### COUNTY EMPLOYEES' AND OFFICERS' ANNUITY AND BENEFIT FUND OF COOK COUNTY (A FIDUCIARY FUND OF COOK COUNTY, ILLINOIS)

FINANCIAL STATEMENTS

DECEMBER 31, 2016 AND 2015

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

### FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION

### DECEMBER 31, 2016 AND 2015

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

### FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION

### DECEMBER 31, 2016 AND 2015

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### REPORT OF INDEPENDENT AUDITORS

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

Report on the Financial Statements

We have audited the accompanying financial statements of County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Plan), a fiduciary fund of Cook County, Illinois, which comprise the combining statements of pension plan fiduciary net position and postemployment healthcare plan net position as of December 31, 2016 and 2015, and the related combining statements of changes in pension plan fiduciary net position and postemployment healthcare plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

### **Opinion**

In our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the plan net position of County Employees' and Officers' Annuity and Benefit Fund of Cook County as of December 31, 2016 and 2015, and the changes in plan net position for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

### Other Matters

### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 4e and the required supplementary information on pages 30 through 35 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the Plan's basic financial statements as a whole. The accompanying supplementary information on pages 36 through 40 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

### Other Matters (continued)

Previously Audited Information

Legacy Professionals LLP

We also have previously audited the basic financial statements for the years ended December 31, 2014, 2013, 2012, and 2011 (which are not presented herein), and we expressed unmodified opinions on those financial statements. In our opinion, the information on page 39 is fairly stated in all material respects in relation to the basic financial statements from which it has been derived.

Chicago, Illinois

June 12, 2017

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

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

This section presents Management's Discussion and Analysis of the financial position and performance of the County Employees' and Officers' Annuity and Benefit Fund of Cook County (the Plan) for the years ended December 31, 2016 and 2015. This discussion is presented as an overview of the financial activities of the Plan and should be read in conjunction with the Plan's financial statements.

### **Overview of the Basic Financial Statements**

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

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

Combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position shows the revenues (additions) and expenses (deductions) during the year, where additions less deductions equal net increase (decrease) in net position. The net increase (decrease) in net position reports the change in net position as reported in the combining Statements of Changes in Pension Plan Fiduciary Net Position and Postemployment Healthcare Plan Net Position of the prior year and the current year.

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

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

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

### Financial Highlights

**Net position** increased by \$472,613,595 or 5.5% from \$8,643,044,275 at December 31, 2015 to \$9,115,657,870 at December 31, 2016. Comparatively, net position decreased by \$425,354,505 or 4.7% from \$9,068,398,780 at December 31, 2014 to \$8,643,044,275 at December 31, 2015. The increase in net position for 2016 was primarily due to the increase in the fair value of investments and supplemental employer contributions from Cook County, Illinois of \$270,526,000. The decrease in net position for 2015 was primarily due to the decrease in the fair value of the investments.

Rate of return of the Plan's investment portfolio was 7.67% for 2016, -0.10% for 2015 and 5.90% for 2014.

### **Net Position**

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

### Plan Net Position As of December 31,

				Current Ye	ar
				Increase in	<u>1</u>
	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>Dollars</u>	Percent
Total assets	\$ 10,407,279,006	\$ 9,901,259,891	\$ 10,527,247,093	\$ 506,019,115	5.1%
Total liabilities	1,291,621,136	1,258,215,616	1,458,848,313	33,405,520	2.7%
Net position	\$ 9,115,657,870	\$ 8,643,044,275	\$ 9,068,398,780	\$ 472,613,595	5.5%

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

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

### Changes in Plan Net Position For the Years Ended December 31,

							Current Y Increase/(Decr	
		<u>2016</u>		<u>2015</u>		<u>2014</u>	<u>Dollars</u>	Percent
Additions:								
Employer contributions	\$	464,268,404	\$	186,832,321	\$	190,032,872	\$ 277,436,083	148.5%
Employee contributions		139,355,592		137,707,719		129,325,318	1,647,873	1.2%
Annuitant healthcare benefits contributions		41,650,333		37,635,349		37,358,502	4,014,984	10.7%
Net investment income (loss)								
(includes security								
lending activities)		629,442,470		(21,896,696)		488,890,897	651,339,166	2974.6%
Other		14,019,340		11,457,843		9,742,062	2,561,497	22.4%
Total additions		1,288,736,139		351,736,536	_	855,349,651	936,999,603	266.4%
Deductions:								
Benefits		784,046,767		738,666,760		682,959,960	45,380,007	6.1%
Refunds		26,702,222		33,273,171		26,347,361	(6,570,949)	-19.7%
Administrative expenses		5,373,555		5,151,110		5,010,206	222,445	4.3%
Total deductions		816,122,544	_	777,091,041		714,317,527	39,031,503	5.0%
Net increase (decrease)		472,613,595		(425,354,505)		141,032,124	897,968,100	211.1%
Net position								
Beginning of year		8,643,044,275		9,068,398,780		8,927,366,656	(425,354,505)	-4.7%
End of year	<u>\$</u>	9,115,657,870	\$	8,643,044,275	<u>\$</u>	9,068,398,780	\$ 472,613,595	5.5%

### Additions to Plan Net Position

Total additions were \$1,288,736,139 in 2016, \$351,736,536 in 2015 and \$855,349,651 in 2014.

Employer contributions increased to \$464,268,404 in 2016 from \$186,832,321 in 2015 and decreased from \$190,032,872 in 2014. Employer contributions are statutorily set at 1.54 times employee contributions collected two years prior. The County made supplemental contributions of \$270,526,000 during 2016.

Employee contributions, including permissive service credit purchases, increased to \$139,355,592 in 2016 from \$137,707,719 in 2015 and \$129,325,318 in 2014. The majority of members contribute 8.5% of covered wages.

Annuitant healthcare benefits contributions increased to \$41,650,333 in 2016 from \$37,635,349 in 2015 and were \$37,358,502 in 2014. Annuitant healthcare benefits contributions fluctuate from year to year based on participation and healthcare costs.

Net investment income totaled \$629,442,470 for 2016 compared to income (loss) (\$21,896,696) for 2015 and \$488,890,897 for 2014. Investment earnings fluctuate primarily from the overall performance of the financial markets from year to year.

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

Total deductions were \$816,122,544 in 2016, \$777,091,041 in 2015 and were \$714,317,527 in 2014.

Benefits increased to \$784,046,767 in 2016 from \$738,666,760 in 2015 and \$682,959,960 in 2014 due primarily to the 3% annual cost of living increases for annuitants and an increase in the number of retirees.

Refunds decreased to \$26,702,222 in 2016 from \$33,273,171 in 2015 and \$26,347,361 in 2014. These changes are due to fluctuations in refund applications.

The cost to administer the Plan increased by 4.3% to \$5,373,555 in 2016 from \$5,151,110 in 2015. Comparatively, the cost to administer the Plan increased by 2.8% to \$5,151,110 in 2015 from \$5,010,206 in 2014.

### **Actuarial Information**

### Pension Benefits

Under GASB Statement No. 67, Financial Reporting for Pension Plans, the Plan's funding for pension benefits is as follows:

### Funding for Pension Benefits For the Years Ended December 31,

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability Plan fiduciary net position Employer's net pension liability	\$ 23,240,192,010 9,115,657,870 \$ 14,124,534,140	\$ 23,963,085,690 <u>8,643,044,275</u> <u>\$ 15,320,041,415</u>	\$ 21,945,961,866 9,068,398,780 \$ 12,877,563,086
Plan fiduciary net position as a percentage of the total pension liability	<u>39.22</u> %	<u>36.07</u> %	41.32%

### Postemployment Healthcare Benefits

Under GASB Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, the Plan's funding for postemployment healthcare benefits is as follows:

### Funding for Postemployment Healthcare Benefits For the Years Ended December 31,

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Unfunded actuarial accrued liability	\$ 1,957,804,688	\$ 2,134,106,707	\$ 1,980,088,617
Funded ratio	0.00%	<u>0.00</u> %	<u>0.00</u> %

Contributions for postemployment healthcare benefits are made on a "pay-as-you-go" basis, resulting in a 0.00% funded ratio.

