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# COUNTY EMPLOYEES' AND OFFICERS' ANNUITY AND BENEFIT FUND OF COOK COUNTY

# Actuarial Valuation Report as of December 31, 2012

April 2013

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April 26, 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 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. For purposes of GASB Statement No. 25 and GASB Statement No. 43, we have performed separate actuarial valuations of the pension benefits and retiree health insurance benefits provided by the CEABF and have prepared actuarial reports based on these valuations. As has been done in past years, we have also performed this combined actuarial valuation of the pension and retiree health insurance benefits provided by the Fund to measure the overall funded status and contribution requirements of the Fund. We believe that such a combined valuation is required under Section 9-199 of the Illinois Pension Code which provides that the Fund shall submit a report each year "containing a detailed statement of the affairs of the Fund, its income and expenditures, and assets and liabilities....". This report is intended to present the results of the combined valuation. For more details on the Plans, readers are encouraged to review the separate GASB 25 and 43 reports.

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 6 beginning on page 50.

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 are Enrolled Actuaries, Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet 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. They are 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

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### **EXECUTIVE SUMMARY**

### 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. Actuarial projections are also performed to provide a long-term view of the expected future funding status and contribution patterns.

### Membership

**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.

	December 31, 2012	December 31, 2011
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.

Distributions of active members by age, service, and salary are given in Section 5.2 on page 35. The salaries shown for active members are the actual salaries reported.

A schedule of active member data and reconciliation of the active membership from the previous year is shown in Sections 5.3 and 5.4 beginning on page 36.

*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.

	December 31, 2012	December 31, 2011
Number of members receiving		
payments		
Retirees	13,609	13,023
Beneficiaries	2,565	2,532
> Total	16,174	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.

Distributions of retired members by age and form of payment are given in Section 5.6 through 5.9 on pages 39 through 42.

*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.

	December 31, 2012	December 31, 2011
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 beginning on page 17.

### 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 \$957.0 million during the prior year. This net loss is about 7.0% 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 \$580.4 million during the year ending December 31, 2012. This loss increased the unfunded actuarial accrued liability by \$580.4 million and decreased the funded ratio by 2.2%.

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 6. 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 on page 11.

### 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 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 \$184.6 million, or 12.49% of pay. This represents a decrease in the employer normal cost rate of 0.03% of pay from last year's employer normal cost rate of 12.46%.

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 \$6.8 billion. This represents an increase of \$969.5 million in the unfunded actuarial accrued liability from last year's amount of \$5.8 billion. The annual payment required to amortize the unfunded actuarial accrued liability of \$6.8 billion as of December 31, 2012 is \$535.3 million, or 36.21% of pay.

The annual actuarially required employer contribution for 2013 is \$719.9 million, or 48.7% of pay. This represents an increase of \$64.1 million in the employer contribution amount of \$655.8 million for 2012, or an increase of 3.7% of pay from last year's employer contribution rate of 45.0%.

The actuarial liabilities and development of the annual actuarial employer contribution is shown in Sections 1.1 and 1.2 beginning on page 9.

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 53.6%. This represents a decrease of 3.8% from last year's funded ratio of 57.5% as of December 31, 2011.

A history of the unfunded actuarial accrued liability and the funded ratio is shown in Section 1.6 on page 14.

### 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 and GASB No. 43 can be found in separate reports.

### Projections

As part of the annual actuarial valuation, a forecast of expected future valuation results is performed over a 30 year period beginning on the valuation date. This analysis provides a dynamic look into the future to identify trends in future employer contributions and funded status. The forecast replaces active members who are assumed to decrement (retire, separate, etc.) during the period with new employees resulting in a stable active membership. The forecast assumes all actuarial assumptions are exactly realized each year during the forecast period. The results of these forecasts can be found in Section 4.

### Changes in Plan Provisions

There were no changes in benefits or other Plan provisions considered in the pension valuation since the last valuation performed as of December 31, 2011. The only change in benefits or other Plan provisions considered in the Retiree Health Insurance 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 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 (284) or St. Anthony. Members were automatically migrated to Blue Advantage effective 1/1/2013. The only difference between Blue Advantage and Classic Blue is the participating providers in the network. The Plan designs are identical.

### 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 for the pension Plan since the last actuarial valuation performed as of December 31, 2011.

The following changes have been made to the actuarial assumptions or valuation procedures for the Retiree Health Insurance Plan 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: Terminated 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.
- Separation 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.

## **Comparative Summary of Key Actuarial Valuation Results**

	Actuarial Valuation as of			
	December 31, 2012	December 31, 2011		
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		
• Refrees and Denencianes (Average)	<i><i><i><i><i><i><i><i>i</i>iiiii</i></i></i></i></i></i></i>	<i>\$50,520</i>		
Investment Returns				
Fair Value				
• Rate of Return (7.5% expected)	12.5%	1.2%		
Actuarial Value	2 10/	1 70/		
Rate of Return	3.1%	1.7%		
Summary of Assets and Liabilities				
Total Actuarial Accrued Liability	\$14,630,250,955	\$13,724,012,399		
Actuarial Value of Assets	\$7,833,882,926	\$7,897,102,116		
Unfunded Actuarial Accrued Liability	\$6,796,368,029	\$5,826,910,283		
Funded Ratio	53.55%	57.54%		
Employer Actuarial Required Contribution				
Employer Normal Cost	\$184,581,332	\$181,484,588		
Amortization of Unfunded Actuarial	J10 <del>4</del> ,J01,JJ2	Ş101,+0 <del>4</del> ,500		
Accrued Liability (Surplus)	\$535,308,725	\$474,315,512		
Employer Actuarial Required Contribution	\$719,890,057	\$655,800,100		
Actual/Statutory Contribution	\$190,575,229	\$193,372,210		
Amount by which employer contributions are expected				
to fall short of the actuarially determined contribution	\$529,314,828	\$462,427,890		
to full short of the detailarly determined contribution	<i>\$323,314,020</i>	Ş402,427,030		
Required tax multiple for employer contribution to meet				
actuarially determined contribution	5.82	5.22		
Solvency Date	2034	N/A		

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

Section 1

**Actuarial Funding Results** 

### Section 1.1

Actuarial Liabilities	Totals
1. Present Value of Projected Benefits	
Active Members	
Retirement Benefits	7,535,625,570
Withdrawal Benefits	596,460,140
Death Benefits	171,712,933
Retiree Health Insurance	862,498,001
Total	9,166,296,644
2. Retired Members and Beneficiaries Receiving Pension Benefits	6,431,295,762
3. Retired Members' Retiree Health Insurance	563,890,183
<ol><li>Inactive Members with Deferred Pension Benefits</li></ol>	811,347,220
5. Inactive Members' Retiree Health Insurance	37,496,944
6. Total Present Value of Projected Benefits (1. + 2. + 3. + 4. + 5.)	17,010,326,753
7. Present Value of Future Normal Costs	2,380,075,798
8. Total Actuarial Accrued Liability	14,630,250,955
(6. – 7.)	

### Actuarial Liabilities and Normal Cost

Normal Cost	Totals	% 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. Retiree Health Insurance	29,076,703	1.97%
g. Administrative Expenses	4,518,521	0.31%
2. Total Normal Cost	310,417,409	21.00%
3. Expected Member Contribution	125,836,077	8.51%
4. Employer Normal Cost (2 3.)	184,581,332	12.49%

### Section 1.2

### **Actuarial Contributions\***

Development of Employer Contribution	Fiscal Year Ending December 31, 2013	Fiscal Year Ending December 31, 2012
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. Retiree Health Insurance	610,376,885	
v. Total	6,786,220,846	6,542,268,570
b. Retired Members and Beneficiaries Receiving Benefits	6,431,295,762	5,902,779,764
c. Retired Members' Retiree Health Insurance	563,890,183	452,468,280
d. Inactive Members with Deferred Benefits	811,347,220	826,495,785
e. Inactive Members' Retiree Health Insurance	37,496,944	0
f. Total (2.a.v. + 2.b. + 2.c. + 2.d. + 2.e.)	14,630,250,955	13,724,012,399
3. Actuarial Value of Assets	7,833,882,926	7,897,102,116
4. Unfunded Actuarial Accrued Liability (UAAL) (2.f - 3.)	6,796,368,029	5,826,910,283
5. Funded Ratio (3. / 2.f)	53.55%	57.54%
6. UAAL as a Percent of Annual Payroll (4. / 1.)	459.76%	400.08%
7. Amortization Payment for UAAL		
a. Amount	535,308,725	474,315,512
b. As a % of pay	36.21%	32.57%
8. Employer Normal Cost		
a. Amount	184,581,332	181,484,588
b. As a % of pay	12.49%	12.46%
9. Employer Actuarial Required Contribution		
a. Amount	719,890,057	655,800,100
b. As a % of pay	48.70%	45.03%
10. Actual/Statutory Contribution	190,575,229	193,372,210
11. Required tax multiple for Employer ARC	5.82	5.22
12. Funding Period (years)	30	30

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

## Section 1.3

## **Actuarial Balance Sheet**

Financial Resources	December 31, 2012
1. Actuarial Value of Assets	7,833,882,926
<ul> <li>2. Present Value of Future Contributions</li> <li>(a) Expected Member Contributions</li> <li>(b) Employer Normal Cost</li> <li>(c) Total</li> </ul>	964,827,979 1,415,247,819 2,380,075,798
3. Unfunded Actuarial Accrued Liability/(Reserve)	6,796,368,029
4. Total Assets [1 + 2(c) + 3]	17,010,326,753

Benefit Obligations	December 31, 2012
1. Present Value of Future Benefits	
(a) Active Members	9,166,296,644
(b) Retirees and Beneficiaries	6,995,185,945
(c) Inactive Members	848,844,164
(d) Total	17,010,326,753

### Section 1.4

### Solvency Test

Aggregate Accrued Liability For:

Portion of Accrued Liabilities Covered by Assets

	(1)	(2) Member	(3) Active and				
	Active and	Currently	Inactive Member				
Valuation	Inactive Member	Receiving	Employer	Actuarial			
Date	Contributions	Benefits	Portion	Assets	(1)	(2)	(3)
December 31, 2003	1,141,964,297	4,021,001,425	3,618,003,982	5,929,201,142	100.00%	100.00%	21.18%
December 31, 2004	1,275,497,167	4,423,092,162	3,752,194,757	6,700,845,111	100.00%	100.00%	26.71%
December 31, 2005	1,322,128,598	4,023,901,896	3,923,913,639	7,027,508,138	100.00%	100.00%	42.85%
December 31, 2006	1,496,918,427	4,149,302,173	4,258,357,574	7,462,683,122	100.00%	100.00%	42.66%
December 31, 2007	1,569,401,144	4,466,816,242	4,387,512,514	8,059,879,804	100.00%	100.00%	46.12%
December 31, 2008	1,650,186,209	4,649,512,515	4,773,482,625	8,036,074,797	100.00%	100.00%	36.38%
December 31, 2009	1,749,058,834	5,479,822,836	5,346,634,079	7,945,567,096	100.00%	100.00%	13.40%
December 31, 2010	1,824,472,753	5,826,424,289	5,491,240,133	7,982,368,659	100.00%	100.00%	6.04%
December 31, 2011	1,662,273,117	6,355,248,044	5,706,491,238	7,897,102,116	100.00%	98.11%	0.00%
December 31, 2012	1,821,792,594	6,995,185,945	5,813,272,416	7,833,882,926	100.00%	85.95%	0.00%

