formula annuity. The surviving spouse of an annuitant who dies on or after July 1, 2002 shall be entitled to an annuity of 65% of the employee's annuity at the time of death if the employee had at least 10 years of service, reduced by .5% per month that the spouse is under age 55 at the time of the employee's death. There is no reduction for age if the employee had at least 30 years of service.

### **Brief Summary of Benefit Provisions (continued)**

Section 4.1

Automatic Annual Increase in Surviving Spouse's Annuity. On the January 1 occurring on or immediately after the first anniversary of the deceased employee's death, the surviving spouse's annuity shall be increased by 3% of the amount of annuity payable at the time of the increase. On each January 1 thereafter, the annuity shall be increased by an additional 3% of the amount of annuity payable at the time of the increase.

<u>Child's Annuity.</u> Annuities are provided for unmarried children of a deceased employee who are under age 18. An adopted child is entitled to the child's annuity if such child was legally adopted at least one year before the child's annuity becomes payable. The child's annuity is payable under the following conditions:

- (a) the death of the employee was a duty related death; or (b) if the death is not a duty related death, the employee died while in service and had completed at least four years of service from the date of his or her original entrance in service and at least two years from the latest re-entrance; or (c) if the employee died while in receipt of an annuity, her or she must have withdrawn from service after attainment of age 50.
- (b) The amount of the annuity is the greater of 10% of the employee's final salary at the date of death or \$140 per month for each child.

<u>Duty Disability Benefits.</u> Duty disability benefits are payable to an employee who becomes disabled as a result of an accidental injury incurred while in the performance of an act of duty. Benefits begin on the first regular and normal work date for which the employee does not receive a salary. The amount of the duty disability benefit is equal to 75% of the employee's salary at the date of injury, reduced by the amount the employee receives from Workers' Compensation. However, if the disability, in any measure has resulted from any physical defect or disease that existed at the time such injury was sustained, the duty disability benefit shall be 50% of salary. The CEABF contributes the 8.5% (9% for County Police) of salary normally contributed by the employee for pension purposes.

If the disability commences prior to age 60, duty disability benefits are payable during disability until the employee attains age 65. If the disability begins after age 60, the benefit is payable during disability for a period of 5 years.

Recipients of duty disability benefits also have a right to receive child's disability benefits of \$10 per month on account of each unmarried child less than age 18. Total children's disability benefits shall not exceed 15% of the employee's salary.

Ordinary Disability Benefits. Ordinary disability benefits are provided for employees who become disabled as the result of any cause other than injury incurred in the performance of an act of duty. The amount of the benefit is 50% of the employee's annual salary at the time of disability. The CEABF also contributes the 8.5% (9% for County Police) of salary normally contributed by the employee for pension purposes.

Ordinary disability benefits are payable after the first 30 days of disability provided the employee is not then in receipt of salary. Ordinary disability benefits are payable until the first of the following shall occur:

- (a) the disability ceases; or
- (b) the date that total payments equal the lesser of (1) 1/4 of the total service rendered prior to disability, and (2) five years.

An employee unable to return to work at the expiration of ordinary disability benefit is entitled to an annuity beginning on the date of the employee's withdrawal from service regardless of age on such date.

### **Brief Summary of Benefit Provisions (continued)**

Section 4.1

<u>Death Benefit.</u> Upon the death of an active or retired employee, a death benefit of \$1,000 is payable to the employee's designated beneficiary or to the employee's estate if no beneficiary has been designated.

<u>Group Health Benefits</u>. CEABF may pay all or any portion of the premium for health insurance on behalf of each annuitant who participates in any of the CEABF's health care plans. As of January 1. 2005, the CEABF is paying approximately 55% of the premiums for retiree annuitants and approximately 70% of the premiums for survivor annuitants.

Refund to Employee Upon Withdrawal From Service. Upon withdrawal from service, an employee under the age of 55, or anyone with less than 10 years of service is eligible for a refund. The employee is entitled to a refund of the amount accumulated to his or her credit for age and service annuity and the survivor's annuity together with the total amount contributed for the automatic annual increase, without interest. Upon receipt of such refund, the employee forfeits all rights to benefits from the CEABE.

<u>Election of Refund in Lieu of Annuity.</u> If an employee's annuity or spouse's annuity is less than \$150.00 per month, such employee or spouse annuitant may elect a refund of the employee's accumulated contributions in lieu of a monthly annuity.

<u>Refund For Surviving Spouse's Annuity.</u> If an employee is unmarried at the time of retirement, all contributions for surviving spouse's annuity will be refunded with interest at the rate of 3% per year, compounded annually.

<u>Refund of Remaining Amounts</u>. In the event that the total amount accumulated to the account of employee from employee contributions for annuity purposes has not been paid to the employee and surviving spouse as a retirement or surviving spouse's annuity before the death of the survivor of the employee and spouse, a refund of any excess amount shall be paid to the children of the employee, in equal parts, or if there are no children, to the beneficiaries of the employee or the administrator of the estate.

Employee Contributions. Employees contribute through salary deductions 8.5% (9% for County Police) of salary to the CEABF, 6.5% (7% for County Police) being for the retirement annuity, 1.5% being for the surviving spouse's annuity, and .5% being for the automatic increase in retirement annuity.

<u>Employer Contributions.</u> The County levies a tax annually equal to the total amount of contributions made by employees in the calendar year 2 years prior to the year of the levy, multiplied by 1.54.

Employer Pick-up of Employee Contributions. Since April 15, 1982, regular employee contributions have been designated for federal income tax purposes as being made by the employer. The employee's W-2 salary is therefore reduced by the amount of contribution. For pension purposes, the salary remains unchanged. For purposes of benefits, refunds, and financing, these contributions are treated as employee contributions.

### **Brief Summary of Benefit Provisions (continued)**

Section 4.1

#### Persons Who First Become Participants On or After January 1, 2011

The following changes to the aforementioned provisions apply to persons who first become participants on or after January 1, 2011:

- 1. The highest salary for annuity purposes is equal to the average monthly salary obtained by dividing the participant's total salary during the 96 consecutive months of service within the last 120 months of service in which the total compensation was the highest by the number of months in that period.
- 2. For 2011, the annual salary is limited to the Social Security wage base of \$106,800. Limitations for future years shall automatically be increased by the lesser of 3% or one-half the annual unadjusted percentage increase (but not less than zero) in the Consumer Price Index-U for the 12 months ending in September.
- 3. A participant is eligible to retire with unreduced benefits at age 67 with at least 10 years of service credit. However, a participant may elect to retire at age 62 with at least 10 years of service credit and receive a retirement annuity reduced by one-half of 1% for each month that his or her age is under 67.
- 4. The initial survivor's annuity is equal to 66-2/3% of the participant's earned retirement annuity at the date of death, subject to automatic annual increases of the lesser of 3% or one-half the annual unadjusted percentage increase (but not less than zero) in the Consumer Price Index-U for the 12 months ending in September, based on the originally granted survivor's annuity.
- 5. Automatic annual increases in the retirement annuity then being paid are equal to the lesser of 3% or one-half the annual unadjusted percentage increase (but not less than zero) in the Consumer Price Index-U, whichever is less, based on the originally granted retirement annuity.
- 6. Refund upon withdrawal from service. Upon withdrawal from service, an employee who withdraws from service before age 62 regardless of length of service or withdraws with less than 10 years of service regardless of age is entitled to a refund of total contributions made by the employee without interest.

## Description of Actuarial Methods and Valuation Procedures Section 4.2

#### A. Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Entry Age Actuarial Cost Method of funding.

Sometimes called a "funding method," this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the Plan if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the plan.