### **Actuarial Information (continued)**

### Combined

The Plan actuary has performed a combined valuation of the pension and postemployment healthcare benefits provided by the Plan to measure the overall funded status and contribution requirements of the Plan. Such a valuation is required under Chapter 40, Article 5/9-199 of the Illinois Pension Code which provides that the Plan shall submit a report each year containing a detailed statement of the affairs of the Plan, its income and expenditures, and assets and liabilities. The combined valuation reflects the actuarial assumptions adopted by the Board based on the results of an actuarial experience study. These assumptions conform to the actuarial standards recommended by the Plan's actuary and were used by the Plan's actuary to present the combined funding status in accordance with *Section 9-199*. The Plan's funding under the combined actuarial valuation is as follows:

### Funding for Combined Pension and Postemployment Healthcare Benefits For the Years Ended December 31,

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Unfunded actuarial accrued liability	\$ 7,238,233,759	\$ 7,241,166,616	\$ 6,508,281,618
Funded ratio	<u>56.73</u> %	<u>55.39</u> %	<u>57.51</u> %

### **Contact Information**

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

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

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

## COMBINING STATEMENTS OF PENSION PLAN FIDUCIARY NET POSITION AND POSTEMPLOYMENT HEALTHCARE PLAN NET POSITION

DECEMBER 31, 2016 AND 2015

ASSETS Employer contributions less allowance of \$6,791,899 in 2016 and \$11,090,380 in 2015	Total  \$ 206,231,500	2016 Pension 8 198,037,968 7 556 328	Postemployment Healthcare 8, 193,532	Total  \$ 195,994,802	Pension Ps 188,234,742 5,709,813	Postemployment Healthcare 7,760,060
Employee contributions Accrued investment income Receivable for securities sold Due from Forest Preserve District Employees' Annuity and Benefit Fund of Cook County Medicare Part D subsidy	7,556,328 20,362,677 97,101,028 463,181 883,525	7,556,328 20,362,677 97,101,028 463,181	883,525	5,709,813 20,729,923 101,749,176 515,876 859,672	5,709,813 20,729,923 101,749,176 515,876	
	334,084,867	323,559,005	1,448,805	326,987,496	316,991,555	9,995,941
	4,264,200,142 1,026,986,177 822,348,141	4,264,200,142 1,026,986,177 822,348,141		3,925,905,225 1,031,502,731 765,044,107	3,925,905,225 1,031,502,731 765,044,107	
	67,885,886 26,821,800 206,118,267	67,885,886 26,821,800 206,118,267		51,962,976 25,666,065 191,345,512 458,949,498	51,962,976 25,666,065 191,345,512 458,949,498	
	483,639,898 267,153,632 634,093,947 597,613,560 602,067,528	483,639,898 267,153,632 634,093,947 597,613,560 602,067,528		458,949,498 160,785,243 803,013,247 591,993,643 453,717,122 8 459 885 369	428,449,479 160,785,243 803,013,247 591,993,643 453,717,122 8 459 885 369	
	1,074,265,161	1,074,265,161	10,525,862	1,114,387,026	1,114,387,026 9,891,263,950	9,995,941
	6,092,219 10,525,862 200,737,894 1,074,265,161 1,291,621,136	6,092,219 200,737,894 1,074,265,161 1,281,095,274	10,525,862	5,134,977 9,995,941 128,697,672 1,114,387,026 1,258,215,616	5,134,977 - 128,697,672 1,114,387,026 1,248,219,675	9,995,941
	9,115,657,870	9,115,657,870	\$	8,643,044,275	8,643,044,275	

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

## COMBINING STATEMENTS OF CHANGES IN PENSION PLAN FIDUCIARY NET POSITION AND POSTEMPLOYMENT HEALTHCARE PLAN NET POSITION

	YEARS ENDI	Years Ended December 31, 2016 and 2015	2016 and 2015			
		2016			2015	
	Total	Pension	Postemployment Healthcare	<u>Total</u>	Pension	Postemployment <u>Healthcare</u>
ADDITIONS Employer contributions Statutory	\$ 193,742,404	\$ 144,177,155	\$ 49,565,249	\$ 186,832,321	\$ 136,075,504	\$ 50,756,817
Supplemental Total employer contributions	270,526,000 464,268,404	270,526,000 414,703,155	49,565,249	186,832,321	136,075,504	50,756,817
Employee contributions Salary deductions	134,282,029	134,282,029		132,637,621	132,637,621	•
Refund repayments	2,569,240	2,569,240	1	2,651,848	2,651,848	1 1
Former and miscellaneous service payments Optional payments and deductions	384,375 38,314	38,314	• •	42,030	42,030	
Deductions in lieu of disability	1,881,633	1,881,633	1 2	137.707.719	137.707.719	
Total employee contributions  Annuitant healthcare benefits contributions	41,650,333	170,000,001	41,650,333	37,635,349	•	37,635,349
Investment income  Net appreciation (depreciation) in fair value of investments	484,767,317	484,767,317		(173,161,584)	(173,161,584)	
Dividends	107,959,948	107,959,948	ı	111,215,391	111,215,391	
Interest	64,033,120	64,033,120	1	68,785,887	68,785,887	
	656,760,385	656,760,385	•	6,839,694	6,839,694	
Less investment expenses	(32,912,681)	(32,912,681)		(35,698,935)	(26.859.241)	1 1
The investment income (1055)	042,041,704	101,110,020		(2.2622)		
Securities lending	6 717 110	6717119	ı	5.927.926	5.927.926	ı
income Expenses	(1,122,353)	(1,122,353)	•	(965,381)	(965,381)	1
Net securities lending income	5,594,766	5,594,766	1	4,962,545	4,962,545	1
Other		6		200 000	307 770 0	
Employer federal subsidized programs	3,162,532	5,162,532	- 000 180	3,847,723	5,047,140	3.872.127
Medicare Fart D subsidy Prescription plan rebates	5,882,393		5,882,393	3,205,423		3,205,423
Employee transfers (to) from Forest Preserve District	000 661	122 000		18 370	18 370	,
Employees' Annuity and Benefit Fund of Cook County Miscellaneous	155,999	749,627	1 1	514,198	514,198	1
Total other additions	14,019,340	4,046,158	9,973,182	11,457,843	4,380,293	7,077,550
Total additions See accompanying notes to financial statements.	1,288,736,139	1,187,547,375	101,188,764	351,736,536	256,266,820	95,469,716

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

# COMBINING STATEMENTS OF CHANGES IN PENSION PLAN FIDUCIARY NET POSITION AND POSTEMPLOYMENT HEALTHCARE PLAN NET POSITION

YEARS ENDED DECEMBER 31, 2016 AND 2015

				2016			2015	
					Postemployment			Postemployment
		Total		<u>Pension</u>	Healthcare	Total	<u>Pension</u>	Healthcare
Deductions								
Benefits								
Annuity								
Employee	8	624,231,419	↔	624,231,419	·	\$ 587,861,744	\$ 587,861,744	·
Spouse and children		47,919,324		47,919,324	ı	45,002,859	45,002,859	•
Disability								
Ordinary		10,160,688		10,160,688	1	9,916,487	9,916,487	1
Duty ,		546.572		546,572	•	415,954	415,954	•
Healthcare		101,188,764			101,188,764	95,469,716	1	95,469,716
Total benefits		784,046,767		682,858,003	101,188,764	738,666,760	643,197,044	95,469,716
Refunds		26,702,222		26,702,222	1	33,273,171	33,273,171	•
Net administrative expenses		5,373,555		5,373,555	1	5,151,110	5,151,110	
Total deductions		816,122,544		714,933,780	101,188,764	777,091,041	681,621,325	95,469,716
Net increase (decrease)		472,613,595		472,613,595	1	(425,354,505)	(425,354,505)	t
NET POSITION Beginning of year		8,643,044,275		8,643,044,275	1	9,068,398,780	9,068,398,780	ı
End of year	8	\$ 9,115,657,870	↔	9,115,657,870		\$ 8,643,044,275	\$ 8,643,044,275	· ·

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

### NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2016 AND 2015

### NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

Financial Reporting Entity - Accounting principles generally accepted in the United States of America define a financial reporting entity as consisting of the primary government and its component units for which the primary government is financially accountable. Financial accountability includes appointing a voting majority of a component unit's governing board, the ability of a primary government to impose its will on the component unit, or a potential for a component unit to provide specific financial benefits to or impose specific financial burdens on the primary government. The Plan has determined that no other outside entity meets the above criteria and, therefore, no other entity has been included as a component unit in the Plan's financial statements.

Based on the above criteria, the Plan is considered to be a fiduciary fund of Cook County, Illinois (the County) and is included in the County's financial statements.

New Accounting Pronouncement - The Plan has implemented Governmental Accounting Standards Board (GASB) Statement No. 72, Fair Value Measurement and Application (GASB 72), which addresses accounting and financial reporting issues related to fair value measurements. GASB 72 provides guidance for determining a fair value measurement for financial reporting purpose and applying fair value to certain investments and disclosures related to all fair value measurements.