### Section 1.5

## **Reconciliation of Change in Unfunded Actuarial Liability**

Development of Unfunded Actuarial Liability	Amount
1. Unfunded Actuarial Accrued Liability as of December 31, 2011	5,826,910,283
2. Employer Contribution Requirement of Normal Cost Plus Interest on Unfunded Liability for Period January 1, 2012 to December 31, 2012	632,114,203
3. Actual Employer Contribution for the Year, Plus Interest	197,743,509
<ol> <li>Increase in Unfunded Liability Due to Employer Contribution Plus Interest Being Less Than Normal Cost Plus Interest on Unfunded Liability (2 -3)</li> </ol>	434,370,694
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	124,412,082
8. Net Increase in Unfunded Liability for the Year (4 + 5 + 6 + 7)	969,457,746
9. Unfunded Actuarial Liability as of December 31, 2012 (1 + 8)	6,796,368,029

Section 1.6

### Actuarial Actuarial Unfunded Accrued Value **Funded Ratio** Actuarial Valuation Date Liability (AAL) of Assets (AVA) (AVA as a % of AAL) Accrued Liability (UAAL) December 31, 2003 67.52% 8,780,969,704 5,929,201,142 2,851,768,562 70.90% December 31, 2004 9,450,784,086 6,700,845,111 2,749,938,975 December 31, 2005 9,269,944,133 7,027,508,138 75.81% 2,242,435,995 December 31, 2006 9,904,578,174 75.35% 2,441,895,052 7,462,683,122 77.32% December 31, 2007 10,423,729,900 8.059,879,804 2,363,850,096 December 31, 2008 11,073,181,349 72.57% 8.036.074.797 3,037,106,552 December 31, 2009 12.575.515.749 7,945,567,096 63.18% 4,629,948,653 December 31, 2010 13,142,137,175 60.74% 5,159,768,516 7,982,368,659 7,897,102,116 December 31, 2011 13,724,012,399 57.54% 5,826,910,283 December 31, 2012 14,630,250,955 7,833,882,926 53.55% 6,796,368,029

### History of UAAL and Funded Ratio

Section 2

**Plan Assets** 

### Section 2.1

## Summary of Fair Value of Assets

	Fair Value as of	Fair Value as of		
	December 31, 2012	December 31, 2011		
Asset Category	Amount	%	Amount	%
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.c + 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	

### Section 2.2

## Changes in Fair Value of Assets

Transactions	December 31, 2012	December 31, 2011
Additions	<b>**</b>	
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 Ben	nefits	
a. Beginning of Year	\$7,441,243,250	\$7,574,653,612
b. End of Year	\$8,059,935,628	\$7,441,243,250

### Section 2.3

## Actuarial Value of Assets

2. Unrecognized Return as of December 31, 2011       (455,858,866         3. Fair Value of Assets as of December 31, 2011 (1. + 2.)       7,441,243,255         4. Contributions       130,570,59         (a) Member (includes purchased service)       130,570,59         (b) Employer       130,570,59         (c) Miscellaneous contributions       130,190,68         (d) Total       331,482,06         5. Distributions       563,092,12         (a) Benefit payments       563,092,12         (b) Refund of contributions       33,081,72         (c) Administrative expenses       4,303,35         (d) Total       592,282,651         (b) Item 1       (34,189,41)         (c) Item 4(d)       12,205,852         (d) Item 1       548,188,281         (e) Total (a) + (b) + (c) - (d)]       548,188,281         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread       528,282,652         10. Return to be Spread <b>Fiscal Year Percenti</b> 2010       320,499,232       80%       271,599,386         2010       320,499,232       10%       271,599,386         2011       477,440,319)       600%       266,684,409	Development of Actuarial Value of Assets				Amount
3. Fair Value of Assets as of December 31, 2011 (1. + 2.)       7,441,243,263         4. Contributions       130,570,55         (a) Member (includes purchased service)       130,570,55         (b) Employer       130,570,55         (c) Miscellaneous contributions       190,720,77         (d) Total       331,482,06         5. Distributions       563,092,12         (a) Benefit payments       563,092,12         (c) Administrative expenses       4,303,33         (d) Total       592,282,665         (d) Item 1       592,282,665         (d) Item 2       (34,189,411         (c) Item 4(d)       12,205,562         (d) Item 4(d)       12,205,562         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread       580,599,356,22         10. Return to be Spread       7,1599,384         2011       477,404,319       60%         20212       339,499,232       80%         20212       339,499,232       2011       426,058,096         20212       339,499,232       2011       271,599,384         20212       339,499,232       2021       203,499,692,32       206%         20212       339,499,232<	1. Actuarial Value of Assets as of December 31, 2011				7,897,102,116
4. Contributions       130,570,55         (a) Member (includes purchased service)       130,570,55         (b) Employer       130,70,57         (c) Miscellaneous contributions       100,720,77         (c) Miscellaneous contributions       331,482,06         (d) Total       5. Distributions         (a) Benefit payments       563,092,12         (b) Refund of contributions       33,081,72         (c) Administrative expenses       4,303,35         (d) Total       592,282,665         (d) Total       592,282,665         (d) Item 1(       592,282,665         (b) Item 2       (34,189,411         (c) Item 4(d)       12,205,852         (d) Item 5(c)       22,110,811         (e) Total [(a) + (b) + (c) - (d)]       548,188,282         7. Actual Return to be Spread for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread       39,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       271,599,386         2010       320,429,232       80%       271,599,386         2011       (477,440,31)       60%       271,599,386         2012       339,499,232       80%       271,599,386 </td <td>2. Unrecognized Return as of December 31, 2011</td> <td></td> <td></td> <td></td> <td>(455,858,866)</td>	2. Unrecognized Return as of December 31, 2011				(455,858,866)
(a) Member (includes purchased service)       130,570,59         (b) Employer       10,190,68         (c) Miscellaneous contributions       10,190,68         (d) Total       331,482,06         5. Distributions       563,092,12         (a) Benefit payments       563,092,12         (b) Refund of contributions       33,081,724         (c) Administrative expenses       4,303,35         (d) Total       502,828,665         (e) Total       592,282,665         (b) Item 2       (34,189,41)         (c) Item 4(d)       12,205,851         (c) Item 4(d)       12,205,851         (c) Item 4(d)       12,205,851         (c) Item 5(c)       22,110,811         (e) Total (a) + (b) + (c) - (d)]       548,188,282         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread       339,499,233         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       12012       339,499,232         2011       (477,40,319)       60%       (286,484,197)         2010       320,297,20       40%       (218,103,881)         2011       (477,40,319)       60%       (284,84,4	3. Fair Value of Assets as of December 31, 2011 (1. + 2.)				7,441,243,250
(b) Employer       190,720,77         (c) Miscellaneous contributions       331,482,06         (d) Total       331,482,06         5. Distributions       563,092,12         (a) Benefit payments       563,092,12         (b) Refund of contributions       33,081,724         (c) Administrative expenses       4,303,351         (d) Total       600,477,205         6. Expected Return at 7.50% on       (34,189,413         (a) Item 1       552,282,655         (b) Item 2       (34,189,413         (c) Item 4(d)       12,205,855         (d) Item 5(C)       (22,110,812         (e) Total (fa) + (b) + (c) - (d)]       548,189,292         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,936,62         10. Return to be Spread       2011       (477,440,319)       60%       271,599,380         2010       320,259,720       40%       28,103,888       2009       64,068,096       20%       12,203,57,20         10. Return to be Spread       2011       (477,440,319)       60%       28,103,888       2009       64,068,096 <t< td=""><td>4. Contributions</td><td></td><td></td><td></td><td></td></t<>	4. Contributions				
(c) Miscellaneous contributions       10,190,68         (d) Total       331,482,06         5. Distributions       563,092,124         (a) Benefit payments       563,092,124         (b) Refund of contributions       33,081,724         (c) Administrative expenses       4,303,355         (d) Total       600,477,205         6. Expected Return at 7.50% on       11,205,855         (d) Item 1       592,282,665         (b) Item 2       12,418,8414         (c) Item 4(d)       12,205,855         (d) Item 5(c)       22,110,813         (e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread <b>Vinecognized Vinecognized Fiscal Year be Spread Overcognized Vinecognized</b> 2011       (477,440,319)       60%       271,599,386         10. Return to be Spread <b>Vinecognized Vinecognized Vinecognized</b> 2010       320,299,232       80%       271,599,386					130,570,599
(d) Total       331,482,06         5. Distributions       563,092,121         (a) Benefit payments       563,092,121         (b) Refund of contributions       33,081,721         (c) Administrative expenses       4,303,353         (d) Total       600,477,200         6. Expected Return at 7.50% on       (a) Item 1         (a) Item 1       592,282,653         (b) Item 2       (34,189,441)         (c) Item 4(d)       22,110,811         (d) Item 5(c)       22,110,811         (e) Total [(a) + (b) + (c) - (d)]       548,188,285         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread <b>Percent Return</b> 2012       339,499,232       80%       271,599,386         2011       (47,7440,319)       60%       226,052,702         10. Return to be Spread       2009       564,068,096       20%       112,813,613         2009       564,068,096       20%       112,813,613       226,052,702         11. Actuarial Value of Assets (9. – 10.) <b>7,833,882,926</b> <td></td> <td></td> <td></td> <td></td> <td>190,720,776</td>					190,720,776
5. Distributions       5.63.092.121         (a) Benefit payments       33.081.72         (b) Refund of contributions       33.081.72         (c) Administrative expenses       600.477.203         (d) Total       600.477.203         6. Expected Return at 7.50% on       592.282.653         (a) Item 1       592.282.653         (b) Item 2       (34.189.411         (c) Item 4(d)       12.205.853         (d) Item 5(c)       22.110.811         (e) Total [(a) + (b) + (c) - (d)]       548.188.281         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887.687.51         8. Return to be Spread for Fiscal Year (7 6.e)       339.499.232         9. Total Fair Value of Assets as of December 31, 2012       8.059.935.62         10. Return to be Spread <b>Fiscal Year Wirecognized Virecognized Unrecognized Unrecognized</b> 2012       339.499.232       80%       271.599.386         2013       20.259.720       40%       128.103.886         2010       320.259.720       40%       128.103.886         2009       564.068.096       20%       112.813.619         2008       (2.458.448.408)       0%       0%	(c) Miscellaneous contributions				10,190,689
(a) Benefit payments       563,092,124         (b) Refund of contributions       33,081,724         (c) Administrative expenses       4,303,355         (d) Total       600,477,205         6. Expected Return at 7.50% on       (34,189,411         (a) Item 1       592,282,655         (b) Item 2       (34,189,411         (c) Item 4(d)       12,205,855         (d) Item 5(c)       22,110,812         (e) Total [(a) + (b) + (c) - (d)]       548,188,281         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,233         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread <b>Viriecognized Fiscal Year be Spread Viriecognized</b> 2012       339,499,232       80%       271,599,396         10. Return to be Spread <b>Viriecognized Viriecognized</b> 2012       339,499,232       80%       271,599,396         2013       20,259,720       40%       128,103,888         2010       320,259,720       40%       128,103,888         2009       564,068,096       20%       128,103,888	(d) Total				331,482,064
(b) Refund of contributions       33,081,724         (c) Administrative expenses       4,303,35         (d) Total       600,477,203         6. Expected Return at 7.50% on       (34,189,414)         (a) Item 1       592,282,653         (b) Item 2       (34,189,414)         (c) Item 4(d)       12,205,853         (d) Item 5(c)       22,110,812         (e) Total [(a) + (b) + (c) - (d)]       548,188,283         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,511         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       2012       339,499,232         2011       (477,440,319)       60%       (246,464,19)         2010       320,259,720       40%       128,103,888         2010       320,259,720       40%       128,103,888         2009       564,068,096       20%       112,813,611         2008       (2,458,448,408)       0%       0%         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       7	5. Distributions				
(c) Administrative expenses       4,303,353         (d) Total       600,477,203         6. Expected Return at 7.50% on       (34,189,413         (a) Item 1       592,282,653         (b) Item 2       (34,189,413         (c) Item 4(d)       12,208,853         (d) Item 5(c)       22,110,812         (e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Unrecognized       Wirecognized         2011       (477,440,319)       60%       (28,64,64,19)         2010       320,259,720       40%       12,8103,88         2009       564,068,096       20%       112,813,616         2009       564,068,096       20%       112,813,616         2008       (2,458,448,408)       0%       0%         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       7,833,882,926	(a) Benefit payments				563,092,126
(d) Total       600,477,200         6. Expected Return at 7.50% on       592,282,653         (b) Item 2       (34,189,411         (c) Item 4(d)       12,208,853         (d) Item 5(c)       22,110,812         (e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Fiscal Year       Keturn to         Verifical Year       bit Spread       Verecognized         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,19)         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,611         2008       (2,458,448,08)       0%       (2         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       10	(b) Refund of contributions				33,081,726
6. Expected Return at 7.50% on       592,282,653         (a) Item 1       592,282,653         (b) Item 2       (34,189,411         (c) Item 4(d)       12,205,853         (d) Item 5(c)       22,110,811         (e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread <b>Percent Return</b> 2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,19°         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,610         2008       (2,458,448,408)       0%       0%         11. Actuarial Value of Assets (9. – 10.) <b>7,833,882,926</b> 7,833,882,926	(c) Administrative expenses				4,303,353
(a) Item 1       592,282,653         (b) Item 2       (34,189,413         (c) Item 4(d)       12,205,853         (d) Item 5(c)       22,110,813         (e) Total [(a) + (b) + (c) - (d)]       548,188,283         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Fiscal Year       be Spread       Percent         Fiscal Year       be Spread       Percent       Return: for         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,197)         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,81,03,886         2009       564,068,096       20%       112,81,03,886         2009       564,068,096       20%       1226,052,702         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       7,833,882,926	(d) Total				600,477,205
(b) Item 2       (34,189,419         (c) Item 4(d)       12,205,853         (d) Item 5(c)       22,110,813         (e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,511         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,622         10. Return to be Spread       Percent       Percent         Percent       2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,197)       2010       320,259,720       40%       128,103,886         2010       320,259,720       40%       128,103,886       0%       0       0         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       7,833,882,926       7,833,882,926       7,833,882,926	6. Expected Return at 7.50% on				
(c) Item 4(d)       12,205,853         (d) Item 5(c)       22,110,812         (e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread <b>Fiscal Year be Spread Fiscal Year be Spread Percent 2012</b> 339,499,232 <b>80%</b> 271,599,386         2011       (477,440,319) <b>60%</b> (286,464,19°)         2009       564,068,096       20%       112,813,619         2008       (2,458,448,408)       0%       0%         11. Actuarial Value of Assets (9. – 10.) <td>(a) Item 1</td> <td></td> <td></td> <td></td> <td>592,282,659</td>	(a) Item 1				592,282,659
(d) Item 5(c)       22,110,812         (e) Total [(a) + (b) + (c) - (d)]       548,188,283         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Fiscal Year       be Spread         Fiscal Year       be Spread       Percent         Fiscal Year       be Spread       Percent         2012       339,499,232       80%         2011       (477,440,319)       60%         (286,464,19')       2010       320,259,720         2010       320,259,720       40%       128,103,888         2009       564,068,096       20%       112,813,619         2008       (2,458,448,408)       0%       0%         11. Actuarial Value of Assets (9. – 10.)       7,833,882,920       7,833,882,920	(b) Item 2				(34,189,415)
(e) Total [(a) + (b) + (c) - (d)]       548,188,287         7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Unrecognized       Unrecognized         Percent:       Return: to       Unrecognized       Return: to         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,19°)         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,616         2008       (2,458,448,408)       0%       (477,403,19)         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       7,833,882,926	(c) Item 4(d)				12,205,855
7. Actual Return on Fair Value for Fiscal Year, Net of Investment Expenses       887,687,51         8. Return to be Spread for Fiscal Year (7. – 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Inrecognized         Fiscal Year       be Spread       Percent         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,19°)         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,615         2008       (2,458,448,408)       0%       (477,402,100)         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926       7,833,882,926	(d) Item 5(c)				22,110,812
8. Return to be Spread for Fiscal Year (7. – 6.e)       339,499,232         9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Fiscal Year       be Spread       Percent       Return         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,19°         2010       320,259,720       40%       128,103,888         2009       564,068,096       20%       112,813,616         2008       (2,458,448,408)       0%       (477,403,19)         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926	(e) Total [(a) + (b) + (c) – (d)]				548,188,287
9. Total Fair Value of Assets as of December 31, 2012       8,059,935,62         10. Return to be Spread       Inrecognized       Unrecognized         Fiscal Year       be Spread       Percent       Return         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,197)         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,616         2008       (2,458,448,408)       0%       0%         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926	7. Actual Return on Fair Value for Fiscal Year, Net of Investment E	xpenses			887,687,519
10. Return to be Spread       Unrecognized:       Unrecognized:         Fiscal Year       be Spread       Percent         2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,19°         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,615         2008       (2,458,448,408)       0%       0%         Total       226,052,702         11. Actuarial Value of Assets (9. – 10.)       7,833,882,926	8. Return to be Spread for Fiscal Year (7. – 6.e)				339,499,232
Return to         Unrecognized         Unrecognized           2012         339,499,232         80%         271,599,380           2011         (477,440,319)         60%         (286,464,19)           2010         320,259,720         40%         128,103,880           2009         564,068,096         20%         112,813,610           2008         (2,458,448,408)         0%         0%           Total         226,052,702           11. Actuarial Value of Assets (9. – 10.)         7,833,882,926	9. Total Fair Value of Assets as of December 31, 2012				8,059,935,628
Fiscal Year         be Spread         Percent         Return           2012         339,499,232         80%         271,599,366           2011         (477,440,319)         60%         (286,464,197)           2010         320,259,720         40%         128,103,888           2009         564,068,096         20%         112,813,616           2008         (2,458,448,408)         0%         0           Total         226,052,702           11. Actuarial Value of Assets (9. – 10.)         7,833,882,926	10. Return to be Spread				
Fiscal Year         be Spread         Percent         Return           2012         339,499,232         80%         271,599,366           2011         (477,440,319)         60%         (286,464,197)           2010         320,259,720         40%         128,103,888           2009         564,068,096         20%         112,813,616           2008         (2,458,448,408)         0%         0           Total         226,052,702           11. Actuarial Value of Assets (9. – 10.)         7,833,882,926			Return to	Unrecognized	Unrecognized
2012       339,499,232       80%       271,599,386         2011       (477,440,319)       60%       (286,464,197)         2010       320,259,720       40%       128,103,886         2009       564,068,096       20%       112,813,619         2008       (2,458,448,408)       0%       0%         Total         7,833,882,926		Fiscal Year			
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			339,499,232	80%	271,599,386
2009         564,068,096         20%         112,813,619           2008         (2,458,448,408)         0%         0           Total         226,052,702		2011	(477,440,319)	60%	(286,464,191)
2008         (2,458,448,408)         0%         0           Total         226,052,702           11. Actuarial Value of Assets (9. – 10.)         7,833,882,926		2010	320,259,720	40%	128,103,888
2008         (2,458,448,408)         0%         0           Total         226,052,702           11. Actuarial Value of Assets (9. – 10.)         7,833,882,926		2009	564,068,096	20%	112,813,619
11. Actuarial Value of Assets (9. – 10.)     7,833,882,926		2008		0%	0
				Total	226,052,702
12. Recognized Rate of Return for the Year on Actuarial Value of Assets 3.10	11. Actuariai value of Assets (9. – 10.)				7,833,882,926
	12. Recognized Rate of Return for the Year on Actuarial Value of A	Assets			3.10%
13. Rate of Return for the Year on Market Value of Assets (reported by investment consultant) 12.50	13. Rate of Return for the Year on Market Value of Assets (reported	d by investmer	nt consultant)		12.50%