The Normal Cost for the plan is determined by summing individual results for each active member and determining an average normal cost rate by dividing the summed individual normal costs by the total payroll of members before assumed retirement age.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the Normal Cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date.)

The **Unfunded Actuarial Accrued Liability** is the excess of the Actuarial Accrued Liability over the Actuarial Value of Plan Assets actually on hand on the valuation date. The Unfunded Actuarial Accrued Liability is amortized as a level percent of payroll over an open 30-year period.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the Unfunded Actuarial Accrued Liability.

## Description of Actuarial Methods and Valuation Procedures (continued) Section 4.2

#### **B.** Asset Valuation Method

The actuarial value of assets is based on a five-year smoothing method and is determined by spreading the effect of each year's investment return in excess of or below the expected return. The fair value of assets at the valuation date is reduced by the sum of the following:

- (i) 80% of the return to be spread during the first year preceding the valuation date,
- (ii) 60% of the return to be spread during the second year preceding the valuation date,
- (iii) 40% of the return to be spread during the third year preceding the valuation date, and
- (iv) 20% of the return to be spread during the fourth year preceding the valuation date.

The return to be spread is the difference between (1) the actual investment return on fair value and (2) the expected return on fair value.

#### C. Valuation Procedures

No actuarial liability is included for members who terminated non-vested prior to the valuation date, except those due a refund of contributions.

No termination or retirement benefits were projected to be greater than the dollar limitation required by the Internal Revenue Code Section 415 for governmental plans.

Annual increases in salary were limited to the dollar amount defined under Internal Revenue Code Section 401(a)(17) for affected members.

## Summary of Actuarial Assumptions and Changes in Assumptions Section 4.3

The actuarial assumptions used for the December 31, 2012 actuarial valuation are summarized below. Consistent with past practice, the mortality rate, termination rate, retirement rate, and salary assumptions are based on an experience analysis of CEABF, over the period 2005 through 2008. These assumptions were adopted by the Board as of December 31, 2009. This experience study was performed by the prior actuary. For the December 31, 2012 actuarial valuation, Buck Consultants was retained as the actuarial consultant.

Mortality Rates. The UP-1994 Mortality Table for Males, rated down 2 years, and the UP-1994 Mortality Table for Females, rated down 1 year.

<u>Termination Rates.</u> Termination rates based on the recent experience of the CEABF were used. The following is a sample of the termination rates used:

### Rates of Termination Age at Entrance

		Males			Females	;
Attain Age	ed 27	32	37	27	32	37
27	.145			.183		
32	.116	.165		.117	.165	
37	.030	.105	.141	.030	.093	.114
42	.030	.030	.085	.030	.030	.060
47	.030	.030	.030	.030	.030	.030

### Summary of Actuarial Assumptions and Changes in Assumptions (continued) Section 4.3

<u>Retirement Rates</u>. For persons who became participants prior to January 1, 2011, rates of retirement for each age from 50 to 75 based on the recent experience of the CEABF were used. The following are samples of the rates of retirement used:

Less Than 30 Years of Service at Retirement

	Rates of R	Retirement
<u>Age</u>	<b>Males</b>	<b>Females</b>
50	.010	.012
55	.060	.072
60	.250	.216
65	.150	.120
70	.250	.200
75	1.000	1.000

#### 30 or More Years of Service at Retirement

	Rates of F	Rates of Retirement		
<u>Age</u>	<b>Males</b>	<b>Females</b>		
50	.150	.128		
55	.300	.213		
60	.375	.230		
65	.270	.120		
70	.450	.200		
75	1.000	1.000		

Retirement Rates for Deputy Sheriffs Who Are Members of the Cook County Police Department With 20 or More Years of Service at Retirement

	Rates of 1	Rates of Retirement		
<u>Age</u>	<b>Males</b>	<b>Females</b>		
50	.211	.211		
55	.169	.169		
60	.382	.382		
65	1.000	1.000		

### Summary of Actuarial Assumptions and Changes in Assumptions (continued) Section 4.3

<u>Retirement Rates</u>. For persons who became or will become participants on or after January 1, 2011, rates of retirement for each age from 62 to 75 were used. The following are samples of the rates of retirement that were used:

	Rates of R	Rates of Retirement		
<u>Age</u>	<b>Males</b>	<b>Females</b>		
62	.400	.350		
64	.225	.150		
67	.400	.350		
70	.450	.200		
75	1.000	1.000		

Salary Progression. 5.0% per year, compounded annually.

Interest Rate. 7.5% per year, compounded annually.

Medical Trend Rate. 8% in the first year, decreasing by .5% per year until an ultimate rate of 5% is reached.

<u>Loading for Reciprocal Benefits</u>. Costs and liabilities of active employees were loaded by 1% for reciprocal annuities where the County is the last employer. It was assumed that 50% of inactive members with one or more year of service would receive a reciprocal annuity where the County is not the last employer. These reciprocal annuities were valued as of the member's retirement date as 10 times an inactive member's accumulated contributions.

Marital Status. 85% of participants were assumed to be married.

Spouse's Age. The spouse of a male employee was assumed to be four years younger than the employee. The spouse of a female employee was assumed to be four years older than the age of the employee.

<b>Glossary of Terms</b>	Section 4.4
Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of Plan members to the years of service that give rise to that cost.
Actuarial Present Value of Future Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual	
Required Contribution	Disclosure measure of annual pension cost.
GASB 25	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated.
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature plan. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.

# **Actuarial Certification - Retiree Health Benefits**

**buck**consultants

A Xerox Company

April 30, 2013

Board of Trustees County Employees' and Officers' Annuity and Benefit Fund of Cook County Chicago, Illinois

#### Certification of Actuarial Valuation

Ladies and Gentlemen:

These results summarize the annual actuarial valuation results of County Employees' and Officers' Annuity and Benefit Fund of Cook County ("CEABF" or "the Fund") as of December 31, 2012 performed by Buck Consultants, LLC.

The purpose of this valuation is to determine the Annual Required Contribution ("ARC") for the Plan year January 1, 2013 through December 31, 2013, as well as the funded status of the Plan as of the valuation date, December 31, 2012. The ARC and funded status are determined in accordance with GASB Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans* ("GASB 43"). The results may also be used by the government of Cook County for use in determining the County's ARC and Annual OPEB Cost ("AOC") in accordance with GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefit Other Than Pensions* ("GASB 45").

The actuarial valuation is based on unaudited financial data, working rates, plan information and census data provided by Fund staff. The calculations rely on this information, and are only as accurate as the information provided. The benefits considered in this valuation are postretirement health only. The County may offer other postemployment benefits that warrant measurement under GASB 45. However, the scope of this valuation is limited to the County's postretirement health and welfare benefit program. The actuary did not verify the data and information submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable.

The Fund is currently not funded for health liabilities. We recommend that a funding policy be legislated that is sufficient to pay the Normal Costs of active Plan members, Plan expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percent of payroll (or salary) over a period no longer than 30 years.

123 North Wacker Drive, Suite 1000 • Chicago, IL 60606 312.846.3000 • 312.846.3999 (fax)

#### **Actuarial Certification - Retiree Health Benefits (continued)**

# **buck**consultants

A Xerox Company

Certain assumptions for use in valuing the Plan were adopted by the Board as of December 31, 2009. These assumptions have been supplemented by additional assumptions related to the health benefits that were developed for this valuation. The actuary for CEABF performs an analysis of plan experience periodically and recommends changes in basic assumptions if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. Many of the assumptions used in this valuation are based on an experience analysis of CEABF, over the period 2005 through 2008. This experience study was performed by the prior actuary, and the results of that study have not been evaluated by Buck for reasonableness and suitability for this purpose. We relied on the analysis of the prior actuary for our valuation. A summary of the actuarial assumptions and methods used in this actuarial valuation are shown in Section 3.