**Method of Accounting** - The financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized as income pursuant to legal requirements as specified by the Statutes. Employee contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

**Investments** - Investments are reported at fair value, which generally represents reported market value as of the last business day of the year. Where less than an entire investment holding is sold, average value is used to determine realized gain or loss.

### NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

Capital Assets - The Plan has set a capitalization threshold of \$100,000 for all capital asset types. As of December 31, 2016 and 2015, the Plan does not have any capital assets.

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

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

**Subsequent Events** - Subsequent events have been evaluated through June 12, 2017, which is the date the financial statements were available to be issued.

### NOTE 2. PLAN DESCRIPTION

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

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

### NOTE 2. PLAN DESCRIPTION (CONTINUED)

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

Covered employees are required to contribute 8.5% (9% for sheriffs) of their salary to the Plan, subject to the salary limitations for Tier 2 participants in Article 5/1-160. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest (3% or 4% depending on when the employee became a participant). The County's total contribution is the amount of contributions made by the employees to the Plan in the calendar year two years prior to the year for which annual applicable tax is levied, multiplied by 1.54. The source of funds for the County's contributions has been designated by State Statute as the County's annual property tax levy. The County's payroll for employees covered by the Plan for the years ended December 31, 2016 and 2015 was \$1,580,251,254 and \$1,572,417,298 respectively.

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

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

At December 31, 2016 and 2015, participants consisted of the following:

	<u>2016</u>	<u>2015</u>
Active members	20,969	21,596
Retired members	15,222	14,922
Beneficiaries	2,687	2,675
Inactive members	14,005	13,190
Total	52,883	52,383

### NOTE 3. EMPLOYER'S PENSION LIABILITY

### **Net Pension Liability**

The components of the employer's net pension liability of the Plan for the years ended December 31, 2016 and 2015 are as follows:

	<u>2016</u>	<u>2015</u>
Total pension liability Plan fiduciary net position	\$ 23,240,192,010 9,115,657,870	\$ 23,963,085,690 8,643,044,275
Employer's net pension liability	\$ 14,124,534,140	\$ 15,320,041,415
Plan fiduciary net position as a percentage of the total pension liability	<u>39.22</u> %	<u>36.07</u> %

See the schedule of changes in the employer's net pension liability and related ratios in the required supplementary information for additional information related to the funded status of the Plan.

The net pension liability was determined by actuarial valuations performed as of December 31, 2016 and 2015 using the following actuarial methods and assumptions:

Actuarial valuation date	December 31, 2016 and 2015
Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar - Open
Remaining amortization period	30 years
Asset valuation method	Five Year Smoothed Average Market
Actuarial assumptions:	
Inflation	3.25% per year, compounded annually
Salary increases	3.75% to 8.00%, based on age
Investment rate of return	7.50% per year, compounded annually
Retirement age	Rates of retirement for each age from 50 to 75 based
	on recent experience of the Plan where all employees
	are assumed to retire by age 75
Mortality	RP-2000 Blue Collar Mortality Table, base year 2000,
	fully generational based on Scale BB
Postretirement annuity increase	Tier 1 participants - 3.0% compounded annually
	Tier 2 participants - the lesser of 3.0% or one half of
	the increase in the Consumer Price Index

The actuarial assumptions used in the December 31, 2016 and 2015 valuations were based on the results of an actuarial experience study conducted by Buck Consultants, LLC dated January 2014.

### NOTE 3. EMPLOYER'S PENSION LIABILITY (CONTINUED)

### **Discount Rate**

The blended discount rates used to measure the total pension liability at December 31, 2016 and 2015 were 4.64% and 4.15%, respectively. The projection of cash flows used to determine the discount rate assumed that the employer's contributions will continue to follow the current funding policy. Based on this assumption, the Plan's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current plan members. Municipal bond rates of 3.71% and 3.20% at December 31, 2016 and 2015, respectively, and the long-term investment rate of return of 7.50% were used in the development of the blended discount rates. The municipal bond rates are based on the S&P Municipal Bond 20 Year High Grade Rate Index.

### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following is an analysis of the net pension liability's sensitivity to changes in the discount rate at December 31, 2016 and 2015. The following table presents the net pension liability of the employer using the blended discount rate as well as the employer's net pension liability calculated using a discount rate 1 percent lower and 1 percent higher than the current discount rate:

	1% Decrease 3.64%	Current Discount Rate 4.64%	1% Increase 5.64%
Net Pension Liability - December 31, 2016	\$ 18,243,015,037	\$ 14,124,534,140	<u>\$ 10,873,652,859</u>
		Current Discount	
	1% Decrease 3.15%	Rate 4.15%	1% Increase 5.15%
Net Pension Liability - December 31, 2015	\$ 19,821,767,092	\$ 15,320,041,415	\$ 11,800,111,612

### NOTE 4. SUMMARY OF EMPLOYER FUNDING POLICIES

### **Statutory Funding**

Employer contributions are funded primarily through a tax levied by Cook County, Illinois. The employer contributions to be remitted to the Plan are equal to the total contributions made by the employees to the Plan in the calendar year two years prior, multiplied by 1.54.

### **Supplemental Funding**

During the year ended December 31, 2016, the County made supplemental contributions to the Plan totaling \$270,526,000 to promote the long-term fiscal sustainability of the Plan. These contributions were made pursuant to a one year Intergovernmental Agreement (IGA) entered into as of December 8, 2015 between the County and the Plan.

On November 14, 2016, the County entered into a one year IGA with the Plan to make supplemental contributions to the plan totaling \$353,800,000 to promote the long-term fiscal sustainability of the Plan. The supplemental contributions are expected to be paid by the County beginning on December 31, 2016 through October 31, 2017 in the monthly amount of \$25,000,000 with a final payment of \$78,000,000 on November 30, 2017. The first monthly supplemental contribution payment was received by the Plan on January 6, 2017. Subsequent to year end and through the date of these financial statements, the County has made supplemental contributions totaling \$150,000,000 of the \$353,800,000.

### NOTE 5. INVESTMENTS

### **Investment Policy**

The Board of Trustees is responsible for establishing reasonable and consistent investment objectives, policies, and guidelines governing the investment of Plan assets in accordance with the Statutes. The Plan is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stocks, shares, debentures, or other obligations or securities as set forth in the "prudent person" provisions of the state statutes. All of the Plan's financial instruments are consistent with the permissible investments outlined in the state statutes and any index-linked financial instruments are limited to those indices that replicate the permissible investments outlined in the State Statutes. During the year ended December 31, 2016 and 2015, there were no changes to the investment policy.

The Plan's investment policy in accordance with the Statutes establishes the following target allocation across asset classes:

		Long-term
	Target	Expected Real
Asset Class	Allocation %	Rate of Return
Domestic equities	25.00%	9.36%
International equities	20.00%	7.61%
Fixed income	32.00%	2.03%
Real estate funds	8.00%	6.91%
Private equity	9.00%	4.68%
Hedge Funds	6.00%	12.40%
Total investments	100.00%	

### Long-term expected rate of return

The long-term expected rate of return on the Plan's investments was determined based on the results of an experience study performed by Buck Consultants LLC. The results of the experience study were adopted by the Board in January 2014. The investment return assumption was based on the current asset allocation of the Plan. In the experience study, Buck Consultants LLC developed best estimate ranges of expected future real rates of return (net of pension plan investment expense and inflation) for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates or geometric real rates of return for each major asset class included in the Plan's target asset allocation as of December 31, 2013 are listed in the table above.