Section 3

Projections

### Section 3.1

## **Projection Assumptions and Methods**

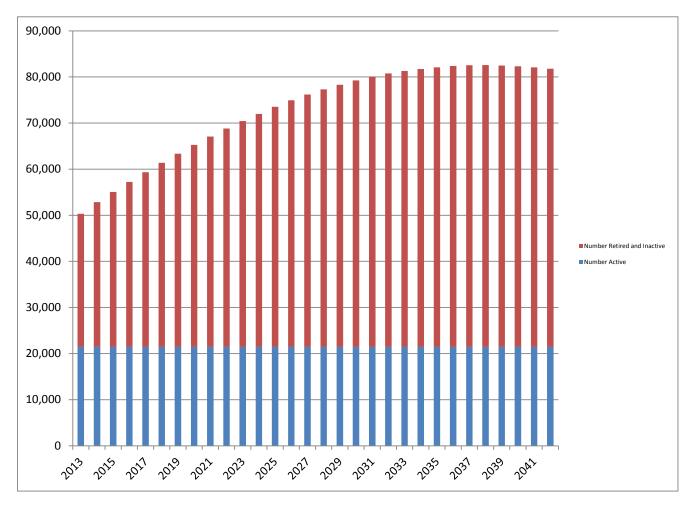
Actuarial assumptions:

- Projected Salary Increases for New Hires	4.00%
- Projected Returns	7.50%
<ul> <li>Contributions Based On the Current Levy</li> </ul>	N/A

Section 3.2

**Membership Projection** 

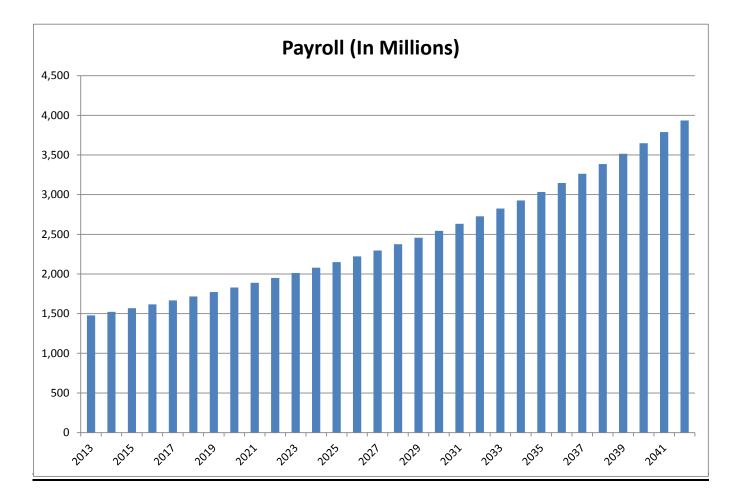
### **Projected Member Count**



Section 3.2 (cont'd)