The assumptions and methods used to determine the ARC of CEABF and all supporting schedules meet the parameters and requirements pursuant to GASB 43, and GASB 45.

The undersigned are Members of the American Academy of Actuaries and in combination meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in these results. To the best of the undersigned actuaries' knowledge, this actuarial statement is complete and accurate. The calculations have been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions, or to provide explanations or further details as may be appropriate.

BUCK CONSULTANTS, LLC

Daniel A. Levin, FSA, MAAA, FCA, CEBS

Daniel a. Levin

Principal, Health & Productivity

Larry Langer, EA, ASA, MAAA, FCA Principal, Retirement

# **Actuarial Valuation - Retiree Health Benefits**

### Overview

The County Employees' and Officers' Annuity and Benefit Fund of Cook County ("CEABF" or "the Fund") offers health benefits to separated and retired employees of Cook County and their eligible dependents. This report presents the results of the actuarial valuation of the Plan benefits as of the valuation date of December 31, 2012.

### **Purpose**

This report had been prepared at the request of the Fund for use in financial reporting of CEABF under GASB 43. It was also prepared for purposes of the County's financial statements under GASB 45. It may not be appropriate for other purposes, such as analyzing proposed design alternatives, funding, pricing or option choice. Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck.

## Membership

#### **Summary of Membership Data**

	Year Ending December 31, <u>2012</u> <u>2011</u>	
1. Annuitants Currently Receiving Benefits	8,179	7,925
Separated Employees Entitled     To Benefits But Not Yet Receiving Them	1,737	1,520
3. Active Employees	21,447	22,037
4. Total Number of Members	31,363	31,482

### **Changes in Plan Provisions**

The only change in benefits or other plan provisions considered in this actuarial valuation since the last valuation performed as of December 31, 2012 is that effective January 1, 2013, Classic Blue HMO participants changed to Blue Advantage HMO for all employees and covered dependents that are not part of the following medical Groups: Loyola (Site 349), Northwestern (Sites 466 or 467), North Shore Medical Group (Site 284) or St. Anthony (Site 374). Members were automatically migrated to Blue Advantage HMO effective January 1, 2013. The only difference between the Blue Advantage HMO and the Classic Blue HMO is the participating providers in the network. The plan designs are identical.

## Changes in Actuarial Assumptions, Methods, or Procedures

The following changes have been made to the actuarial assumptions or valuation procedures since the last actuarial valuation performed as of December 31, 2011:

- Participants ineligible for Medicare: The 435 retirees/survivors and 25 covered spouses as of December 31, 2012 who are over age 65 but are enrolled in a non-Medicare plan are being valued without Medicare benefits. In addition, 5% of retirees survivors under age 65 are assumed to be ineligible for Medicare at the time that they retire.
- Participation percentage for retirees: The percentage of retirees assumed to elect medical benefits at retirement has been
  revised to 70%.
- Participation percentage for spouses: The percentage of future retirees electing to cover a spouse for medical benefits at retirement has been revised to 40%.
- Vested termination benefit: Separated employees who are eligible for a future benefit are included in the Actuarial Accrued Liability. It is assumed that 30% of employees who terminate with 10 years of service before retirement age return and elect health coverage at age 61. It is also assumed that 40% of them will elect to cover a spouse.
- Separations from service, retirements, and deaths were assumed to occur in the middle of the year, instead of the beginning of the year (for separations from service) or end of the year (for deaths).
- The calculation methodology was refined to separately model dependent spouse costs based on the age and Medicare status of the spouse.
- Age graded claim costs were reflected for current as well as future retirees.
- Excise Tax on High-Cost Plans: The estimated impact of this tax is reflected in the December 31, 2012 liabilities. The Retiree Drug Subsidy was reflected for this purpose only.

### **Actuarial Valuation - Retiree Health Benefits (continued)**

# Changes in the Actuarial Accrued Liability (AAL)

December 31, 2011 Report	\$1,678,571,388
Matching of Prior Actuary Results	(16,392,194)
Expected Growth Due to the Passage of Time	113,892,571
Demographic Experience	(17,653,361)
Updated Per Capita Health Plan Cost	(41,011,239)
Changes in Plan Provisions	(102,528,096)
Reflect Participants Ineligible for Medicare	128,784,573
Participation Assumption changes	(78,885,298)
Additional Liability due to Vested Terminated Benefits	73,649,850
Mid-Year Decrement Assumption	(53,337,221)
Aging Curve and Separate Spouse Payment Form	147,688,701
Additional Liability due to Inclusion of Excise Tax	12,829,458
December 31, 2012 Report	\$1,845,609,132

Note: AAL does not reflect Retiree Drug Subsidy (RDS) Payments, since GASB 43/45 rules do not allow it.

# Development of Annual Required Contribution (ARC) Section 1.1

Development of Employer Contribution	December 31, 2012 Valuation ARC for Fiscal Year 2013	December 31, 2011 Valuation ARC for Fiscal Year 2012
1. Annual Payroll	\$1,478,253,368	\$1,456,444,123
2. Actuarial Accrued Liability		
a. Active Members	1,005,068,577	1,073,195,985
b. Inactive Members with Deferred Benefits	64,145,311	, , , , <u>-</u>
c. Retired Members and Beneficiaries Receiving Benefits	776,395,244	605,375,403
d. Total $(a. + b. + c.)$	1,845,609,132	1,678,571,388
3. Actuarial Value of Assets	-	-
4. Unfunded Actuarial Accrued Liability (UAAL)	1,845,609,132	1,678,571,388
5. UAAL as a Percent of Annual Payroll	124.9%	115.3%
6. Amortization Payment for UAAL		
a. Amount	108,425,638	100,614,110
b. As a % of pay	7.3%	6.9%
7. Employer Normal Cost		
a. Amount	63,535,361	56,086,278
b. As a % of pay	4.3%	3.9%
8. Interest Cost	6,737,966	included above
9. Annual Required Contribution (6. + 7. + 8.)	178,698,965	156,700,388
10. Pay-go Costs for the Year <sup>1</sup>	44,951,460	43,964,717
11. Amortization Period (years)	30	30

<sup>&</sup>lt;sup>1</sup> Source: Estimated amount for 2013; for 2012 as provided by CEABF.