### **Annual Money-Weighted Rate of Return**

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.67% and (0.10)% for years ended December 31, 2016 and 2015, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Plan's investment policy is an average credit quality for each manager's total fixed income portfolio (corporate and U.S. Government holdings) of not less than A- by two out of three credit agencies (Moody's Investor Service, Standard & Poor's and/or Fitch). The following table presents a summarization of the Plan's credit quality ratings of investments at December 31, 2016 and 2015 valued by Moody's Investors Service, Standard & Poor's and/or Fitch:

Type of Investment	Rating	<u>2016</u>	<u>2015</u>
U.S. Government and government agency			
obligations	Aaa/AAA	\$ 172,604	\$ -
	Aa/AA	928,904,735	965,636,744
	Not Rated	97,908,838	65,865,987
	•	\$ 1,026,986,177	\$ 1,031,502,731
Corporate bonds	Aaa/AAA	\$ 48,506,639	\$ 57,113,576
•	Aa/AA	32,586,006	28,938,979
	A/A	165,481,684	174,154,771
	Baa/BBB	360,891,419	325,354,126
	Ba/BB	114,193,825	84,495,383
	B/B	39,430,435	39,063,698
	Caa/CCC	6,992,198	9,675,474
	Ca/CC		474,788
	C/C	276,176	-
	D/D	347,296	227,406
	Not Rated	53,642,463	45,545,906
		\$ 822,348,141	\$ 765,044,107
Commingled fixed income fund	Baa/BBB	\$ 26,821,800	\$ 25,666,065
Short-term investments	Not Rated	\$ 602,067,528	\$ 453,717,122

### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments held for longer periods are subject to increased risk of adverse interest rate changes. The Plan's investment policy for duration for each manager's total fixed income portfolio is within plus or minus 30% of the duration for the fixed income performance benchmark (*Bloomberg Barclays US Aggregate Fixed Income*, which was 5.89 years at December 31, 2016 and 5.68 years at December 31, 2015). The following table presents a summarization of the Plan's debt investments at December 31, 2016 and 2015, using the segmented time distribution method:

Type of Investment	<u>Maturity</u>		<u>2016</u>		<u>2015</u>
U.S. Government and government agency					
obligations	Less than 1 year	\$	41,930,224	\$	34,489,303
	1 - 5 years		260,538,133		275,344,178
	6 - 10 years		199,418,969		199,568,985
	Over 10 years		525,098,851		522,100,265
		\$	1,026,986,177	<u>\$</u>	1,031,502,731
Corporate bonds	Less than 1 year	\$	80,770,194	\$	319,667,924
	1 - 5 years		236,779,236		106,319,205
	6 - 10 years		287,367,978		194,184,823
•	Over 10 years		217,430,733		144,872,155
		\$	822,348,141	<u>\$</u>	765,044,107
Commingled fixed income fund	1 - 5 years	<u>\$</u>	26,821,800	<u>\$</u>	25,666,065
Short-term investments	Less than 1 year	\$	602,067,528	<u>\$</u>	453,717,122

### Foreign Currency Risk

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

The Plan's exposure to foreign currency risk at December 31, 2016 and 2015 is as follows:

		Fair Value		Fair Value
		(USD)		(USD)
Type of Investment		2016		2015
U.S. and international equities				
Australian dollar	\$	72,090,036	\$	67,145,553
Brazil real	Ψ	22,034,268	Ψ	15,342,482
British pound sterling		235,875,591		314,998,719
Canadian dollar		98,136,267		64,015,512
Chilean peso		2,535,875		2,191,251
Colombian peso		471,258		395,721
Czech koruna		38,001		43,778
Danish krone		24,225,552		23,422,657
Egyptian pound		24,223,332		291,663
Egyptian pound European euro		425,043,124		381,778,462
•		107,837,446		108,983,901
Hong Kong dollar Hungarian forint				
Č		1,023,544		360,318
Indian rupee		14,579,736		10,620,170
Indonesian rupiah Israeli shekel		6,341,159		4,946,620
		7,142,608		6,014,267
Japanese yen		313,922,289		286,510,705
Malaysian ringgit		5,038,720		5,659,128
Mexican peso		8,513,047		9,752,911
New Taiwan dollar		30,991,207		29,347,463
New Turkish lira		496,551		656,541
New Zealand dollar		11,400,230		8,260,832
Norwegian krone		21,520,393		16,463,743
Phillipenes peso		6,723,629		5,987,426
Polish zloty		3,389,402		1,842,172
Russian ruble		532,753		342,695
Singapore dollar		21,223,544		19,942,448
South African rand		15,117,538		12,463,900
South Korean won		43,635,467		44,461,886
Swedish krona		43,845,594		41,815,199
Swiss franc		78,901,898		102,611,092
Thailand baht		8,974,788		7,869,619
United Arab Emirates dirham		-		1,131,081
U.S. dollar		2,632,354,161		2,330,235,310
Total U.S. and international equities	\$	4,264,200,142	\$	3,925,905,225

### Foreign Currency Risk (continued)

	Fair Value (USD)	Fair Value (USD)
Type of Investment	<u>2016</u>	<u>2015</u>
Corporate bonds		
British pound sterling	\$ 874,914	\$ 1,414,207
European euro	-	2,045,354
Mexican peso	10,956,224	9,271,891
Philippines peso	984,540	1,483,988
Swedish krona	1,079,281	-
U.S. dollar	808,453,182	750,828,667
Total corporate bonds	\$ 822,348,141	\$ 765,044,107
Private equities		
European euro	\$ 10,868,687	\$ 4,393,640
U.S. dollar	256,284,945	156,391,603
Total private equities	\$ 267,153,632	\$ 160,785,243

For the years ended December 31, 2016 and 2015, net realized gain on investments sold, reflecting the difference between the proceeds received and cost value of securities sold, was \$96,385,836 and \$286,603,188 respectively. These amounts are included in the net appreciation (depreciation) in fair value of investments as reported on the combining statements of changes in pension plan fiduciary net position and postemployment healthcare plan net position. The calculation of realized gains and losses is independent of the calculation of net appreciation (depreciation) in the fair value of plan investments. Investments purchased in a previous year and sold in the current year result in their realized gains and losses being reported in the current year and their net appreciation (depreciation) in Plan assets being reported in both the current year and the previous years.

### NOTE 6. WHEN-ISSUED TRANSACTIONS

The Plan may purchase securities on a when-issued basis, that is, obligate itself to purchase securities with delivery and payment to occur at a later date. At the time the Plan enters into a commitment to purchase the security, the transaction is recorded at the purchase price which equals fair value. The value at delivery may be more or less than the purchase price. No interest accrues to the Plan until delivery and payment takes place. As of December 31, 2016 and 2015, the Plan contracted to acquire securities on a when-issued basis with a total principal amount of approximately \$94,100,000 and \$65,866,000 respectively.

### NOTE 7. FAIR VALUE MEASUREMENTS

GASB Statement No. 72, *Fair Value Measurement and Application*, established a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

### Basis of Fair Value Measurement

Level 1	Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities
Level 2	Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly
Level 3	Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable

The Plan categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The Plan has the following recurring fair value measurements as of December 31, 2016 and 2015:

		Fair Value Measurements at 12/31/2016 Using:				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
Investments by fair value level						
U.S. and international equities	\$ 4,264,200,142	\$ 4,264,200,142	\$ -	\$ -		
U.S. Government and government						
agency obligations	1,026,986,177	-	1,026,986,177	-		
Corporate bonds	822,348,141	-	822,348,141	-		
Exchange traded funds	483,639,898	483,639,898	-	-		
Total investments by fair value level	6,597,174,358	\$ 4,747,840,040	<u>\$ 1,849,334,318</u>	\$ -		
Investments measured at net asset value	2,401,754,620					
Total investments at fair value	\$ 8,998,928,978					

NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

		Fair Value Measurements at 12/31/2015 Using:				
		Quoted				
		Prices in				
		Active	Significant			
		Markets for	Other	Significant		
		Identical	Observable	Unobservable		
		Assets	Inputs	Inputs		
	Total	(Level 1)	(Level 2)	(Level 3)		
	Total	(Level 1)	(Level 2)	(Ecver 3)		
Investments by fair value level						
U.S. and international equities	\$ 3,925,905,225	\$ 3,925,905,225	\$ -	\$ -		
U.S. Government and government						
agency obligations	1,031,502,731	-	1,031,502,731	-		
Corporate bonds	765,044,107	_	765,044,107	_		
Exchange traded funds	458,949,498	458,949,498	-	-		
Total investments by fair value level	6,181,401,561	\$ 4,384,854,723	\$ 1,796,546,838	\$ -		
Investments measured at net asset value	2,278,483,808					
investments measured at her asset value	2,270,403,000					
Total investments at fair value	\$ 8,459,885,369					

### Level 1 Measurements

U.S. and international equities and exchange traded funds are traded in active markets on national and international securities exchanges and are valued at closing prices on the measurement date.

### Level 2 Measurements

U.S. Government and government agency obligations and corporate bonds are generally valued by benchmarking model-derived prices to quoted market prices and trade data for identical or comparable securities. To the extent that quoted prices are not available, fair value is determined based on a valuation model that include inputs such as interest rate yield curves and credit spreads. Securities traded in markets that are not considered active are valued based on quoted market prices, broker to dealer quotations, or alternative pricing sources with reasonable levels of price transparency. Securities that trade infrequently and therefore have little or no price transparency are valued using the investment manager's best estimates.

### NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

The valuation methods for investments measured at net asset value (NAV) are presented on the following table:

	Fair Value			3	Unfunded	Redemption Frequency	Redemption Notice
		12/31/2016 12/31/2015		Commitments	(If Eligible)	Period	
		12/31/2010		123112013	COMMITTALIA	(M Eligible)	
Investments measured at net asset value							
Collective international equity fund (1)							
Lazard/Wilmington Emerging							
Markets Sudan Free Portfolio	\$	67,885,886	\$	51,962,976	-	Daily	N/A
Commingled fixed income fund (2)							
MacKay Shields Defensive Bond							
Arbitrage Fund Ltd.		26,821,800		25,666,065	-	Daily	5 days
Private global fixed fund limited partnership (3)							
Franklin Templeton Global Multisector							
Plus Fund, L.P.		206,118,267		191,345,512	-	Monthly	15 days
Private equities (4)		267,153,632		160,785,243	280,535,000	Closed Ended	N/A
Hedge funds (5)							
Burnham Harbor Fund Ltd.		446,348,433		432,883,249	-	Monthly	95 days
Buckingham Fund		16,335,874		202,002,528	-	Quarterly	65 days
RC Kenwood Fund Ltd.		171,409,640		168,127,470	-	Quarterly	90 days
Real estate funds (6)							
JPMCB Strategic Property Fund		247,049,922		229,752,871	-	Quarterly	45 days
PRISA Separate Account		231,002,063		222,523,994	<b>-</b>	Quarterly	90 days
Others		119,561,575		139,716,778	42,077,000	Quarterly	90 days
Short-term investments (7)							
BNY Mellon EB Temporary							/.
Investment Fund		602,067,528	_	453,717,122	-	Daily	N/A
Total investments measured							
at net asset value	\$	2,401,754,620	\$	2,278,483,808			

- (1) <u>Collective international equity fund</u> The fund's investment objective is to achieve long-term capital appreciation by investing primarily in equity and equity-related securities of issuers that are located, or do significant business, in emerging market countries. The fair value of the investment in the fund has been determined using the NAV per share of the investment.
- (2) <u>Commingled fixed income fund</u> The fund's investment objective is to track the performance of the Barclays U.S. Aggregate Index. The fair value of the investment in the fund has been determined using the NAV per share of the investment.
- (3) Private global fixed income fund limited partnership The partnership's investment objective is to maximize total investment return by investing in a portfolio of fixed and floating rate debt securities and debt obligations of governments, government-related or corporate issuers worldwide, as well as derivative financial instruments. The fair value of the investment in the partnership fund has been determined using the NAV per share (or its equivalent) of the investment.

### NOTE 7. FAIR VALUE MEASUREMENTS (CONTINUED)

- (4) Private equities This investment consists of 47 limited partnership investments with an investment objective to achieve long-term capital appreciation and capital preservation through investments in limited partnerships, privately issued securities, private equity funds, and other pooled investments. Closed-end limited partnership interests are generally illiquid and cannot be redeemed. It is expected that liquidation of the limited partnership interests will generally coincide with the terms of the various underlying partnership agreements. These underlying private equity partnerships generally have a fund life per the Limited Partnership Agreements of approximately 10 to 12 years plus 2 to 3 one-year extensions. However, the underlying general partners may extend their funds indefinitely to facilitate an orderly liquidation of the underlying assets. The fair value of the investments in this type has been determined using the NAV per share (or its equivalent) of the investments.
- (5) <u>Hedge funds</u> The investment objective of the hedge funds is to invest in non-traditional portfolio managers, diversified portfolios of hedge funds having a low correlation with major investment markets, and diversified groups of alternative investment funds that invest or trade in a wide variety of financial instruments and strategies. The fair value of the investment in the hedge funds has been determined using the NAV per share (or its equivalent) of the investment.
- (6) Real estate funds This investment includes a commingled pension trust fund, an insurance company separate account, and other real estate funds that are designed as funding vehicles for tax-qualified pension plans. Their investments are comprised primarily of real estate investments either directly owned or through partnership interests and mortgage and other loans on income producing real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. Due to the nature of the investments and available cash on hand, significant redemptions in this type of investment may at times be subject to additional restrictions.
- (7) <u>Short-term investments</u> This investment's objective is to invest in short-term investments of high quality and low risk to protect capital while achieving investment returns. The fair value of the investment in the fund has been determined using the NAV per share of the investment.

### NOTE 8. DERIVATIVES

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

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

### NOTE 8. DERIVATIVES (CONTINUED)

Derivative transactions involve, to varying degrees, credit risk, interest rate risk and market risk. Credit risk is the possibility that a loss may occur because a party to a transaction fails to perform according to the previously agreed upon terms. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Market risk is the possibility that a change in interest or currency rates will cause the value of a financial instrument to decrease or become more costly to settle.

Forward currency contracts are used to hedge against fluctuations in foreign currency-denominated assets used primarily in portfolio trade settlements. These contracts are a cash contract in which a seller agrees to deliver a specific cash commodity to a buyer sometime in the future. Forward agreements are subject to the creditworthiness of the counterparties, which are principally large financial institutions. Forward currency contracts are reported at fair value in the receivable for securities sold and payable for securities purchased on the combining statement of pension plan fiduciary net position and postemployment healthcare plan net position included in investments. The gain or loss on forward currency contracts is recognized and recorded on the combining statement of changes in pension plan fiduciary net position and postemployment healthcare plan net position as part of investment income. The foreign currency contracts are short-term in nature, typically ranging from one week to three months.

The Plan uses futures contracts as an investment vehicle to gain exposure to an asset class with minimal market entry costs to the Plan. At December 31, 2016, the Plan had futures contracts with a fair value of (\$1,494,554) a notional value of \$198,921,540 and a maturity date of March 17, 2017 for all contracts. Comparatively, at December 31, 2015, the Plan had futures contracts with a fair value of \$745,803 and a notional value of \$236,370,350 with a maturity date of March 18, 2016 for all contracts.

Futures contracts are reported at fair value in the equity investments on the combining statement of pension plan fiduciary net position and postemployment healthcare plan net position. The gain or loss on futures contracts is reported as part of investment income on the combining statement of changes in pension plan fiduciary net position and postemployment healthcare plan net position. See Note 5 for investment risk for the Plan's equity investments.

### NOTE 8. DERIVATIVES (CONTINUED)

The Plan's portfolio includes the following derivative instruments at December 31, 2016 and 2015:

	<u>2016</u>	<u>2015</u>
Hedging derivative instruments Forward currency contract receivables	\$ 17,399,562	\$ 17,256,284
Forward currency contract payable  Total hedging derivative instruments	(17,000,354) 399,208	(17,183,165) 73,119
Investment derivative instruments U.S. Equity Index Futures Contracts	(1,494,554)	745,803
Total	\$ (1,095,346)	\$ 818,922

For the years ended December 31, 2016 and 2015, the change in fair value of the deferred inflows and outflows of the foreign currency contracts was not material to these financial statements.

### NOTE 9. SECURITIES LENDING

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

The Plan does not have the right to sell or pledge securities received as collateral unless the borrower defaults. The average term of securities loaned was 43 days for 2016 and 103 days for 2015; however, any loan may be terminated on demand by either the Plan or the borrower. Cash collateral was invested in a separately managed portfolio, which had an average weighted maturity at December 31, 2016 and 2015 of 84 and 64 days, respectively.

As of December 31, 2016 and 2015, the fair value (carrying amount) of loaned securities was \$1,253,039,566 and \$1,365,261,211 respectively. As of December 31, 2016 and 2015, the fair value (carrying amount) of cash collateral received by the Plan was \$1,074,265,161 and \$1,114,387,026 respectively. The cash collateral is included as an asset and a corresponding liability on the combining statements of pension plan fiduciary net position and postemployment healthcare plan net position. As of December 31, 2016 and 2015, the fair value (carrying amount) of non-cash collateral received by the Plan was \$212,162,888 and \$287,086,886 respectively.

### NOTE 9. SECURITIES LENDING (CONTINUED)

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

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

During 2016 and 2015, there were no losses due to default of a borrower or the lending agent.

A summary of securities loaned at fair value as of December 31, 2016 and 2015 is as follows:

	<u>2016</u>	<u>2015</u>
Securities loaned - backed by cash collateral		
U.S. and international equities	\$ 665,348,723	\$ 764,542,280
U.S. Government and government		
agency obligations	109,193,962	85,059,135
Exchange traded funds	170,060,838	149,394,555
Corporate bonds	 102,952,991	85,557,467
Total securities loaned -		
backed by cash collateral	1,047,556,514	1,084,553,437
Securities loaned - backed by non-cash collateral U.S. Government and government		
agency obligations	205,483,052	280,707,774
Total	\$ 1,253,039,566	\$ 1,365,261,211

### NOTE 10. POSTEMPLOYMENT GROUP HEALTHCARE BENEFIT PLAN

### **Plan Description**

The Plan administers a Postemployment Group Healthcare Benefit Plan (PGHBP), a single-employer defined benefit postemployment health plan. PGHBP is administered in accordance with Chapter 40, Article 5/10 of the Statutes, which assigns the authority to establish and amend benefit provisions to the Plan's Board of Trustees. PGHBP provides a healthcare benefit to annuitants who elect to participate in PGHBP.