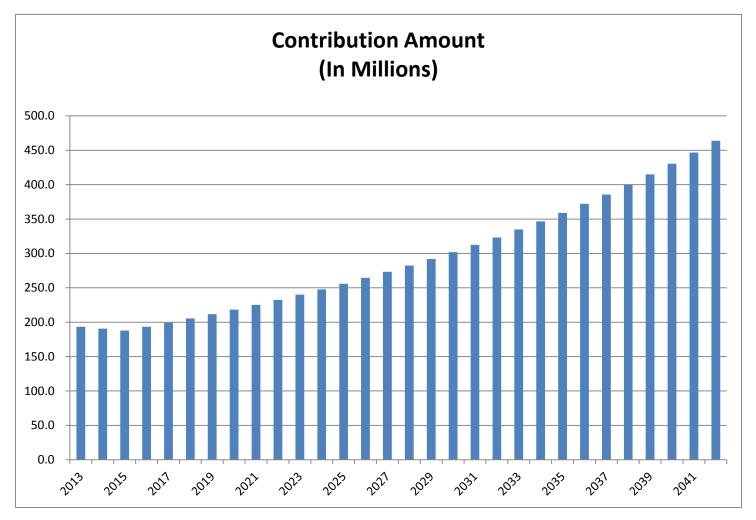
**Membership Projection** 

### Projected Current and New Member Payroll

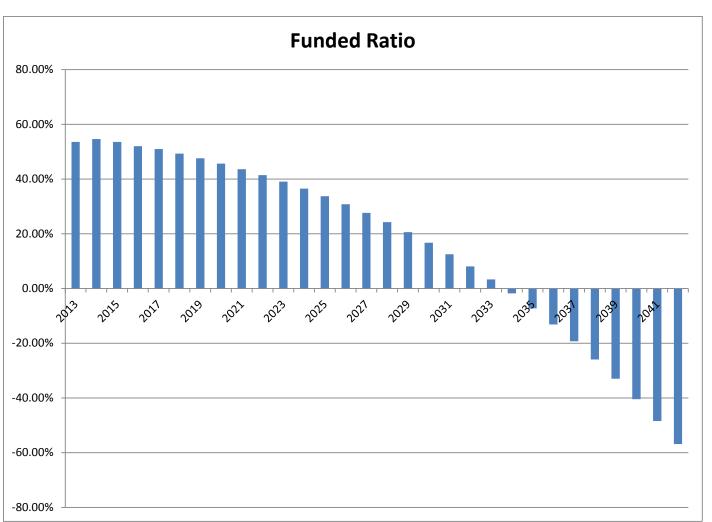


Section 3.3

## **Projection of Employer Contribution Amounts**



Section 3.4



Projection of Funded Status

### Section 3.5

## **Table of Projected Actuarial Results**

				Employer Co	ontributions					
Fiscal Year	Payroll	Total Payout	Employee Contributions	Based on Tax Levy	as a % of payroll	Total Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio	Assumed Return
2013	1,478.3	702.0	125.8	193.4	13.08%	14,630.3	7,833.9	6,796.4	53.5%	7.50%
2014	1,521.9	729.4	129.5	190.6	12.52%	14,948.6	8,163.3	6,785.3	54.6%	7.50%
2015	1,567.7	776.7	133.4	187.9	11.99%	15,577.4	8,345.6	7,231.8	53.6%	7.50%
2016	1,615.6	828.1	137.5	193.5	11.98%	16,208.7	8,431.5	7,777.2	52.0%	7.50%
2017	1,665.7	880.7	141.7	199.3	11.96%	16,839.8	8,577.3	8,262.5	50.9%	7.50%
2018	1,717.3	935.1	146.1	205.4	11.96%	17,470.5	8,615.5	8,855.0	49.3%	7.50%
2019	1,771.8	991.9	150.8	211.7	11.95%	18,099.2	8,609.1	9,490.1	47.6%	7.50%
2020	1,828.6	1,054.5	155.6	218.3	11.94%	18,723.6	8,549.1	10,174.5	45.7%	7.50%
2021	1,887.7	1,115.9	160.6	225.2	11.93%	19,338.7	8,433.3	10,905.4	43.6%	7.50%
2022	1,949.0	1,175.4	165.9	232.5	11.93%	19,946.1	8,260.2	11,685.9	41.4%	7.50%
2023	2,013.3	1,236.7	171.3	240.0	11.92%	20,547.7	8,024.0	12,523.7	39.1%	7.50%
2024	2,080.0	1,301.4	177.0	247.8	11.91%	21,142.9	7,716.9	13,426.0	36.5%	7.50%
2025	2,148.7	1,369.7	182.9	255.9	11.91%	21,727.6	7,330.5	14,397.1	33.7%	7.50%
2026	2,220.6	1,435.6	189.0	264.4	11.91%	22,297.6	6,861.9	15,435.7	30.8%	7.50%
2027	2,296.0	1,492.4	195.4	273.2	11.90%	22,855.3	6,315.0	16,540.3	27.6%	7.50%
2028	2,374.9	1,556.9	202.1	282.3	11.89%	23,409.2	5,676.7	17,732.5	24.2%	7.50%
2029	2,457.3	1,625.7	209.1	291.9	11.88%	23,951.7	4,936.3	19,015.4	20.6%	7.50%
2030	2,543.0	1,694.2	216.4	301.9	11.87%	24,476.9	4,087.3	20,389.6	16.7%	7.50%
2031	2,632.6	1,760.4	224.0	312.4	11.87%	24,984.6	3,124.8	21,859.8	12.5%	7.50%
2032	2,726.3	1,812.1	232.0	323.3	11.86%	25,477.0	2,056.1	23,420.9	8.1%	7.50%
2033	2,824.2	1,879.2	240.3	334.7	11.85%	25,968.9	858.1	25,110.8	3.3%	7.50%
2034	2,926.8	1,944.9	249.1	346.6	11.84%	26,444.2	-476.5	26,920.7	-1.8%	7.50%
2035	3,033.9	2,012.2	258.2	359.0	11.83%	26,903.8	-1,958.6	28,862.4	-7.3%	7.50%
2036	3,145.9	2,069.9	267.7	372.1	11.83%	27,344.0	-3,588.2	30,932.2	-13.1%	7.50%
2037	3,263.2	2,118.0	277.7	385.7	11.82%	27,773.1	-5,365.5	33,138.6	-19.3%	7.50%
2038	3,386.0	2,178.9	288.2	399.9	11.81%	28,200.8	-7,313.6	35,514.4	-25.9%	7.50%
2039	3,514.6	2,233.1	299.1	414.8	11.80%	28,613.7	-9,437.3	38,051.0	-33.0%	7.50%
2040	3,648.8	2,284.6	310.5	430.4	11.80%	29,016.0	-11,745.6	40,761.6	-40.5%	7.50%
2041	3,788.9	2,330.1	322.4	446.8	11.79%	29,409.7	-14,244.9	43,654.6	-48.4%	7.50%
2042	3,934.9	2,368.9	334.9	463.8	11.79%	29,801.2	-16,941.3	46,742.5	-56.8%	7.50%

Section 4

Member Data

### Section 4.1

## Summary of Members Included

As of De	ecember 31	2012	2011						
	Active Members (includes 260 disabled in 2012 and 311 in 2011)								
(1)		21,447	22,037						
(2)	Average Age	47.5	47.3						
(3)	Average Credited Service	14.0	13.7						
(4)	Average Annual Earnings	\$68,926	\$66,091						
Retirees	and Beneficiaries								
(1)	Number	16,174	15,555						
(2)	Average Age	71.2	71.1						
(3)	Average Monthly Pension Benefit	\$2,701	\$2,577						
	Inactive Members (not refunded								
	itions or commenced benefits)								
(1)	Number	11,856	12,584						
(2)	Average Age	44.8	44.7						
Total Nu	Total Number of Members 49,477 50,176								

Section 4.2

Attained											
Age		Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	Total
Under 25	Number	122	0	0	0	0	0	0	0	0	122
	Average Salary	38,147	0	0	0	0	0	0	0	0	38,147
25-29	Number	965	162	2	0	0	0	0	0	0	1,129
	Average Salary	48,519	53,736	39,922	0	0	0	0	0	0	49,252
30-34	Number	909	848	231	10	0	0	0	0	0	1,998
	Average Salary	58,252	61,344	54,611	57,721	0	0	0	0	0	59,141
35-39	Number	551	833	785	239	9	0	0	0	0	2,417
	Average Salary	66,956	68,980	66,924	60,495	58,528	0	0	0	0	66,973
40-44	Number	451	618	836	969	383	15	0	0	0	3,272
	Average Salary	68,262	74,588	72,100	71,048	64,746	73,135	0	0	0	70,873
45-49	Number	343	406	652	760	949	271	20	0	0	3,401
	Average Salary	65,689	67,777	73,238	73,981	72,628	67,551	72,062	0	0	71,360
50-54	Number	295	344	565	655	815	624	140	3	0	3,441
	Average Salary	64,031	66,149	70,805	77,996	76,013	76,777	69,648	55,202	0	73,383
55-59	Number	242	287	453	546	613	483	226	33	0	2,883
	Average Salary	70,242	64,830	74,252	73,633	75,881	82,706	73,287	68,948	0	74,487
60-64	Number	114	245	315	340	315	204	84	37	3	1,657
	Average Salary	76,410	71,507	69,166	69,241	70,491	75,800	74,737	64,502	86,814	71,305
65-69	Number	46	84	170	158	158	81	33	14	9	753
	Average Salary	88,567	72,591	68,746	70,436	68,810	69,855	67,062	84,852	68,276	71,093
70 & Up	Number	22	41	60	87	68	38	21	18	19	374
	Average Salary	74,679	74,466	63,911	61,514	61,464	65,536	58,790	74,665	67,849	65,294
TOTAL	Number	4,060	3,868	4,069	3,764	3,310	1,716	524	105	31	21,447
	Average Salary	60,333	67,174	69,847	72,109	72,499	76,265	71,527	70,089	69,808	\$68,926

### Age and Service Distribution of Active Members As of December 31, 2012

### Section 4.3

Age and	Salary Distribution of Active Members	
	as of December 31, 2012	

Age	Number	Annual Salaries	Average Annual Salary
	Ma	le	
Under 20	3	\$59,280	\$19,760
20-24	37	1,512,536	40,879
25-29	600	29,388,353	48,981
30-34	1,019	58,431,137	57,342
35-39	1,153	78,850,791	68,388
40-44	1,550	113,810,143	73,426
45-49	1,546	117,200,121	75,809
50-54	1,459	114,666,750	78,593
55-59	1,221	98,737,563	80,866
60-64	722	57,619,750	79,806
65-69	373	29,291,262	78,529
70 and over	194	14,846,503	76,528
Total Male	9,877	\$714,414,189	\$72,331
	Fem	ale	
Under 20	11	\$196,560	\$17,869
20-24	32	1,215,710	37,991
25-29	400	18,981,922	47,455
30-34	919	53,543,121	58,262
35-39	1,245	81,573,052	65,521
40-44	1,628	111,244,829	68,332
45-49	1,854	124,741,466	67,282
50-54	2,015	139,790,190	69,375
55-59	1,724	119,713,169	69,439
60-64	1,043	69,288,806	66,432
65-69	480	30,878,602	64,330
70 and over	219	12,671,752	57,862
Total Female	11,570	\$763,839,179	\$66,019
Male and Female	21,447	\$1,478,253,368	\$68,926