#### **Actuarial Valuation - Retiree Health Benefits (continued)**

# **Schedule of Funding Progress**

Section 1.2

A history of the GASB Statement No. 45 liabilities and assets follows:

Actuarial						UAAL as a
Valuation Date	Actuarial	<b>Actuarial Accrued</b>	Unfunded	Funded	Covered	Percentage of
December 31,	Value of Assets	<u>Liability</u>	<b>Liability</b>	<b>Ratio</b>	<u>Payroll</u>	<u>Payroll</u>
2006	\$ -	\$1,506,821,967	\$1,506,821,967	0.0%	\$1,412,878,627	106.6%
2007	-	1,554,123,496	1,554,123,496	0.0%	1,370,844,734	113.4%
2008	-	1,448,828,756	1,448,828,756	0.0%	1,463,372,408	99.0%
2009	-	1,686,872,018	1,686,872,018	0.0%	1,498,161,713	112.6%
2010	-	1,724,622,462	1,724,622,462	0.0%	1,494,093,569	115.4%
2011	-	1,678,571,388	1,678,571,388	0.0%	1,456,444,123	115.3%
2012	-	1,845,609,132	1,845,609,132	0.0%	1,478,253,368	124.9%

# **Schedule of Employer Contributions**

Section 1.3

A history of the GASB Statement No. 45 required contributions and actual percentages follow:

Fiscal Year Ended December 31,	Annual Required Contribution (ARC)	Employer Contribution <sup>1</sup>	Employer Contribution as a Percent of ARC
2006	\$166,070,688	\$26,818,379	16.15%
2007	169,154,664	31,420,216	18.57%
2008	169,823,905	37,781,310	22.25%
2009	157,964,519	35,779,228	22.65%
2010	163,823,488	40,183,057	24.53%
2011	165,176,771	38,185,306	23.12%
2012	156,700,388	37,986,237	24.24%

# GASB 45 Net OPEB Obligation (NOO) as of December 31, 2012 Section 1.4

1. NPO as of December 31, 2011	\$ 493,558,555
2. Annual Required Contribution (ARC)	156,700,388
3. Interest on NOO	22,210,135
4. Adjustment to ARC	(30,300,321)
5. Annual OPEB Cost for 2012 (2. + 3. + 4.)	148,610,202
6. Total Employer Contribution for 2012 <sup>1</sup>	37,986,237
7. NOO as of December 31, 2012 (1. + 5 6.)	604,182,520

<sup>&</sup>lt;sup>1</sup> Source: Total Employer's Contribution for 2012 as provided by CEABF.

### **Summary of Substantive Plan Provisions**

### Section 2.1

#### **Eligibility**

Tier 1 retirement (hired before January 1, 2011)

• Age 50 and 10 years of service

Tier 2 retirement (hired on or after January 1, 2011)

• Age 62 and 10 years of service

All active employee members who separate with 10 or more years of service can receive postretirement health benefits under the Plan upon receipt of annuity benefits, provided that if they elect to retire under the Illinois Reciprocal Act, CEABF is their final retirement system.

Surviving dependents of actively employed members and surviving dependents of covered annuitants are eligible for postretirement health benefits under the Plan upon receipt of annuity benefits.

Eligible annuitants may cover their spouses and dependent children under the age of 26 and all disabled children (no age limitation).

#### **Medical Plans**

Non-Medicare retirees can choose from:

- Blue Cross Blue Shield PPO
- Blue Cross Blue Shield Blue Advantage HMO
- Blue Cross Blue Shield Classic Blue HMO

Medicare eligible retirees can choose from:

- Blue Cross Blue Shield PPO Medicare Supplement
- Blue Cross Blue Shield Blue Advantage HMO
- Blue Cross Blue Shield Classic Blue HMO

All Medicare plans are supplemental to Medicare Part A & B benefits.

A retail and mail pharmacy benefit through CVS/Caremark is included with the election of any medical plan.

#### **Contributions**

CEABF pays approximately 55% of the total premium for retiree annuitants, including the cost of family coverage, and approximately 70% of the total premium for survivor annuitants, including the cost of family coverage.

### **Assumptions and Methods**

Section 3.1

The actuarial assumptions used for the December 31, 2012 actuarial valuation are summarized below. Consistent with past practice, the mortality rate, termination rate, retirement rate, and salary assumptions are based on an experience analysis of CEABF, over the period 2005 through 2008. These assumptions were adopted by the Board as of December 31, 2009. This experience study was performed by the prior actuary. For the December 31, 2012 actuarial valuation, Buck Consultants was retained as the actuarial consultant.

Valuation Date December 31, 2012

Discount Rate 4.50% Salary Scale 5.00%

**Termination Rates** The following is a sample of the termination rates used:

			Age at	t Entramce			
		Males	Females				
Attained Age	27	32	37	<u>27</u>	32	37	
27	.145			.183			
32	.116	.165		.117	.165		
37	.030	.105	.141	.030	.093	.114	
42	.030	.030	.085	.030	.030	.060	
47	.030	.030	.030	.030	.030	.030	

**Retirement Rates** For deputy sheriffs who are members of the Cook County Police department who became participants prior to January 1, 2011 (Tier 1):

Service at retirement	< 20	0 Years	≥20 Years		
<u>Age</u>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	
50	.010	.012	.211	.211	
55	.060	.072	.169	.169	
60	.250	.216	.382	.382	
65	.150	.120	1.000	1.000	
70	.250	.200	1.000	1.000	
75	1.000	1.000	1.000	1.000	

Section 3.1

For other members who became participants prior to January 1, 2011 (Tier 1):

Service at retirement	< 30	Years	≥30	≥30 Years		
<u>Age</u>	Male	<b>Female</b>	Male	<b>Female</b>		
50	.010	.012	.150	.128		
55	.060	.072	.300	.213		
60	.250	.216	.375	.230		
65	.150	.120	.270	.120		
70	.250	.200	.450	.200		
75	1.000	1.000	1.000	1.000		

For members who became participants on or after January 1, 2011 (Tier 2):

<u>Age</u>	<u>Male</u>	<u>Female</u>
62	.400	.350
64	.225	.150
67	.400	.350
70	.450	.200
75	1.000	1.000

### **Mortality Rates**

The UP-1994 Mortality Table for males, rated down 2 years, and the UP-1994 Mortality Table for females, rated down 1 year.

### **Disability Rates**

Included in termination and retirement rates.

### Anticipated Plan Participation

70% of eligible employees are assumed to elect retiree medical benefits.

30% of vested terminated employees are assumed to elect retiree medical benefits upon turning age 61.

Future annuitants are assumed to elect from among the available plans consistently with current retiree participation elections.

Current annuitants who elect coverage are assumed to remain in coverage. Current annuitants who have waived or deferred coverage are not assumed to participate in the future.

### Dependent Coverage

40% of future annuitants are assumed to cover a dependent. 40% of surviving dependents are assumed to elect coverage upon the death of an actively employed member and are assumed to commence benefits when the actively employed member would have reached age 61. Males are assumed to be 4 years older than females. Actual ages were used for dependents of current annuitants.

Section 3.1

Per Capita Health Plan Costs Estimated net annual per capita incurred claim costs per covered adult for fiscal 2013 at age 65, including administrative expenses:

	Blue Advantage HMO	Classic Blue HMO	PPO	Weighted
	IIIVIO	IIIVIO	110	<u>Average</u>
Not Medicare eligible	\$12,960	\$13,832	\$16,271	\$14,054
Medicare eligible	\$ 3,581	\$ 3,770	\$ 3,543	\$ 3,567
% of Current Retirees i Not Medicare eligible Medicare eligible	n Plan (rounded): 58% 32%	12% 6%	30% 62%	

Per capita medical costs were developed from the medical working rate provided by the Fund for calendar year 2013, consistent with the practice of the prior actuary, adjusting for age morbidity. Claims experience was requested from the Fund, but was not readily available. Thus, we were unable to validate the rates, and the valuation relies on the accuracy of the rate calculations. We understand that the rates represent medical benefit costs only for annuitants under the Fund. Participant contribution amounts are estimated by taking the relevant percentage of age adjusted expected per capita costs, rather than separately projecting average age contribution rates.

Section 3.1

**Age-Based Morbidity** 

Per capita costs are adjusted to reflect expected cost increases related to age. The increase in the net incurred claims was assumed to be:

<u>Age</u>	<b>Annual Increase</b>	<u>Age</u>	<b>Annual Increase</b>
49 and below	2.5%	70-74	2.5%
50-54	3.3%	75-79	2.0%
55-59	3.6%	80-84	1.0%
60-64	4.2%	85-89	0.5%
65-69	3.0%	90 and over	0.0%

Health Care Cost Trend Rates Health care cost trend rates apply to expected claims, premiums and retiree contributions:

From 2013 to 2014	7.5%
From 2014 to 2015	7.0%
From 2015 to 2016	6.5%
From 2016 to 2017	6.0%
From 2017 to 2018	5.5%
2018 & later	5.0%

**Census Data** 

The active, deferred vested, and retiree census were provided by the Fund.