### NOTE 10. POSTEMPLOYMENT GROUP HEALTHCARE BENEFIT PLAN (CONTINUED)

### Plan Description (continued)

All benefit elections under the PGHBP are fully self-insured. The Plan is currently allowed, in accordance with State Statutes, to pay all or a portion of medical costs for the annuitants. Presently, the employee and spouse annuitants pay approximately 48% and 33% of the annual medical costs, respectively. The remaining costs are borne by the Plan. The Plan does not maintain stop-loss coverage for the PGHBP.

At December 31, 2016 and 2015, the number of annuitants and surviving spouses participating in the PGHBP, totaled 8,954 and 8,783 respectively.

The following is a reconciliation of healthcare benefits payable for the years ended December 31, 2016 and 2015:

	<u>2016</u>	<u>2015</u>
Healthcare benefits payable, January 1	\$ 9,995,941	\$ 9,803,028
Claims incurred	101,718,685	95,662,629
Claims paid	(101,188,764)	(95,469,716)
Healthcare benefits payable, December 31	\$ 10,525,862	\$ 9,995,941

The Plan's actuary, Segal Consultants, estimated medical claims incurred but not reported (IBNR) as of December 31, 2016 and 2015 based on industry standards including historical IBNR levels, insurance company studies, lag studies and actuarial assumptions. The Plan estimated the prescription claims liability for both December 31, 2016 and 2015 based on claims paid subsequent to year end.

The Plan's employees are also participants in the PGHBP. The Plan had 31 employees at both December 31, 2016 and 2015. During years ended December 31, 2016 and 2015, the Plan paid healthcare premiums for 11 retired Plan employees. For active and retired Plan employees, the actuarially determined liability under GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, is included in the total actuarial liability and related GASB Statement No. 43 disclosure.

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

**Method of Accounting** - PGHBP's financial statements have been combined with the Plan's financial statements and are presented using the accrual basis of accounting. The Plan subsidizes the cost for postemployment group health benefits in excess of the retiree healthcare premiums with no contribution rate or asset allocation associated with it. Postemployment group healthcare costs are recognized when incurred and estimable.

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

**Administrative Costs** - Administrative costs associated with PGHBP are paid by the Plan's employer contributions and annuitant health benefit contributions.

### NOTE 10. POSTEMPLOYMENT GROUP HEALTHCARE BENEFIT PLAN (CONTINUED)

### **Summary of Significant Accounting Policies (continued)**

Health Care Cost Trend Rates - 2016 - 7.50% in the first year, decreasing by .25% per year until an ultimate rate of 4.75% is reached for pre-medicare and 6.00% in the first year, decreasing by .25% until an ultimate rate of 4.75% is reached for post-medicare. 2015 - 7.75% in the first year, decreasing by .25% per year until an ultimate rate of 4.75% is reached for pre-medicare and 6.25% in the first year, decreasing by .25% until an ultimate rate of 4.75% is reached for post-medicare.

### **Inflation Rate Assumption - 3.25%** per year.

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

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

As of December 31, 2016, the most recent actuarial valuation date, the PGHBP was 0% funded on an actuarial basis. The actuarial accrued liability for benefits was \$1,957,804,688 and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$1,957,804,688. The covered payroll (annual payroll of active employees covered by the Plan) was \$1,609,559,234 and the ratio of the UAAL to the covered payroll was 121.64%.

As of December 31, 2015, the PGHBP was 0% funded on an actuarial basis. The actuarial accrued liability for benefits was \$2,134,106,707 and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$2,134,106,707. The covered payroll (annual payroll of active employees covered by the Plan) was \$1,597,597,077 and the ratio of the UAAL to the covered payroll was 133.58%.

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

### NOTE 11. RELATED PARTY TRANSACTIONS

The Plan has common Trustees and shares office space with the Forest Fund who reimburses the Plan for shared administrative services provided by the Plan. During the years ended December 31, 2016 and 2015, the Plan allocated administrative expenditures of \$101,167 and \$92,675 respectively to the Forest Fund.

### NOTE 11. RELATED PARTY TRANSACTIONS (CONTINUED)

As of December 31, 2016 and 2015, the Forest Fund owes the Plan \$463,181 and \$515,876 respectively. These amounts include plan transfers of Plan members transferring from one plan to another.

### NOTE 12. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE

In June 2015, GASB issued Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets that are not within the Scope of GASB Statement No. 68, and Amendments to Certain Provisions of GASB Statements 67 and 68. Statement No. 73 establishes requirements for pension plans that are not administered through a trust (not covered by Statements 67 and 68). The requirements in Statement No. 73 for reporting pensions generally are the same as Statement 68, however, the lack of a trust that meets specified criteria is reflected in the measurements. Statement No. 73 is effective for the Plan's fiscal year ending December 31, 2016, except for provisions that address employers and governmental nonemployer contributing entities for pensions that are not within the scope of GASB Statement No. 68, which are effective for the Plan's fiscal year ending December 31, 2017.

In June 2015, GASB issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Statement No. 74 replaces the requirements of Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. This Statement addresses the financial reports of defined benefit Other Postemployment Benefit Plans that are administered through trusts that meet specified criteria. The Statement requires more extensive note disclosures and required supplementary information related to the measurement of the other postemployment benefit liabilities for which assets have been accumulated, including information about the annual money-weighted rates of return on plan investments. Statement No. 74 is effective for the Plan's fiscal year ending December 31, 2017.

In June 2015, GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Statement No. 75 replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Statement No. 75 requires governments to report a liability on the financial statements for the other postemployment benefits that they provide. Statement No. 75 also requires more extensive note disclosures and required supplementary information about the other postemployment benefit liabilities. Statement No. 75 is effective for the Plan's fiscal year ending December 31, 2018.

In January 2016, GASB issued Statement No. 80, Blending Requirements for Certain Component Units - an amendment of GASB Statement No. 14. Statement No. 80 amends the blending requirements for the financial statement presentation of component units of all state and local governments established in Statement No. 14, The Financial Reporting Entity, as amended. Statement No. 80 is effective for the Plan's fiscal year ending December 31, 2017.

#### NOTE 12. PRONOUNCEMENTS ISSUED NOT YET EFFECTIVE (CONTINUED)

In March 2016, GASB issued Statement No. 81, *Irrevocable Split-Interest Agreements*. Statement No. 81 improves accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. Statement No. 81 is effective for the Plan's fiscal year ending December 31, 2017.

In March 2016, GASB issued Statement No. 82, *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73.* Statement No. 82 addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. Statement No. 82 is effective for the Plan's fiscal year ending December 31, 2017.

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. Statement No. 83 addresses accounting and financial reporting for certain asset retirement obligations and establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for asset retirement obligations. Statement No. 83 is effective for the Plan's fiscal year ending December 31, 2019.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. Statement No. 84 improves guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. Statement No. 84 is effective for the Plan's fiscal year ending December 31, 2019.

In March 2017, GASB issued Statement No. 85, *Omnibus 2017*. Statement No. 85 addresses practice issues that have been identified during implementation and application of certain GASB Statements. It addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits (OPEB)). Statement No. 85 is effective for the Plan's fiscal year ending December 31, 2018.

In May 2017, GASB issued Statement No. 86, Certain Debt Extinguishment Issues. Statement No. 86 was issued to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources are placed in an irrevocable trust for the sole purpose of extinguishing debt. Statement No. 86 also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. Statement No. 86 is effective for the Plan's fiscal year ending December 31, 2018.