### Section 4.4

## Member Data Reconciliation

	Active Members	Retired Members	Beneficiaries	Inactive Members	Total
As of 12/31/2011	22,037	13,023	2,532	12,584	50,176
Retirements	(672)	990		(318)	
Deaths With Beneficiary	(23)	(113)	147	(11)	
Terminations	(832)			832	
Rehires	352			(352)	
Miscellaneous	(314)	(291)	(114)	(879)	(1,598)
Net Change	(1,489)	586	33	(728)	(1,598)
New Entrants During the Year	899				
As of 12/31/2012	21,447	13,609	2,565	11,856	49,477

### Section 4.5

## Schedule of Active Member Data

Valuation Date	Number	Annual Earnings	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings
December 31, 2010 December 31, 2011 December 31, 2012	23,165 22,037 21,447	\$1,494,093,569 1,456,444,123 1,478,253,368	\$64,498 66,091 68,926	2.5% 4.3%

## Section 4.6

## Schedule of Retired Member Data

Valuation		Annual Benefit	Average Annual Benefit
Date	Number	Payments	Payments
December 31, 2010	15,333	\$445,909,273	\$29,082
December 31, 2011	15,555	480,953,987	30,920
December 31, 2012	16,174	524,228,085	32,412

## Section 4.7

## Schedule of Retired Members by Type of Benefit and Option Elected

Amount of Monthly		Number of	Type of Pens	ion Benefit	Opt	ion Selecte	b		
	Pens	ion Be	nefit	Recipients	1	2	1	2	3
6	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	C
	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	C
Ov	er \$18,000	)		21	21	0	5	16	C
	tals			16,174	13,609	2,565	9,225	6,791	158

### Type of Pension Benefit

#### **Option Selected** 1. Whole Life Annuity

Regular retirement
 Survivor payment

2. 65% Joint and Contingent Annuity

3. Temporary Annuity

## Section 4.8

## Schedule of Retired Members and Beneficiaries

As of December 31	2012	2011
Retired		
(1) Number, Fiscal Year Start	13,023	12,460
(2) Net Change	586	563
(3) Number, Fiscal Year End	13,609	13,023
(4) Average Current Age	71.1	70.6
(5) Average Monthly Pension Benefit	\$2,983	\$2,861
Beneficiaries		
(1) Number, Fiscal Year Start	2,532	2,394
(2) Net Change	33	138
(3) Number, Fiscal Year End	2,565	2,532
(4) Average Current Age	72.0	73.5
(5) Average Monthly Pension Benefit	\$1,205	\$1,114
Total		
(1) Number, Fiscal Year Start	15,555	14,854
(2) Net Change	619	701
(3) Number, Fiscal Year End	16,174	15,555
(4) Average Current Age	71.2	71.1
(5) Average Monthly Pension Benefit	\$2,701	\$2,577

## Section 4.9

# Schedule of Benefit Payments

Attained	Number	Annual
Ages	Number	Payments
< 20	117	¢662.015
< 30	117	\$662,015
30-34 35-39	2 11	10,432 67,277
	25	
40-44		188,313
45-49	48	389,365
50-54	306	10,402,534
55-59	1,089	44,664,039
60-64	2,506	96,787,919
65-69	3,239	123,696,275
70-74	2,995	99,218,913
75	514	15,434,631
76	482	14,587,269
77	494	14,136,108
78	451	12,388,382
79	421	11,459,176
80	375	11,180,561
81	353	9,809,262
82	356	8,963,823
83	300	7,602,069
84	285	6,692,763
85	269	6,243,762
86	255	5,884,994
87	182	3,809,460
88	224	4,589,513
89	172	3,446,202
90	152	2,803,041
91	124	2,406,433
92	98	1,828,475
93	91	1,548,932
94	59	1,021,985
95	49	537,507
96	41	529,822
97	26	458,416
98	22	203,318
99	15	234,710
100	11	99,198
100	6	117,750
101	2	23,079
	3	63,669
103	2	
104		19,793 16,000
105	2	16,900
Total	16 174 0	E 21 220 00F
Total	16,174 \$	524,228,085

Section 5

Basis of the Actuarial Valuation

## Section 5.1A

## BRIEF SUMMARY OF PENSION BENEFIT PROVISIONS

<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

<u>Money Purchase Annuity.</u> 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.

<u>Minimum Formula Annuity.</u> 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.

<u>Optional Plan of Contributions and Benefits.</u> 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.

<u>Alternate Annuity for County Officers.</u> 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

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

<u>Minimum Formula Annuity.</u> 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.

<u>Surviving Spouse's Annuity - Death after Retirement.</u> 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.

<u>Automatic Annual Increase in Surviving Spouse's Annuity.</u> 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

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.

<u>Ordinary Disability Benefits.</u> 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.

<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> The 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 55% of the premiums for retiree annuitants and 70% of the premiums for survivor annuitants.

<u>Refund to Employee Upon Withdrawal From Service.</u> 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 CEABF.

<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.

<u>Employee Contributions.</u> 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.

<u>Employer Pick-up of Employee Contributions.</u> 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.

### 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:

- 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 of percentage change 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 of the increase 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 change 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.

## Section 5.1B

# SUMMARY OF SUBSTANTIVE PLAN PROVISIONS FOR RETIREE HEALTH CARE

Eligibility	<ul><li>Tier 1 retirement (hired before January 1, 2011)</li><li>Age 50 and 10 years of service</li></ul>
	<ul><li>Tier 2 retirement (hired on or after January 1, 2011)</li><li>Age 62 and 10 years of service</li></ul>
	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	<ul> <li>Non-Medicare retirees can choose from:</li> <li>Blue Cross Blue Shield PPO</li> <li>Blue Cross Blue Shield Blue Advantage HMO</li> <li>Blue Cross Blue Shield HMO Classic</li> <li>Medicare eligible retirees can choose from: <ul> <li>Blue Cross Blue Shield PPO Medicare Supplement</li> <li>Blue Cross Blue Shield Blue Advantage HMO</li> <li>Blue Cross Blue Shield Blue Advantage HMO</li> <li>Blue Cross Blue Shield HMO Classic</li> </ul> </li> <li>All Medicare plans are supplemental to Medicare Part A &amp; B benefits.</li> <li>A retail and mail pharmacy benefit through CVS/Caremark is included with the election of any medical plan.</li> <li>Effective January 1, 2013, all participants in the HMO Classic plan were migrated to the Blue Advantage plan, except those in:</li> </ul>
	<ul> <li>North Shore Medical Group</li> <li>Northwestern</li> <li>Loyola</li> <li>St. Anthony</li> </ul>

	BLUE CROSS BLUE SHIELD		BLUE SHIELD	BLUE CROSS BLUE SHIELD
Plan Features	BLUE ADVANTAGE HMO AND CLASSIC BLUE HMO	PPO IN-NETWORK	PPO OUT-OF-NETWORK	PPO MEDICARE SUPPLEMENT
Annual Deductible	\$0	\$200 Individual/\$400 Family	\$400 Individual/\$800 Family	\$200 Individual/\$400 Family
Out-of-Pocket Maximum	\$1,500 Individual/ \$3,000 Family	\$1,500 Individual/ \$3,000 Family	\$5,000 Individual/ \$10,000 Family	\$1,500 Individual/ \$3,000 Family
Annual Maximum	None	\$1,250,000	\$1,250,000	\$1,250,000
Physician Services				
Routine Physical Exam	\$15 Copay	90% after deductible	70% after deductible	90% after deductible
Follow-up Visit	\$15 Copay	90% after deductible	70% after deductible	90% after deductible
Specialist	\$25 Copay	90% after deductible	70% after deductible	90% after deductible
Diagnostic Tests and X-rays	Covered in full	90% after deductible	70% after deductible	90% after deductible
Immunizations	\$15 Copay	90% after deductible	70% after deductible	90% after deductible
Wellness	\$15 Copay	90% after deductible	70% after deductible	90% after deductible
Hospital Services				
Inpatient Care	Covered in full	90% after deductible	70% after deductible	90% after deductible
Room & Board	\$100 Copay (per admission)	90% after deductible	70% after deductible	90% after deductible
Outpatient Services				
Outpatient Surgery	Covered in office visit	90% after deductible	70% after deductible	90% after deductible
Speech, Physical & Occupational Therapy	\$25 Copay (60 visit combined limit/calendar year)	90% after deductible	70% after deductible	90% after deductible
Behavioral Health Services				
Mental Health – Outpatient	\$15 Copay	90% after deductible	70% after deductible	90% after deductible
Mental Health – Inpatient	\$100 Copay	90% after deductible	70% after deductible	90% after deductible
Substance Abuse – Outpatient	\$15 Copay	90% after deductible	70% after deductible	90% after deductible
Substance Abuse – Inpatient	\$100 Copay	90% after deductible	70% after deductible	90% after deductible
Emergency Services				
Emergency Room	\$100 Copay (waived if admitted)	\$100 Copay (waived if admitted)	\$100 Copay (waived if admitted)	\$100 Copay (waived if admitted)

	BLUE CROSS BLUE SHIELD BLUE ADVANTAGE HMO AND			BLUE CROSS BLUE SHIELD PPO MEDICARE
Plan Features	CLASSIC BLUE HMO	PPO IN-NETWORK	PPO OUT-OF-NETWORK	SUPPLEMENT
Ambulance	Covered in full	90% after deductible	90% after deductible	90% after deductible
Hospital Alternatives				
Skilled Nursing	Covered in full	90% (120 days per calendar year)	90% (120 days per calendar year)	50% (120 days per calendar year)
Hospice	Covered in full	90% after deductible	70% after deductible	90% after deductible
Private Duty Nursing	Covered in full	90% after deductible (10 visit max per mo.)	70% after deductible (10 visit max per mo.)	90% after deductible (10 visit max per mo.)
Home Health Care	Covered in full	90% after deductible	70% after deductible	90% after deductible
Other Services				
Durable Medical Equipment	Covered in full	90% after deductible	70% after deductible	90% after deductible
Hearing	Routine Hearing Care with Office Visit Copay; Discounts available through TruHearing	90% after deductible for Routine Hearing Test if submitted w/diagnostic code; Discounts available through TruHearing	90% after deductible for Routine Hearing Test if submitted w/diagnostic code; Discounts available through TruHearing	No Coverage; Discounts available through TruHearing
Vision Screening and Exams	\$15 Office Copayment limited to one screening/exam every 12 months	Discounts on exams, frames and lenses y through Davis Vision b chrough Davis Vision		Discounts on exams, frames and
Eyeglasses and Contacts	\$75 allowance for frames every 24 months; Discount on frames and lenses through Davis Vision			
PRESCRIPTION PLAN (sar	ne for all): 30 Day Supply at Retail: \$10 Ge Caremark Mail: \$15 Generic / \$50			oply at CVS or
Blue Adva	ntage DOES NOT include: NORTHWES	TERN, LOYOLA, NORTHSHORE	E MEDICAL GROUP, ST. ANTHO	DNY

**Contributions** The Fund 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.

The following are the annual working rates effective January 1, 2013. These rates represent an estimated cost of self-insured coverage and include administrative expenses.