**Actuarial Cost Method** 

The entry age actuarial cost as a percentage of earnings was used.

**Amortization Method** 

30 years open, level dollar.

**Assets** 

The valuation assumes CEABF or the County has not set aside any assets to prefund its retiree medical liabilities.

**Medicare Coordination** 

Medicare is assumed to remain the primary payer for current and future retirees and spouses who are at least age 65 and who are currently on Medicare. Medicare is assumed to become primary for 95% of current retirees and spouses who are not yet age 65, when they attain that age, and for all future retirees and spouses by the time they reach age 65.

**IBNR** 

The calculations do not include any explicit amount for incurred but not reported claims (IBNR).

**Retiree Drug Subsidy** 

The value of the Retiree Drug Subsidy under Medicare Part D is not directly reflected in the valuation, in accordance with GASB Technical Bulletin No. 2006-1 *Accounting and Financial Reporting by Employers and OPEB Plans for Payments from the Federal Government Pursuant to the Retiree Drug Subsidy Provisions of Medicare Part D*, on this issue. An estimate of the value of the subsidy has been reflected in projecting the value of the Excise Tax on High-Cost Employer Plans (see next section).

The valuation was prepared on an on-going plan basis. This assumption does not imply that an obligation to continue the plan actually exists.

Miscellaneous

Section 3.1

Considerations of the Patient Protection and Affordable Care Act (PPACA) - Summary of Effects of Selected Provisions

**Early Retiree Reinsurance Program:** Effective 6/1/2010. Due to the short-term nature of the payments expected to be received under this program it is assumed to have no future impact on CEABF.

**Removal of Lifetime/Annual Maximum:** The plan is not subject to the requirement to eliminate lifetime maximums, since it is a retiree only plan.

**Expansion of Child Coverage to Age 26:** The impact of covering retiree children to age 26 is assumed to have already been reflected in the working rates provided.

**Medicare Part D Retiree Drug Subsidy:** RDS payments are not reflected as an ongoing offsetting item in GASB 43 valuations, and so no direct impact is reflected. The valuation does reflect the RDS in estimating the future impact of the Excise Tax on High-Cost Employer Health Plans.

Excise Tax on High-Cost Employer Health Plans (aka "Cadillac Tax"): Effective 1/1/2018. We performed a projection of the calculation on the Plan using a CPI of 3.0%, blending non-Medicare and Medicare retiree coverage for testing purposes. The tax amount expected is based on projected net employer costs for Medicare retirees after RDS, as this is the way we expect costs to be determined for tax purposes. The projection indicates that the overall increase in liability would be approximately 0.7% and we have adjusted the results accordingly. Additional commentary on this issue can be found on the following page.

**Other Revenue Raisers:** The PPACA legislation includes a variety of other revenue raisers that involve additional costs on employers, providers (such as medical device manufacturers) and insurers. We considered these factors when developing the trend assumption used.

**Other:** We have not identified any other specific provision of the PPACA legislation that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will continue to monitor any potential impacts.

### Assumptions and Methods (continued)

Section 3.1

**High-Cost Plan Excise Tax:** The PPACA legislation added a new High-Cost Plan Excise Tax (also known as the "Cadillac Tax") starting in calendar year 2018. For valuation purposes, we assumed that the value of the tax will be passed back to the Plan in higher premium rates.

Based on our understanding of the tax, we think it is clear that the tax does not apply directly to CEABF. Rather, the tax applies to the administrator of the benefits, Blue Cross Blue Shield, which in turn is then expected to pass the additional cost along to CEABF.

The tax is 40% of the excess of a) the cost of coverage over b) the limit. We modeled the cost of the tax by calculating "a" (the cost of coverage) using the working rates projected with trend. We calculated "b" (the limit) starting with the statutory limits (\$10,200 single and \$27,500 family), adjusted for the following:

- Limits will increase from 2018 to 2019 by 4.0% (CPI plus 1%);
- Limits will increase after 2019 by 3.0% (CPI); and
- For retirees over age 55 but not on Medicare, the limit is increased by an additional dollar amount of \$1,650 for single coverage, \$3,450 for family coverage<sup>1</sup>.

We also examined the possibility that the limits would be increased due to excess trend. An estimate of trend for the period from 2010 through 2018 for the federal standard Blue Cross Blue Shield option (using actual increase rates from 2010 to 2013 and the valuation trend from 2013 to the valuation 2018) is compared to the statutory "assumed" 55% trend, with trend in excess of 55% applied on the base amount before the additional amount for "early" retirees. However, it appears due to favorable experience in the federal benchmark Blue Cross Blue Shield plan that there will not be any excess trend.

<sup>&</sup>lt;sup>1</sup> These additional amounts are available at other ages for plans sponsored by an employer where the majority of employees are engaged in high risk professions including law enforcement officers and fire fighters. Since only a minority of the retirees included in this valuation are police and fire, we are assuming that this exception would not apply.

### Description of Actuarial Methods and Valuation Procedures Section 3.2

#### **Actuarial Cost Method**

Liabilities and contributions shown in this report are computed using the Entry Age Actuarial Cost Method of funding.

Sometimes called a "funding method," this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the plan if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the plan.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of funding that would have accumulated had annual contributions equal to the Normal Cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date).

The **Unfunded Actuarial Accrued Liability** is the excess of the Actuarial Accrued Liability over the Actuarial Value of Plan Assets actually on hand on the valuation date. The Unfunded Actuarial Accrued Liability is amortized as a level dollar amount over an open 30-year period.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the Unfunded Actuarial Accrued Liability.

Glossary of Terms	Section 3.3
Actuarial Accrued Liability	Total accumulated cost to fund OPEB benefits and expenses arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a OPEB plan for a group of plan members to the years of service that give rise to that cost.
Actuarial Present Value of Future Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future OPEB benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to OPEB and insurance benefits based on specific procedures and assumptions.
Annual	
Required Contribution	Disclosure measure of annual OPEB cost.
GASB 43	Governmental Accounting Standards Board Statement Number 43 which specifies how the Annual Required Contribution (ARC) is to be calculated and disclosure requirement for CEABF.
GASB 45	Government Accounting Standards Board Statement Number 45 which specifies how to calculate the Annual OPEB Cost that the employer recognizes.
Employer Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the Plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by Plan assets.