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



# REQUIRED SUPPLEMENTARY INFORMATION - PENSION

# SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

	<u>2016</u>	2015	2014
Total pension liability Service cost	\$ 559,176,234	\$ 496,161,454	\$ 491,887,347
interest Difference between expected and actual experience	318,014,746	(126,330,351)	) i
Changes of assumptions  Expected benefit payments, including refunds of employee contributions	(1,893,474,930)	(676,470,215)	(622,003,259)
Net change in total pension liability	(722,893,680)	2,017,123,824	828,317,923
Total pension naturey Beginning of year	23,963,085,690	21,945,961,866	21,117,643,943
End of year	\$ 23,240,192,010	\$ 23,963,085,690	\$ 21,945,961,866
Plan fiduciary net position	\$ 414 703 155	\$ 136 075 504	\$ 146.075.414
Contributions - employer			
Net investment income	629,442,470	(21,896,696)	488,890,897
Expected benefit payments, including refunds of employee contributions	(709,560,225)	(676,470,215)	(622,003,259)
Administrative expenses	(5,373,555)	(5,151,110)	(5,010,206)
Other	4,046,158	4,380,293	3,753,960
Net change in plan fiduciary net position	472,613,595	(425,354,505)	141,032,124
Plan fiduciary net position			737 776 200 0
Beginning of year		i	
End of year	\$ 9,115,657,870	\$ 8,643,044,275	\$ 9,068,398,780
Employer's net pension liability	\$ 14,124,534,140	\$ 15,320,041,415	\$ 12,877,563,086
Plan fiduciary net position as a percentage of the total pension liability	39.22%	36.07%	41.32%
Covered-employee payroll	\$ 1,580,251,254	\$ 1,572,417,298	\$ 1,514,550,023
Employer's net pension liability as a percentage of covered-employee payroll	893.82%	974.30%	850.26%

Note:

This schedule is intended to show information for ten years. The additional years' information will be displayed as it becomes available.

See Report of Independent Auditors.

# See Report of Independent Auditors.

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

# SCHEDULE OF EMPLOYER CONTRIBUTIONS AND RELATED NOTES REQUIRED SUPPLEMENTARY INFORMATION - PENSION

## LAST TEN FISCAL YEARS

2007	\$ 287,061,532	(230,114,335) \$ 56,947,197	\$ 1,370,844,734	16.79%
2008	\$ 283,892,734	(150,227,360) \$ 133,665,374	\$ 1,463,372,408	10.27%
2009	\$ 352,850,988	(152,506,089) \$ 200,344,899	\$ 1,498,161,713	10.18%
2010	\$ 454,327,461	(144,539,577) \$ 309,787,884	\$ 1,494,093,569	%19.6
2011	\$ 493,724,370	(160,652,118)	\$ 1,456,444,123	11.03%
2012	\$ 540,218,287	(152,734,539) \$ 387,483,748	\$ 1,478,253,368	10.33%
2013	\$ 595,370,046	(147,720,014) \$ 447,650,032	\$ 1,484,269,715	%36.6
2014	\$ 519,642,931	(146,075,414)	\$ 1,514,550,023	9.64%
2015	\$ 514,888,487	(414,703,155)     (136,075,504)       148,112,661     \$ 378,812,983	\$ 1,572,417,298	8.65%
2016	\$ 562,815,816 \$ 514,888,487	69	\$ 1,580,251,254	26.24%
	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution  Contribution deficiency	Covered employee payroll	Contributions as a percentage of covered employee payroll

### Notes to Schedule

Actuarially determined contribution rates are calculated as of December 31, one year prior to the fiscal year in which contributions are reported.

December 31, 2016 Valuation Date

Methods and assumptions used to

determine contribution rates:

Entry Age Normal Level Dollar - Open Actuarial cost method Amortization method

30 years
Five Year Smoothed Average Market Remaining amortization period Asset valuation method

3.25% per year, compounded annually

Salary increases Retirement age

Inflation

Mortality

3.75% to 8%, based on age 7.5% per year, compounded annually Investment rate of return Postretirement annuity increases

#### REQUIRED SUPPLEMENTARY INFORMATION - PENSION

#### SCHEDULE OF INVESTMENT RETURNS

<u>2016</u> <u>2015</u> <u>2014</u>

Annual money-weighted rate of return, net of investment expense 7.67% (0.10)% 5.90%

#### Note:

This schedule is intended to show information for ten years.

The additional years' information will be displayed as it becomes available.

REQUIRED SUPPLEMENT	ADV INCODMATION -	Postembi ovment H	TALTHCARE
REQUIRED SUPPLEMENT	ART INFORMATION -	TOSTEMILOTMENT I	EADTHCARE

#### REQUIRED SUPPLEMENTARY INFORMATION - POSTEMPLOYMENT HEALTHCARE

#### SCHEDULE OF FUNDING PROGRESS

			Actuarial				UAAL as a Percentage
	Actı	arial Value	Accrued	Unfunded	Funded	Covered	of Covered
Year Ended	C	f Assets	Liability (AAL)	AAL (UAAL)	Ratio	Payroll	Payroll
December 31,		<u>(a)</u>	<u>(b)</u>	<u>(b-a)</u>	<u>(a/b)</u>	<u>(c)</u>	<u>(b-a)/c</u>
2011	\$	-	\$ 1,678,571,388	\$ 1,678,571,388	0.00%	\$ 1,456,444,123	115.25%
2012	\$	-	\$ 1,845,609,132	\$ 1,845,609,132	0.00%	\$ 1,478,253,368	124.85%
2013 (1)	\$	-	\$ 1,978,767,490	\$ 1,978,767,490	0.00%	\$ 1,484,269,715	133.32%
2014	\$	-	\$ 1,980,088,617	\$ 1,980,088,617	0.00%	\$ 1,514,550,023	130.74%
2015	\$	-	\$ 2,134,106,707	\$ 2,134,106,707	0.00%	\$ 1,597,597,077	133.58%
2016	\$	_	\$ 1,957,804,688	\$ 1,957,804,688	0.00%	\$ 1,609,559,234	121.64%

<sup>(1) -</sup> Change in actuarial assumptions.

#### REQUIRED SUPPLEMENTARY INFORMATION - POSTEMPLOYMENT HEALTHCARE SCHEDULE OF EMPLOYER CONTRIBUTIONS

	Annual	Required		Percent	
	Required	Statutory	Employer	of ARC	
Year Ended	Contribution	Basis	Contributions	Contributed	
December 31,	(ARC) (a)	<u>(b)</u>	<u>(b)</u> (c)		
2011	\$ 165,176,771	\$ -	\$ 38,185,306	23.12%	
2012	\$ 156,700,388	\$ -	\$ 37,986,237	24.24%	
2013	\$ 178,698,965	\$ -	\$ 40,097,630	22.44%	
2014	\$ 189,907,202	\$ -	\$ 43,957,458	23.15%	
2015	\$ 190,871,452	\$ -	\$ 50,756,817	26.59%	
2016	\$ 206,678,514	\$ -	\$ 49,565,249	23.98%	

#### REQUIRED SUPPLEMENTARY INFORMATION - POSTEMPLOYMENT HEALTHCARE

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

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

Valuation date December 31, 2016 and 2015

Actuarial cost method Entry age actuarial cost as a percentage of earnings

Amortization method Level Dollar - Open

Amortization period 30 years

Actuarial assumptions

Discount rate 4.50% per year

Inflation 3.25% per year

Health care cost trend rate 2016 - 7.50% in the first year, decreasing by .25%

per year until an ultimate rate of 4.75% is reached

for pre-medicare and 6.00% in the first year

decreasing by .25% per year until an ultimate rate

of 4.75% is reached for post-medicare

2015 - 7.75% in the first year, decreasing by .25% per year until an ultimate rate of 4.75% is reached

for pre-medicare and 6.25% in the first year

decreasing by .25% per year until an ultimate rate

of 4.75% is reached for post-medicare

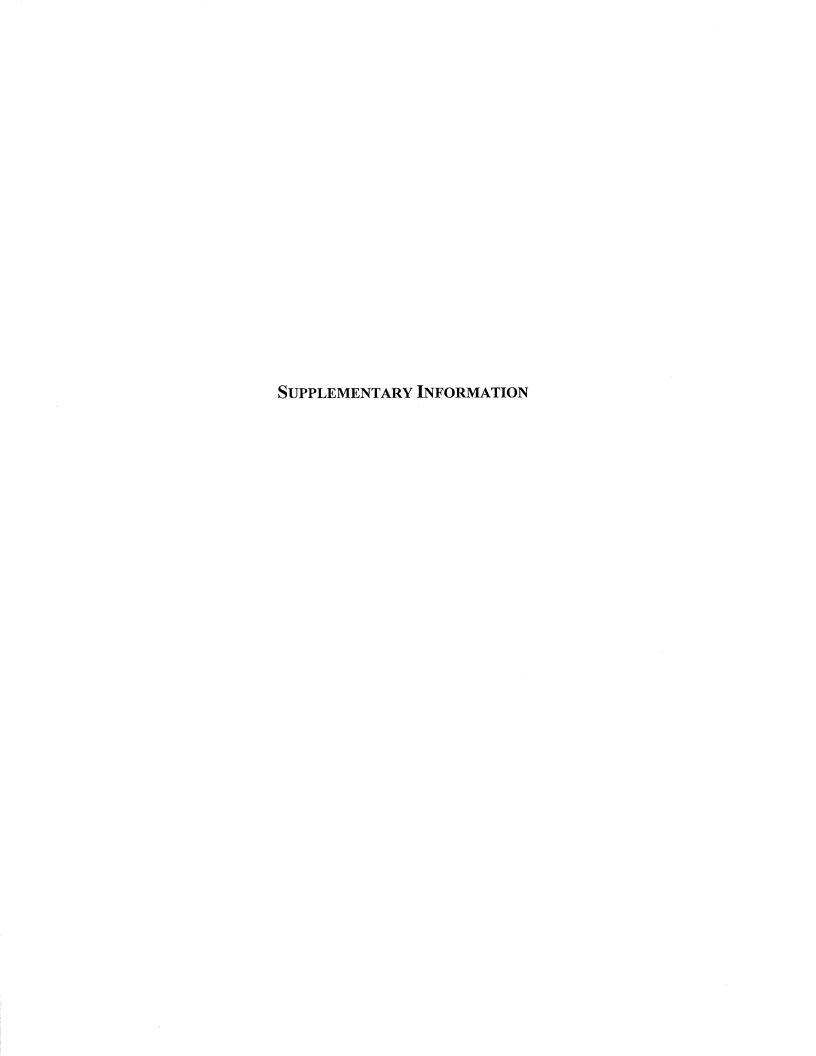
Mortality rates RP-2000 Blue Collar Mortality Table,