	Blue Advantage			Weighted
	HMO	HMO Classic	PPO	Average
Single w/o Medicare	\$ 11,316	\$ 12,024	\$ 14,616	\$ 12,372
Two w/o Medicare	\$ 22,632	\$ 24,024	\$ 29,232	\$ 24,744
Single w/ Medicare	\$ 4,380	\$ 4,536	\$ 4,656	\$ 4,560
Two w/ Medicare	\$ 8,724	\$ 9,048	\$ 9,312	\$ 9,108

Section 5.2A

## Description of Actuarial Methods and Valuation Procedures

## 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 dollar 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.

## Section 5.2A (cont'd)

## Description of Actuarial Methods and Valuation Procedures

## 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.

The compensation amounts used in the projection of benefits and liabilities were December 31, 2012, rates of pay provided by staff of the CEABF.

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.

## Section 5.3A

## Summary of Actuarial Assumptions and Changes in Assumptions for Pension

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. We relied on the analysis of the prior actuary for our report.

<u>Mortality Rates.</u> 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	
Attained Age	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

<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. The following are samples of the rates of retirement used:

Less Than 30 Years of Service at Retirement

	Rates of Retirement			
Age	Males Females			
50	.010	.012		
55	.060	.072		
60	.250	.216		
65	.150	.120		
70	.250	.200		
75	1.000	1.000		

## Section 5.3A (cont'd)

## Summary of Actuarial Assumptions and Changes in Assumptions for Pension

30 or More Years of Service at Retirement

	Rates of Retirement				
Age	Males	Females			
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 Retirement		
Age	Males	Females	
50	.211	.211	
55	.169	.169	
60	.382	.382	
65	1.000	1.000	

<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 Retirement		
Age	Males	Females	
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.

## Section 5.3A (cont'd)

## Summary of Actuarial Assumptions and Changes in Assumptions for Pension

Loading For Reciprocal Benefits. 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.

<u>Spouse's Age.</u> 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.

## Section 5.3B

## Summary of Actuarial Assumptions and Methods for Retiree Health Care

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. We relied on the analysis of the prior actuary for our report.

December 31, 2012

Discount Rate 4.50%

Salary Scale 5.00%

	Age at Entrance					
	Males				Females	5
Attained Age	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

Retirement RatesFor deputy sheriffs who are members of the Cook County Police<br/>department who became participants prior to January 1, 2011 (Tier 1):

Svc at ret	< 20 Years		>= 20	Years
Age	Male	Female	Male	Female
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 5.3B (cont'd)

## Summary of Actuarial Assumptions and Methods for Retiree Health Care

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

Svc at ret	< 30 Years		>= 30	Years
Age	Male	Female	Male	Female
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):

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

Mortality RatesThe UP-1994 Mortality Table for males, rated down 2 years, and the<br/>UP-1994 Mortality Table for females, rated down 1 year.

**Disability Rates** Included in termination and retirement rates.

Anticipated Plan70% of eligible employees are assumed to elect retiree medicalParticipationbenefits.

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.

## Section 5.3B (cont'd)

## Summary of Actuarial Assumptions and Methods for Retiree Health Care

**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.

Per CapitaEstimated net annual per capita incurred claim costs per covered<br/>adult for fiscal 2013 at age 65, including administrative expenses:

	Blue Advantage HMO	Classic Blue HMO	РРО	Weighted Average
Not Medicare eligible	\$12,960	\$13,832	\$16,271	\$14,054
Medicare eligible	\$ 3,581	\$ 3,770	\$ 3,543	\$ 3,567
% of Current Retirees in	Plan (rounded):			
Not Medicare eligible	58%	12%	30%	
Medicare eligible	32%	6%	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.

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:

Age	Annual Increase	Age	Annual Increase
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%

## Section 5.3B (cont'd)

# Summary of Actuarial Assumptions and Methods for Retiree Health Care

Health Care Cost Trend Rates	Health care cost trend rates apply to expected claims, premiums and retiree contributions:		
	From 2013 to 20147.5%From 2014 to 20157.0%From 2015 to 20166.5%From 2016 to 20176.0%From 2017 to 20185.5%2018 & later5.0%		
Census Data	The active, deferred vested, and re Fund.	etiree census were provided by the	
Actuarial Cost Method	The entry age actuarial cost as a pe	ercentage of earnings was used.	
Amortization Method	30 years open, level dollar.		
Assets	The valuation assumes CEABF or assets to prefund its retiree medica	the County has not set aside any al liabilities.	
Medicare Coordination	future retirees and spouses who currently on Medicare. Medicare 95% of current retirees and spous	the primary payer for current and are at least age 65 and who are is assumed to become primary for ses who are not yet age 65, when uture retirees and spouses by the	
IBNR	The calculations do not include an not reported claims (IBNR).	ny explicit amount for incurred but	
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).		
Miscellaneous		n an on-going plan basis. This an obligation to continue the plan	

## CONSIDERATIONS OF THE PATIENT PROTECTION AND AFFORABLE 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 Plan.

**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 0.70% 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.

**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.

	GLOSSARY OF TERMS
Actuarial Accrued Liability	Total accumulated cost to fund pension or Other Postemployment Benefits (OPEB) 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 or 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 pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension or OPEB and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension or OPEB cost.
GASB 25	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated.
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	Governmental Accounting Standards Board Statement Number 45 which specifies how to calculate the Annual OPEB Cost that the employer recognizes.
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.

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## SUMMARY OF LEGISLATIVE CHANGES

#### 1982 Session

#### SB 1147

• Actuarial reporting to Insurance Department and Pension Laws Commission. Actuarial statements prepared by a qualified actuary for plan years ending after December 31, 1984 including actuarial present value of credited projected benefits.

#### SB 1452

• Allows a participant who served as Village Trustee and was not then eligible to participate in the IMRF for such service, to obtain credit in this fund by making the required contributions. Four-year maximum credit.

#### SB 1579

• Permitted investment list moved to general section of the statute. Expanded fiduciary standards, prohibited transactions, civil action may be brought by Attorney General or by a participant.

#### HB 2286

• Deputy Sheriff may elect between January 1, 1983 and January 15, 1983 to transfer credit to this Fund from the State Employees' Retirement System.

#### 1983 Session

SB 22

• Delegation of investment authority restrictions.

#### HB 514

- 10% prudent person investment category.
- 10% increase in spouse benefits to spouses receiving benefits as of January 1. 1984.
- Immediate participation rather than after 1 year of service.
- Refunds if off the payroll at least 30 days.
- Money purchase annuity for County Sheriffs service not counted for Sheriff Formula.
- Elected sheriff may be covered by Sheriff Formula with contributions.

#### HB 637

 Allows an active member of the General Assembly to establish credit in this fund for time for which he or she could have elected to participate with interest at 6% and to transfer credits to the Park Fund.

#### 1984 Session

• No legislative changes.

### 1985 Session

HB 17

- For withdrawals on or after July 1, 1985, 10 year vesting formula (for employee minimum and spouse minimum annuity) providing the employee 2% of final average earnings for each year of service reduced 0.5% (for ages 55-60) for each month under age 60 (but no reduction with at least 30 years of service). Spouse minimum amount is 50% of the employee's amount at retirement (reduced 0.5% for each month the spouse is under age 60) but not less than 10% of the final average earnings.
- Unisex money purchase factors for widows/widowers.
- Disability provisions extended to 70 in certain cases.
- Sheriff formula for withdrawals after December 31,1985 after having attained age 50 in service with 20 or more years of service of 50% of 4 year average earnings plus 2% for each year or fraction of service over 20.
- Changes in the reversionary annuity provisions.
- Optional plan of 3% contributions for 1% optional benefit per year of service. Provisions for
  payment of past service with interest. Provisions expire July 1, 1990. Such plan, if elected by a
  member, would require a 3% of salary contribution (with interest for past service) and would
  produce an additional 1% per year of service benefit and would increase the employee annuity,
  post-retirement increase and spouse annuity. Membership in this plan is optional and as such, it
  is possible to delay election to just prior to retirement. Therefore, at this time, there is no accurate
  estimate of how many members will actually elect the optional benefits. The liabilities and the
  annual cost requirements of the fund may be substantially understated (up to 50% in some
  cases) if participation is high. It is difficult to pre-fund an unknown benefit. Actuarial losses may
  occur as experience develops.

#### 1986 Session

#### HB 2630

- Allows for a member of a County police department to establish service credit for approved leaves of absence without pay, during which the employee served as head of an employee association consisting of other police officers by making the required contributions.
- Allows for the use of service of less than one year for calculating reciprocal annuities in the case of employees who transfer or are transferred as a class from one participating system to another.

#### HB 2715

- For withdrawals after January 1, 1988, and for employees with at least 10 years of service and age 50, the minimum formula annuity is increased to 2.2% of the Final Average Salary for each of the first 20 years of service and 2.4% for each year thereafter, not to exceed the maximum of 80% of Final Average Salary. For retirement between age 50 (new minimum retirement age) and age 60, the annuity thus computed will be reduced 0.5% for each month the employee is under age 60 unless the employee has 30 or more years of service in which case no reduction will apply.
- The surviving spouse of an employee who retires on or after January 1. 1988, with at least 10 years of service is entitled to 50% of the annuity including increases that the deceased annuitant

was receiving as of his or her date of death. Such annuity to be reduced 0.5% for each month the surviving spouse is under age 60 at the date of the annuitant's death.

- Effective January 1, 1988, any child's annuity being paid shall be increased from \$140 per month to 10% of the employee's salary at the date of death provided that the increased annuity would be greater than \$140 per month, subject to Statutory maximums.
- Effective January 1, 1987, the maximum age conditions for any disability are removed for employees whose disability continued past that date.
- A Deputy Sheriff with at least 15 years of service as a Deputy Sheriff can receive credit under the Police formula for other Cook County service by electing to pay an additional contribution prior to retirement. In addition, any Police Officer who has rendered at least 20 years of service and who separates from service prior to age 50 and does not withdraw his or her contributions can apply for pension benefits at age 50 without returning to duty.
- Effective July 1, 1988, all employee and surviving spouse annuitants will receive a one-time increase. Such increase to be an additional 1% for each full year that the annuitant has received benefits as of July 1. 1988.
- An alternative plan for elected officials of 3% of the Final Average Salary for the first 8 years, 4% for the next 4 years and 5% thereafter, subject to the maximum of 80%, is available. The elected official must contribute an additional 3% of salary to receive these benefits.
- Effective December 1, 1988, the Retirement Board will be increased from 5 to 7 Trustees. One annuitant Trustee to be elected for a 3 year term by those persons receiving annuity or disability benefits and 1 Forest Preserve District Trustee to be elected by the Forest Preserve District contributors for a term of 3 years beginning December 1, 1988.

### 1988 Session

• No legislative changes

#### 1989 Session

SB 95

- Allows active members of the General Assembly to transfer credits and creditable service established in the Fund to a Fund established under Article 5 of the Pension Code.
- For withdrawals on or after July 1, 1985, provides that for employees with at least 30 years of service, no reduction for age less than 60 will apply for the spouse annuity.

#### SB 1096

• Extends the Optional Plan of benefits from the original expiration date of July 1, 1990 to July 1, 1992.

### HB 332

- Signed August 23, 1989.
- Eliminated age-related discriminatory provisions as required by Federal law or regulations.
- Provided for age discrimination changes effective January 1, 1988 to eliminate age 65 requirements for marriage in service and children's benefits, provided contributions after age 65 for spouse benefits, provided employee accumulation annuities be computed after age 70.

provided employee and spouse accumulation annuities not be "fixed" at age 65, provided no age 70 restriction on disability benefits, provided for active members over age 65 that their accounts be "unfixed" and accumulate interest until the date of withdrawal, and provided that there be no age 70 membership limitation and removed the permitted "no spouse" refund at age 65.