### **Additional Actuarial Tables**

TABLE I					
Schedule of Active Member	Valuation <u>Date</u>	<u>Number</u>	Annual <u>Payroll</u>	Annual Average <u>Pay</u>	% Increase In Average <u>Pay</u>
Valuation	12/31/07	23,456	\$1,370,844,734	58,443	5.7%
Data -	12/31/08	23,436	1,463,372,408	62,441	6.8%
Pension Benefits	12/31/09	23,570	1,498,161,713	63,562	1.8%
Tension benefits	12/31/10	23,165	1,494,093,569	64,498	1.5%
	12/31/11	22,037	1,456,444,123	66,091	2.5%
	12/31/12	21,447	1,478,253,368	68,926	4.3%

### TABLE II

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls -Pension Benefits

Year Ended	Added Number	Annual	Removed Number	from Rolls Annual Benefits	Rolls-E	nd-of Year Annual Benefits	Average Annual Benefit	% Increase in Average Annual Benefit
2007	910	\$37,609,335	602	\$ 9,344,686	14,018 \$	350,005,854	\$24,968	6.4%
2008	791	32,064,586	517	8,641,406	14,292	373,429,034	26,129	4.6%
2009	693	43,524,587	510	9,455,204	14,475	407,498,417	28,152	7.7%
2010	917	40,259,064	538	10,616,859	14,854	437,140,622	29,429	4.5%
2011	1,158	55,308,088	580	12,124,191	15,432	480,324,519	31,125	5.8%
2012	1,374	58,601,319	632	14,697,753	16,174	524,228,085	32,412	4.1%

### TABLE III

Schedule of Retirees
and Beneficiaries Added
To and Removed
From Rolls -
Retiree Health Benefits

Year Ended	Added to	Annual	Remove Number	d from Rolls Annual <u>Benefits</u>	Rolls En	nd of Year Annual <u>Benefits</u>	Average Annual <u>Benefit</u>	% Change in Average Annual <u>Benefit</u>
2007	544	\$9,141,503	422	\$2,503,304	7,216	\$37,280,444	\$5,166	19.6%
2008	446	6,154,754	362	2,954,855	7,300	40,480,343	5,545	7.3%
2009	428	4,633,172	361	3,680,293	7,367	41,433,222	5,624	1.4%
2010	539	6,120,411	352	2,652,932	7,554	44,900,801	5,944	5.7%
2011	752	4,513,262	381	2,509,723	7,925	46,904,340	5,919	-0.4%
2012	640	3,715,909	386	6,655,532	8,179	43,964,717	5,375	-9.2%

### **Additional Actuarial Tables (continued)**

### TABLE IV

Solvency Test -Pension Benefits

### **Accrued Liabilities for**

Fiscal Year	(1) (2) (3)  Active and Members Active and Inactive Members Currently Inactive Member Accumulated Receiving Employer		r Actuarial Value of	Li	t of Acc abilities ed by As		
<b>Ended</b>	Contributions	Benefits	<u>Portion</u>	Assets	(1)	(2)	(3)
2007	\$1,569,401,144	\$4,035,560,084	\$3,781,326,569	\$8,059,879,804	100%	100%	65%
2008	1,650,186,209	4,258,683,439	4,188,158,217	8,036,074,797	100%	100%	51%
2009	1,749,058,834	5,043,516,963	4,696,505,501	7,945,567,096	100%	100%	25%
2010	1,824,472,753	5,373,790,587	4,824,959,545	7,982,368,659	100%	100%	16%
2011	1,662,273,117	5,902,779,764	5,063,221,680	7,897,102,116	100%	100%	7%
2012	1,821,792,594	6,431,295,762	5,168,398,587	7,833,882,926	100%	93%	0%

### TABLE V

Solvency Test -Retiree Health Benefits

### **Accrued Liabilities for**

Year	(1) Active and Fiscal Inactive Members Year Accumulated		(2) Members Currently Receiving	(3) Active and Inactive Member Employer	Actuarial Value of	Percent Lia Covere	bilities	
<b>Ended</b>	Contr	<u>ibutions</u>	Benefits	Portion	Assets	(1)	(2)	(3)
2007	\$	-	\$573,053,947	\$ 981,069,549	\$ -	0%	0%	0%
2008		-	513,723,492	935,105,264	-	0%	0%	0%
2009		-	588,250,913	1,098,621,105	-	0%	0%	0%
2010		-	606,821,210	1,117,801,252	-	0%	0%	0%
2011		-	605,375,403	1,073,195,985	-	0%	0%	0%
2012		-	776,395,244	1,069,213,888	-	0%	0%	0%



# Statistical Section

This section contains additional schedules that are designed to supplement the information in the Comprehensive Annual Financial Report:

Statements of Changes in Plan Net Position – Pension and Postemployment Healthcare provides details on the specific sources and uses of funds.

Schedules of Retired Members by Benefit Type – Pension and Postemployment Healthcare provides details on the monthly pension amounts for retirement and survivor members, including those with postemployment healthcare.

Schedule of Average Benefit Payments – Pension and Postemployment Healthcare provides details on years of credited service, average monthly pension, average monthly final average salary, and the number of new retirees, including those with postemployment healthcare.

Schedule of Principal Participating Employers – Pension and Postemployment Healthcare provides details on employers who participate in the Plan.

### Statement of Changes in Plan Net Position - Pension

### Statement of Changes in Plan Net Position - Pension

### For year ended December 31, 2012, with comparative totals for 9 years

Additions:	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Employer contributions	\$ 152,734,539	\$ 162,667,160	\$ 141.326.266	\$ 147.934.643	\$ 146.134.911
Employee contributions  Employee contributions	130,570,599	127,577,473	+,,	4 - 1,,,, - 1,, 1	-, -,-
Net investment and net secur		127,377,473	129,449,866	127,795,881	123,776,705
lending income (loss)		92 701 022	022 002 (20	1.012.615.050	(1.050.052.046)
Other	887,687,519	82,701,033	832,882,639	1,013,615,250	(1,858,853,846)
	4,212,209	3,380,437	8,248,307	6,087,899	4,382,353
Total additions	1,175,204,866	376,326,103	1,111,907,078	1,295,433,673	(1,584,559,877)
Deductions:					
Benefits					
Retirement	469,398,775	429,527,599	393,525,707	369,226,987	347,922,288
Survivors	35,762,286	33,003,057	30,307,794	27,837,079	25,815,860
Disability	13,966,348	13,961,631	13,789,106	13,510,567	13,234,974
Refunds			, ,	, ,	, ,
Death	4,636,647	3,036,462	5,569,966	3,424,156	3,565,245
Separation	16,740,836	15,813,775	12,704,374	11,582,869	15,322,631
Other	11,704,243	10,315,098	6,767,478	5,397,886	5,836,226
Net adminstrative and					
miscellaneous expenses	4,303,353	4,078,843	4,074,955	4,248,287	4,172,536
Total deductions	556,512,488	509,736,465	466,739,380	435,227,831	415,869,760
Net increase (decrease)	618,692,378	(133,410,362)	645,167,698	860,205,842	(2,000,429,637)
Net position held in trust:					
Beginning of year	7,441,243,250	7,574,653,612	6,929,485,914	6,069,280,072	8,069,709,709
End of year	\$8,059,935,628	\$7,441,243,250	\$7,574,653,612	\$6,929,485,914	\$ 6,069,280,072

### Statement of Changes in Plan Net Position - Pension (continued)

### For year ended December 31, 2012, with comparative totals for 9 years (continued)

	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Additions:					
Employer contributions	\$ 226,721,014	\$ 194,367,840	\$ 186,540,579	\$ 161,453,318	\$ 148,663,398
Employee contributions	123,047,516	121,672,773	174,213,741	148,991,804	140,073,582
Net investment and net secur	rities				
lending income (loss)	476,910,124	749,245,001	324,731,939	571,265,643	883,619,351
Other	4,142,324	5,433,125	6,977,513	6,162,602	4,566,060
Total additions	830,820,978	1,070,718,739	692,463,772	887,873,367	1,176,922,391
Deductions:					
Benefits					
Retirement	324,724,997	301,803,116	289,176,133	279,822,990	258,423,996
Survivors	23,645,235	21,459,472	19,473,853	17,403,574	15,019,947
Disability	13,038,555	11,722,480	11,359,918	10,748,121	9,993,939
Refunds					
Death	3,997,807	4,101,200	2,862,768	N/A	2,999,393
Separation	56,013,958	17,564,604	17,289,173	N/A	14,008,994
Other	6,611,592	3,256,405	2,889,802	18,049,094 *	27,201,566
Net adminstrative and					
miscellaneous expenses	3,866,188	3,979,155	4,398,437	6,780,941	7,255,667
Total deductions	431,898,332	363,886,432	347,450,084	332,804,720	334,903,502
Net increase (decrease)	398,922,646	706,832,307	345,013,688	555,068,647	842,018,889
Net position held in trust:					
Beginning of year	7,670,787,063	6,963,954,756	6,618,941,068	6,063,872,421	5,221,853,532
End of year	\$8,069,709,709	\$ 7,670,787,063	\$6,963,954,756	\$6,618,941,068	\$6,063,872,421

<sup>\*</sup> Refund breakout for 2004 is unavailable due to the transition to a new actuary.