base year 2000, fully generational based on

Scale BB

Retirement age assumptions Based on actual past experience

assume all employees retire by age 75



#### SCHEDULES OF NET ADMINISTRATIVE EXPENSES AND PROFESSIONAL AND CONSULTING FEES

YEARS ENDED DECEMBER 31, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
Administrative expenses		
Bank charges	\$ 31,351	\$ 31,032
Document imaging	131,046	193,762
Election expense	144,933	91,704
Employee benefits	538,414	561,288
Insurance - fidelity, fiduciary and liability	120,438	117,385
Maintenance of equipment, systems, software and support	426,409	460,365
Membership, conference and training	32,533	43,970
Office expense	85,949	120,426
Postage	111,067	92,461
Printing and stationery	63,217	107,463
Professional and consulting fees	629,268	434,610
Recovery site expense	33,983	41,716
Regulatory filing fees	8,000	8,000
Rent	434,224	416,800
Salaries	2,674,345	2,509,732
Utilities	 9,545	 13,071
Total	5,474,722	5,243,785
Less administrative expenses allocated to Forest Preserve		
District Employees' Annuity and Benefit Fund		
of Cook County	 (101,167)	 (92,675)
Net administrative expenses	\$ 5,373,555	\$ 5,151,110
Professional and consulting fees		
Actuarial service	\$ 131,388	\$ 91,668
Audit	73,540	110,550
Consulting	78,139	66,324
Legal	319,480	139,293
Lobbyist	 26,721	 26,775
Total	\$ 629,268	\$ 434,610

#### SCHEDULES OF INVESTMENT EXPENSES

YEARS ENDED DECEMBER 31, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
Investment manager expense		
Adelante Capital Management	\$ 429,460	\$ 403,063
Angelo Gordon & Co.	224,717	192,351
Ariel Investments	347,552	350,327
Blackstone Alternative Asset Management	4,777,861	4,535,325
Capri Capital Partners	••	18,335
CastleArk Management	966,318	1,035,459
CBRE Global Investors	432,659	436,183
Channing Capital Management	1,355,592	1,324,826
Chicago Equity Partners	200,571	195,889
Cozad Asset Management, Inc.	-	338,984
Credit Suisse Securities	-	(14,000)
Diversified Global Asset Management	561,148	2,052,701
Fiduciary Management Associates	685,262	686,138
Fortaleza Asset Management, Inc.	122,973	122,445
Franklin Templeton Investments	2,438,308	2,489,887
Frontier Capital Management	992,505	977,048
Great Lakes Advisors, Inc.	398,055	383,887
Herndon Capital Management	185,735	373,210
J.P. Morgan Asset Management	3,290,690	2,508,202
John Buck Company	16,091	66,426
Killian Capital Management	296,157	284,325
LaSalle Investment Management	306,925	344,797
Lazard Asset Management, LLC	554,884	632,154
Lightspeed Venture Partners	••	(550)
LM Capital Group, LLC	608,901	588,536
Lombardia Capital	149,214	142,462
Loomis Sayles & Company, LP	811,179	795,240
MacKay Shields	861,181	836,956
Mellon Capital	92,272	133,376
Mesirow Financial	1,739,694	1,965,818

#### SCHEDULES OF INVESTMENT EXPENSES

YEARS ENDED DECEMBER 31, 2016 AND 2015

		<u>2016</u>	2015
INVESTMENT MANAGER EXPENSE (CONTINUED)			
Mondrian Investment Partners, Ltd.	\$	929,628	\$ 911,719
Muller and Monroe Asset Management		352,398	647,201
NCM Capital		294,769	289,012
New Century Investment Management		429,112	420,481
Pacific Venture Group		1,262	10,750
Progress Investment Management		1,681,315	1,684,637
Prudential Real Estate Investors		1,635,473	739,110
RhumbLine Advisers		79,161	80,517
Russell Implementation Services, Inc.		513,381	645,830
SPC Capital Management		74,167	84,167
State Street Global Advisors		313,997	341,069
The Rock Creek Group		1,264,181	1,304,102
Wells Capital Management		817,731	801,460
William Blair & Company		954,612	 951,037
	-	32,187,091	 33,110,892
Investment consulting fees			
Callan Associates, Inc.		369,795	371,459
RVK, Inc.		50,000	 -
Total investment consulting fees		419,795	 371,459
Investment custodian fees			
BNY Mellon		305,795	 216,584
Total investment expenses	\$	32,912,681	\$ 33,698,935

#### Additions By Source

Net Investment and Net Securities

				Annuitant	Lending		
Year Ended	Employer	Employee	Heal	thcare Benefits	Income	Other	Total
December 31,	Contributions	Contributions	<u>C</u>	<u>ontributions</u>	(1)	<u>(2)</u>	<u>Additions</u>
2011	\$195,337,621	\$127,577,473	\$	33,236,282	\$ 82,701,033	\$ 17,614,316	\$ 456,466,725
2012	\$190,720,776	\$128,869,508	\$	33,948,728	\$ 887,687,519	\$ 10,190,689	\$ 1,251,417,220
2013	\$187,817,644	\$127,593,220	\$	35,927,206	\$ 1,179,440,119	\$ 8,547,729	\$ 1,539,325,918
2014	\$190,032,872	\$129,325,318	\$	37,358,502	\$ 488,890,897	\$ 9,742,062	\$ 855,349,651
2015	\$186,832,321	\$137,707,719	\$	37,635,349	\$ (21,896,696)	\$ 11,457,843	\$ 351,736,536
2016	\$464,268,404	\$139,355,592	\$	41,650,333	\$ 629,442,470	\$ 14,019,340	\$ 1,288,736,139

#### **DEDUCTIONS BY TYPE**

				Net	
Year Ended			Ac	lministrative	Total
December 31,	<b>Benefits</b>	Refunds	<b>Expenses</b>		Deductions
2011	\$556,632,909	\$ 29,165,335	\$	4,078,843	\$ 589,877,087
2012	\$595,339,763	\$ 33,081,726	\$	4,303,353	\$ 632,724,842
2013	\$637,697,226	\$ 29,873,030	\$	4,324,634	\$ 671,894,890
2014	\$682,959,960	\$ 26,347,361	\$	5,010,206	\$ 714,317,527
2015	\$738,666,760	\$ 33,273,171	\$	5,151,110	\$ 777,091,041
2016	\$784,046,767	\$ 26,702,222	\$	5,373,555	\$ 816,122,544

<sup>1 -</sup> Includes realized and unrealized net gain or loss on investments and net securities lending income.

<sup>2 -</sup> Includes employer federal subsidized programs, Medicare Part D, prescription/repayment plan rebates and miscellaneous income. Early Retirement Reinsurance Program is included in 2011 and 2012.

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS RECEIVABLE

DECEMBER 31, 2016

				Net
Contribution	Contributions	Uncollected		Contributions
<u>Year</u>	<u>Receivable</u>	<u>Balance</u>	Reserved	Receivable
2015	\$ 192,786,468	\$ 17,369,469	\$ 1,122,704	\$ 16,246,765
2016	\$ 195,653,930	195,653,930	5,669,195	189,984,735
		\$ 213,023,399	\$ 6,791,899	\$ 206,231,500

#### Note:

Employer contributions are funded primarily through property taxies levied by Cook County, Illinois. Uncollected employer contributions for the 2014 and prior levy years are fully reserved.