• Provides that for employees retiring after January 1, 1988, but before age 55, Section 20-131 shall not apply; therefore, they are not entitled to the alternative formula set forth in Section 20-122 repealed in 1975.

### HB 158

• Provides for payment by the Fund of 50% of the health care premiums for annuitants who participate in any of the County's health care programs beginning January 1, 1990 and ending December 31, 1993, subject to the following maximums:

Single coverage, no Medicare	\$130.00 per month
Single coverage, with Medicare	39.00 per month
Annuitant + 1 family member, no Medicare	212.00 per month
Annuitant + 1 family member. 1 with Medicare	168.00 per month
Annuitant + 1 family member, both with Medicare	78.00 per month
Annuitant + 2 or more family members, no Medicare	280.00 per month

### 1990 Session

SB 1951

- Signed January 14, 1991.
- Raises the maximum annuity for a Deputy Sheriff from 75% of final average salary to 80% of final average salary.
- Provides for a revised table to be used for reversionary annuities to allow for the younger age 50 retirement approved in previous legislation.
- Allows for the refund of the additional 0.5% contributions that are paid by a Deputy Sheriff for the special Sheriff's formula to be refunded if the regular formula is used to calculate the employee annuity at the time of retirement. The refund, if given, is to include the interest as well as the 0.5% contributions.
- In the case where an employee who is disabled and cannot return to work after all his/her disability credit has expired, and chooses the option to pay for up to one additional year of service under Section 9-174, this additional service will not affect the resignation date for annuity purposes, but the salary and service will be used for such purposes.
- Provides for employees who retire on or after November 1, 1990, any accumulated vacation paid out in a lump-sum at the time of retirement will not affect the employees' withdrawal date for purposes of annuity. Any service will be granted and used for annuity purposes, but the final average salary will not include the salary for any vacation paid out.

### SB 136

• Amends Chapter 120, Paragraph 671 of the Revenue Act to provide for a separate listing on the tax bill of the dollar amount of tax due from the person assessed which is allocable to a tax levied

under the Illinois Pension Code, or any other tax levied by a municipality or township for public pension or retirement purposes. Effective January 1, 1990.

### 1991 Session

HB 971

- Signed November 19, 1991.
- Early Retirement Window for employees attaining age 55 prior to withdrawal and withdrawing on or after January 1, 1992, but before December 31, 1992, the service requirement for minimum formula annuity is reduced to 5 years. In addition, for the same period above, the age discount for retirement prior to age 60 is reduced to 0.25% per month under age 60 at retirement. The widow(er)'s annuity for the above early retirement window is 50% of the employee's annuity reduced by 0.5% for each month the widow(er) is under the age 60 at the time of the employee's death.

### **Other Changes**

- Provides that the 3% annuity increase will begin on January 1<sup>st</sup> following the first anniversary of retirement for employees who retired with 30 or more years of service and were under age 60 at retirement.
- Extends the Optional Plan of Benefits for an additional 5 years to July 1, 1997.
- Allows for an employee to make contributions and receive service credit for any unused accumulated sick leave up to 180 days, at retirement.
- Employees may now discontinue making contributions to the Pension Fund after 35 (previously 42) years of contributing service upon notification to the Retirement Board at least 60 days before the deductions cease.
- For widow(er)s of employees or annuitants who die after November 19, 1991, the maximum limit on the spouse annuity is removed provided that the employee was at least 60 with at least 20 years of service or also if retirement occurred on or after January 1, 1982, at age 65 or over with at least 10 years of service for retirements.
- For widow(er)s of employees who retired on or after January 1, 1984, but before July 1. 1985. with at least 30 years of service, the annuity is 50% of the employee's annuity as of the date of retirement with no discount for under age 60.
- Beginning with retirements or deaths on January 1, 1992, with at least 10 years of service, the age discount for a widow(er)'s annuity will be 0.5% for each month the widow(er) is under age 55 at the date of the employee's death. This is reduced from age 60 for prior deaths or retirements.
- Beginning on November 19, 1991, provides for a \$1,000.00 death benefit payable upon the death of employee or annuitant to the employee's designated beneficiary, or to the employee's estate if no beneficiary has been named.
- Beginning December 1, 1991, the Fund may pay, on behalf of each of the Fund's annuitants who choose to participate in any of the County's health care plans, all or any portion of the total health care premium (including coverage for other family members) due from each such annuitant.
- Allows the annuitant to authorize the withholding of dues from annuity checks for certain labor organizations.
- Allows participation for all employees with at least one month of service.
- Provides for a repayment of contributions and transfer of service from the General Assembly and for former members of the General Assembly through February 1, 1993.

- Grants the authority to rent or lease office space to the Board of Trustees when deemed desirable for the purposes of the Fund.
- Allows the Pension Fund to withhold contributions to a labor organization from annuity checks provided that at least 100 annuitants authorize withholdings from their checks.
- Provides for the repayment of contributions by former members of the County Police who were the head of an employee association, to include both the employee and employer shares.

### 1992 Session

#### SB 1770

- Signed September 16, 1992.
- Early Retirement Incentive
  - Provides an extra 1% per year of County service, up to 10 maximum, times the final four year average salary for those eligible employees. There is no cost to the employee. The age discount from age 55 to 60 is eliminated if eligible.
  - Eligible if a contributing member on May 1, 1992 and:
    - Retires on or after December 1, 1992 and on or before May 29. 1993;
    - Attains age 55 or more on or before the date of retirement; and
    - Has at least 10 years of creditable service.

### 1993 Session

### SB 1650

- Signed January 26, 1993.
- Provides that the 3% annuity increase will begin no later than January 1, 1993 for employees who retire before age 60 before January 1, 1991 with at least 30 years of service.
- For widow(er)s of annuitants who die on or after January 1, 1993, the widow(er)'s annuity shall be 50% of employee's retirement annuity at death discounted 0.5% per month the widow(er)'s age is less than 55, except if the employee had 30 years of service.
- Allows an employee with 25 years of service to pay for up to 2 years of military service, whether or not followed by County service.
- Two year minimum subsequent service is changed to six months for employees who apply to repay a refund between January I, 1993 and March 1, 1993.
- Employees may transfer to County up to 10 years with Municipal or Laborers' until March 1 1993.
- Allows for transfer of County service credit to Judges.
- Allows a State Policeman to transfer all or some of his service with County Police to State Employees Retirement System until July 1, 1993 and reinstate service credit terminated by a refund by paying 6% compounded annually until July 1, 1993.
- Former members of County Police who retire January 1, 1993 to March 1, 1993 do not have to pay employer contribution for periods served as head of an employee association.

#### 1994 Session

• No legislative changes.

### 1995 Session

### SB 114

- Approved July 14, 1995.
- The amount of earnings that may be taken into account by any retirement system is limited to the maximum dollar limitation specified in Section 401(a)(17) of the Internal Revenue Code, except for persons who became participants before 1996.
- Allows for active participants employed be the Cook County State's Attorney's office on January 1, 1995 to transfer to this Fund credits accumulated under a pension fund established under Article 5 of this Code and to transfer said credits from said fund to the Cook County fund upon payment of both employee and employer contributions with 6% interest to the County Employees' Annuity and Benefit Fund.
- The Fund is authorized to make certain involuntary distributions required by Section 401(a)(9) of the Internal Revenue Code.

#### SB 424

- Approved July 7, 1995.
- The Pension Laws Commission was created as a legislative support services agency.

#### 1996 Session

#### SB 1456

- Approved August 9, 1996.
- Any chief of the County Police Department or undersheriff of the County Sheriffs Department may elect to be included as a deputy sheriff.

#### 1997 Session

HB 313

- Signed June 27, 1997.
- Change county size necessary for fund creation to 3,000,000 from the previously required 500.000.
- As of January 1, 1998 the automatic annual increase for employee and spouse annuitants changed to 3% compounded for all past, current, and future annuitants, regardless of the effective date of the annuity. Term annuities are not eligible for the automatic annual increase.
- Early Retirement Incentive
  - Provides an extra 1% per year of County service, up to 10 maximum, times the final four year average salary for those eligible employees. There is no cost to the employee. The age discount from age 55 to 60 is eliminated if eligible.
  - Eligible if a contributing member on May 1. 1997 and:
    - Retires on or after September 1. 1997 and on or before February 28, 1998;
    - Attains age 55 or more on or before the date or retirement; and
    - Has at least 10 years of creditable service.

- Effective January 1, 1998 all widow(er) annuitants will have their annuities increased by 3% and will receive the automatic increase of 3% compounded annually. Those widow(er) annuitants receiving a Term annuity will not be eligible for the automatic annual increase.
- Extends the Optional Plan of benefits to July 1,2002.
- Allows members of the Cook County police department to transfer their service into the Policemen's fund until July 1, 1998. and to reinstate service credit terminated by a refund by paying 6% compounded annually.
- Allows members of the fund with at least 20 years of service credit to make contributions, until June 1, 1998, into the fund based on CTA compensation and creditable service is granted for this period for up to 10 years of service credit.

#### 1998 Session

• Effective July 1, 1999, Public Act 90-731, allows an alternate payee (former spouse, child, or dependent) designated in a Qualified Domestic Relations Order to receive all or a specified portion of a member's retirement benefits or refund otherwise payable to the member.

#### 1999 Session

• No legislative changes.

#### 2000 Session

• Passed Public Act 87-1130, which removes the remarriage penalty. Effective September 6, 2000 widow annuities will no longer be ceased due to their remarriage.

#### 2001 Session

• No legislative changes.

#### 2002 Session

#### HB 5168

- Signed June 28, 2002.
- Contractual service to the Retirement Board, of at least 5 years, can be purchased as creditable service in the fund for up to 10 years of services by making a written application to the board before July 1, 2003. A person who establishes such credit may, at the same time, reinstate credit in the Fund and repay a refund without a return to service.
- An employee, who withdraws on or after July 1, 1996 but before August 1, 1996, at age 55 or over with 8 or more years of service, may elect to receive a minimum formula annuity equal to 2.2% of the Final Average Salary for each of the first 20 years of service and 2.4% for each year thereafter, not to exceed the maximum of 80% of Final Average Salary. There will be an age discount of 0.25% for each month that the employee is under the age of 60, unless the employee has at least 30 years of service.
- For withdrawals after June 30, 2002, with at least 10 years of service and age 50. the minimum formula annuity is increased to 2.4% of the Final Average Salary for each year of service, not to exceed the maximum of 80% of Final Average Salary.

- Early Retirement Incentive
  - Provides an extra 1% per year of County service, up to 10 maximum, times the highest consecutive four year average salary in the last 10 years of service for those eligible employees. There is no cost to the employee. The age discount for attained age under 60 is eliminated if eligible.
  - Eligible if a contributing member on January 1, 2001 and:
    - Retires on or after November 30, 2002 and on or before March 31, 2003;
    - Attains age 50 or more on or before the date of retirement; and
    - Has at least 20 years of creditable service in the Fund.
- For widow(er)s of annuitants who die in service or after July 1, 2002, or has at least 10 years of service and dies on or after July 1, 2002 while receiving an annuity, the widow(er)'s annuity shall be 65% of employee's retirement annuity at death discounted 0.5% per month the widow(er)'s age is less than 55, except if the employee had 30 years of service.
- For widow(er)s of annuitants who were not married at the time of retirement, but married after
  retirement for at least one year prior to annuitant's death, the widow(er) will be eligible for an
  annuity if the refunded contributions for a widow(er)s annuity are repaid, plus interest at the rate
  of 6% per year. (The Pension Fund Board has received a legal opinion that has interpreted this to
  include the current widow(er). The legal opinion was that, since in these instances no refund of
  spouse contributions was made, there is no payment due from the widow.)
- Extends the Optional Plan of benefits to July 1. 2005.