## Statement of Changes in Plan Net Position - Postemployment Healthcare

### Statement of Changes in Plan Net Position - Postemployment Healthcare

For year ended December 31, 2012, with comparative totals for 9 years

	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Additions:					
Employer contributions	\$37,986,237	\$32,670,461	\$40,183,057	\$35,779,227	\$37,781,310
Other	5,978,480	14,233,879	4,717,744	5,653,995	2,699,033
Total additions	43,964,717	46,904,340	44,900,801	41,433,222	40,480,343
Deductions:					
Healthcare benefits	43,964,717	46,904,340	44,900,801	41,433,222	40,480,343
Net increase (decrease)	-	-	-	-	-
Net position held in trust:					
Beginning of year	_	-	_	-	-
End of year	\$ -	\$ -	\$ -	\$	\$ -

Statement of Changes in Plan Net Position - Postemployment Healthcare (continued)

### Statement of Changes in Plan Net Position - Postemployment Healthcare (continued)

### For year ended December 31, 2012, with comparative totals for 9 years (continued)

	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Additions:					
Employer contributions	\$31,420,216	\$26,818,379	\$28,308,863	\$36,663,724	\$32,378,575
Other	5,860,228	3,823,866	-	-	-
Total additions	37,280,444	30,642,245	28,308,863	36,663,724	32,378,575
Deductions:					
Healthcare benefits	37,280,444	30,642,245	28,308,863	36,663,724	32,378,575
Net increase (decrease)					
	-	-	-	-	-
Net position held in trust:					
Beginning of year					
End of year	\$ -	\$ -	\$	<u> </u>	<u>\$</u>

### Schedule of Retired Members by Benefit Type -**Pension**

### Schedule of Retired Members by Benefit Type - Pension

### As of December 31, 2012

Amour	t of M	lonthly	Number of	Type of Pens	ion Benefit	o	ption Selecte	ed
Pens	ion Be	enefit	Recipients	1	2	1	2	3
\$ 1	-	\$ 600	2,784	1,851	933	1,862	790	132
601	-	1,200	2,278	1,568	710	1,558	695	25
1,201	_	1,800	1,809	1,451	358	1,185	623	1
1,801	_	2,400	1,736	1,516	220	1,057	679	0
2,401	_	3,000	1,510	1,335	175	911	599	0
3,001	_	3,600	1,355	1,273	82	772	583	0
3,601	_	4,200	1,035	990	45	512	523	0
4,201	_	4,800	1,034	1,019	15	423	611	0
4,801	_	5,400	755	748	7	298	457	0
5,401	_	6,000	796	792	4	292	504	0
6,001	_	6,600	392	390	2	156	236	0
6,601	_	7,200	235	232	3	72	163	0
7,201	_	7,800	147	145	2	55	92	0
7,801	_	8,400	52	51	1	14	38	0
8,401	_	9,000	33	30	3	9	24	0
9,001	_	9,600	22	20	2	4	18	0
9,601	_	10,200	25	25	0	4	21	0
10,201	_	10,800	27	25	2	6	21	0
10,801	_	11,400	20	20	0	4	16	0
11,401	_	12,000	14	14	0	3	11	0
12,001	_	12,600	20	20	0	5	15	0
12,601	_	13,200	12	12	0	4	8	0
13,201	_	13,800	14	13	1	5	9	0
13,801	-	14,400	7	7	0	1	6	0
14,401	_	15,000	9	9	0	2	7	0
15,001	_	15,600	9	9	0	3	6	0
15,601	-	16,200	9	9	0	2	7	0
16,201	-	16,800	4	4	0	1	3	0
16,801	_	17,400	6	6	0	0	6	0
17,401	_	18,000	4	4	0	0	4	0
Over \$	18,000	)	21	21	0	5	16	0
Totals			16,174	13,609	2,565	9,225	6,791	158

### Type of Pension Benefit Option Selected

- 1. Regular retirement
- 1. Whole Life Annuity
- 2. Survivor payment
- 2. 65% Joint and Contingent Annuity
- 3. Temporary Annuity

### Schedule of Retired Members by Benefit Type -Postemployment Healthcare

### Schedule of Retired Members by Benefit Type - Postemployment Healthcare

### As of December 31, 2012

Amount	Amount of Monthly		Number of	Number of Type of Pension B		on Benefit Option Selected			
Pensio	n Be	nefit	Recipients	1	2	1	2	3	
\$ 1	_	\$ 600	300	94	206	278	22	0	
601	_	1,200	686	380	306	554	132	0	
1,201	_	1,800	871	654	217	632	239	0	
1,801	_	2,400	1,024	881	143	689	335	0	
2,401	_	3,000	983	854	129	656	327	0	
3,001	_	3,600	960	902	58	615	345	0	
3,601	_	4,200	714	677	37	407	307	0	
4,201	_	4,800	719	708	11	348	371	0	
4,801	_	5,400	543	536	7	263	280	0	
5,401	_	6,000	608	604	4	258	350	0	
6,001	_	6,600	290	288	2	142	148	0	
6,601	_	7,200	179	176	3	63	116	0	
7,201	_	7,800	102	100	2	43	59	0	
7,801	_	8,400	33	32	1	11	22	0	
8,401	_	9,000	25	22	3	9	16	0	
9,001	_	9,600	19	18	1	3	16	0	
9,601	-	10,200	16	16	0	4	12	0	
10,201	_	10,800	22	20	2	5	17	0	
10,801	-	11,400	12	12	0	2	10	0	
11,401	_	12,000	6	6	0	2	4	0	
12,001	_	12,600	12	12	0	3	9	0	
12,601	_	13,200	6	6	0	2	4	0	
13,201	_	13,800	7	7	0	3	4	0	
13,801	_	14,400	5	5	0	0	5	0	
14,401	_	15,000	3	3	0	2	1	0	
15,001	_	15,600	6	6	0	2	4	0	
15,601	_	16,200	7	7	0	1	6	0	
16,201	_	16,800	3	3	0	0	3	0	
16,801	_	17,400	4	4	0	0	4	0	
17,401	_	18,000	3	3	0	0	3	0	
Over \$1	8,000		11	11	0	2	9	0	
Totals			8,179	7,047	1,132	4,999	3,180	0	

### **Type of Pension Benefit**

### **Option Selected**

- 1. Regular retirement
- 1. Whole Life Annuity
- 2. Survivor payment
- 2. 65% Joint and Contingent Annuity
- 3. Temporary Annuity

## Schedule of Average Benefit Payments - Pension

Schedule	of Average Benefit Payments -	Pension	n					
				Vears of C	redited Se	rvice		
		<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>
2003	Average Monthly Pension	\$ 269	\$ 727	\$1,395	\$2,437	\$3,606	\$4,010	\$3,757
2003	Average Monthly Final Average Salary	N/A	N/A	\$4,222	\$4,667	\$4,999	\$5,461	\$4,999
	Number of New Retirees	287	100	154	132	908	647	391
2004	Average Monthly Pension	\$ 293	\$ 771	\$1,514	\$1,983	\$3,409	\$3,638	\$3,595
	Average Monthly Final Average Salary	N/A	N/A	\$4,562	\$4,579	\$4,475	\$5,236	\$5,181
	Number of New Retirees	123	63	139	82	42	27	52
2005	Average Monthly Pension	\$ 342	\$1,071	\$1,529	\$2,362	\$2,768	\$4,188	\$ 708
	Average Monthly Final Average Salary	N/A	N/A	\$4,265	\$4,608	\$4,699	\$5,464	\$5,166
	Number of New Retirees	110	50	112	84	41	25	43
2006	Average Monthly Pension	\$ 363	\$1,280	\$1,821	\$2,248	\$2,843	\$3,689	\$4,094
	Average Monthly Final Average Salary	N/A	N/A	\$5,052	\$4,516	\$4,880	\$6,252	\$4,946
	Number of New Retirees	80	55	110	111	68	39	46
2007	Average Monthly Pension	\$ 355	\$1,016	\$1,921	\$2,543	\$3,404	\$4,034	\$4,477
	Average Monthly Final Average Salary	N/A	N/A	\$5,435	\$5,138	\$5,506	\$5,421	\$5,907
	Number of New Retirees	71	65	156	158	127	59	119
2008	Average Monthly Pension	\$ 382	\$1,368	\$1,871	\$2,751	\$3,394	\$4,441	\$4,575
	Average Monthly Final Average Salary	N/A	N/A	\$5,719	\$5,540	\$5,682	\$6,219	\$6,048
	Number of New Retirees	69	43	121	128	121	76	91
2009	Average Monthly Pension	\$ 302	\$1,311	\$2,055	\$2,671	\$3,682	\$3,854	\$4,491
	Average Monthly Final Average Salary	N/A	N/A	\$6,649	\$5,778	\$6,095	\$5,931	\$5,992
	Number of New Retirees	58	30	77	96	100	59	120
2010	Average Monthly Pension	\$ 335	\$1,144	\$1,855	\$2,598	\$3,349	\$3,968	\$4,278
	Average Monthly Final Average Salary	\$5,927	\$6,780	\$5,616	\$5,512	\$5,319	\$5,466	\$5,408
	Number of New Retirees	74	38	92	122	153	72	176
2011	Average Monthly Pension	\$ 439	\$ 955	\$1,931	\$2,705	\$3,686	\$4,316	\$4,537
	Average Monthly Final Average Salary	\$6,747	\$6,114	\$6,090	\$5,667	\$5,948	\$6,123	\$5,712
	Number of New Retirees	74	30	138	157	212	131	267
2012	Average Monthly Pension	\$ 432	\$ 982	\$1,828	\$2,579	\$3,273	\$4,273	\$4,578
	Average Monthly Final Average Salary	\$7,369	\$6,598	\$5,733	\$5,475	\$5,391	\$5,882	\$5,795
	Number of New Retirees	97	35	110	167	210	113	287
N/A - Not	Available							

### Schedule of Average Benefit Payments -Postemployment Healthcare

	of Average Benefit Payments -	Postem	ipioyme	nt Heal	tncare			
				Vears of (	Credited Se	rvice		
		<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-</u>
2003	Average Monthly Pension	\$ 476	\$ 739	\$1,517	\$2,478	\$3,543	\$3,963	\$3,770
	Average Monthly Final Average Salary	N/A	N/A	\$4,233	\$4,617	\$5,479	\$5,442	\$4,95
	Number of New Retirees	3	9	86	85	529	489	304
2004	Average Monthly Pension	\$ 0	\$491	\$1,702	\$1,974	\$2,596	\$3,673	\$3,534
	Average Monthly Final Average Salary	\$ 0	N/A	\$5,162	\$4,559	\$8,492	\$5,193	\$5,144
	Number of New Retirees	0	5	65	52	25	19	4:
2005	Average Monthly Pension	\$ 828	\$2,245	\$1,685	\$2,453	\$2,794	\$3,771	\$3,72
	Average Monthly Final Average Salary	N/A	N/A	\$4,482	\$4,812	\$4,884	\$5,317	\$5,178
	Number of New Retirees	2	6	58	59	24	17	30
2006	Average Monthly Pension	\$ 412	\$1,329	\$1,923	\$2,342	\$2,985	\$5,291	\$4,269
	Average Monthly Final Average Salary	N/A	N/A	\$5,117	\$4,696	\$5,014	\$6,508	\$5,023
	Number of New Retirees	3	17	57	70	44	26	32
2007	Average Monthly Pension	\$ 380	\$1,467	\$2,153	\$2,601	\$3,530	\$4,117	\$4,630
	Average Monthly Final Average Salary	N/A	N/A	\$5,721	\$5,121	\$5,486	\$5,600	\$6,050
	Number of New Retirees	3	13	77	109	87	37	82
2008	Average Monthly Pension	\$ 150	\$1,238	\$1,830	\$3,046	\$3,418	\$4,317	\$4,585
	Average Monthly Final Average Salary	N/A	N/A	\$5,050	\$5,941	\$6,128	\$5,920	\$6,010
	Number of New Retirees	1	10	62	76	70	47	72
2009	Average Monthly Pension	\$ 399	\$ 0	\$2,031	\$2,672	\$3,434	\$3,906	\$4,398
	Average Monthly Final Average Salary	N/A	\$ 0	\$6,679	\$5,804	\$6,652	\$5,994	\$6,03
	Number of New Retirees	4	0	31	64	46	41	88
2010	Average Monthly Pension	\$ 199	\$1,468	\$1,931	\$2,784	\$3,273	\$4,141	\$4,239
	Average Monthly Final Average Salary	\$2,747	\$7,743	\$5,740	\$5,673	\$5,151	\$5,639	\$5,36
	Number of New Retirees	1	5	41	72	110	58	118
2011	Average Monthly Pension	\$ 239	\$ 783	\$1,839	\$2,852	\$3,787	\$4,056	\$4,574
	Average Monthly Final Average Salary	\$4,669	\$5,044	\$5,376	\$5,729	\$5,991	\$5,710	\$5,750
	Number of New Retirees	2	7	58	89	144	96	190
2012	Average Monthly Pension	\$ 635	\$1,127	\$1,767	\$2,746	\$3,462	\$4,572	\$4,479
	Average Monthly Final Average Salary	\$5,149	\$7,880	\$5,489	\$5,552	\$5,457	\$6,193	\$5,672
	Number of New Retirees	2	4	36	88	142	82	19'

### Schedule of Principal Participating Employers -Pension and Postemployment Healthcare

### Schedule of Principal Participating Employers - Pension and Postemployment Healthcare

### As of December 31, 2012 and 2003

	Ĩ	<u>2012</u>	<u>2003</u>		
Participating Employer	Covered Employees	Percentage of Total Covered Employees	Covered <b>Employees</b>	Percentage of Total Covered Employees	
Cook County	21,447	99.87%	25,513	99.92%	
County Employees' and Officers' Annuity and Benefit Fund of Cook County	27	0.13%	21	0.08%	
Total	<u>21,474</u>	100.00%	<u>25,534</u>	100.00%	

COUNTY EMPLOYEES' AND OFFICERS' ANNUITY AND BENEFIT FUND OF COOK COUNTY 33 North Dearborn Street, Suite 1000 Chicago, IL 60602 312.603.1200 www.cookcountypension.com