#### 2003 Session

• No legislative changes.

### 2004 Session

• No legislative changes.

#### 2005 Session

SB 1446

- Made certain changes to the provisions relating to QILDRO, effective July 1, 2006. It makes an alternate payee entitled to receive death benefits and allows the alternate payee to receive a percentage of the employee's retirement benefits (instead of only a fixed dollar amount).
- Public Act 94-0079, prohibits Illinois public pension funds from investing or depositing in entities doing business in or with die government of Sudan.

#### 2006 Session

• No legislative changes.

### 2007 Session

HB 49

- Public Act 95-279, effective January 1, 2008.
- Provides that legally adopted children shall be entitled to the same benefits as other children, and no child's or survivor's benefit shall be disallowed because the child is an adopted child.

### HB 3578

- Public Act 95-0654, effective January 1, 2008.
- Eliminated the alternative formula for county officers elected after January 1, 2008.

#### HB 5168

- Signed into law on August 23, 2007 as Public Act 95-0369.
- Provided that members who were in active employee status on December 31, 2006, applies for a refund of contributions between the dates of August 23, 2007 and October 7, 2007, and resigns their position between August 23, 2007 and October 22,2007, shall be entitled to receive a one-time lump sum retirement cancellation payment equal to the member's accumulated contributions with interest, multiplied by 1.5, in lieu of any retirement annuity or other benefit provided by the fund. An employee who receives a retirement cancellation payment may not be rehired until after being out of service for at least 365 days. A person who has received an alternative retirement cancellation payment and who returns to service under the Fund must repay the regular refund with interest at 3% per year and the 50% enhancement payment with interest at 6% per year.
- Eliminated the requirement to maintain various reserve accounts no longer needed for the administration of the fund.

#### SB 1380

- Signed into law on August 28, 2007 as Public Act 95-0504.
- Provides that for 6 months from the effective date, an employee may transfer to this Fund up to 6 years of creditable service accumulated under Article 3 of the Pension Code upon payment to this Fund of the amount of employee and employer contribution that would have been required if the employee had participated in this Fund during the period for which credits is being transferred plus interest at the rate of 6% per year.

#### 2008 Session

- Public Act 95-1036, effective February 17. 2009.
- Provides that duty disability and child's disability benefits shall not be allowed unless application therefor is made while the disability exists; except that this limitation does not apply if the Board finds that there was reasonable cause for delay in filing the application while the disability existed. Provides that this is intended to be a restatement and clarification of existing law and does not imply that application for a duty disability benefit made after the disability had ceased, without a finding of reasonable cause, was previously allowed under this Article.
- Provides that (i) before any action may be taken by the Board of Trustees on an application for duty disability benefit or widow's compensation or supplemental benefit, the related applicant must



file a timely claim under the Workers' Compensation Act or the Workers' Occupational Diseases Act, as applicable, to establish that the disability or death resulted from an injury incurred in the performance of an act or acts of duty, and the applicant must receive compensation or payment from the claim or the claim must otherwise be finally adjudicated and (ii) with respect to duty disability', satisfactory proof must be provided to the Board that the final adjudication of the claim established that the disability or death resulted from an injury incurred in the performance of an act or acts of duty.

Amends the Cook County Forest Preserve Article of the Illinois Pension Code. Adds a provision
imposing forfeiture of benefits upon conviction of a felony arising out of or in connection with the
member's employment.

#### 2009 Session

- Public Act 96-0006 effective April 3, 2009.
- Requires Board members to file a verified written statement of economic interest annually with the office of the Clerk of Cook County.
- Requires the Board to adopt a policy that sets quantifiable utilization goals for the management of assets in specific asset classes for emerging investment managers. Goals shall be separated by minority ownership, female ownership, and person with a disability ownership.
- Requires that if at least one emerging firm meets criteria of search process, at least one shall be invited to present to the Board for final consideration.
- Requires the Board to adopt a policy that sets forth goals for increasing the racial, ethnic, and gender diversity of its fiduciaries, including its consultants and senior staff.
- Requires the Board to adopt a policy that sets forth goals for utilization of WMDBE firms for all contracts and services, based on the percentage of total dollar amounts of all contracts let.
- Requires the Board to adopt a policy that sets forth goals for increasing the utilization of minority broker-dealers.
- Requires an annual report to the Governor and General Assembly on the utilization of "emerging firms" as defined by Article 1 of the Pension Code.
- Requires the Board to award all contracts for investment services using a competitive process that is substantially similar to the process required for the procurement of professional services under Article 35 of the Illinois Procurement Code. Requires the Board to adopt a procurement policy which will be posted on the Fund's website and filed with the Illinois Procurement Policy Board.
- Provides that a person may not act as a consultant or investment adviser unless that person is registered as an investment adviser or bank under the federal Investment Advisers Act of 1940.
- Requires investment contracts between the Retirement Board and investment service providers to include certain required information.
- Provides consultant contracts cannot exceed five years in duration; however, incumbent consultants may compete for new contracts.
- Requires investment consultants and advisers to disclose all direct and indirect fees, commissions, penalties, and other compensation paid by or on behalf of the investment consultant or adviser in connection with the services provided.
- Requires that a description of every contract let for investment services be posted on the website, including name of entity awarded the contract, amount of contract, total fees paid, and disclosure describing the factors that contributed to the selection.

- Requires the Fund to maintain a website that shall include standard investment reporting, a copy
  of relevant Board policies, a listing of investment consultants and managers, a notification of any
  requests for investment services, and the names and e-mail addressed of Board members, Fund
  directors, and senior staff.
- Requires Board members to attend at least eight hours of ethics training per year and requires each Board to annually certify its member's compliance and submit an annual certification to the Division of Insurance of the Department of Financial and Professional Regulation.
- Prohibits any Fund trustee or employee or their spouses or immediate family living with them to
  intentionally solicit or accept any gift from any prohibited source as prescribed in Article 10 of the
  State Officials and Employees Ethics Act, including educational materials and missions and travel
  expenses for discussing Fund business.
- Provides that any person who knowingly makes any false statement or falsifies or permits falsifying any record of the pension fund in an attempt to defraud is guilty of a Class 3 felony.
- Provides that no person or entity shall retain a person or entity to influence the outcome of an investment decision or the procurement of investment advice to a pension fund for compensation, contingent upon the decision of the Board.
- Requires approval for travel or education mission expense of a Trustee by a majority of the Board prior to mission.

- Public Act 96-0542 effective August 17, 2009.
- Amends the Open Meetings Act and the Freedom of Information Act.

#### 2010 Session

SB 1946 and SB 550

- Public Acts 96-0889, effective April 14, 2010, added 5/1-160 and Public Act 96-1490, effective December 30, 2010, made technical changes 5/1-160. These acts created a 2<sup>nd</sup> Tier of benefits for all reciprocal systems of the Pension Code.
- Members first participating in any reciprocal fund, except Judges and GARS, on or after January 1, 2011 will be Tier 2 members.
- Tier 2 members will have their salary capped at \$106,800 for all purposes. The amount of the cap is subject to increase annually at the lesser of 1/2 of the change in CPI-U or 3%. If the change in CPI-U is zero or negative, the cap will not change.
- Tier 2 member's Final Average Salary (FAS) used in annuity benefit calculations will be based on the highest consecutive 96 months in the last 10 years.
- Tier 2 members will not be able to receive an unreduced retirement annuity until age 67 and the earliest they can receive any retirement annuity is age 62. Annuities payable before age 67 are reduced 1/2<sub>2</sub>% for each full month under 67 regardless of service. Tier 2 members must have at least 10 years of service to qualify for a retirement annuity.
- Tier 2 members will not be able to receive a COLA until the January 1 following their 67<sup>th</sup> birthday or following the 1 year anniversary of retirement, whichever is later. The COLA will not be compounded and will be the lesser of 1/2 the change in CPI-U or 3%. If the change in CPI-U is zero or negative, there will be no increase.
- The Tier 2 surviving spouse annuity will be 66-2/3% of the member's retirement annuity at death. If the member is not retired, it is 66-2/3% of the member's earned retirement annuity.
- The Tier 2 COLA for a surviving spouse annuity will begin the January 1 following the member's death if the member was retired. If the member was not retired it will begin on the January 1 following the 1 year anniversary of the member's death. The COLA will not be compounded and will be the lesser of the 1/2 change in CPI-U or 3%. If the change in CPI-U is zero or negative, there will be no increase.
- Tier 2 members receiving a retirement annuity will have their annuity suspended if they go to work on a full time basis with any reciprocal fund except Judges and GARS.
- There was no change in the member's benefit accrual percentage (2.4% per year) or the employee or employer contributions.

#### HB 4644

- Public Act 96-0961 effective July 2, 2010 added 5/9-128.2 allows elected officials to establish earnings credit for the amount of stipend that was not received.
- Member must pay employee contributions and employer's normal cost on the stipend not received and actuarially assumed interest. Payment must be received by January 2, 2011.

### 2011 Session

- Public Act 96-1513 effective June 1, 2011 allows 2 unmarried people to enter into a Civil Union. Partners of a Civil Union are to be treated the same as a spouse in the State of Illinois.
- The Fund will now grant spouse annuity benefits to a partner of a Civil Union and annuitants can cover their Civil Union partners under the Fund's Health Benefit plan. A Civil Union certificate will be treated as the equivalent to a Marriage certificate.

### SB 1672

- Public Act 97-0530 effective August 23. 2011 requires all Funds to comply with the Federal H.E.A.R.T. Act of 2008.
- Public Act 97-0609 effective January 1, 2012 amends 5/1-160(h) stating members that first become participants on or after the effective date will have their retirement annuity suspended if they return to work for the employer on a contractual basis.
- The member is required to notify the Fund prior to accepting the contractual employment.

### HB 1670

• Public Act 97-0504 effective January 1, 2012 amends the Open Meetings Act to require elected or appointed members of public bodies to take electronic training by the Attorney General's Public Access Counselor. Training must be completed by the end of 2012. Members that are elected or appointed after January 1, 2012 must complete the training within 90 days of taking the oath or assuming the responsibilities of the position.

HB 3813

- Public Act 97-0651 effective January 5, 2012 amends Article 1 in regards to Fraud and Fiduciary Liability.
- Requires fiduciaries to report reasonable suspicion of false statements. The Board of Trustees must report reasonable suspicion of false statements to the State's Attorney.
- The Act also amends 5/9-219 requiring sheriff police and correction officers that purchase service while on approved leave to represent a labor organization to remain in sworn status during the leave to be eligible to purchase service credit.

### 2012 Session

HB 3969

 Public Act 97-0967 effective August 16, 2012 amends Article 1 adding 5/1-166 which requires an employer to pay GARS for any additional liability created from a reciprocal retirement if the retiree's FAS is higher than their highest GARS salary, and they were employed by the non-GARS agency for 2 years or less since leaving GARS.